Office Development in Metro Vancouver:

2022 Inventory and Technical Report

March 2023

Executive Summary

Metro Vancouver's Office Development Inventory and Technical Report was prepared in late 2022 and early 2023, and is an update of the 2018 edition. The report explores the factors that influence regional-scale office development and occupancy decisions, and identifies challenges and opportunities for office growth in Metro Vancouver's Urban Centres. It identifies key issues and trends affecting office space to better inform government policies. Although the COVID-19 pandemic has had a significant impact and disruption on office occupancy matters, this report looks beyond the pandemic to longer term implications and considerations.

Advancing Regional Planning Goals

Actions to encourage office development in Urban Centres and areas well served by transit are key elements of the Metro Vancouver regional growth strategy. Regional policy directs office development and associated activities to Urban Centres, as promoting significant new office development outside of Urban Centre locations such as in suburban office parks can have negative impacts on land use and transportation patterns for the region.

Office space accommodates growth of businesses and employment within the local community and larger region. These accommodations, in the form of office buildings, are built by developers who respond to market signals such as demand and supply.

Focusing office development in Urban Centres benefits the regional transportation system and livability in a number of ways: by supporting the development of complete and walkable communities, reducing vehicle commutes and employee transportation costs, protecting lands for other uses, complementing commercial and residential land uses, and increasing the vibrancy and success of the region's Urban Centres.

Planning policy and market forces are partially aligned. Office tenants increasingly desire locations that are well-served by rapid transit and urban amenities, while still in some cases highway access and suburban sites are also needed by other tenant types. There have been significant new office development projects in downtown Vancouver, responding to the strong tenant demand, especially by the growing number of tech companies that need to be by urban amenities to attract and retain talented workers. However, office growth in many other Urban Centres has been limited.

The report was informed through an investigation of the market and planning factors that influence the location, type, and amount of office development and occupancy in Metro Vancouver. Information about the office market and office development was gathered through a review of relevant publications, compilation of a comprehensive inventory database of office buildings[1], and in-depth interviews with experienced industry participants[2], including major office developers, and brokers, and municipal planning and economic development staff.

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[1] Note that this report and associated inventory statistics should replace previous reports, as the inventory has been further refined with every subsequent edition.
[2] The preparation of the earlier edition of this report was informed by other interviews at that time, including with office tenants. Comments that are still relevant are retained in the updated edition of this report.

Office Inventory Summary

Based on the comprehensive inventory prepared by Metro Vancouver, at the end of 2022, there were 78 million sq ft of office space in the region located within 1,338 buildings with 10,000 sq ft or more of office space. Individual buildings with less than 10,000 sq ft of have been excluded from the inventory, as they are challenging to measure and likely comprise only a small component of the total inventory. Summary findings from the analysis of the office building inventory data:

- Approximately half (47% of buildings and 55% of floor space) of the office inventory was located in Vancouver/UBC, with other notable sub-regions being Burnaby/New Westminster (at 16% and 17% respectively), Surrey/White Rock (14% and 12%), and Richmond (7% and 6%).
- Slightly over three-quarters (77%) of the office inventory was located on lands regionally designated 'General Urban', which are intended to accommodate a wide variety of land uses. Of the balance, 20% was located on 'Mixed Employment' lands which can accommodate various commercial uses, and 3% on ‘Industrial’ lands.
- Of just the office inventory in Urban Centres, 69% was located in the Metro Core (downtown Vancouver and the Broadway Corridor), 16% in Regional City Centres, 9% in Municipal Town Centres, and 6% in the Surrey Metro Centre. The balance, 22.6 million sq ft, was not located in Urban Centres.
- Most of the office inventory in the Metro Core and the Regional City Centres (90% and 79%, respectively) was within 800 metres of rapid transit stations, whereas 46% of the office space in Municipal Town Centres was near rapid transit.
- Relative to the Frequent Transit Network (FTN), 51 million sq ft (65%) of office space was located within 800 metres (10-minute walk) of a rapid transit station, and 18.8 million sq ft (24%) was located within 400 metres (5-minute walk) of FTN bus only. The balance, 8.4 million sq ft (11%) of office space, was located beyond the FTN service area.
- Of the inventory not within Urban Centres (22.6 million sq ft), 21% was within 800 metres of rapid transit service and 46% was within 400 metres of FTN bus only.
- Of the total inventory, 7.6 million sq ft (10%) was neither in an Urban Centre nor near FTN transit (either bus or SkyTrain).
- The 55 million sq ft of office space located in the 26 Urban Centres was distributed predominately in the Metro Core with a total of 38 million sq ft or 69% of the total office space in Urban Centres in the region. The next largest Urban Centres (at less than one-tenth the size) are Metrotown City Centre and Surrey City Centre at approximately 3 million sq ft each, and Richmond City Centre at 2 million sq ft.
- The average amount of office space in the seven Regional City Centres was 1.3 million sq ft each, while the seventeen Municipal Town Centres contain relatively limited amounts of office space (6% of the region’s total), with an average of 280,000 sq ft of office space.
- Most office buildings (86%) are under 100,000 sq ft in size, and 11% in the 100,000 to 250,000 sq ft range. There are very few buildings (43 of 1,338) over 250,000 sq ft; 3% of buildings, representing 21% of the total floor space.

- Of the entire inventory, the average size is 58,000 sq ft and the median size is 31,000 sq ft.
- There is a gradual upward trend in the size of office buildings over recent decades, with some years being skewed by a few very large building completions.

Recent Office Development Growth

Office development is impacted primarily by market demand. The office development process (approvals, design, financing, marketing, permitting, construction, and occupancy) is often complex and lengthy, and cannot always be fully completed within a single economic / market cycle. Analysis of the newer building stock completed between 1990 and 2022, which totalled 41 million sq ft, is summarized as follows:

- Office building completion rates and distribution patterns vary considerably from year-to-year.
- A large proportion of existing and newer office space is located in the Metro Core, centred in downtown Vancouver, and at other locations with rapid transit service. Smaller Urban Centres are generally attracting only limited office development activity.
- There was significant office development between 1990 and 2002. For the 2004-2012 period, development was considerably lower (except for 2009), with another cycle peaking in 2015.
- During the 2003-2012 period, the completion of new office projects was considerably lower. In years with higher levels of completion, a large proportion of that occurred in the City of Vancouver, mostly in the form of large new buildings in the downtown core.
- Non-Urban Centre development peaked in the 1990-2009 period, while from 2014 to 2022 the proportion of office space development in Urban Centres and particularly Metro Core increased.
- 63% of the newer office stock was built within Urban Centres (compared to 71% for the entire stock). The balance of office development was located outside of Urban Centres.
- 60% of the newer stock was located within 800 metres of rapid transit stations, with 41% located within the Metro Core (all with access to FTN transit). Of the newer inventory, 15.3 million sq ft or 37% was located outside of Urban Centres.
- 60% of newer office development was located within 800 metres of rapid transit, and 23% within 400 metres of FTN bus only. The balance, 17%, was located in areas not accessible to the FTN.

Market Trends

A variety of types of office buildings in diverse locations are required for different types of office tenants. The region has relatively few large office tenants (e.g. corporate headquarters) and many smaller ones, which challenges the development of new large-scale office buildings. Although in the last few years there has been significant growth of tech sector tenants. Ultimately, businesses make individual decisions and consider the trade-offs regarding accommodation costs and features.

Market Conditions and Developments

- Prior to the COVID-19 pandemic starting in early 2020, the region's office market was very strong with low vacancy rates and increasing lease rates, spurring considerable new major office developments, especially in downtown Vancouver.
- There was significant growth in the tech sector, with large companies occupying large blocks of office space and seeking premium accommodations and amenities found in the Metro Core.
- Although there are a number of large high-profile office projects coming to market, there are also many smaller or mid-sized office buildings. These buildings serve local areas and may be located throughout the region, and not necessarily in Urban Centres or near transit. Demand is limited in smaller Urban Centres with less accessibility and lower levels of transit service.
- More recently, due to the COVID-19 pandemic and associated rapid growth in remote working, the amount of office space needed, its utilization, and design have been greatly impacted. The long-term implications of this on office space demand are not yet known.

Tenant Preferences

- Office tenants increasingly prioritize accessibility to rapid transit service and urban amenities, and developers are responding accordingly, which is a change from the more suburban development patterns of earlier decades.
- Not all tenants wish to locate in Urban Centres, as some businesses prioritize highway access or other features, including lower costs.
- Some tenants may prefer an architecturally unique and high-profile building; however, these buildings can be less efficient and cost more. Some businesses seek a high prestige central business district office location (i.e. downtown Vancouver) and are able and willing to pay a premium. Proximity to urban amenities is strongly desired by tech tenants, such as Mt. Pleasant in Vancouver.

Trends

- There was significant growth in co-working facilities prior to the pandemic, namely WeWork and Regus / Spaces, that provide spaces and services to a range of tenant types, responding to the desire for flexibility by business occupants.
- There has been an apparent increase of strata development projects, rather than conventional lease rental tenure. From a development perspective, strata values can drive up residual land prices to the point where non-strata / lease development is no longer financially viable. That noted, the extent of strata development is limited, and some of that space is ultimately leased.
- There was a trend towards open concept office design to encourage collaboration and achieve space efficiencies. Due to the COVID-19 pandemic being a communicable disease and the increase in remote working and online meetings, desired office space designs are changing.

Key Considerations for Office Development

Office market characteristics such as demand, rental rates, preferences, scale, design, and development potential vary greatly by sub-market. The strengths of the Metro Vancouver regional economy, particularly relating to the office market, include: a 'Vancouver' brand that is internationally recognized, a boom in the tech sector with large American companies that are locating operations in Vancouver to access an international and educated workforce subject to Canada's immigration policies, the region being a livable and desirable place with many amenities, and a strong education system that fosters talent. Challenges or weaknesses include the high cost of housing and living, as well as high land and construction costs for development, and long and uncertain development approval processes that increase risk for projects.

The main office market of the region, the Metro Core, experienced strong office demand, leading to increasing lease rates and spurring development of additional office space supply in the years leading up to the pandemic. This growth was largely driving by demand from expanding tech companies, such as software and animation, that desired locations in the Metro Core to attract and retain talented employees. With the completion of some buildings that started before COVID-19 and the pandemic's continued influence on the office market, the number of new office development projects in the immediate future is expected to be limited.

As the population, economic activity, and workforce grows in the outer parts of the region it is expected that the demand for office space in those areas will also grow. However, this may take a long time, as small communities still have limited scale in terms of population and economic throughput and thus limited office demand. Building new office space in a sub-market without adequate demand may simply steal or re-locate tenants from one part of that sub-market to another, not actually attracting new tenants (i.e. zero-sum).

The best effort to attract tenants to outer Urban Centres may be as a value proposition (e.g. lower rents, and offering some urban features / amenities, at a location that is closer to a segment of the workforce). However, from a development perspective, construction costs are high in all locations. As such, it is difficult to make projects financially viable in outer Urban Centres that experience low office rents. Consequently, developers are concerned about being 'forced' rather than 'encouraged' by municipalities to build office space in locations with weak demand, which may lead to long-term vacancies.

Future Considerations for Office in Urban Centres

Based on the research and interviewees, the report outlines various actions for consideration by different parties to support office space in Urban Centres. These are organized into two parts in the final section of the report: priority actions that can be acted on immediately, and a list for further exploration.

The issues of concern most consistently expressed by interviewees and supported by research, and which can be undertaken in the shorter term with relatively high potential of effectiveness are:

- **Development Approval Process** - Streamline the development review / approval process, reduce the uncertainties and risks, and manage municipal charges / fees.
- **Land Use Planning** - Encourage, but do not mandate, mixed-use projects with office components; rather, allow market demand to inform the supply of office development in specific locations.
- **Zoning Definition** - Allow general office uses, rather than overly specific / limiting types of office business uses. This would improve tenanting flexibility and decrease landlord risk.
- **Tenant Permits** - Shorten and simplify the permitting process for basic interior improvements / renovations needed when new office tenants occupy a premise and operate a business.
- **Municipal Incentives** - Explore financial or regulatory incentives to encourage office development, and reduce policy and regulatory barriers.
- **Research** - Undertake further relevant research and case studies / best practices / innovation profiles into topics such as integrating office space into mixed-use or multi-use projects, and also identify where office components may or may not be warranted.

Developers and tenants want to work with municipalities to build and occupy new projects. Generally, the private sector desires the flexibly to build the type of office space that is in demand, where warranted, and to allow for increased development densities to take advantage of 'strong' locations. In turn, municipalities want new projects to advance economic goals and the private sector to help create spaces for jobs that advance complete community objectives, while also ensuring that development matches infrastructure and amenity investments.

Municipalities in the region continue to make various efforts to attract office development to their communities. In some cases, these efforts match market forces, such as in the Metro Core and surrounding areas where there is consistent and strong demand, especially for tech tenants that seek to locate in areas rich with rapid transit and urban amenities. In other places, market demand is spurring office development at SkyTrain station locations that are not necessarily in Urban Centres. In some locations, however, municipalities are encouraging mixed-use development with office space components where developers state that there is limited office market demand. Where this occurs, some developers feel that this approach introduces office supply in the hopes of generating demand that may not materialize and the space remains vacant.

Nevertheless, as local populations and associated workforces grow, and smaller-scale Urban Centres develop capacity and scale over time, the opportunity for providing population-serving office space will increase in these locations. Substantially, it is market forces rather than government policies that produce office development; prioritizing growth to target areas requires both market demand and public sector investment.

Ultimately, office development is a large investment decision, with the main factors being land values, construction costs, and lease rates. There is little that local governments can do to significantly impact those factors; other items that municipalities may have influence over tend to be less impactful.

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1.0 INTRODUCTION

1.1. Report Purpose

The purpose of this report[3] is to explore the factors and trends that influence office development and occupancy decisions in the Metro Vancouver region, and identify challenges and opportunities for office potential in Urban Centres. The report is informed through an investigation of the market and policy factors, as well as ongoing trends, which influence the location, type, and amount of office development and occupancy in Metro Vancouver. This research includes detailed analysis of office building development patterns in the region over the past century, and particularly the last few decades, supplemented with key informant interviews and literature review.

The report was prepared in late 2022 and early 2023. Although the COVID-19 pandemic has had a significant impact of office occupancy matters, this report looks beyond the pandemic to longer term implications and outcomes.

Actions that encourage office development in Urban Centres and areas well-served by transit are key elements of the regional growth strategy. While residential development in Urban Centres has been robust in recent years, office development has been limited primarily to certain locations. This report identifies areas for further exploration and opportunities for Metro Vancouver, member municipalities, developers, and other organizations to work together to advance office development in Urban Centres.

1.2. Research Questions

Three main methods were used in preparing this report: 1) information about the office market and the office development process was gathered through a review of relevant publications; 2) compilation of a comprehensive inventory database of office buildings in the region; and 3) in-depth interviews with key industry participants, including major office investors, developers, brokers, and municipal staff.

The following section addresses the state of the office market in Metro Vancouver, policy considerations, office development and tenancy issues and trends, as well as possible actions by the public and private sectors. These research questions are explored and answered in the balance of the report.

1.2.1. What are the regional directions and trends for office development location?

Metro 2040, the regional growth strategy, adopted in 2011 (and updated as *Metro 2050*), directs office development to Urban Centres, continuing the direction established in past

[3] This report is an update of the earlier edition completed in 2018.

regional plans. Focusing office development in the region's Urban Centres benefits the regional transportation system and livability in a number of ways, by: encouraging transit usage and reducing vehicle commutes, employee transportation, costs and associated greenhouse gas emissions; complementing commercial and residential land uses; increasing the vibrancy, livability, and success of Urban Centres; and protecting lands for other uses such as industrial. Some population-based, local serving office tenants located outside of Urban Centres are also considered appropriate to serve the needs of area residents.

Planning policy and market forces are partially and increasingly aligned. The market tends to respond to locations that are well served by rapid transit and urban amenities, while still some tenants need highway access with ample vehicle parking. In the past, access to highways was a priority for many office tenants, and office developers built accordingly. However, increasingly office tenants recognize the benefits to their businesses and employees of being located near transit (particularly rapid transit stations) and amenities in the region's Urban Centres. Specifically, ongoing market trends include:

- The Metro Core (downtown Vancouver and Broadway Corridor) experienced significant growth in new supply of large office buildings, with strong demand especially from tech sector tenants;
- In other Urban Centres, the supply of new office space is limited or varies;
- Some rapid transit station locations outside of Urban Centres are attracting office development and tenants, as they can offer the transit accessibility of an Urban Centre, but at lower costs;
- Reflecting market demand, there are few new office parks in the region outside of Urban Centres in locations that have poor transit service and limited amenities; and
- Evolving growth of new forms of office tenure, specifically strata and co-working.

While rapid transit station accessibility is increasingly desirable, the value of transit is not universal. Adjacency to a rapid transit station (i.e. SkyTrain) is beneficial, but those rapid transit station locations alone do not always provide a mix of supporting land uses and the presence of urban amenities. Furthermore, the connectivity of transportation systems is better within a network, than at the ends or edges of the network. Urban Centres can offer the full range of functions and amenities that stand-alone transit station locations may not provide.

1.2.2. What are the benefits of locating office space within Urban Centres?

As stated in the regional growth strategy, Urban Centres are intended to be the region's focal points for concentrated growth and transit service, and priority locations for employment, higher density housing, commercial, cultural, entertainment, institutional, and mixed-uses. The regional growth strategy identifies 26 Urban Centres of varying scale, distributed throughout the region.

By locating office space and associated employment in Urban Centres, a number of benefits can be achieved, including:

- Improve access and use of public transit;

- Reduce reliance of vehicle use for commuting and thus less congestion and greenhouse gas emissions;
- Reduce transportation costs for workers;
- Complement surrounding retail, residential, and institutional uses;
- Improve access to various amenities for office workers, such as area shops and services;
- Support workforce attraction and retention;
- Contribute to surrounding businesses by locating additional employees in the immediate area;
- Contribute to the general vibrancy, livability, and success of Urban Centres; and
- Support the development of complete communities.

1.2.3. What are the problems with locating office space outside of Urban Centres?

Despite longstanding regional policy to direct office growth to Urban Centres, the market pattern during the 1990s was defined by significant new office development in suburban office parks outside of Urban Centres. Although that trend has since changed, that pattern and those older buildings remain.

Typically, these office parks are located in areas far from transit services, and have a much higher proportion of employees who drive to work. This dispersed pattern is challenging from a regional perspective for several reasons, particularly to provide an efficient transportation system. Secondly, more driving means more traffic congestion and makes it difficult to meet the region's climate actions and greenhouse gas emission reduction targets. Thirdly, the creation of office parks came at the expense of the region's limited land supply, often built on land that was once used or designated for industrial purposes. Finally, locating jobs and activities in office parks can hamper the growth of the region's Urban Centres. Urban Centres need all types of activities to thrive, with employment contributing to their vibrancy and success. For employees, being in an Urban Centre is also preferable to working in an office park, in terms of both the amenities and transportation options. Office tenants are increasingly selecting desirable urban locations in order to attract and retain a talented workforce, especially notable for the tech sector.

How are office market trends evolving?

The Metro Vancouver office market is diverse, segmented and represents a variety of regional locations and different tenant needs. Office development occurs at different types of locations, ranging from the Metro Core to other Regional City Centres, Municipal Town Centres, rapid transit stations, and elsewhere.

Office tenants and employees increasingly prefer transit-accessible locations, namely rapid transit stations (i.e. SkyTrain); that demand is demonstrated through consistently lower vacancies and higher rents at those locations. Responding to the strong office demand before the COVID-19 pandemic, a number of major office developments were recently completed and are underway in downtown Vancouver, and in some other growing centres.

Downtown Vancouver, other Urban Centres, SkyTrain stations, and auto-oriented office parks, all continue to serve different types of business needs and office markets. However, there is an overall and growing trend towards new developments locating near the region's SkyTrain stations, which fills an important need in the office market.

Despite development activity indicating that transit-accessible locations are increasingly in demand, there exists office parks outside of Urban Centres that are poorly connected to the transit system. Although there has been limited office park development in the past decade, these locations can offer larger sites, which allow for low rise buildings with larger floorplates, better access to the highway network with ample parking, and other features desired by certain types of tenants.

Past office designs striving for increased efficiencies in terms of reduced space per worker and shared work spaces are being reconsidered due to infection spreading concerns associated with the pandemic. These changes in utilization rates will have transportation impacts in terms of the amount of required parking, transit demand, and building design, as well as on the amount and type of onsite amenities.

1.2.4. What tools do governments have to support office development in Urban Centres?

The regional growth strategy requires municipalities to prepare Regional Context Statements identifying how local plans will direct office development to Urban Centres and support the regional employment targets. Through Official Community Plans (or equivalents), local area plans, zoning bylaws and other policies, and as the local approving authority, municipalities can advance and support this important objective. Supplementing market trends, municipal policies can encourage office development proposals within and discourage projects in locations outside of Urban Centres. Additionally, to support office development in desired locations, municipalities can explore reducing barriers and incent investment through tools such as: pre-zoning land for office use and density; expediting the development application and permitting process; introducing regulatory and financial incentives; and other possible means, financial and otherwise, appropriate for local circumstances.

Beyond land use plans and tools, governments at all levels can provide signals to the market about appropriate locations for office investment. Providing transportation and other infrastructure at the right locations to support Urban Centre development is important to the health and vibrancy of the regional economy and communities. Businesses want accommodations that best meet their needs in terms of location, accessibility, facilities, design, amenities, costs, and other features. By improving the transit service, urban amenities, and infrastructure offerings in Urban Centres, these locations can become more attractive to office developers and office tenants as locations for investment. Yet those lands can also be very expensive, which is a major aspect of project viability. Decisions by public agencies, including the location of educational, medical institutions, and other government office facilities in Urban Centres can also spur further market and development interest.

1.3. Regional Growth Strategy Context

The Metro Vancouver region is forecast to grow by approximately one million residents and 500,000 jobs between 2021 and 2051. To protect the region's ability to attract investment and jobs, the regional growth strategy establishes regional land use designations and overlays that the member municipalities must consider and advance through local planning. The Urban Containment Boundary limits encroachment into lands regionally designated as 'Agricultural', 'Rural', and 'Conservation & Recreation'. The 'Industrial' and 'Employment' designations protect lands for industrial and employment uses. Office and commercial uses are encouraged to locate in Urban Centres and Frequent Transit Development Areas (FTDA), generally located on lands regionally designated 'General Urban', which allows for a variety of uses.

Reflecting continuing population, employment, and economic growth on Metro Vancouver's limited land base, focusing and densifying development in Urban Centres is an important element of the regional growth strategy. To build vibrant and livable communities, the regional growth strategy's Strategy 1.2 includes specific policies about office space, including guidelines for the land use and transportation characteristics of Urban Centres and FTDAs. There are identified three different types of Urban Centres: Metro Core, Regional City Centres, and Municipal Town Centres.

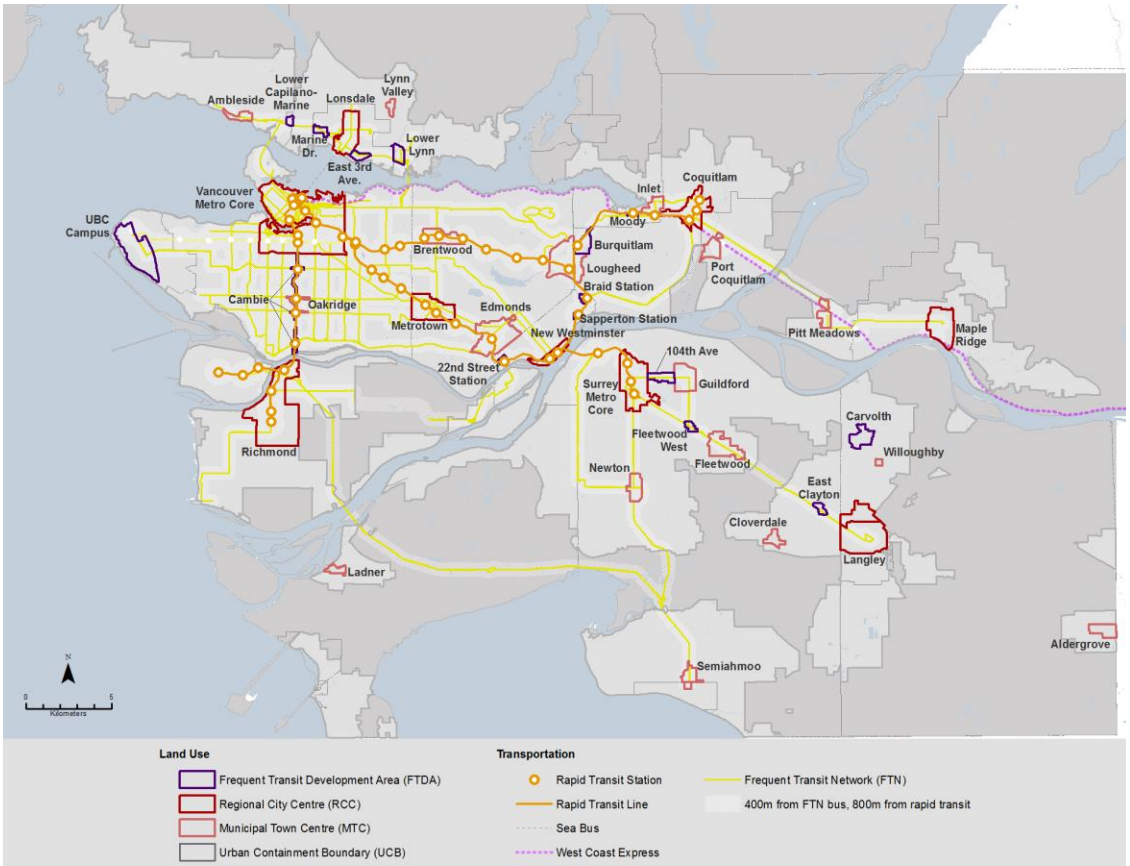
The 26 Urban Centres identified in the regional growth strategy are intended as priority locations for transit-oriented employment and services, higher density housing, commercial, cultural, entertainment, institutional, and mixed-uses. Urban Centres are intended to emphasize place-making, with enriched public realm, where transit, cycling, and walking are the preferred modes of transportation. Orienting growth and development in this way helps to:

- Support an efficient land use pattern and transportation network;
- Protect natural areas, agricultural and industrial lands by focusing growth in urban areas;
- Provide jobs closer to where people live;
- Create complete communities that are accessible, promote transit, walking and cycling, provide access to a range of housing options, employment, social and cultural opportunities, parks, greenways and recreational opportunities, and promote healthy living; and
- Expand the opportunities for transit, multiple-occupancy vehicles, cycling and walking, reduce expenditure on transportation, energy use, and greenhouse gas emissions, and improve air quality.

For reference, Map 1.1 shows the locations of Urban Centres as well as the Frequent Transit Network (rail and bus) (FTN) in the region.

As an important part of the regional growth strategy, 50% of all employment growth (forecasted to be 500,000 jobs between 2021 and 2051) is to be directed to Urban Centres, with different Urban Centres anticipated to grow at different rates, plus 27% of growth located in FTDAs.

Map 1.1: Regional Growth Strategy Urban Centres and Frequent Transit Network



1.4. Stakeholder Perspectives

There are a number of different public and private sector stakeholders that influence office development patterns in the region. These groups have different interests and priorities. Government agencies and municipal plans can guide the market and reinforce the benefits of locating office development and employment in Urban Centres, with policies reinforcing positive market trends.

Metro Vancouver, as the regional government, implements the regional growth strategy so that the long-term projected growth is managed, lands are used efficiently, and employment opportunities are distributed appropriately throughout the region, reflecting investments in transportation networks, infrastructure, and key centres. This goal also means encouraging office development in locations that support transit usage, coordinating with other agencies and initiatives, with complementary land uses, amenities and facilities, where infrastructure can best support high job density. This development pattern also helps support a prosperous and growing economy with office-based employment as an integral part of the functioning of the larger overall economy. Metro Vancouver has other complementary strategies, such as protecting and intensifying industrial lands, increasing affordable housing, supporting sustainable transportation choices, and attracting and growing economic and employment activity.

TransLink provides regional transportation services, including transit service, bike lanes and pedestrian facilities, and in conjunction with municipalities is responsible for the Major Road Network. Transit service supports commuting workers, while the Major Road Network is needed for regional people and goods movement. TransLink's investment and regional transportation strategies also support office development in Urban Centres because these areas provide higher concentrations of riders and can be more effectively served by transit and more readily accessed by walking and cycling, as compared to other locations.

Municipalities wish to attract high-quality development to their communities and are the approving authority for office development projects. From a municipal perspective, office development offers employment opportunities for the resident workforce and property taxation revenues, and supports the community's commercial vibrancy, especially in Urban Centres.

Provincial and Federal Governments advance gateway objectives through the region's transportation system supporting provincial and national economic and trade interests, and invest in major infrastructure, including rapid transit lines. These senior levels of government also encourage and benefit from economic growth through tax revenue and employment levels. Additionally, government departments and agencies are major employers and tenants.

Office tenants need space that is functional and affordable, in terms of size and shape, location, access, and other attributes. Office tenants balance their location preferences and building needs, along with workforce retention and recruitment issues, operational needs, and financial considerations.

Office developers want to build projects that are successful, profitable, have manageable risks, are desirable by office tenants, and readily absorbed by the market. Viable investments necessitate balancing the development costs and revenues of the project, including land and construction costs, with land uses, building designs, market demand, and rent levels. Developers want to optimize the potential of a site, such as leasable space, while achieving a reasonable project schedule, approval requirements, and expectations of office tenants.

1.5. Interview Participants

Major office developers, commercial brokers, and municipal planning and economic development staff were interviewed to learn about Metro Vancouver's office market (see Appendix A for a list of interviewees). The objective was to gain insights about the changing nature of the Metro Vancouver office market and sub-markets, location preferences, and the criteria and decision-making process for selecting office locations and developing office space. 24 interviews, involving 48 interviewees, were conducted between mid-September and mid November 2022[4]. Discussion questions were sent to the interviewees in advance of the meetings (see Appendix B for a list of the questions).

[4] Note: The preparation of the earlier edition of this report was informed by other interviews at that time, including with office tenants. Comments that are still relevant are retained in the updated edition of this report.

The developers and brokers interviewed had significant experience building or leasing large-scale office projects in the region, while municipal staff provided additional perspectives. There were three different groups of interviewees:

- **Office developers / landlords** - experience both in downtown Vancouver and markets in other parts of Metro Vancouver, as well as in other North American cities.
- **Office brokers** - extensive knowledge of the office market with specialized knowledge of Metro Vancouver's multiple sub-markets. The brokers provided a unique perspective, being knowledgeable about the needs of both the developer and tenant, as well as changes over time.
- **Municipal staff** - provided the local government perspective (both planning and economic), outlining their role in the process of attracting investment and development to their communities and the trends being seen from local businesses and developers. They also provided insight on the experience of policies and tools to encourage and retain office tenancy, and the development approvals process.

2.0 METRO VANCOUVER OFFICE CHARACTERISTICS

Compared to other large North American markets, Metro Vancouver has fewer headquarter companies and has many smaller-sized office tenants. The Metro Vancouver market has a range of different business sectors, which is healthy and beneficial should one sector experience a decline. In the past, the resource sector (e.g. forestry, mining, energy) drove much of the office growth in the Vancouver office market and supporting services such as accounting, finance, and legal firms. More recently, there has been significant growth in the tech sector as a major office tenant type. However, trends seen in the office market, labour force, and general economy have been significantly disrupted by the COVID-19 pandemic.

2.1. COVID-19 Impacts and Return to Office

The COVID-19 pandemic upended the office market and business accommodation decisions. Starting in early 2020 and lasting for a varied period, many office-based employees were working from home rather than at the office. While some stakeholders and employers never believed 'the office is dead' headlines when the pandemic started, many employees continue to want flexibility and the ability to work at home, at least part time.

The opinions and facts about the impacts and implications, depth and durability, of the pandemic experience range widely, from those who believe work can be effectively completed remotely, saving employees a daily commute and reducing greenhouse gas emissions, to others who believe it has reconfirmed the need for in-person interactions and team collaboration at the office. Some recognize the nuance of the matter, noting that different types of employees have different roles and complete different tasks, thus the optimum work space design and location should vary by function. There is widespread agreement that some level of increased flexibility with working at home and at the office will be a long-term result from the pandemic's forced and sudden experiment of remote working.

COVID-19 accelerated many pre-existing trends such as use of remote technology and flexible working arrangement, some of which have long been discussed but not materialized, like tele-working and paperless offices. With the proper technology and high speed internet, remote work can be easily accommodated. As the impacts of the pandemic carry on, the full-scale return to the office has been much delayed.

To attract employees back to the office, many employers commenced with gentle encouragements before applying firmer requirements for in-person work. Such incentives are described as a way to 'earn the commute' of employees – i.e. the office work space and associated building amenities and locational attributes must be adequately desirable and appealing to induce employees from their home to the office. The belief is that employees will increasingly want to come to the office when they feel it is needed and valued.

This has spurred many landlords to upgrade on-site amenities of existing buildings, and incorporate such design features and amenities such as rooftop patios, bike parking and end of trip facilities, dog 'barking lots' for employees with pets, and programing special events into new buildings. This has resulted in redesigns of some office spaces, varying by situation, including adapting open space layouts to provide more collaboration areas, and converting some workstations to enclosed offices. Additionally, more common areas and meeting rooms are being provided, including lounges and lunch rooms. Reflecting the need for small in-person meetings and larger on-line conference-type meetings, this can entail replacing large boardrooms with smaller team meeting rooms, along with 'quiet' rooms for individuals to take calls.

As one interviewee noted, it has taken two to three years to adjust and react to the COVID-19 pandemic, and it may take just as long to 'unwind', thus it may yet be many years to fully understand and appreciate the long-term implications and responses. This is in part because real estate and accommodation investments take a long time to decide and implement. How much office space per worker will ultimately be needed is the outstanding question. It will take time to discern these impacts on businesses accommodations and office development.

While some employees believe they could work from anywhere thanks to online technology, some employers note that such remote flexibility could allow them to hire anyone, including workers in lower wage jurisdictions in other parts of the world. Such pressures and tensions for employers wanting employees back at the office versus employees wanting continued flexibility, may adjust depending on the economic and labour market conditions, as well as the needs of the employer, role of the employee, push for accountability, cost management, home office working arrangements, and employee commute times, which may all impact the propensity to return to the office.

With employees continuing to be part time at the office, the question arises of how efficient office space could be. Truly optimized space allocation would entail employees having unassigned workstations, and only using shared desks / offices when they are in the office (i.e. 'hoteling', or 'hot desking'). If a significant percentage of employees are not at the office on any given day, then the number of workstations and amount of office space required could be significantly reduced. However, that would require desk sharing (or hot-desking or hoteling). In some cases, to meet a balance of incentives and space allocation, employees are provided dedicated workstations desks if they are in the office at least a certain number of days per week (often three), while employees who do not come in as frequently are only provided with shared hot-desks as needed (with an office locker to store for their belongings).

It should also be recognized that not everyone may have at home a suitable office arrangement or setup for professional meetings. Some businesses believe in-person work is best for collaborative and creative activities, along with mentoring, training, and leadership experiences and corporate culture, while other businesses recognize that for some standard, routine tasks working at home may be just as effective and reduce corporate accommodation costs. The solution varies by sector, business, and worker.

Although there are different work tasks and different ways to define and measure productivity (especially creativity), the benefits of physical proximity for businesses and employees to creativity and collaboration, through urban economies and agglomeration, have been in place many years, have grown over time, and are not expected to disappear.

Professional services and tech sectors were amongst the strongest employment sectors during COVID-19, and given the availability of home and portable (laptop) computers, high speed internet, and online meeting technology, is also driving the trend to remote work.

2.2. Space Utilization

It is recognized that during and since the beginning of the COVID-19 pandemic office space has been typically significantly underutilized. Although the vacancy rates indicate how much space is leased, the measures of occupancy or utilization are limited or vary. Simple observations and the volume of space on the sub-lease market indicate that the amount of underutilized or unused office space is considerable.

There are some ways to measure actual utilization levels. For example, landlords may have various building measures, from parking stalls, evaluator lifts, door openings, security passes, etc. In many cases those monitors / sensors were added during the pandemic, thus the baseline data needed to compare current utilization rates with pre-COVID-19 rates does not exist.

During the initial, turbulent period of the pandemic, many business tenants deferred accommodation decisions. Many later discovered that by delaying decisions, the easiest option was to renew existing leases, rather than trying to relocate or downsize with limited time available. In existing buildings, most leases continued to be renewed even if the space is underutilized, although tenants are tending to take more time to review and consider space needs, rather than automatically renewing. Tenants during such times of uncertainty generally seek flexibility and space that does not require onerous lease commitments.

However, as the impacts of the pandemic continue, and the ability for some staff to work remotely increases, some businesses may be looking more closely at their office space needs and accommodation costs. Yet even if working from home is an option, a hybrid work arrangement and a business workforce requires some office space for in-person activities.

Market Trends

Prior to the COVID-19 pandemic, the Metro Vancouver office market was strong, with very low vacancy rates in the order of 2%. This included both the Vancouver Central Business District (CBD) and surrounding areas, as well as the suburban markets that experienced considerable declines in vacancy rates over the preceding years. For the City of Vancouver market, the vacancy rate stayed low despite significant new office supply added. With the impacts of COVID-19 starting in early 2020, along with new office buildings coming to market, the vacancy rate increased to about 6-7% by the end of 2022 (although notably the vacancy rate was higher in the Vancouver core and lower in the suburban markets).

Most market participants view a vacancy rate in the order of 8% as being balanced and healthy, providing reasonable options and flexibility for both landlords and tenants. Furthermore, much of the new office space being built is already leased, through agreements that were arranged pre-pandemic, although not all necessarily occupied.

While all parties are aware of the divergent trends, such as greater working from home yet also increased space per person at the office, and the different sectors facing different issues and trends, the views about actual office utilization rates (as opposed to lease rates) are less bound by data. Rather, utilization rates are estimated based on observations or limited available data measures, and the future rates are a combination of best guesses and estimates.

For the most part, it appears that major tenants continue to lease their space, often bound by long-term lease agreements, but are increasingly exploring sub-lease options to vacate unused space. This includes some brand-new office buildings, with space that has never been occupied. In other sectors, businesses maintain their space with the expectation that it will be needed in the medium-term future as more employees return to the office and their workforce grows.

While current market changes may mean some reductions in office space needs, there are optimistic expectations that with an eventual return to a version of pre-pandemic conditions and long-term growth in the workforce, including the recognized need to collaborate in-person, the outlook for office space demand is still positive.

Overall, as one participant said, "there's no sea change", as the fundamentals are still substantially the same. No companies appear to be headed to zero office presence, as they still need space to operate. Many are simply continuing what they've long done, as they try to minimize the impacts of disruptions on their operations. Rather, COVID-19 may only effect decisions at the margin. As always: "Landlords and tenants need to work together to make buildings and spaces work, especially in a changing market".

Rents and Sub-Leases

It is expected by some interviewees that the evident tech market slowdown in late 2022 will result in a (at least a slight) downward pressure on office market rents. Noting that the face rent rates may still be about the same, but larger inducements and better terms for tenants reduce actual / effective rents. There has also been general inflation over the past few years, yet rents are relatively flat, thus the real cost has declined. Aside from base rent, operating costs comprising building maintenance and property taxes are rising, paid by the tenant. (Interestingly, the covenants by tenants and landlords vary and are changing – now in some cases the tenants are stronger businesses than the landlords).

In terms of sub-leasing of space, the process is unique, building specific and not straightforward. Often, if the remaining lease duration is less than two years, the head tenant will not bother with a sub-lease process. Or the tenant may negotiate an early termination with the landlord, with a penalty paid. Often, for space that is sub-leased for a short duration there is also an agreement with the landlord for the new tenant to remain in place when the initial head-lease expires; defaulting on lease payments is very rare. The types of tenants that take short-term sub-lease space are those that are more flexible or seeking a lower cost option, such as start-up companies, and tenants needing swing / temporary space.

Also an important consideration and limitation is that it is difficult to fully optimize space, because of considerations like floorplates, access, common areas, layouts, etc., which impede the efficient demising of areas. This is proportionally more of a challenge for smaller spaces than larger ones.

Office Supply

Many new office buildings and much office space is coming to market, although most (estimated by some interviewees at 80%) is pre-leased or pre-sold before construction completion. This new supply is associated with the tail-end of the current building cycle. However, in some cases, these new tenants are attempting to sub-lease their space even before it is occupied. This includes some big tech firms, which are giving back space and putting pause on new space. Also, much 'grey space' exists; space that is unused and available, but not actively marketed, which is hard to quantify.

For businesses that are occupying underutilized space, they may eventually give some back over the next few years, as their leases expire. This will lead to an increase in supply, requiring a longer period for the space to be (re)absorbed by the market. The result is that new buildings may take longer to be fully occupied and utilized, as compared to typical markets and building completions.

Furthermore, developers that are contemplating new office buildings will likely push back construction schedules by a few years to better align with forecasted future market conditions. The question this raises is, if in the coming years (i.e. 2025 / 2026), there will be a shortage of space if most development projects are put on hold now. Based on reported vacancy rates, according to some optimistic participants (more so brokers than developers), market fundamentals warrant more supply, however that does not consider utilization rates or other risks. In downtown Vancouver, for example, the projects already underway are proceeding; developers are not stopping, although maybe slowing on future ones.

Office Demand

Good office space is still in demand, in modern buildings, with nice amenities, functional units, attractive designs, and at central locations. For hybrid work arrangements, employers need to offer a good or great location and space to attract employees to commute to work, and often combine it with other activities on the same day (e.g. lunch out, shopping, dinner, events, a concert, or sports game).

Most leaders want their staff back in the office, but not all of their employees want to return. As has been said: 'Great companies use great space to attract great employees'. Thus, leading companies are providing employees incentives and inducements to come back to the office, including attractive working spaces.

2.3. Regional Office Market Statistics

According to Colliers market reports as of the end of 2022, the total inventory of market office space in the Metro Vancouver region was 76 million sq ft.[5] Note that the market inventory as tracked by brokerage firms excludes some smaller buildings and non-market buildings such as

[5] Colliers, Vancouver Office Market Report, 2022 Q4.

government / institutional offices, which were included in the Metro Vancouver inventory, as explained in subsequent sections.

As of late 2022, Vancouver was still experiencing an office construction boom, having completed 1.4 million sq ft of new space in 2022, with further 6.1 million sq ft actively under construction across the region.[6] Note that much of this construction activity commenced before the pandemic. Meanwhile, the tech sector which had driven demand for large blocks of office space in and around downtown Vancouver slowed in terms of employment levels and leasing activity.

Table 2.1 shows the number of office buildings and amount of office floor space tracked by Colliers for the Metro Vancouver region as of the end of 2022.[7] This data shows that the Vancouver downtown (including Gastown, Railtown, and Yaletown) is the dominant office centre of the region, with about 31% to the total number of office buildings and 44% of total amount of office space. These numbers reflect the fact that office buildings in the central business district (CBD) are notably larger than in other parts of the region. Adding the other Vancouver sub-areas (Broadway Corridor, Periphery), the City of Vancouver in total has 46 million sq ft of market office space, or about 60% of the regional total.[8]

The next largest market is Burnaby, with approximately 11.4 million sq ft or 15% of the regional total, followed by Surrey at 6.5 million sq ft (9%), and Richmond at 4.3 million sq ft (6%). The other sub-markets in the region are relatively small. Over time this may change, reflecting evolving development and employment patterns in the region.

Table 2.1: Metro Vancouver Office Market Inventory by Sub-Region (2022 Q4)

Geography	# of Buildings	Office Space Sq Ft	Buildings - % of Regional Total	Sq Ft - % of Regional Total	Avg Building Size Sq Ft
Vancouver Downtown Core	194	28,956,943	21.5%	37.9%	149,263
Vancouver Gastown / Railtown	50	2,723,951	5.5%	3.6%	54,479
Vancouver Yaletown	36	1,739,320	4.0%	2.3%	48,314
Vancouver Broadway Corridor	128	8,520,305	14.2%	11.2%	66,565
Vancouver Periphery	60	4,301,301	6.6%	5.6%	71,688
Vancouver Sub-Total	***468***	***46,241,820***	***51.8%***	***60.6%***	***98,807***
Burnaby	124	11,453,012	13.7%	15.0%	92,363
Surrey	99	6,543,345	11.0%	8.6%	66,094
Richmond	65	4,321,278	7.2%	5.7%	66,481
North Van	60	2,769,556	6.6%	3.6%	46,159
New West	34	2,227,165	3.8%	2.9%	65,505
Langley	40	2,098,385	4.4%	2.7%	52,460
Tri-Cities	13	680,069	1.4%	0.9%	52,313
Other Areas Sub-Total	***435***	***30,092,810***	***48.2%***	***39.4%***	***69,179***
Regional Total	**903**	**76,334,630**	**100.0%**	**100.0%**	**84,534**

Source: Colliers, Market Report Metro Vancouver, 2022 Q4.

[6] Colliers, Vancouver Office Market Report, 2022 Q4.
[7] Colliers, Vancouver Office Market Report, 2022 Q4.
[8] Colliers, Vancouver Office Market Report, 2022 Q4.

According to Colliers, the overall average vacancy rate for the region at the end of Q4 2022 was 5.9%. Downtown Vancouver had a higher vacancy rate (8.4%), while other parts of the region had lower vacancy rates (average 4.3%), reflecting some declines in office demand by the tech sector in Vancouver and growth in demand by other sectors in the suburban markets. The building vacancy rate as well as space utilization rates have been greatly impacted by the pandemic, work-from-home trends, and tech employment levels.

Office rental rates are highest in downtown Vancouver, with an average asking rent rate of about $40 per sq ft, and over $50 for Class AAA space. Rent rates in other markets are considerably lower, in the range of $20-30 per sq ft. Typically, building operations, maintenance, and property taxes represent an extra 50-60% of accommodation costs for tenants in addition to net rents.

As for the class of office buildings (a function of the quality and location of the accommodations) in the region, approximately 78% are Class A and B (average quality). Only 8% of buildings are Class AAA (top quality), 15 of 22 of which are located in downtown Vancouver.[9] Rents for different classes and locations of office space vary accordingly. See Table 2.2 for a summary of the region's office inventory by building class.

[9] Colliers, Vancouver Office Market Report, 2022 Q4.

Table 2.2: Metro Vancouver Office Market Inventory by Building Class (2022 Q4)

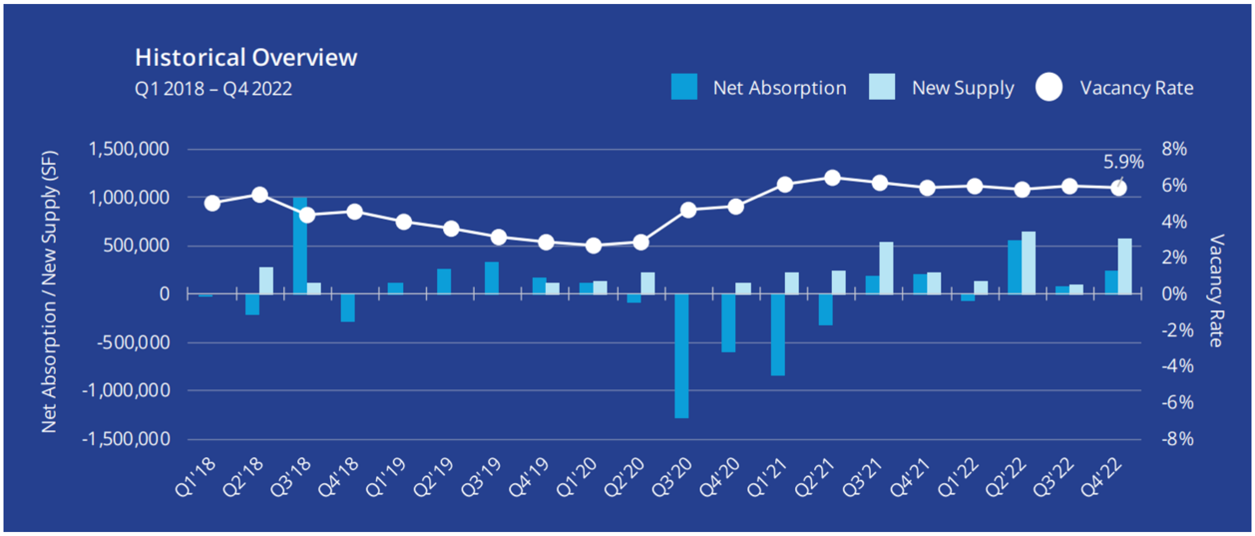
Geography	Class	# of Buildings	Space Sq Ft	Avg Building Size	Total # Building / Sq Ft
Vancouver	AAA	15	4,609,156	307,277	
	A	118	16,811,728	142,472	
	B	188	17,600,027	93,617	**468**
	C	147	7,220,909	49,122	**46,241,820**
Burnaby	AAA	0			
	A	57	7,385,118	129,563	
	B	53	3,524,313	66,496	**124**
	C	14	543,581	38,827	**11,453,012**
Tri-Cities	AAA	0			
	A	6	362,184	60,364	
	B	3	121,024	40,341	**13**
	C	4	196,861	49,215	**680,069**
Langley	AAA	-			
	A	19	1,204,632	63,402	
	B	16	712,565	44,535	**40**
	C	5	181,188	36,238	**2,098,385**
New West	AAA	0			
	A	9	954,408	106,045	
	B	13	795,659	61,205	**34**
	C	12	477,098	39,758	**2,227,165**
North Van	AAA	0			
	A	27	1,304,636	48,320	
	B	25	1,252,063	50,083	**60**
	C	8	212,857	26,607	**2,769,556**
Richmond	AAA	0			
	A	28	2,312,327	82,583	
	B	28	1,564,500	55,875	**65**
	C	9	444,451	49,383	**4,321,278**
Surrey	AAA	7	1,698,980	242,711	
	A	32	2,072,913	64,779	
	B	38	1,713,903	45,103	**99**
	C	22	1,057,549	48,070	**6,543,345**
Regional Total	**AAA**	**22**	**6,308,136**	**286,733**	**8.3%**
	A	**296**	**32,407,946**	**109,486**	**42.5%**
	B	**364**	**27,284,054**	**74,956**	**35.7%**
	C	**221**	**10,334,494**	**46,762**	**13.5%**
	Total	**903**	**76,334,630**	**84,534**	**100.0%**

Source: Colliers, Market Report Metro Vancouver, 2022 Q4.

Office vacancy rates in Metro Vancouver declined over the 2015 to 2019 period due to market demand growth and spurred new building supply, however vacancy rates increased starting in 2020 due in part to the pandemic, as seen in Chart 2.1. In 2020 and 2021 there was significant negative absorption levels.

As the downtown market vacancy rate continues to increase and more sub-lease space comes to market, rents are not expected to rise, and this provides additional choices for tenants who may want to move or expand in the downtown Vancouver core. Meanwhile, the vacancy rates in other sub-markets, which are much smaller, are declining, providing relatively few options for tenants seeking space in those locations.

Chart 2.1: Metro Vancouver Office Market Absorption and Vacancy Rates (2018 - 2022)



Source: Colliers, Market Report Metro Vancouver, 2022 Q4.

Prior to the COVID-19 pandemic, the healthy demand for office space throughout Metro Vancouver has highlighted shortfalls of new supply in multiple markets.[10] While the development pipeline in Metro Vancouver had typically maintained steady new supply, a gap in product delivery and availability formed in key markets such as downtown Vancouver, Burnaby, Richmond and, to a lesser extent, Surrey and Vancouver-Broadway.[11]

However, with the impacts of COVID-19, conditions have changed. More recently[12]:

> *"… the office sector in Metro Vancouver is facing significant headwinds due to a combination of pandemic-related remote work trends, coupled with deteriorating equity markets and expectations of an impending recession. Rising occupancy rates in office buildings, along with an increase in sublease space on the market, have created conditions not seen in many years."*

Despite the attention surrounding the tech sector, which has had a major influence on demand levels and vacancy rate, it is expected that the overall evolution of the Metro Vancouver market will continue to grow at a steady pace, although there are unknowns associated with the extent of remote work levels into the future.

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[10] Avison Young, Metro Vancouver Office Market Report, Mid-Year 2018.
[11] NAIOP Vancouver, Office Cost of Business Survey, 2018.
[12] NAIOP Vancouver, Office Cost of Business Survey, 2022.

3.0 SUB-REGIONAL PROFILES

Within the Metro Vancouver region, each of the office sub-markets have different characteristics.

3.1. Locational Distribution

Relatively few office tenants move between geographic markets or asset classes. Those that want to be in downtown Vancouver are already there and not likely to move, for example.

Most employee-focused businesses want to offer their workforce an office with good accessibility, close to amenities, and at a central location. Along with amenities on-site or in the immediate area, successful office nodes need to have good transit service, in the form of a SkyTrain according to most interviewees – ideally within the regional transit network, and not 'at the end of a line'. In terms of geographic location, that usually means downtown Vancouver, and also parts of Burnaby and Surrey City Centre.

For sub-markets, such as Coquitlam and Surrey, over time as the population and economy of these areas grow, local office businesses will also grow. This includes both local population-serving businesses (such as medical / dental offices), as well as some new branch offices.

Even pre-pandemic there were some trends towards sub-regional branch offices for firms like banking and financial services, namely to Surrey and Langley, serving those areas. Those tenants are tracking the business opportunities in those markets associated with a growing economy and workforce.

Although much discussed, many interviewees do not expect significant growth in the form of major sub-regional or distributed corporate offices. The view is that if people can effectively work from home, why go to a local office to work there, with extra rent costs, that executives / leadership are not likely to often visit. The supposed hub-and-spoke or satellite model may not be widespread. According to some observers, rather than sub-regional corporate offices, they are seeing ones expanding into regions outside of Metro Vancouver, like Kelowna, Nanaimo, and Victoria, where employees have moved to during the pandemic.

As the office inventory increases in an area / sub-region and the market is proven, market participants and municipal staff believe that developers will become more confident to build additional office space in these locations. As a start, mixed-use buildings allow for some office as well as retail and residential – the residential part makes the office part financially viable. This office space serves the local population in the form of small to medium size business tenants. Over time, development may shift from mixed-use buildings to standalone office buildings. Success may require a minimum amount of office space in order to eventually create a critical mass for a commercial centre. An adequately sized ecosystem of economic activity is important to business and talent attraction.

Some businesses may realize that not only is their workforce now 'elsewhere', but their customers are also no longer primarily in downtown. In those unique cases, to be closer to employees and clients, and to reduce rent costs, they may come to prefer a regionally accessible location like Burnaby. In other unique cases, some local businesses grow and stay within their original community, close to features such as major destinations (YVR airport), natural features (Arcteryx active lifestyle clothing), or cultural like Richmond.

In terms of business headquarters, of the relatively few major headquarters in the region, most are in downtown Vancouver. Virtually all tech companies are in the Vancouver core (including Mt. Pleasant), in order to attract and retain talented employees. As of late 2022, the downtown Vancouver market was experiencing a rising vacancy rate, up significantly from extreme lows immediately before the pandemic. This increase in vacancy rate reflects both new office building supply and some curtailing of demand by some sectors. The new supply and associated tenant moves may lead to greater vacancies in some older buildings.

Existing suburban business parks in some cases are doing relatively well during the pandemic. Some of these business tenants desire suburban office space, as it is convenient by car, especially while there were concerns about physical distancing and contracting COVID-19 on public transit. Suburban buildings can include office space with quasi-industrial attributes, needed by some operators. Notably, the tenant profile of the suburbs is different than the urban core.

3.2. Profile of Specific Sub-Regions / Urban Centres

This section provides commentary on the sub-markets and urban centres in the region.

Vancouver

- Vancouver has long been the region's major historic business hub. Vancouver, and specifically the Central Business District in downtown and the surrounding 'core' (including the CBD, Yaletown, Gastown, Mt. Pleasant, and the Broadway Corridor), is the business centre for the region and the province, with over half of the region's office inventory. The Metro Core has a much higher percentage of jobs in professional and commercial services, in comparison to the rest of the region. This distribution illustrates how very different the Metro Core is from the other sub-markets in the region.
- Most people generally want to be where the action is, which usually means 'downtown'. Particularly, the tech sector needs ready access to talent, most of whom work or want to work in or around downtown Vancouver. Thus, the bulk of new office space is being built in this part of the region.
- The Broadway corridor will also grow the area's office market, as a location where many businesses are or want to be, and close to workforce as well as amenities. The Vancouver Broadway Plan will have a significant amount of office space and employment associated with the extension of the SkyTrain line. Broadway ('Mid Town') is central and a major office draw, second only to Vancouver downtown / CBD. Some interviewees see Broadway as an alternative to downtown corporate towers, yet also different than Mt. Pleasant's light industrial character.

- In Mt. Pleasant some businesses want to expand in place but cannot find space in the area – instead, they open a second (possibly more of an industrial type function) facility in another location, and maintain a front facing space in Mt. Pleasant.
- Outside of downtown but still within the City of Vancouver, there is Broadway Tech to the east. The campus meets the needs of tenants that want to be accessible to downtown Vancouver and the region; it has both good rapid transit service and is accessible to Highway 1. Broadway Tech is also attractive to tenants that need larger floorplates.

Burnaby

- Burnaby is the next largest office market in the region, with a considerable amount of office space located in the Metrotown area, which includes a cluster of office towers around the Metrotown shopping centre. Metrotown is viewed as a good office location due to its centrality in the region and its high level of transit service.
- Brentwood is seen as a desirable area due to its good transit and road access, with many major developments, both residential and commercial.
- Burnaby also includes a significant amount of office park development located in various parts of the city outside of Burnaby's four Urban Centres (i.e. Metrotown, Brentwood, Lougheed, and Edmonds), such as Canada Way and Willingdon Avenue.
- More office park development located far from SkyTrain stations is not predicted in Burnaby, because office tenants want the amenities and transit service found in Urban Centre and at SkyTrain locations.
- Most demand is from existing expanding businesses. Metrotown and Brentwood are seen as being the major office nodes for Burnaby. More office is coming along in phased projects by SkyTrain stations (both mixed-use and multi-use buildings).
- Yet some interviewees believe that Burnaby does not have the mass or draw of Vancouver's CBD.

New Westminster

- New Westminster has a concentration of office space at the Sapperton SkyTrain station ('The Brewery District') and in the downtown (including the Anvil Centre Office Tower). Although New Westminster's downtown has historically been a centre for office uses, there is also a supply of office space in the 'Uptown' neighbourhood, which offers space for both local and some regional serving tenants.
- Generally, downtown New Westminster offers different types of office development potential (or upgrade of historic buildings) compared to other locations (i.e. Braid, Sapperton) which can offer large sites that can accommodate comprehensive development plans.

Surrey

- Surrey has a variety of office building types distributed throughout the city. The Surrey City Centre area contains an increasing number of modern office buildings, with the relocation of the City Hall and establishment of the Simon Fraser University Surrey Campus to this area spurring additional development interest. Surrey Centre is expected to strengthen as a good location for office in the future, however, it will take some time to fully develop and mature.

- Developers and brokers felt that the Surrey City Centre office market will grow over time. The City of Surrey has long-term strategies for the area to build it out over the coming decades, and sees Surrey City Centre is a step above other city centres in the region, such as Coquitlam, Metrotown, and Richmond, and is a 'game changer' in terms of long-term growth potential.
- The extension of SkyTrain from Surrey east to Langley improves the relative location of the Surrey City Centre, putting it closer to the centre rather than the end of the SkyTrain network.
- The current supply of available office space in the city is small, providing limited immediate options to interested tenants. Growth is expected to come from engineering, law, and accounting firms, and perhaps some government agencies. A positive feature for this market is that the City of Surrey is perceived as being proactive and supportive of the Surrey City Centre, with a lot of land available for development.
- There are expanding businesses in Surrey looking for office space, increasingly in the Surrey City Centre. The decline in office vacancy rates in Surrey over the past years reflects the business activity going there.
- 'If you built it they will come', has been true so far for much of the office space built in Surrey. The question is if it will be true for more and larger office buildings. There are some concerns that if too many new office buildings come to market at once, it could create more supply than can be readily absorbed.

Richmond

- Richmond has a large proportion of its office stock located outside of its downtown centre running along No 3 Road. This suburban office stock includes Crestwood office park and other areas to the east of the Richmond Centre. Many of these office parks were built in the 1990s, and in the past decade experienced high vacancy rates because of difficulties in attracting office tenants to areas with few amenities and limited transit.
- Richmond is considered a 'gateway to the region' by some participants, given its proximity to the YVR airport, and has some good tenants located in its office parks. However, for employees who live in the eastern parts of the region such as Coquitlam, Surrey and Langley, Richmond is difficult to conveniently access by both car and transit.
- Noted considerations to locating in downtown Richmond (namely the No 3 Road corridor) include few accommodation options for office tenants, although that will increase, and some office space coming in mixed-use projects, although some as strata tenure.
- There has not been much new office development for many years in Richmond. The past high vacancy was naturally absorbed leading up to the pandemic. Suburban complexes like Crestwood and Airport Executive Park now have much lower vacancy rates than in the past. Along No 3 Road in the City Centre, there is increased interest in office development.

North Shore

- The North Shore is a very small office market, with a fragmented supply located in many different buildings, some of which are smaller and older. It has few major office tenants other than some government agencies (such as ICBC, which has announced it is planning to relocate).
- There is limited demand for office space in the North Shore, as major office businesses tend to locate in other cities that are more accessible to the regional workforce. Highway traffic congestion to / from the North Shore from the rest of the region is a notable constraint to attracting employees to this sub-region.
- The City of North Vancouver, and especially Lonsdale Regional City Centre with its enhanced urban amenities, is located very close to Vancouver's CBD via the SeaBus, which improves its accessibility.

Coquitlam

- Even with the completion of the Evergreen Rapid Transit Line in 2016, some market participants view Coquitlam as being located on the edge of the region. It is expected that it will take time before significant standalone office developments occur, which will be supported by the ongoing growth in population and employment in the area.
- Coquitlam is a relatively young city centre, only 30-40 years old. It was originally built as a shopping mall, and then added apartment residential. The limited office that exists is predominantly local serving. As the community grows and matures, the city hopes to attract more business activities and office tenants.
- The Coquitlam Centre has strong transportation / transit combination – SkyTrain, bus exchange, West Coast Express, along with micro mobility and park amenities.
- As the population of the sub-region increases, business and employment space opportunities will also increase. The City has policies requiring office component on some of the city centre lands, but no policies preventing strata office tenure.

Rest of the Region

- Other areas, such as Port Moody, Langley, Delta, Maple Ridge, and Pitt Meadows, have very small office markets with few major office buildings.
- The Langley market, while still small, is experiencing strong demand. Businesses there looking for space have very few options. Supply may increase over time, particularly for Langley with the extension of the SkyTrain line to be completed by 2028.
- Most of the office tenants serve the local population, which will grow as the area population and economy grows. Other opportunities may entail attracting some government and institutional offices.

3.3. Additional Considerations

In the secondary markets, the possibility to attract a government agency as a major new tenant with many employees is seen as a possible catalyst for greater activity. Institutional / public sector tenants, like hospitals and universities, are major drivers for associated private sector office demand and investment. The directing of these types of investments to Urban Centres is supportive of policies in the regional growth strategy.

Pre-leasing is difficult in suburban markets. Prospective tenants want to see the building completed (or at least construction started) before making a lease commitment decision. Yet many of these suburban locations have very limited office supply. Demand is now spurring some development. But the ‘chicken and egg’ conundrum has been often noted, of there not being adequate (proven) demand to build new space, yet not enough new space to satisfy (current) demand.

Some cities require developers to build office space within a mixed-use complex, even if the office market demand is not yet there. If this is a small amounts of office, it can be reasonably absorbed by the local market; but larger blocks of space are much more difficult, and represent an increased development risk. Furthermore, excessive new office space may saturate a small market, depressing rental prices, making it difficult for other market office space to compete.

For some projects, the office space in mixed-use buildings can be poorly designed, with too many columns, inefficient floorplans, awkward access, etc., which does not allow for functional design including open areas and collaboration space.

Shuttle bus service is a benefit for existing suburban business parks that are beyond walking distance from a SkyTrain station. However, it was noted that with more flexibility for working times, it also means people coming into the office at different hours, which may favour car instead of transit commute and thus needed parking.

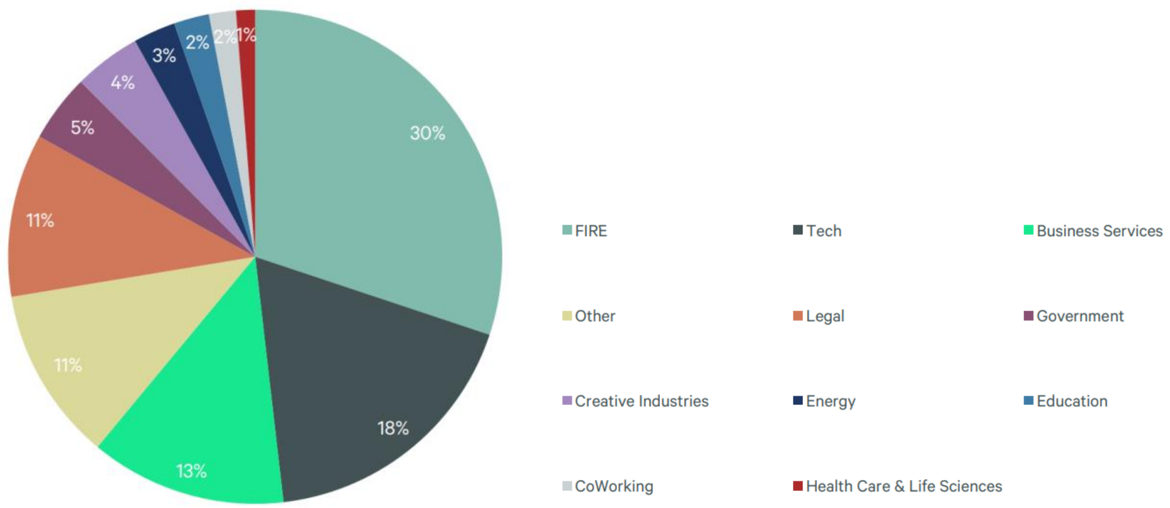
4.0 OFFICE TENANT TYPES

The type of tenants requiring accommodations influences the demand for office space.

4.1. Tenant Profile

Chart 4.1 illustrates the distribution of office tenant composition in downtown Vancouver as of late 2022. This shows that 30% was FIRE (Finance, Insurance, Real Estate) sector, 18% Tech, and 13% Business Services, followed by other smaller groups.[13] This changes over time and would be different in other sub-areas given the varied economic profiles of different parts of the region.

Chart 4.1: Vancouver Downtown Tenant Make Up



Source: CBRE Research, 2022.

This ratio of tenant types is notably different than it was four years prior. In Q2 2018, technology tenants accounted for 33.5% of office space demand, followed by Education at 12.7%, and Professional Services at 8.9%.[14]

Tech Business Sectors

In the past, building landlords often did not prefer tech tenants, as they were prone to quickly grow or fail, either way likely vacating the space – not ideal stable, long-term occupants. Now, many tech tenants are large, growing, and mature, and thus attractive for landlords.

The 'tech centre' of Vancouver has shifted from Yaletown to Gastown to Mt. Pleasant, and now the Broadway Corridor with the extension of SkyTrain rapid transit line. Notably, the boundaries of 'downtown Vancouver' have expanded from the historic core (CBD), to include these areas and the POST complex on the eastern edge of the core. Additionally, growth of bio-tech / life sciences / medical facilities close to the new St Paul Hospital campus and Great Northern Way will include significant new office / lab space and education facilities. The Mt.

[13] CBRE Office Market Overview extraction Oct 2022 for Metro Vancouver.
[14] Colliers, Metro Vancouver Office Market Report, Q2 2018.

Pleasant area is very popular with notable newer buildings containing light industrial, technology, labs, and innovative spaces.

Tech tenants often pay a premium for prime office space, which is a key component to attracting workers, and noting that office accommodations are a relatively small percentage of total business costs.

The tech sector slowed in 2022, led by stock market declines, with a lag to business operations thereafter, causing more caution and defense about business and employment decisions. Some tech businesses are now looking at employee layoffs and space savings efforts to reduce costs. This may mean putting office space on the sub-lease market and consolidating operations for efficiencies. In cases of office moves, even if the rent per sq ft is higher in the new space, less space may be required as it can be used more efficiently, thus the total accommodation costs may be lower.

The longer-term outlook for tech sector businesses and tenants is seen as positive, despite cyclical dips in hiring. Amazon and Microsoft are very large corporations and with major operations in Vancouver. They provide stability to the city and regional economy, whereas some smaller start-up businesses that are dependent on venture capital funding may be less stable or durable.

These tenant trends are reiterated through the results of the interviews:

- The large tech tenants that have entered the market in the past few years represent a significant shift in the dynamics of the downtown Vancouver office market. While Vancouver has relatively few major corporate headquarters, these new tech companies have been taking up large blocks of space, often preferring large floorplates for efficiencies and a new building for modern features, and need a central Vancouver location to attract and retain young urban talent.
- Large corporate and global professional services firms often want to be located in trophy buildings, however this is less a factor for tech tenants, who may prefer the feel of Mt. Pleasant.
- At the same time, but not receiving the same amount of profile, are the many small office tenants in the market, taking up 3,000-8,000 sq ft of space each.
- Large tech companies are increasingly comfortable with locating in Vancouver, given that it is a known location, an international city, west coast time zone, has many amenities, and access to an international workforce. The presence of large tech companies (such as Amazon) are attracting more tech companies, both big and small. Talented workforce wants to live in the region, and although housing prices are high, some workers are satisfied with renting as they may not have expectations about home ownership or intent to live in the region permanently.

Average Office Tenant Size

Compared to other major North American markets, Metro Vancouver has relatively few large corporate head offices and is composed of many small and mid-size tenants. Specifically, for downtown Vancouver, which contains much of the office businesses in the region (although the mix is different from the rest of the region), the average office tenant size was 7,750 sq ft in 2022, based on tenancy occupancies of approximately 21.3 million sq ft and 2,750 units.[15] This is up slightly from past years recorded as 7,200 sq ft in 2014 and 7,400 sq ft in 2012.

Of this inventory in late 2022, 59% of the office space was occupied by tenants under 20,000 sq ft in size (2,582 units), comprising 94% of all units. At the other end of the spectrum, tenants over 75,000 sq ft in size comprise only 1% of all units (25 units), yet represent 15% of the total office space. This documents the wide range of unit / tenant sizes, with a significant cluster of them being smaller, and a limited number of much larger outliners. This distribution is shown in Table 4.1.

Table 4.1: Distribution of Office Tenant Sizes in Downtown Vancouver (2022)

Unit Size Range	Total Sq Ft	# of Units	Avg Unit Size	% of Total Sq Ft	% of Total Units
0 - 1,999	956,799	719	1,331	4.5%	26.1%
2,000 - 4,999	3,249,963	1,011	3,215	15.2%	36.8%
5,000 - 9,999	3,298,151	477	6,914	15.5%	17.3%
10,000 - 19,999	5,070,538	375	13,521	23.8%	13.6%
20,000 - 29,999	1,408,617	59	23,875	6.6%	2.1%
30,000 - 49,999	1,872,274	50	37,445	8.8%	1.8%
50,000 - 74,999	2,208,677	35	63,105	10.4%	1.3%
75,000 - 99,999	580,072	7	82,867	2.7%	0.3%
100,000 - 199,999	1,924,210	15	128,281	9.0%	0.5%
200,000 +	743,125	3	247,708	3.5%	0.1%
Total	**21,312,426**	**2,751**	**7,747**	**100%**	**100%**

Source: CBRE Research, 2022.

Other Tenant Sectors

Although the tech sector may be slowing, other sectors such as professional services are still growing. During the pandemic, some businesses grew and increased their workforce while others have stayed constant and retracted, thus space needs vary for those reasons as well.

In some of those sectors, companies are leasing more space, especially the larger, confident, well-financed ones. By sector, lawyers and bankers have higher rates of return to office occupancy as compared to tech companies. For such sectors, despite or because of COVID-19, business is still good, and accommodation decisions are not driven by cost constraints.

With a possible slowdown in the economy and an increase in unemployment rates, more employees may want to work at the office to maintain and advance their careers. As noted by some employers, the past war for talent where employers had to offer many benefits to attract employees is now over. For some businesses, this may be associated with a corporate 'culture reset', where the new policy may spur some employees to leave, and the ones that remain will be supportive of increasing in-office requirements.

[15] Source: CBRE Research, 2022. Note that some businesses may occupy multiple office spaces in multiple buildings; for this analysis each space / unit is treated separately. Furthermore, this analysis does not include vacant space.)

4.2. Co-Working Space

The growth of co-working office space in the Metro Vancouver market was significant prior to the COVID-19 pandemic. This was particularly reflected in the rapid rise of WeWork, and the more established Regus with its multiple brands including 'Spaces'. Co-working firms rapidly become some of the largest tenant types in the Vancouver core. These companies were responsible for an inordinate amount of leasing activity between 2017 and 2019 and in part accelerated the demand for additional office development.[16]

Co-working is accommodating the evolving nature of work, and makes a very illiquid asset (real estate) liquid and flexible. Co-working operators offer a flexible space and service to a range of tenant types, including: i) small businesses that want a professional location and services and socialization offered in a workplace environment, and ii) much larger businesses that take up multiple floors at a time and may require the space for short-term needs, such as a swing site or a specific project.

Co-working offers tenants, or ‘members’, ready-to-go full-service office accommodations, taking care of all details such as furniture, wi-fi, space planning, support services, reception, etc., that would otherwise have to be organized and managed by the business. The co-working space eliminates the need for companies to invest in real estate, as professional space providers are quicker and nimbler than businesses that are not real estate experts. The tenant pays a premium for these services but with no required long-term commitment, the tenant also has the flexibility to grow, contract, or move as their business evolves.

4.3. Strata Office Tenure

In 2017 and 2018 there were a number of notable strata office projects, partly in response to the low vacancy and strong demand, as well as low interest rates. Purchasing office space can be an investment opportunity for owner-occupiers who are struggling to find and control space in a tight leasing market. The option to own rather than rent is particularly attractive for companies whose space requirements will remain stable for the foreseeable future.[17]

In terms of pricing and demand, one broker states that developers of future downtown Vancouver office strata buildings should not expect to capture the same prices as the high-profile Bosa Waterfront Centre project did in 2017; the unique project achieved high prices because everything lined up, in terms of the site, the project, and the demand.[18]

There are differing views about the implication and extent of strata office:

- Strata office space has not yet had a significant impact on the downtown Vancouver office market as almost all new construction continuing to target lease tenants, despite the early successes of the Bosa Waterfront Centre and Burrard Place.[19]

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[16] Avison Young, Metro Vancouver Office Market Report, Mid-Year 2018.
[17] Colliers, Metro Vancouver Office Market Report, Q3 2018.
[18] Vancouver Sun - Evan Duggan, Waterfront Centre’s strata units represent price pinnacle: analysts, December 12 2018.
[19] Avison Young, Metro Vancouver Office Market Report, Mid-Year 2018.

- This is a clear sign that the definition of an office investor in Metro Vancouver has shifted.[20]
- Most of the strata office that is being built and sold downtown would likely end up on the leasing market anyway.[21]

Most office space in the region continues to be lease tenure. For development projects, if no rezoning is required as part of the approvals, the city has no interest in the tenure of the space. However, in the case of the City of Vancouver if the project involves a rezoning, the Community Amenity Contribution may be higher if it is strata rather than lease tenure. This reflects the fact that strata values can be higher per sq ft than rental.

In the City of Richmond, there are concerns about strata tenure units built for investors rather than occupants, being underutilized or poorly managed. Furthermore, subdivision of space into small units makes it very difficult for a large tenant to ever occupy it. Richmond has a policy that strata units cannot be smaller than a building floor plate.

In terms of market forces, strata tenure may work in some limited places or in small markets where investors are active, or businesses want to own their accommodations. In some suburban markets (often as part of mixed-use buildings) there may be proportionally more strata office sales than the Vancouver core.

The stratification of commercial space, including office, retail, and industrial, is a relatively new phenomenon in the Metro Vancouver market. Some of the drivers for this trend include a desire for users to be able to own and control their space, which is also an interest of investors. However, there was a question by some interviewees about the depth of demand for this market. With the increase in interest and mortgage rates, it is expected that strata development and sales will diminish.

From a development perspective, high strata values can drive up residual land values to the point where non-strata (lease) development is no longer financially viable. Some critics note that the flexibility to change unit sizes as businesses expand and contract is greatly diminished by stratification as compared to lease tenure of the premise. Strata projects can be dominated by investors who may be less concerned about the management of the property. Furthermore, many businesses do not want to own their space due to the long-term commitment of capital, liability, building maintenance, and other issues.

[20] BOMA BC Leasing Guide: Commercial Real Estate Office Space - Frank O'Brien, Shape-Shifting Office Sector Defines Intelligent Design, 2018.
[21] Vancouver Sun - Evan Duggan, Waterfront Centre's strata units represent price pinnacle: analysts, December 12 2018.

5.0 OFFICE BUILDING INVENTORY

Metro Vancouver first compiled an office building inventory database for the region in 2012, which has been updated in 2015, 2018, and 2022, based on multiple sources, including proprietary databases from brokerage firms, BC Assessment Authority, and member municipalities. Records were consolidated as best as possible given the multiple data sources to provide a comprehensive inventory of the office buildings, although some data gaps, inconsistencies, and limitations may exist. In late 2022, the database was further updated and enhanced[22]. Note that this report and associated inventory statistics should replace previous reports, as the inventory has been further refined with every subsequent edition.

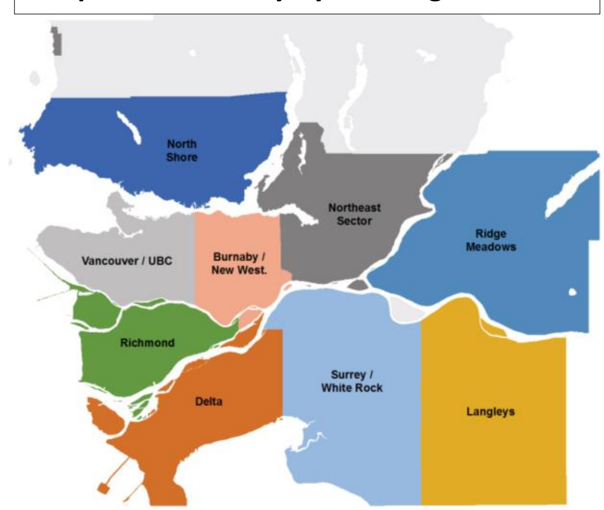
5.1. Background on the 2022 Office Inventory

The database includes all buildings in the Metro Vancouver region with at least 10,000 sq ft of office space. This includes some mixed-use buildings with office components over this size threshold. In total, the inventory is larger than the published brokerage firm reports because it includes some smaller buildings that are not included in market summaries, and also buildings from other sources that are not typically considered 'market' office (such as owner-occupied, government, and institutional buildings).

For analysis purposes, Urban Centre locations are those identified in the regional growth strategy; their boundaries are defined by the respective member municipalities. To provide for consistency, all numbers in this report have been generated using the most recent Urban Centre boundaries.

The Frequent Transit Network (FTN), maintained by TransLink, was used for establishing transit service levels as of late 2022. The FTN comprises bus and rapid transit corridors that provide reliable service at least every 15 minutes throughout the day and over the entire week. The FTN provides a network of transit routes around which municipalities can focus population and job growth. Transit service can be in the form of FTN bus or rapid transit stations (SkyTrain). The defined distance (straight line) for access to FTN is 800 metres (a 10-minute walk) for rapid transit and 400 metres (a 5-minute walk) for bus, which are considered acceptable walking distances / times to access these forms of transit.

Map 5.1: Inventory by Sub-Region



The FTN service changes over time; the earlier office building inventories analyzed transit service based on previous versions of the FTN. Thus, in some cases the changes in tabulated office space that is near FTN bus service may be

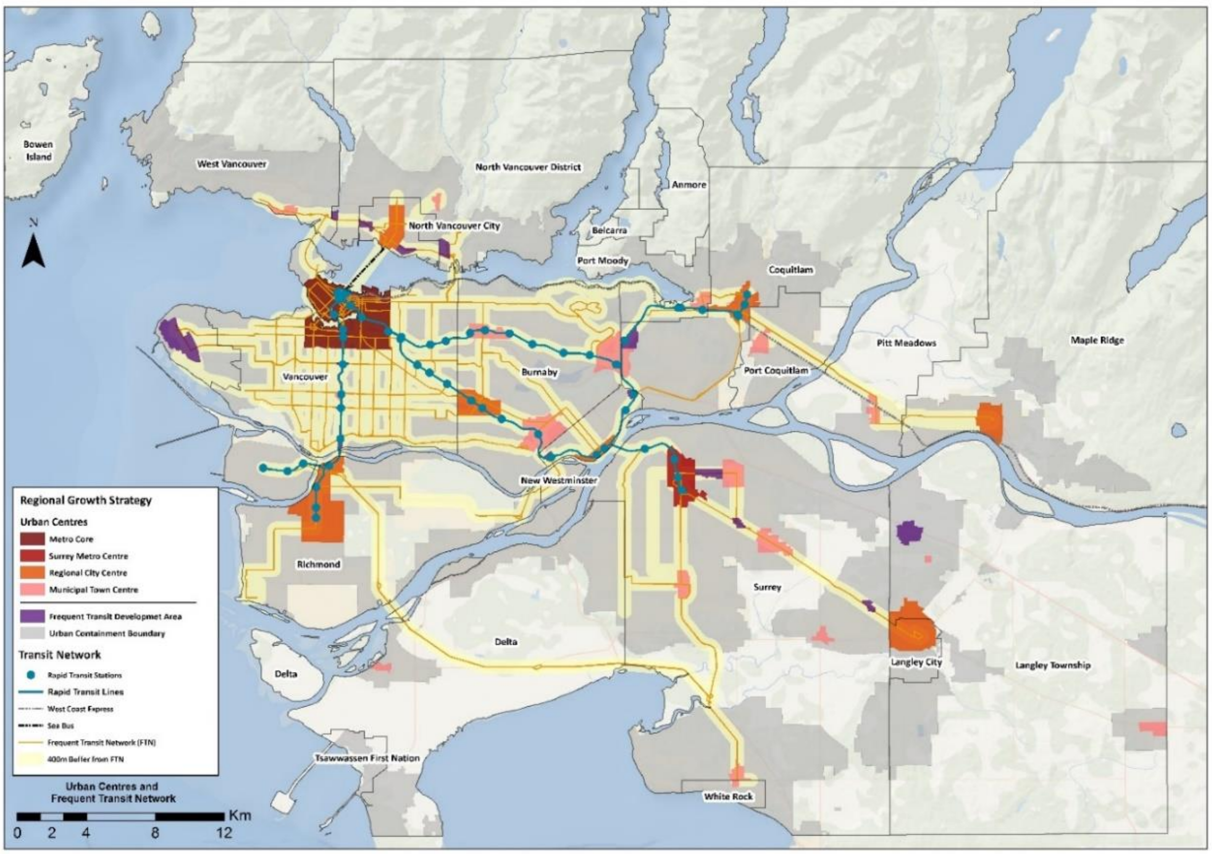
[22] Metro Vancouver would like to thank the following brokerage firms which contributed to the office building inventory update: Colliers International, CBRE, Cushman & Wakefield.

due to changes in transit service after the buildings were constructed. The amount of office space located near West Coast Express Stations, but not by rapid transit stations or within Urban Centres, was negligible and not analyzed for this report.

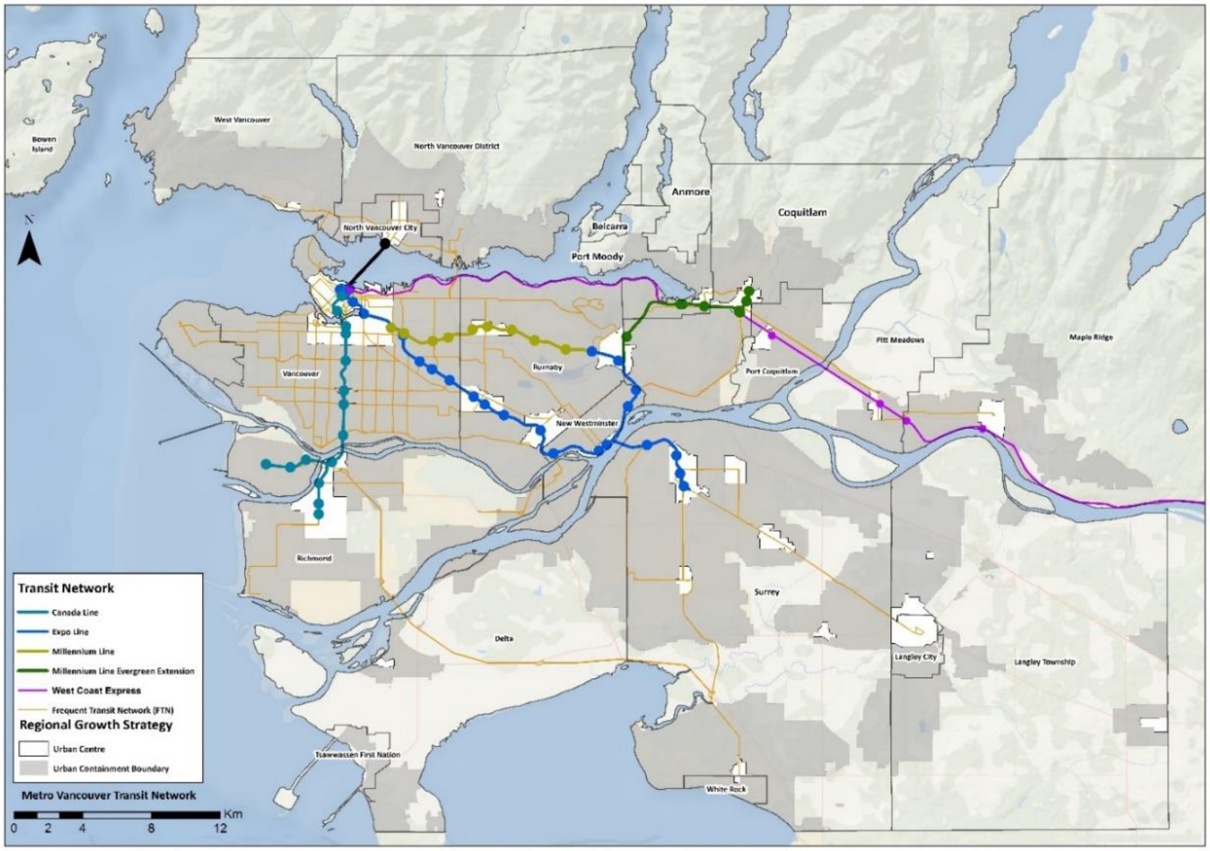
Based on the comprehensive inventory prepared by Metro Vancouver, at the end of 2022 there was approximately 78 million sq ft of office space in the region located within 1,338 buildings. The numbers in the report have been rounded for reporting purposes. (See Appendix F for supplemental tables.)

Map 5.1 shows the sub-regions, Map 5.2 shows the Urban Centres in the Metro Vancouver by type, and Map 5.3 shows the rapid transit (SkyTrain) network.

Map 5.2: Metro Vancouver Urban Centres and Frequent Transit Network

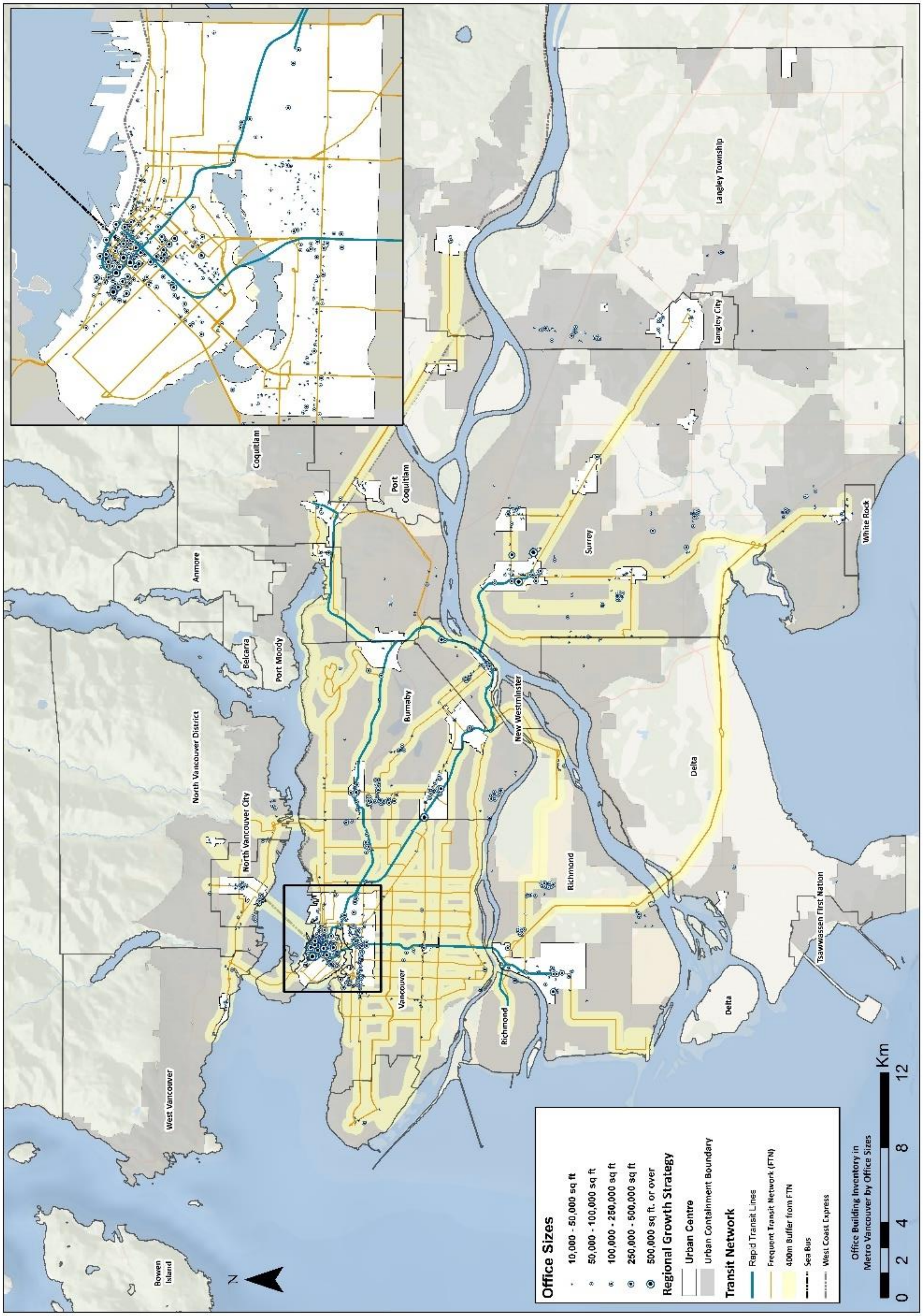


Map 5.3: Metro Vancouver Rapid Transit Network



Map 5.4 shows the distribution of office buildings throughout the Metro Vancouver region. The larger the symbol and the greater the number of symbols indicate large office building clusters. Larger buildings are concentrated in downtown Vancouver.

Map 5.4: Office Building Inventory in Metro Vancouver



5.2. Office Inventory by Sub-Region and Regional Land Use Designation

Table 5.1 shows the number of buildings and amount of office space within each sub-region, as well as the distribution within the region as of the end of 2022. Approximately half (47% of buildings and 55% of floor space) of the office inventory was located in Vancouver/UBC, with other notable sub-regions being Burnaby/New Westminster (at 16% and 17% respectively), Surrey/White Rock (14% and 12%), and Richmond (7% and 6%).

Table 5.1: Office Distribution by Sub-Region

Geography	Number of Buildings	*Distribution*		Floor Space Sq Ft	*Distribution*	Avg Building Size Sq Ft
Vancouver/UBC	624	*47%*		43,000,000	*55%*	68,900
Burnaby/New West	214	*16%*		13,500,000	*17%*	63,100
Surrey/White Rock	183	*14%*		9,200,000	*12%*	50,300
Richmond	96	*7%*		4,800,000	*6%*	50,000
North Shore	96	*7%*		3,300,000	*4%*	34,400
Langleys	66	*5%*		2,400,000	*3%*	36,400
Northeast Sector	42	*3%*		1,300,000	*2%*	31,000
Ridge/Meadows	7	*1%*		300,000	*0%*	42,900
Delta	10	*1%*		200,000	*0%*	20,000
Total	**1338**	***100%***		**78,000,000**	***100%***	**58,300**

The regional growth strategy establishes regional land use designations, including 'General Urban', 'Mixed Employment', and 'Industrial'. As shown in Table 5.2, slightly over three-quarters (77%) of the office space inventory was located on lands regionally designated 'General Urban', which are intended to accommodate a wide variety of land uses. Of the balance, 20% was located on 'Mixed Employment' lands which can accommodate various commercial uses. A relatively small amount (3%) of the office inventory was located on 'Industrial' lands, which are intended primarily for industrial related activities.

Table 5.2: Office Distribution by Regional Land Use Designation

Designation	Office Sq Ft	# Buildings
General Urban	59,830,000	994
Mixed Employment	15,500,000	252
Industrial	2,690,000	92
Total	**78,020,000**	**1,338**

5.3. Office Building Size

Table 5.3 show the distribution of buildings by office size. As can be seen, most office buildings (86%) are under 100,000 sq ft in size, and 11% in the 100,000 to 250,000 sq ft range. There are very few buildings (43 of 1,338) over 250,000 sq ft; 3% of buildings, representing 21% of the total floor space. Of the entire inventory, the average size is 58,000 sq ft and the median size is 31,000 sq ft.

Table 5.3: Distribution of Office Buildings by Size - Entire Inventory

Building Size	Count	%		Sq Ft	%	Avg Size
500,000+	7	1%		4,300,000	6%	615,000
250,000-499,999	36	3%		12,100,000	15%	337,000
100,000-249,999	146	11%		22,300,000	29%	152,000
50,000-99,999	258	19%		18,000,000	23%	70,000
10,000-49,999	891	67%		21,400,000	27%	24,000
Total	**1338**	**100%**		**78,100,000**	**100%**	**58,000**

Specifically over the more recent period of 2000-2022, 364 office buildings were completed with 26.5 million sq ft of office floor space as shown in Table 5.4. Approximately half (54%) of these buildings were under 50,000 sq ft, and another quarter (27%) were between 50,000 sq ft and 100,000 sq ft. However, smaller buildings under 50,000 sq ft represented only 20% of the total new office space. The 18 buildings over 250,000 sq ft are fewer (5% of the total) but are much larger, and thus comprise 26% of the total new office space for the 2000-2022 period. Of this inventory, the average size is 73,000 sq ft and the median size is 45,000 sq ft, both of which are higher than the older stock.

Table 5.4: Distribution of Office Buildings by Size - Built 2000-2022

Building Size	Count	%		Sq Ft	%	Avg Size
500,000+	4	1%		2,500,000	9%	624,000
250,000-499,999	14	4%		4,400,000	17%	315,000
100,000-249,999	54	15%		7,900,000	30%	147,000
50,000-99,999	97	27%		6,500,000	25%	67,000
10,000-49,999	195	54%		5,200,000	20%	27,000
Total	**364**	**100%**		**26,500,000**	**100%**	**73,000**

As can be seen in Chart 5.1, in terms of distribution since 1950, there was a pattern of larger buildings (over 250,000 sq ft) completed during the 1970s and 1980s, and then resuming again after 2010.

Chart 5.1: Building Year Built by Office Size (1950-2022)

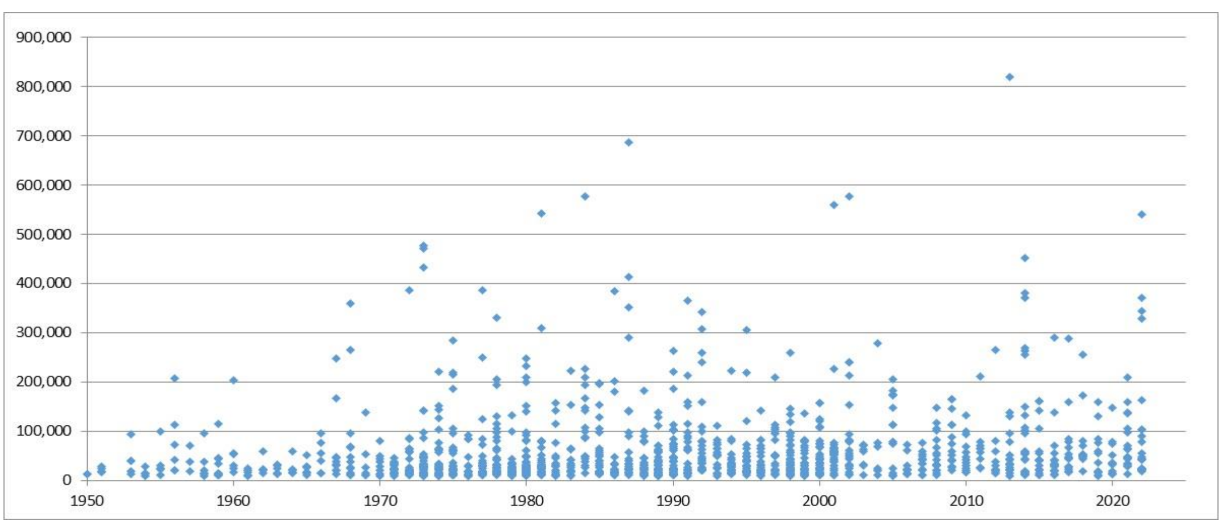
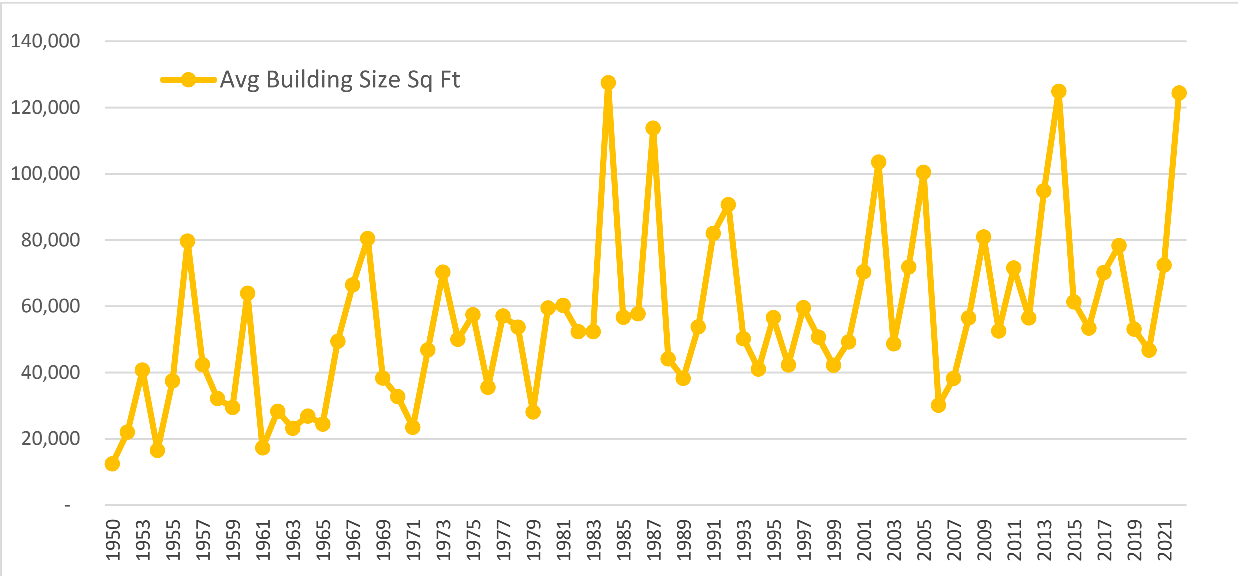


Chart 5.2 shows the average size of office buildings completed between 1950 and 2022. As can be seen, there is a gradual upward trend in the size of office buildings over recent decades, with some years being skewed by a few very large building completions.

Chart 5.2: Average Size of Office Building by Year Completed (1950-2022)



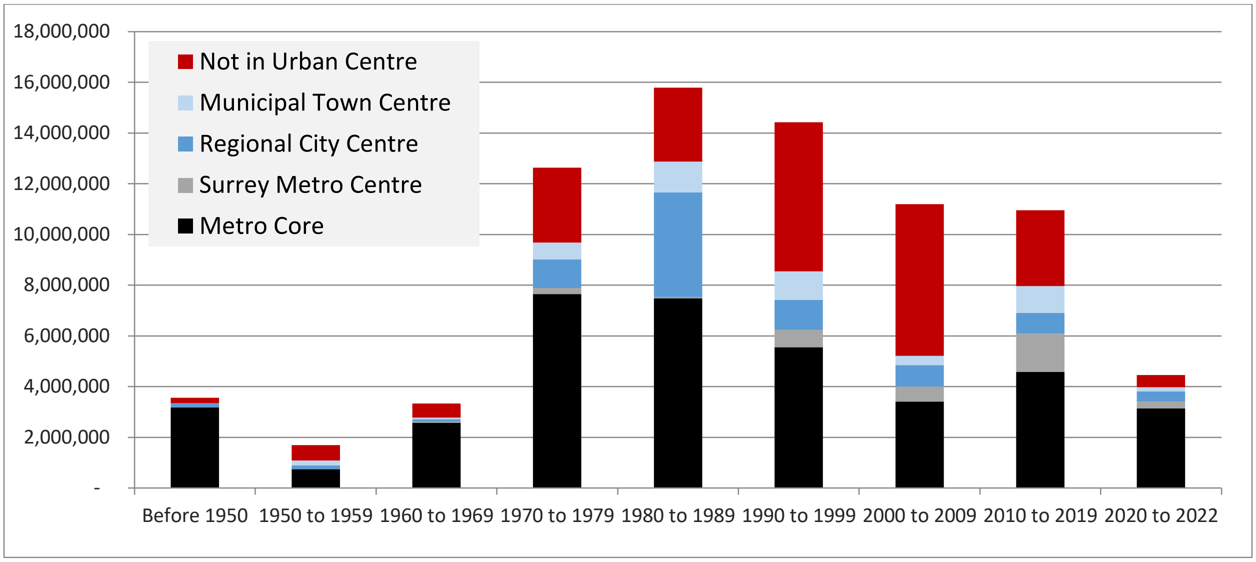
Generally, newer office buildings are becoming larger. Based on the entire inventory, for the buildings over 500,000 sq ft the average completion year was 1998, while for buildings under 50,000 sq ft the average completion year was 1981.

5.4. Office Building Inventory Year Built

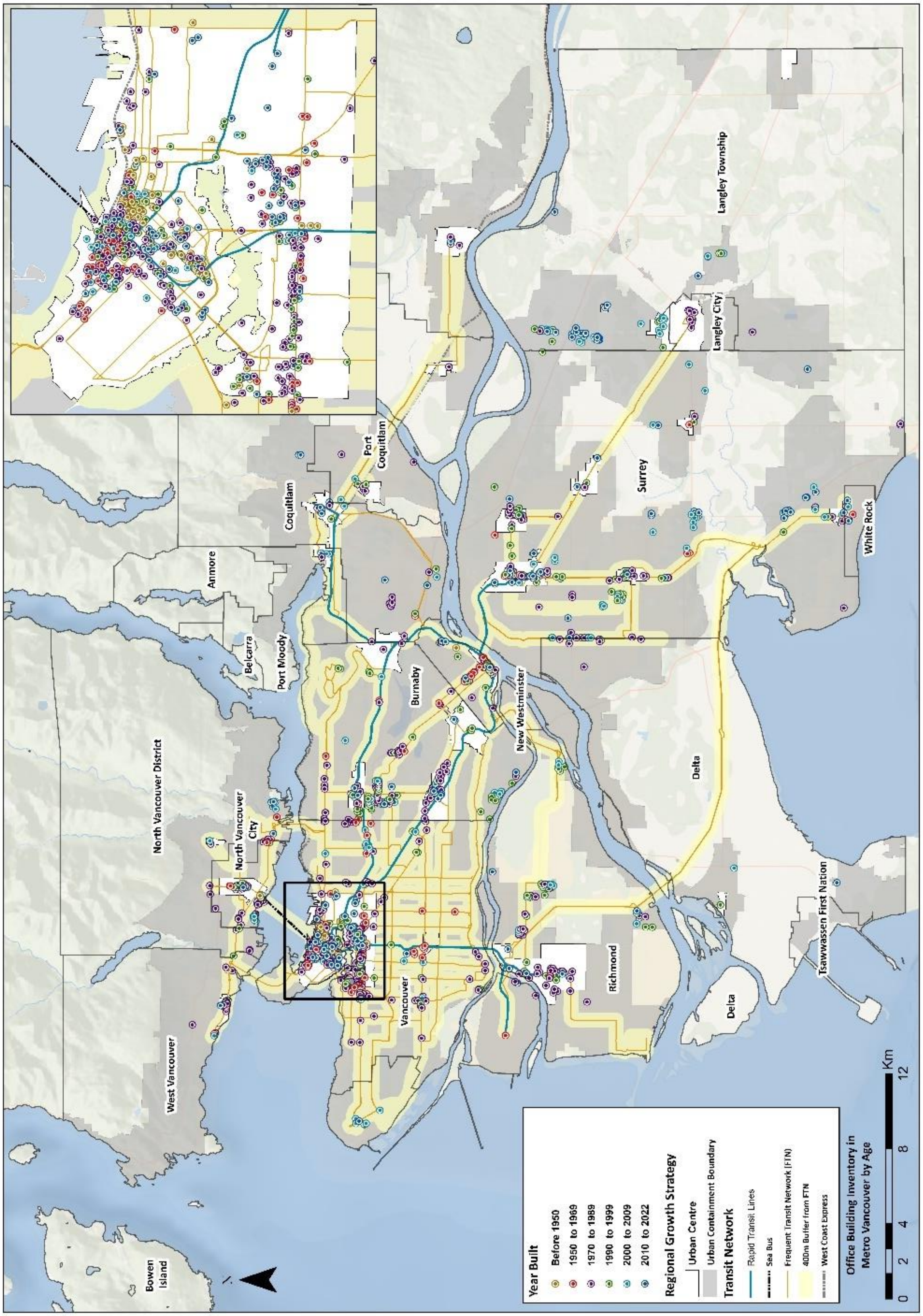
Based on the available records, the building year built (in the form of completions) was compiled. Note that in some cases older buildings have been substantially renovated; where building data is available for substantial renovations, the year renovated has replaced the initial year built. The completion of individual large projects can have a significant impact on the results during periods of relatively lower activity and in small markets. Map 5.5 shows the building inventory by year built.

As seen in Chart 5.3, a substantial portion of the current stock of office space was built in the decades between 1970 and 2019. Particularly, during the 1990 to 2009 period a large proportion of completed buildings were located outside of Urban Centres, whereas that ratio is much lower more recently.

Chart 5.3: Inventory by Period Built by Urban Centre Type



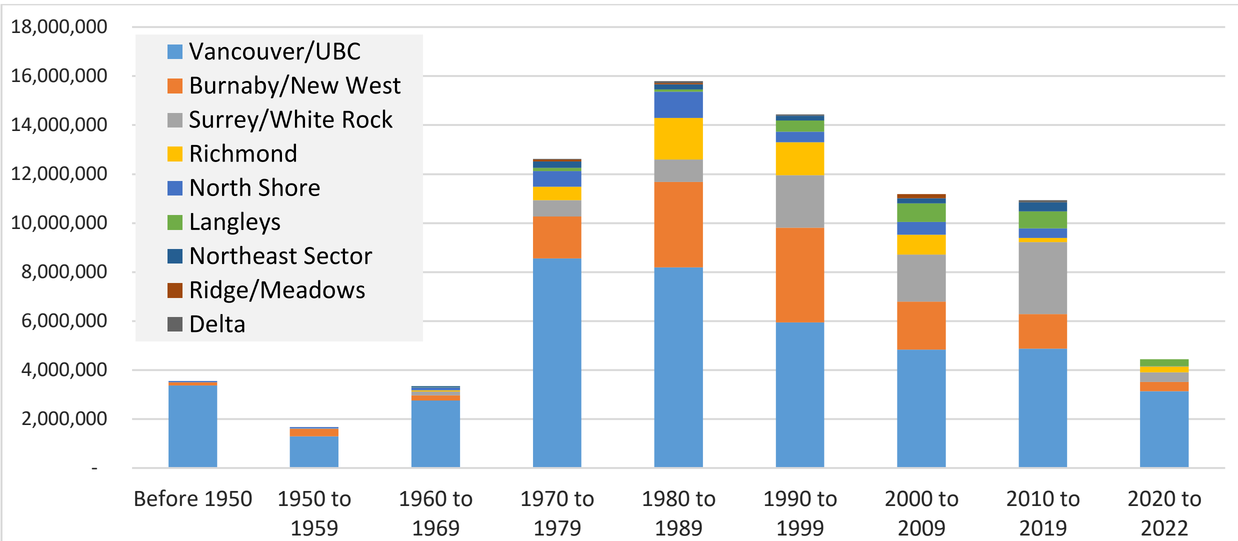
Map 5.5: Inventory by Building Year Built



5.5. Office Building Inventory Year Built by Location

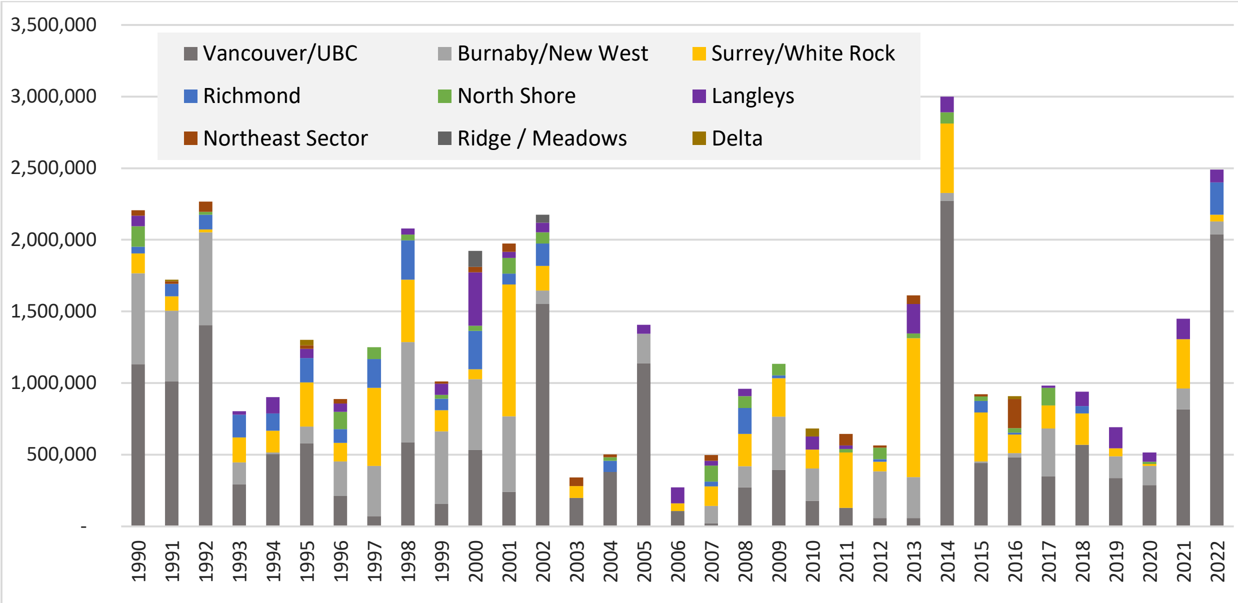
Chart 5.4 show the distribution of office space growth by sub-region and by period built. Much of the development was within the City of Vancouver, and to a lesser extent Burnaby / New Westminster during the 1980 to 2009 period. More recently, between 2010 and 2019 a greater proportion of development was in Surrey. There was a total of 41 million sq ft of office space developed during the 1990-2022 period, which provides for an average of approximately 1.7 million sq ft per year.

Chart 5.4: New Inventory by Sub-Region by Period Built



Completion rates vary considerably from year to year. Chart 5.5 shows the building year built distribution, with significant office development from 1990 to 2002, while during the 2003-2012 period, the completions were considerably lower. In years with higher levels of completion, a large proportion of that occurred in the City of Vancouver, mostly in the form of large new buildings in the downtown core.

Chart 5.5: New Inventory by Sub-Region (1990-2022)



5.6. Office Inventory Relative to Urban Centres and Transit Service

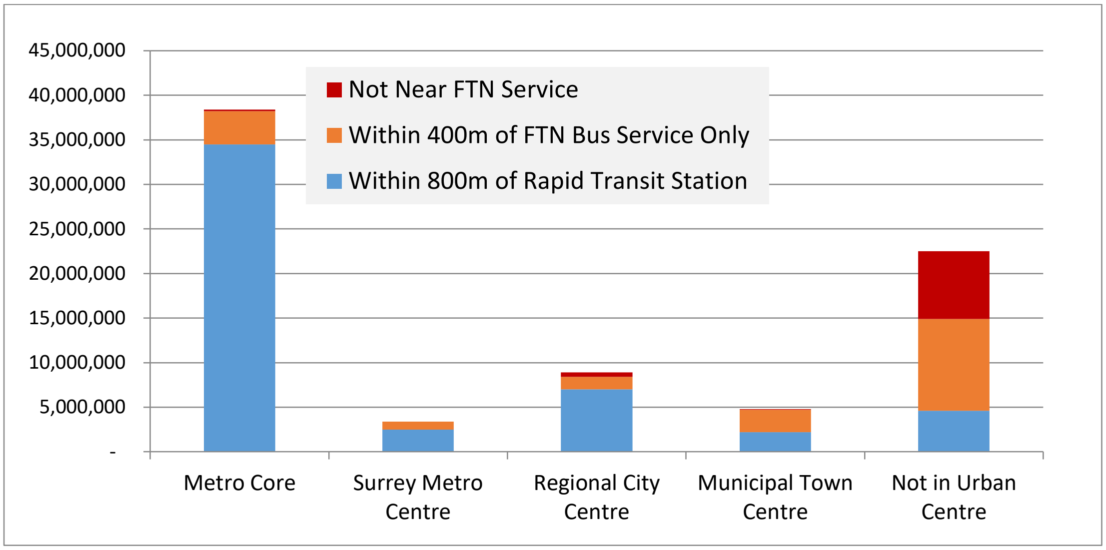
Table 5.5 shows the distribution of the office space relative to both Urban Centres and the FTN. Most office space is located within either an Urban Centre (71%) or within 400 metres of FTN bus / 800 metres of rapid transit service (88%), or within at least one of these geographies (90%). Most of the inventory in the Metro Core and the Regional City Centres (90% and 79%, respectively) is within 800 metres of rapid transit stations (SkyTrain), whereas 46% of the office space in Municipal Town Centres is near rapid transit.

Table 5.5: Inventory by Urban Centres and Transit Service

Centre Type / Transit Level	800m of Rapid Transit Station	400m of FTN Bus Service Only	Not Near FTN Service	Total Sq Ft	*% of Total*
Metro Core	34,473,000	3,693,000	160,000	**38,326,000**	*49%*
Surrey Metro Centre	2,515,000	877,000	-	**3,392,000**	*4%*
Regional City Centre	6,985,000	1,397,000	505,000	**8,887,000**	*11%*
Municipal Town	2,201,000	2,496,000	137,000	**4,834,000**	*6%*
Not in Urban Centre	4,630,000	10,340,000	7,613,000	**22,583,000**	*29%*
Total Sq Ft	**50,804,000**	**18,803,000**	**8,415,000**	**78,022,000**	*100%*
% of Total	*65%*	*24%*	*11%*	*100%*	

Chart 5.6 shows the inventory cross referenced by Urban Centre type and transit service level. Of the inventory not within Urban Centres (22.6 million sq ft), 20% was within 800 metres of rapid transit service and 46% was within 400 metres of FTN bus only. Approximately 7.6 million sq ft (10%) of the total 78 million sq ft inventory was neither in an Urban Centre nor near FTN transit (either bus or SkyTrain).

Chart 5.6: Inventory by Urban Centres and Transit Service

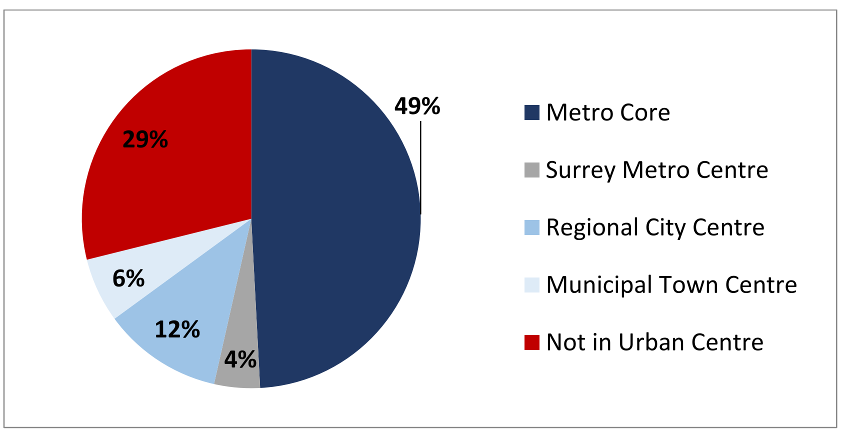


5.7. Office Inventory Relative to Urban Centres

Chart 5.7 shows the distribution of office space by sub-region relative to Urban Centre types. Of the total inventory in the region (78 million sq ft), 71% or 55 million sq ft was located within Urban Centres. The balance, 22.6 million sq ft, was not located in Urban Centres.

Specifically, of just the amount of office space within Urban Centres, 69% was located in the Metro Core (downtown Vancouver and the Broadway Corridor), 16% in Regional City Centres, 9% in Municipal Town Centres, and 6% in the Surrey Metro Centre.

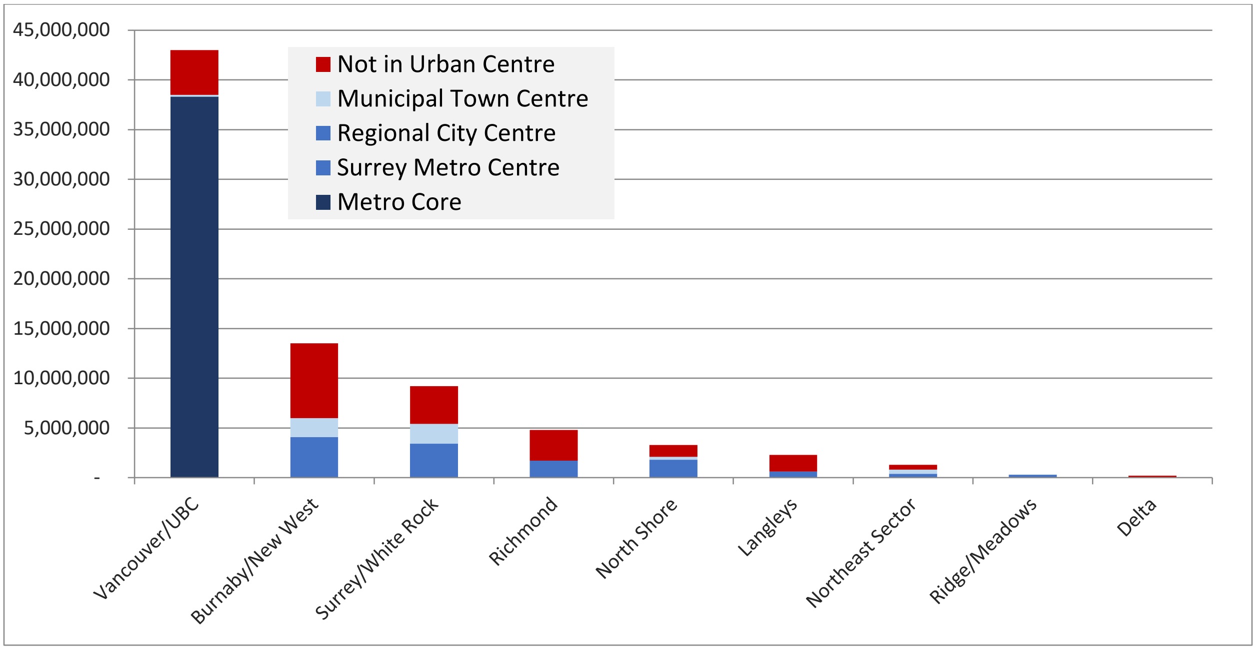
Chart 5.7: Inventory by Urban Centre Type



As shown on Chart 5.8, the 55 million sq ft of office space located in the 9 sub-regions and 26 Urban Centres was distributed as follows: Metro Core (downtown Vancouver and the Broadway Corridor) dominates with a total of 38 million sq ft or 69% of the total office space in Urban Centres in the region. The next largest Urban Centres (at less than one-tenth the size) are Metrotown City Centre and Surrey City Centre at approximately 3 million sq ft each, and Richmond City Centre at 2 million sq ft. The average size of the seven Regional City Centres was

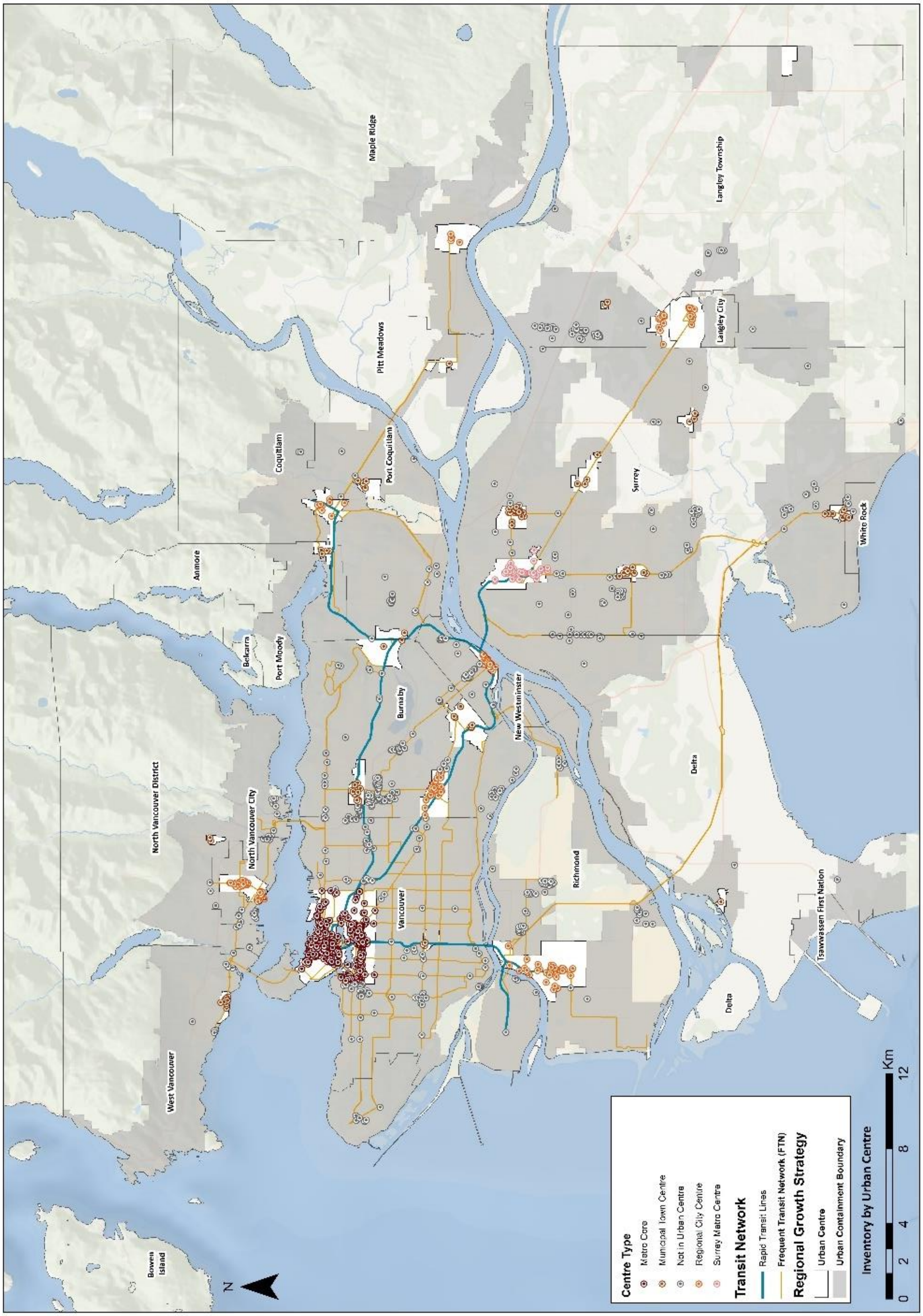
1.3 million sq ft, while the seventeen Municipal Town Centres contain relatively limited amounts of office space (6% of the regional total), with an average of 280,000 sq ft of office space each.

Chart 5.8: Inventory by Sub-Region and by Urban Centre Type



Map 5.6 and Chart 5.9 show the inventory relative to Urban Centres. For Vancouver, the majority of space is within Urban Centres (i.e. Metro Core), whereas for Burnaby / New Westminster, North Shore, Richmond, and Surrey, a significant proportion of office space is not located in Urban Centres.

Map 5.6: Inventory by Urban Centre



5.8. Office Inventory Relative to Transit Service

Relative to the FTN, some 51 million sq ft (65%) of office space was located within 800 metres (10-minute walk) of a rapid transit station, and 18.8 million sq ft (24%) within 400 metres (5-minute walk) of FTN bus only. The balance, 8.4 million sq ft (11%) of office space, was located beyond the FTN service area.

Chart 5.9: Inventory by Transit Service

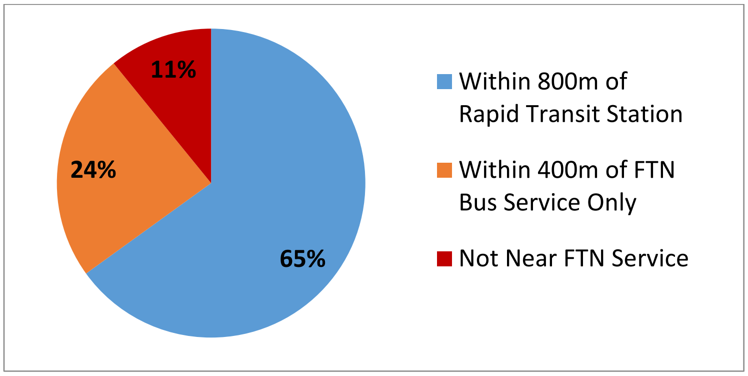
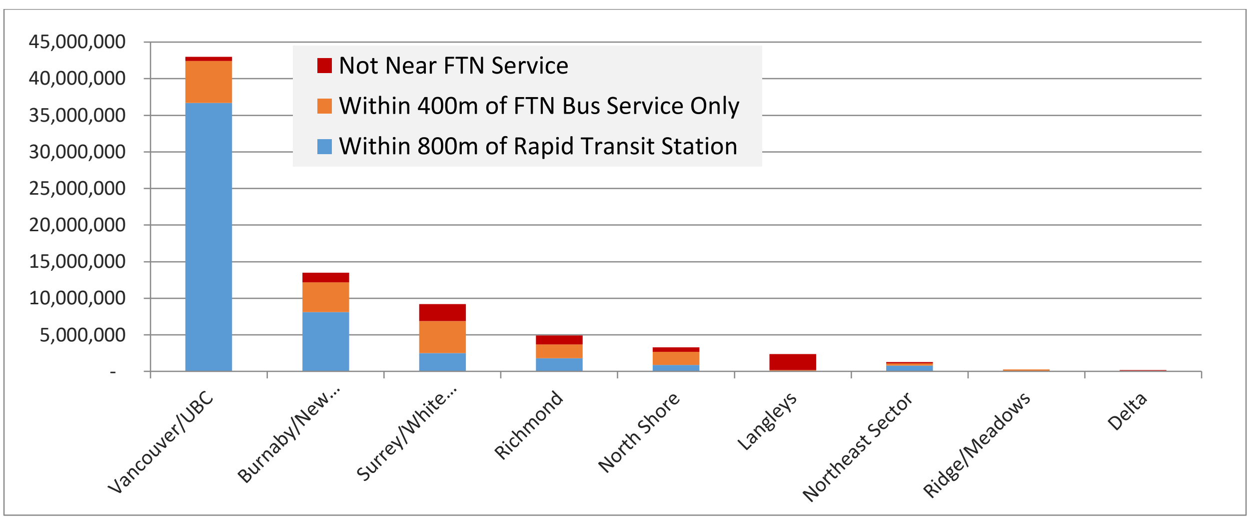


Chart 5.10 shows the distribution of office space by sub-region relative to transit service. Most of the office space in the City of Vancouver is near rapid transit (i.e. SkyTrain in the Metro Core), and the balance is served by FTN bus. For other sub-regions, the proportion of office space by rapid transit is lower, and the amount served by FTN bus is higher, as well as the amount of inventory not near FTN service.

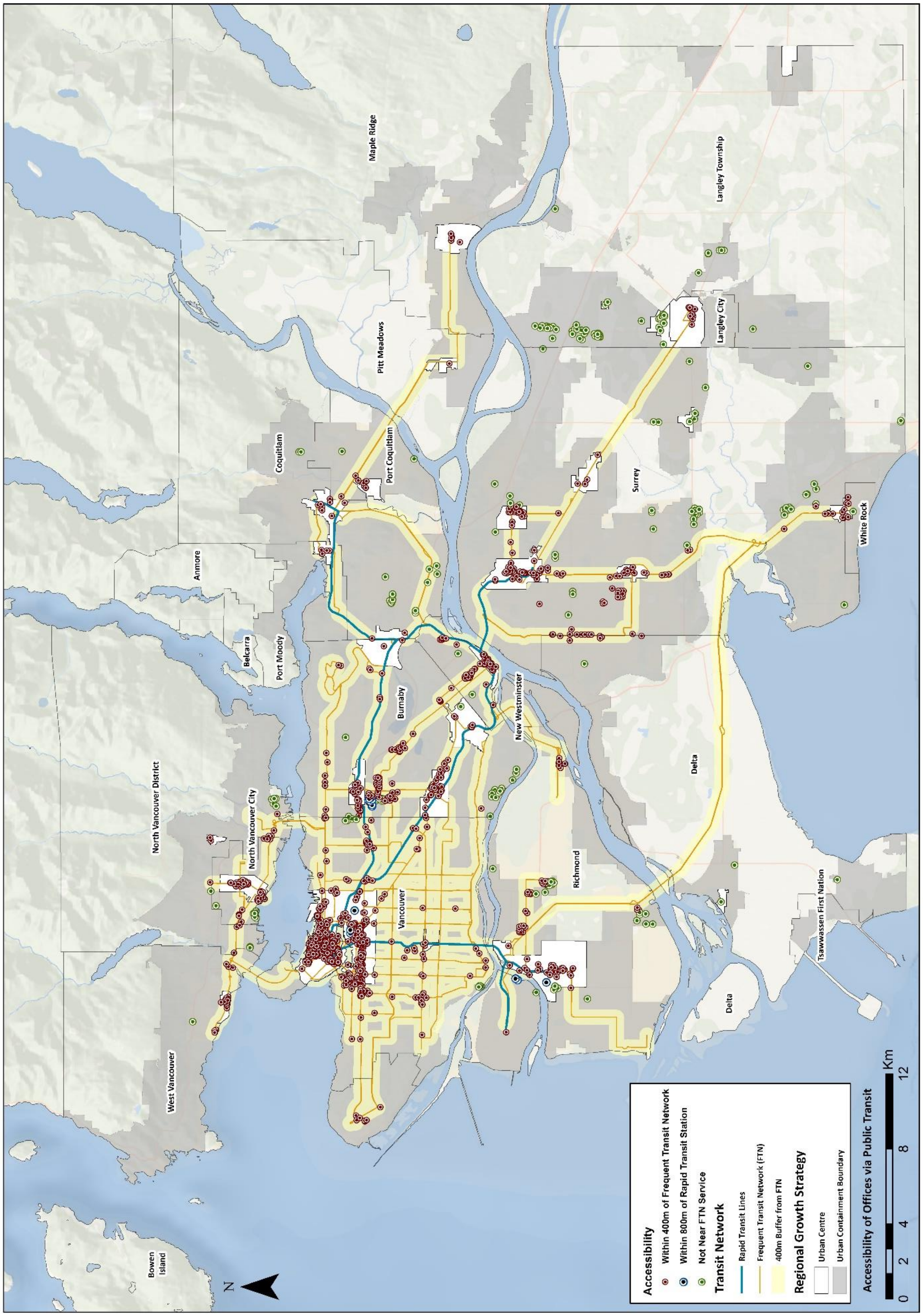
Chart 5.10: Inventory by Sub-Region and Transit Service



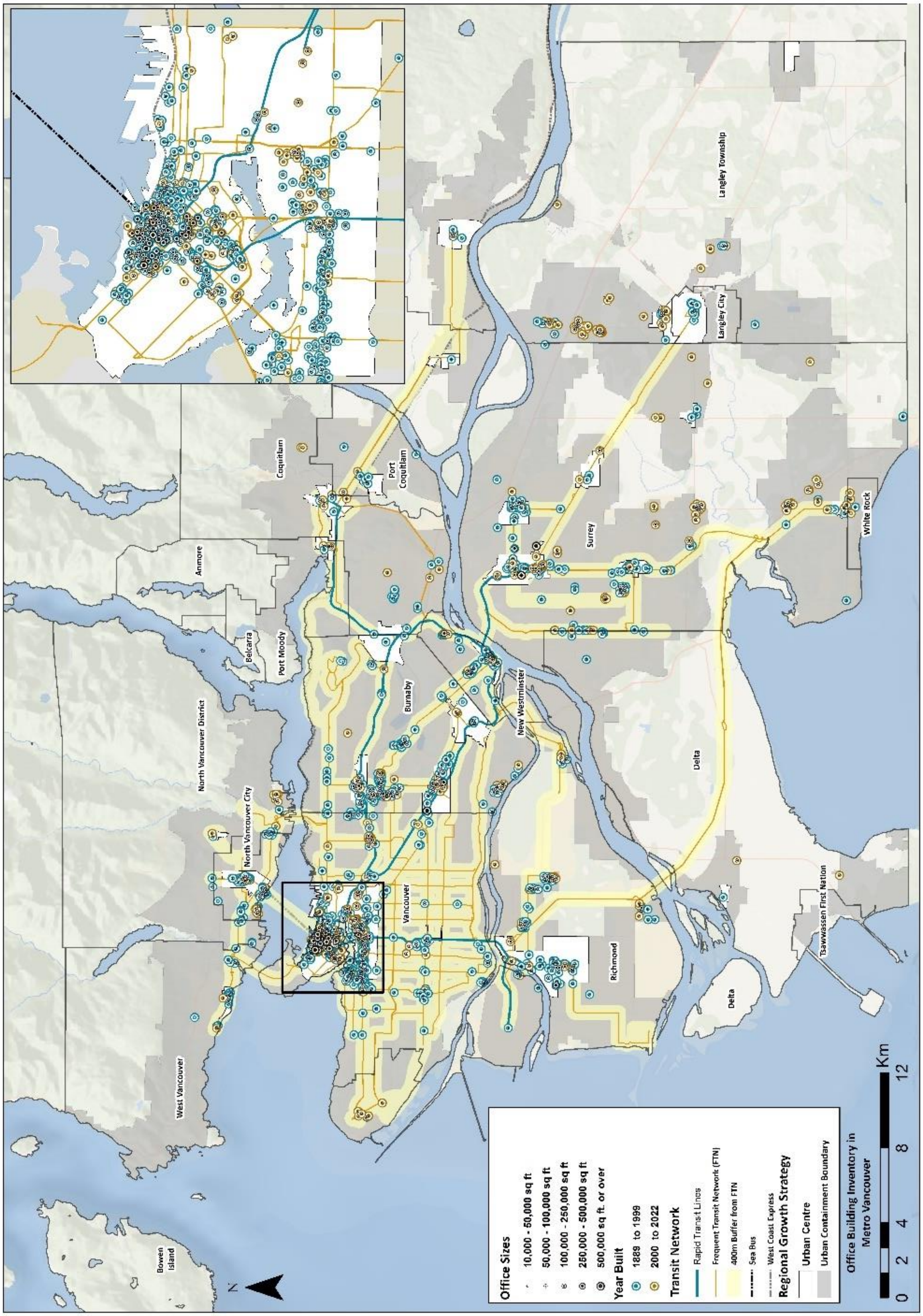
Map 5.7 show the inventory relative to transit service. For Vancouver, the majority of office space is within 800 metres of rapid transit stations, whereas for many outer parts of the region, a higher proportion of the inventory has FTN bus service only.

Map 5.8 illustrates the office inventory by location and size, with a large concentration of buildings in the Metro Core as well as some other clusters.

Map 5.7: Inventory by Transit Service Type



Map 5.8: Inventory by Building Size and Year Built



5.9. Newer Office Inventory Relative to Urban Centres and Transit Service

Charts 5.11 and 5.12 show the growth in office space between 1990-2022, totalling 41 million sq ft, relative to both Urban Centres and the Frequent Transit Network. More than half (60%) of the newer inventory was located within 800 metres of rapid transit stations, and 41% was within the Metro Core (all of which with access to FTN transit).

Urban Centres

Of the growth for the 1990-2022 period, 63% was within Urban Centres (compared to 71% for the entire stock). The balance, 15.3 million sq ft or 37%, was located outside of Urban Centres.

Chart 5.11: Growth by Urban Centre (1990-2022)

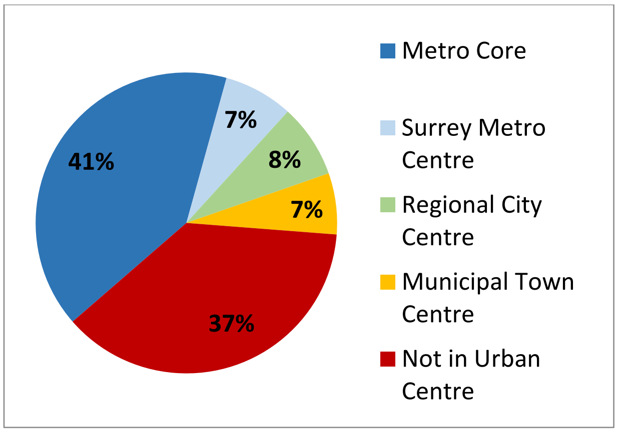
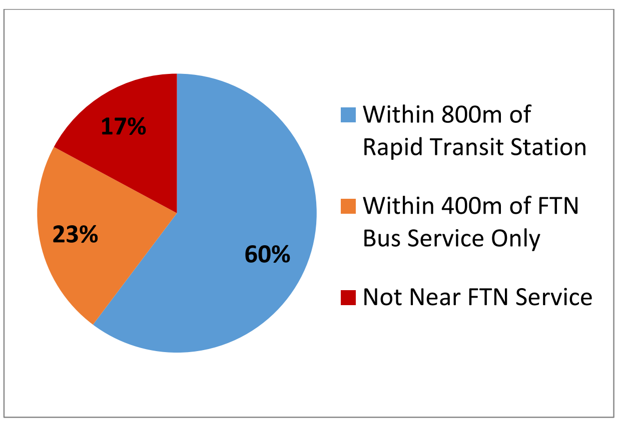


Chart 5.12: Growth by Transit Service (1990-2022)



The distribution of office development by Urban Centre type has varied from year to year over the past decades, as shown in Chart 5.13. Despite some years with a higher proportion of development in Urban Centre locations, non-Urban Centre development peaked in the 1990-2009 period, while from 2014 to 2022 the ratio of office space development in Urban Centres and particularly the Metro Core increased.

Chart 5.13: Inventory by Year Built and Urban Centre Type (1990-2022)

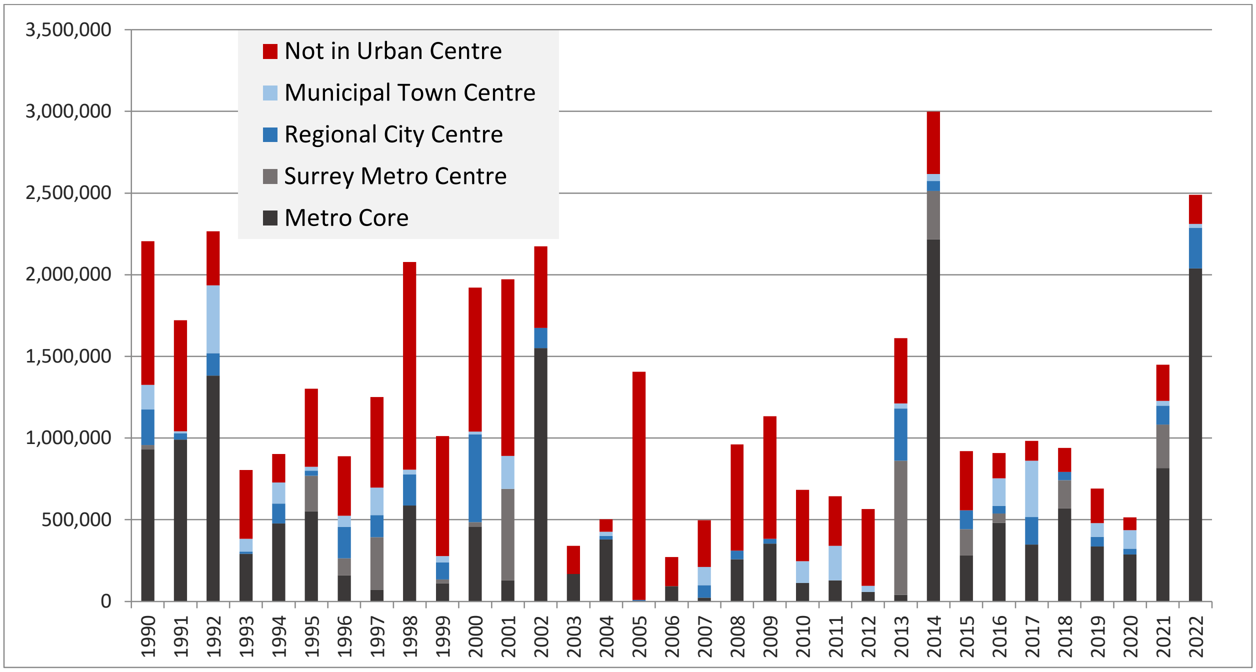
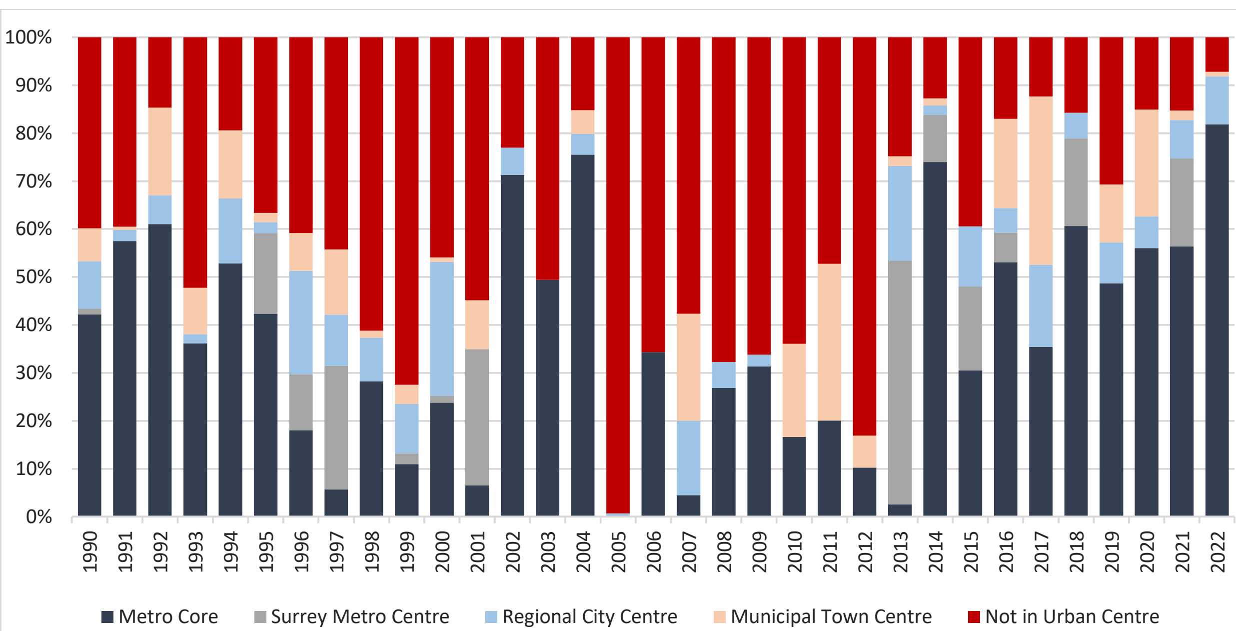


Chart 5.14 shows the building completions by year built from 1990-2022 relative to Urban Centre types as percentage of total completions. The distribution has differed considerably by year, although since 2006 the percentage of new office space development outside of Urban Centres has generally declined.

Chart 5.14: Inventory by Year Built and Urban Centre Type (1990-2022)

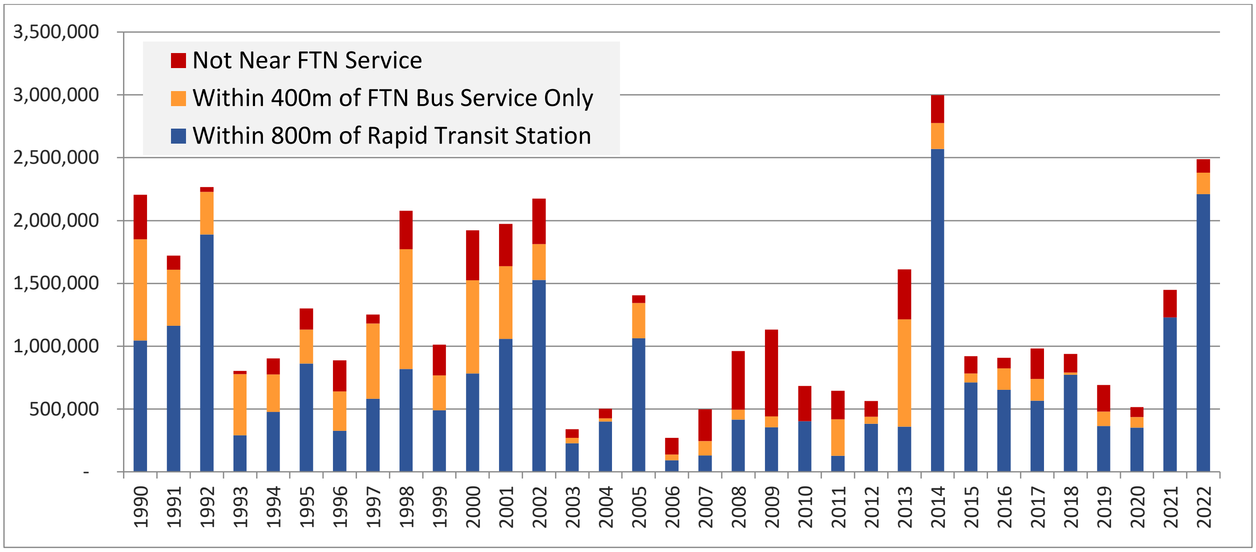


Frequent Transit Network

Chart 5.15 shows the office space growth in the region between 1990 and 2022 relative to the Frequent Transit Network (rapid transit stations and FTN bus). As can be seen, results vary greatly by year, in some cases reflecting the impact of only a few new buildings completed per period, while in other years, completions of major projects have skewed the annual results.

Of the total growth for the 1990-2022 period, approximately 60% of new office space development was located within 800 metres of rapid transit, and 23% within 400 metres of FTN bus only. The balance, 7.0 million sq ft or 17%, was located in areas not accessible to the FTN.

Chart 5.15: Inventory by Year Built and Transit Service (1990-2022)



Cumulative Growth in Inventory Over Time

Charts 5.16, 5.17, and 5.18 show the cumulative growth in the office inventory from 1950 to 2022. Much of the pre-exiting inventory and growth was in the City of Vancouver and more precisely within the Metro Core. However, proportionally the amount of office space in Vancouver is declining, with growth in other areas such as Burnaby / New Westminster and Surrey / White Rock, some growth in other Urban Centres although also outside of Urban Centres, yet still mostly at locations with FTN transit service.

Chart 5.16: Cumulative Inventory Growth by Sub-Region (1950-2022)

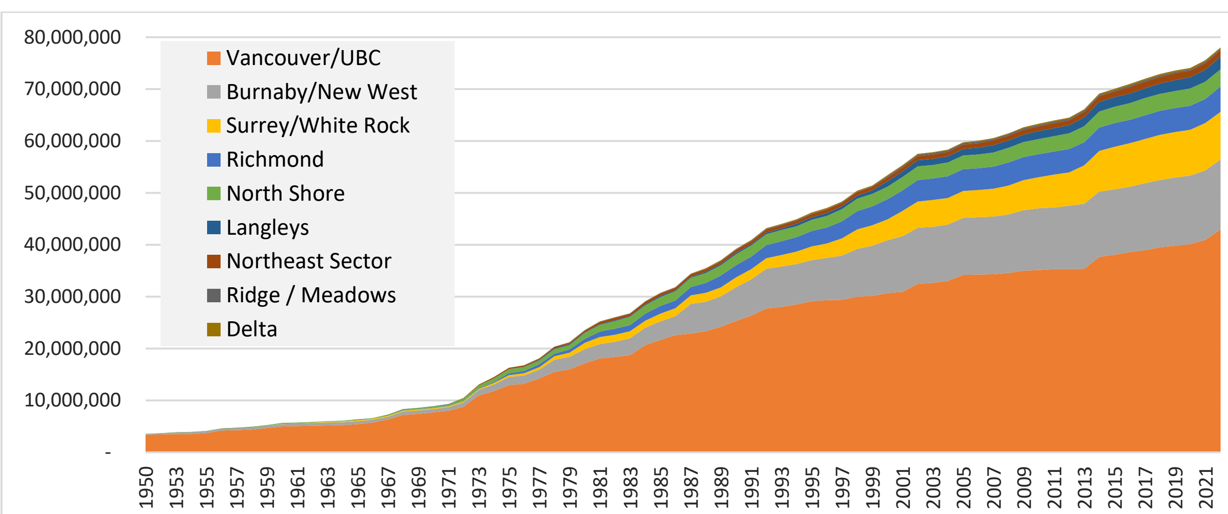


Chart 5.17: Cumulative Inventory Growth by Urban Centre Type (1950-2022)

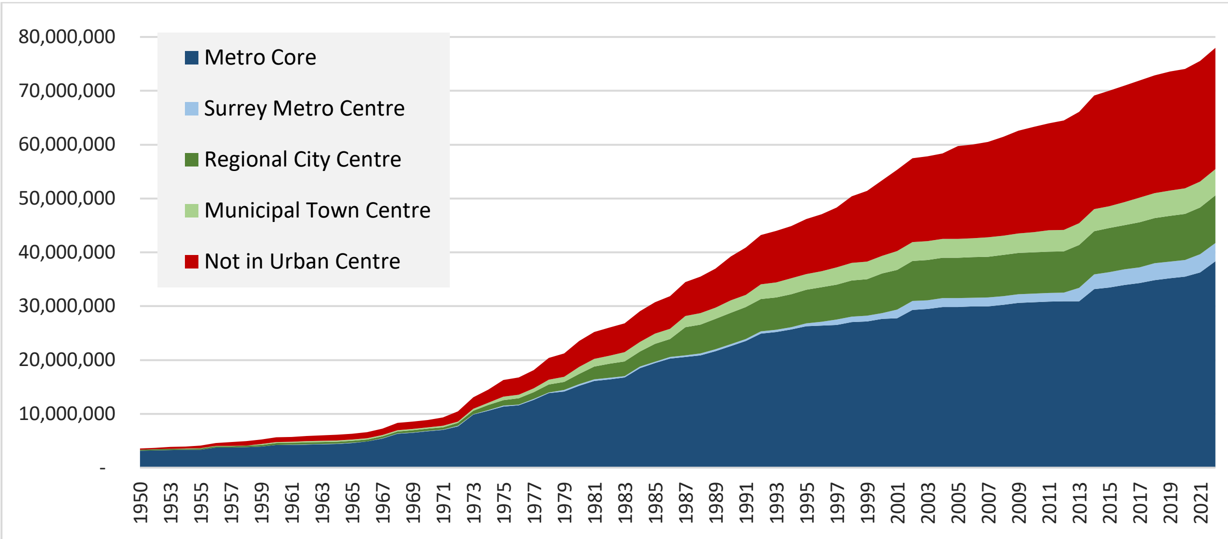
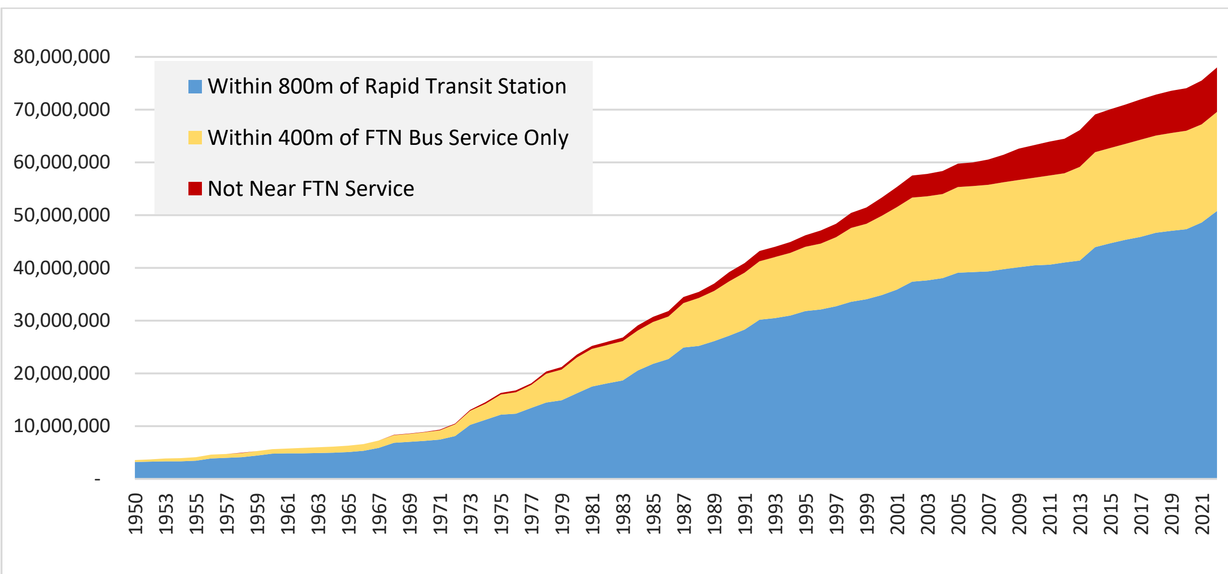


Chart 5.18: Cumulative Inventory Growth by Transit Service (1950-2022)



6.0 OFFICE TENANT CONSIDERATIONS

Office tenants are not all the same; the types of businesses and their accommodation needs vary, as do the local market characteristics and accommodation options in sub-markets. Some tenants need to be or prioritize downtown Vancouver near other corporate headquarters, some need to be close to their workforce, some serve their local community, and others prefer a business park campus-type environment. The following sections summarize the factors that tenants consider when selecting office space accommodations.

Although note that the office space market has been impacted at least temporarily by the COVID-19 pandemic. The ultimate long-term implications of the pandemic on office space demand and preferences are yet to be fully understood. Additionally, the 'war for talent', which grew with the pandemic especially for the tech sector and included employers providing employees much flexibility, has slowed, with now pressure to return to the office. The rationale and benefits of being in the office are still largely valid and valuable for activities that cannot be fully reproduced online.

Business Needs

Accommodation (re)location is a significant business decision by tenants. Different businesses with different needs are looking for different types of office accommodations. The list of criteria includes the following, with different prioritization or ranking depending on the sector or business:[23]

Business Objectives

- Employee retention
- Brand value enhancement
- Desire for prestige locations and client accessibility

Space / Design

- Current space needs and potential for future expansion
- Number of employees (range and estimated growth)
- Potential for efficiencies through consolidating multiple office spaces
- Office space and building design features – efficient and large floorplate design

Amenities / Features

- Image/quality/aesthetics
- Building services
- Office hours
- Security and access
- Communications infrastructure

Financial / Transition

- Budget
- Tenant improvement needs
- Timing / availability of space

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[23] Adapted from: Colliers, Office Leasing Guide, 2016.

- Lease terms / structure /renewals
- Cost (lease rate, building management, property taxes) and tenant inducements
- Quality of property management service

Access

- Location
- Parking
- Accessibility – transit, roads, parking, congestion
- Proximity to airport and other regional destinations
- Proximity to employees, customers, suppliers, competitors, other corporate operations

Other

- Green building design features / environmental considerations / LEED Certification
- Signage / naming rights
- Requirement for non-office components (e.g. warehouse, storage, flex space)

6.1. Overview of Tenant Considerations

6.1.1. Workforce Demographics and Residential Location

Workforce demographics and place of residence have a bearing on office site selection. For example, employee age may influence preferences for commuting modes. Interviewees reported that older employees are more likely to own and use a vehicle to commute, whereas younger employees may prefer transit and biking. The type of work and pay level may also influence preferences.

Where employees live may also impact business location decisions, as tracked by postal code mapping analysis. Higher income employees may tend to live on the North Shore and west side of Vancouver and thus prefer a downtown Vancouver work location, whereas lower income employees may live in the eastern parts of the region where housing is generally more affordable, and prefer work locations in Burnaby or Surrey.

Common concerns of employees when faced with an office move are whether their commute will change, the design of the new office space, and the amenities available at or near the workplace. Businesses that are new to the region may also consider locations that are within convenient proximity to good neighbourhoods, housing, and schools, and other amenities for their workers.

6.1.2. Space Needs, Size of Space and Other Space Functions

The amount and type of office space per employee can vary greatly. For example, senior employees may require larger offices that include private meeting space, compared to junior employees who work in smaller workstations. There was a previous industry trend towards using office space more efficiently and increasing the density of employees, through smaller office sizes, more cubicles, open concept, fewer enclosed offices, and more efficient office design with modern furniture and equipment. However, with the COVID-19 pandemic this trend stopped and even reversed.

Smaller businesses prefer smaller building floorplates in order to avoid being one of many tenants on a large floor. Large businesses prefer buildings with larger floorplates that allow their employees to be spread over fewer floors, and provide for a more efficient design, such as fewer reception areas and common facilities.

Some businesses have quasi-industrial or non-office components, such as those that support manufacturing, distribution or warehouse functions, in proximity to their office / administration function. These types of businesses may be satisfied with Class B or C office space, rather than Class A. Such types of office / light industrial flex spaces are not typically found in Urban Centres. Therefore, these businesses may favour an office park / light industrial type building (i.e. flex space) and location (i.e. proximity to highways) to fulfil this need.

6.1.3. Employee Trips and Visitor Traffic

Although greatly impacted by the pandemic, some employees spend most of their day at their desk, whereas other employees often travel. The number of visitors to the business also varies depending on the sector. Accordingly, the importance of accessibility and proximity to customers, suppliers, branch offices / stores, and other related functions varies greatly. Accessibility and proximity, therefore, impact whether the business needs a location in an Urban Centre, near transit, or whether they may choose a suburban office park location with highway access. Accordingly, some companies are more likely to value an accessible location than others.

6.1.4. The Value of Prestige

There is a range of attributes offered by buildings, with some designs focused on architectural interest, while others on efficiencies. Some tenants are willing to pay a premium for unique and high profile space, while other businesses want a simpler space that effectively meets their needs and budget. For situations and scales that allow it, businesses may prefer to own or occupy an entire building in order to be in full control of how it is managed and help brand their company.

Some businesses desire a high prestige central business district office location (i.e. downtown Vancouver) and are willing and able to pay a premium. For example, a large law firm may want a downtown location close to its clients and other businesses and for profile. This proximity benefits the company and employees in terms of meeting time, accessibility to a larger number of other businesses, and provides more opportunities for face-to-face interactions. Proximity to a range of urban amenities is strongly desired by tech tenants.

Other businesses do not value such characteristics nor have the ability to pay as much. For example, a call centre may not afford higher rents, and does not generally have clients who visit the office, so a downtown location is not necessary.

6.1.5. Customer Market

Some businesses serve local population markets (e.g. medical or dental offices) and wish to be situated near their customers. These businesses tend to be smaller, and will likely grow at a rate similar to the population growth rate of the surrounding area. Other businesses serve the regional market and need a central location (downtown Vancouver, or near major highways), and may grow at faster rates. Some Metro Vancouver businesses operate beyond the region, so airport, rail, or port proximity is important to them.

6.1.6. Surrounding Uses

Some office tenants, especially corporate businesses, are very sensitive to the uses in the surrounding area, and may prefer to locate in an office-only building or commercial district, rather than having to share a building and facilities (i.e. elevator, lobby, parking) with non-office users such as residents and shoppers. Requiring mixed-use development in these cases can impose challenges for some office tenants (in addition to building design issues), and may deter some types of businesses.

6.1.7. Tenure and Leases

The nature of tenure itself impacts office markets. It is important to note that most businesses lease rather than own their accommodations, reflecting the fact that businesses prefer to invest their capital in their business operations rather than in a building. There are relatively few strata office buildings in the region, although some notable examples. A lease provides for lower costs and less commitment, whereas ownership provides security of tenure and capital appreciation potential.

Businesses often need to make decisions about office relocations 12-18 months before lease expiry because typical lease agreements and renewals require significant notice before the end of the lease. These office tenants must then be able to find a new office accommodation that meets their needs and that is available at the appropriate time. Relocating offices can be a significant decision for business tenants as it represents a major disruption in operations, moving expenses, a new location, and potentially higher operating costs.

Office space is usually leased for terms of five to ten year periods; longer for large and new spaces, and shorter for smaller spaces requiring less improvements. The tenant needs to have a reasonable understanding of their office space needs, which reflect their business and staffing requirements over this term, and then commit to leasing the space for this period. This can be a challenge for businesses that expand and contract significantly in response to changes in business or economic cycles. This has been particularly exemplified during the COVID-19 pandemic. Some businesses may be very sensitive to accommodation costs or may be less established or financially stable, which reduces their ability to incur significant costs or make a commitment to a long-term lease obligation. Co-working operators are filling this need for flexibility, and grew significantly leading up to the pandemic.

6.1.8. Business Costs

Tenants are sensitive to costs, and this can be especially true for branch offices, where their headquarters are located in another city and makes the final decision about accommodations. According to rough estimates by interviewees, office accommodation costs (e.g. rent, building management, and property taxes) are approximately 5% of a business' total operating cost. Staffing costs are usually by far the largest single cost (approximately 80%). Small and new businesses tend to also be very cost sensitive.

However, cost is not the sole deciding factor, and if space is poorly located or lacks needed features, low rent will not justify it. As office space in Urban Centres is usually more expensive (both rent and operating costs) compared to other locations, business tenants only pay a premium if there is a value or benefit to them. For some businesses, even aside from costs, an Urban Centre location may not meet their needs as well as an alternative location / facility.

Depending on the tenant needs and the office space, tenant improvements (renovation / customization) of the space must usually be made. This can represent a notable effort and cost to the tenant, only part of which is reimbursed by the landlord. In some cases, cost savings can be achieved by consolidating business operations into a single site and utilizing a more efficient design.

6.2. Office Amenities

The market for office space continues to change (and accentuated by the pandemic), with tenants increasingly demanding a workplace that appeals to workers. This is particularly the case during a competitive labour market where highly skilled workers are key, such as tech / software. Competition in the office market was once primarily determined by location, transit access, and costs. While those factors are still important, tenants are increasingly interested on building facilities and area amenities.[24]

To attract and retain employees, employers often seek space and buildings that provide amenities and vibrancy, yet also consideration of efficiencies. In the recent past, this included open plans with fewer private offices, typically resulting in less floor space per employee. Workers may not prefer these types of compact workspaces; they seek a more interactive, collaborative and vibrant office environment. The common element in successful designs is that they "activate" the spaces by creating opportunities for socialization and work in a wider range of places.

Providing activated spaces and many amenities has become increasingly a necessity, rather than a luxury, to attract and retain tenants and employees. The desired and increasingly required amenities for office tenants and workers continue to grow. This includes a good location, proximate transit access (i.e. rail rapid transit stations), surrounding urban destinations, building features, and modern space design.

[24] NAIOP Research Foundation - Richard Peiser, Raymond Torto, Activating Office Building Common Spaces for Competitive Advantage, 2017.

Some interviewees noted that in order to attract employees to the office, the workplace has to be superior to their home office and offer features and experiences that home does not have. That applies to both the work space and also the associated building amenities and surrounding destinations. For example, to overcome the commute, draw employees to the office because the workplace offers opportunity to interact with other team members, has on-site facilities like a gym or roof-top deck, is close to restaurants for lunch, and provides the ability to combine urban attractions and errands while downtown for the day (such as an event in the evening after work).

These increasingly-desired amenities and features are being retrofit into existing buildings and included in the design of new buildings. As more projects with these features come to market, they become the new Class AAA or A buildings. Tenants that want prime space will move to these modern buildings, out of other older ones which will move down the classification rating as they become dated, resulting in a reset or re-definition of building classifications, particularly in downtown Vancouver.

6.3. Building Features

For major building landlords, providing not only an office space but an entire building complex or campus is important. This may mean significant investments in enhancing the common areas (lobbies, elevators, and hallways), as well as proximate facilities, like plaza and retail with restaurants and associated place-making efforts. This is in order to make the entire experience attractive for employees as a ‘third space’, counterbalancing home and work. These efforts can include programing of activities and events in the building campus. If people are going to be induced to come to work, the experience of both the office space and the building place need to be attractive and active.

Amenities no longer simply mean a sandwich shop for lunch, rather a range of shops and services, such as restaurants, grocery stores, banks, gyms, entertainment, and other facilities in the immediate area. It is especially desirable if the facilities are within the same building or complex, highlighting the interest in mixed-use or multi-use developments.

In terms of building design, for top tier tenants, they want the best that new Class AAA buildings can offer. This includes large amenity spaces, conference facilities, ZERO Carbon and LEED Platinum certification, etc., as they plan to operate it for a long period.

For brand new office buildings, the space is usually offered by the landlord to the tenant as an empty shell (with only limited air conditioning system and no finished ceilings – this being a lower level of base delivery than in the past). The cost to build out accommodations for the tenant can be significant, in the order of $250 per sq ft; only a small part of which is funded by the landlord. To amortize this investment, the tenant will want a long enough lease, often ten years and with terms for extension. Existing space and smaller units may have shorter lease durations. (As improvement costs can be significant, some businesses don’t want to walk away from their investment (which is a sunk cost); this can be more emotional for smaller businesses, while being purely a financial decision for big companies.)

Along with costs, the permitting process and construction period can both take considerable time, thus impacting how quickly landlords and tenants can respond to market forces and business changes. Permitting may be required even for relatively modest changes to existing space, causing delays for interior modification / upgrades / improvements and thus tenant moves.

6.4. Value of Locating in Urban Centres and Near Rapid Transit

Office location is typically very important to tenants; if the location is inaccessible, it can lead to operating inefficiencies and higher staff turnovers. Office locations with poor transit access are often difficult to lease, while locations close to rapid transit tend to have lower vacancy rates and higher rental rates.

Virtually all publications and interviewees stressed the importance of transit accessibility, namely SkyTrain. Since the 2010 Winter Olympics and construction of the Canada Line, there has been a marked increase in interest and acceptance of transit by SkyTrain for commuting. Office tenants have increasingly prioritized proximity to SkyTrain stations as an important criterion in selecting office accommodations. Light rail is preferred over bus, as bus service is seen as less permanent and not as reliable and comfortable as SkyTrain. SkyTrain service is extending to other parts of the region, including Port Moody / Coquitlam, Broadway Corridor, and Surrey / Langley City. Office developers are aware of the trend towards increased tenant appreciation of rapid transit access and are responding accordingly.

Transit accessible locations mean that there is less need for on-site parking per worker. However, developers caution that because of the greater space efficiencies in new buildings, parking requirements do not necessarily need to be reduced, as there may be more workers per sq ft (e.g. some offices accommodate 1 employee per 150 sq ft, compared to the previous standards of 1 employee per 250 sq ft). Even if an office building is well-served by transit, tenants still expect some level of parking because some employees will continue to drive to work, or use a vehicle during the day for work purposes.

In addition to access to transit, developers are cognizant that many employees also walk and bike to work, and are providing more facilities to support cyclists (e.g. locker facilities, secured bike parking, end-of-trip facilities). Also, the availability of amenities for employees, such as proximity to shops, restaurants, gyms and recreational facilities are of increasing importance for businesses.

Tenants want employees to be able to travel to work with ease, although workplace and commute patterns have been significantly impacted by the pandemic. Interviewees note that younger employees typically have a greater propensity to take transit, and that older employees who are accustomed to driving are not as likely to switch to transit if the employer moves to a location with good transit service. If the location is not near frequent transit service, employers or property managers may invest in a shuttle bus service to transport workers to the nearest rapid transit station. Office tenants are increasingly willing to pay a premium for access to rapid transit stations, or alternatively, may accept lower quality office accommodations if located near rapid transit versus higher quality accommodations without such rapid transit access.

Access to SkyTrain and other amenities are ever-more important from the perspective of tenants, with an eye to attracting and retaining employees. A SkyTrain station alone is often no longer enough – business tenants want to be close to more amenities. Furthermore, desired accessibility to SkyTrain can mean less than the standard 400 to 800 metre (i.e. 5 to 10 minute) walking distance; while a shorter distance is preferred, it is important to recognize that how long a walk 'feels' can depend on the surrounding environment, sidewalk connectivity, and urban design.

6.5. Extent of Tenant Movement Between Geographic Areas

Interviewees and publications stated differing views about the relationship between the downtown Vancouver office market and that of the rest of the region. While most noted that relatively few tenants move between sub-markets (both geographies and office classes), some stated that with higher prices in the Vancouver CBD, some tenants may be tempted to move to less expensive locations. Conversely, in an effort to attract and retain a skilled workforce, some businesses (especially tech) 'need' to be in the downtown or surrounding core. And yet another perspective, is that with rising vacancy rates and sub-lease listings in the downtown, there may be more accommodation options for companies that want to relocate there.

Back-office employees that are not required to be downtown could be relocated to the suburban markets such as Burnaby, Richmond, and Surrey.[25] Although at the same time, some of this type of work is also being done by employees while working at home.

Suburban Office Obsolescence?

Suburban office parks have lost their luster for a variety of reasons, including a growing preference among younger workers to live (and work) in more dynamic urban centres than in the sometimes staid suburbs. Technological advancement has made the need for many clerical and processing jobs and associated back-end real estate increasingly obsolete.[26]

As the needs of the modern tenant becomes defined as trophy or Class AAA office space by rapid transit and robust amenities in Urban Centres, older properties are challenged to compete, especially 1980s and 1990s era campus settings. Yet, some outdated properties may still appear attractive to tenants who are value-conscious or who are seeking a specific type of space.[27]

Given that there have been very few new suburban office buildings constructed in the past decades, vacancy rates have been declining as space fills up in these buildings due to a local absorption. Businesses in suburban locations, when considering relocating to downtown, once they fully understand the much higher costs (both net rent and operating), typically renew at their existing location.

[25] Jones Lang LaSalle, Metro Vancouver Office Insight, Q2 2018.
[26] New York Times - Nick Corasaniti, As Office Parks Empty, Towns Turn Vacancies Into Opportunities, May 29 2018.
[27] NGKF Newmark Knight Frank, Suburban Office Obsolescence, 2015.

There are many factors that signify building obsolescence. Some of these can be addressed such as building upgrades and adding amenities, while others such as location or building design, cannot. Buildings near the incurably obsolete end of the spectrum are candidates for repurposing (i.e. by conversion to other uses or redevelopment).[28]

Other Locational Considerations

A central location for businesses is best to access the region's workforce - namely Vancouver or Burnaby - that is readily accessible from much of the region. Simple geography has resulted in much of Burnaby and downtown Vancouver being the central area and accessible via the transit and road networks.

Additional considerations about the market were expressed by interviewees, informing the potential, or limit, to attract office developments and tenants to outer Urban Centres:

- As the population, economic activity, and workforce grows in outer locations, the demand for office space in those areas will also grow. As more people move to the suburbs because of housing affordability, many may prefer to work within those communities to have shorter commutes. However, this may take a long time, as sub-markets still have limited scale and limited demand. And for some employees, working close to home in fact now means working at home, thus no increased demand for local office space.
- SkyTrain access helps, however in small markets, the impacts of new SkyTrain is limited compared to larger markets, and some areas are still 'at the end of the line', rather than in a more central location on the transit network. Office businesses want to be by other office businesses, making it difficult to establish new nodes.
- There is still a need for suburban office space. Some tenants enjoy a campus feel - low rise and accessible to certain amenities, instead of overly urban, congested, and high rises. However, businesses that want / need to be in the CBD are there and will pay for it.
- For Coquitlam City Centre, there is ongoing densification with multi-residential, but the office market is limited. Small office components in mixed-use buildings with local-serving businesses are more appropriate and realistic under current conditions. No large major tenants are likely to locate there unless locally owned or some other unique reasons.
- Surrey has the potential to accommodate an increasing number of local-serving firms and offices. Achievement of a critical mass is likely required to enable more office development over time, such as new corporate offices.
- On the North Shore, transportation access is a challenge for constructing new office buildings, and also for office tenants accessing the regional workforce.
- A number of interviewed developers commented that if municipalities require the provision of office space where it is not warranted by the market, or the approval process is too arduous, they may simply not build anything at this time, and wait for conditions to change.

[28] NGKF Newmark Knight Frank, Suburban Office Obsolescence, 2015.

- It was also noted that building new office space in a sub-market without adequate demand may simply steal or re-locate tenants from one part of that sub-market to another, not attract new tenants (i.e. zero-sum).
- The best effort to attract tenants to outer Urban Centres may be as a value proposition – i.e. lower rents, and offering urban features / amenities, in a location close to a growing workforce and economy. However, from a development perspective, construction costs are still high in all locations; so with low rents in areas with weak office demand, it is difficult to make such office development viable.

7.0 OFFICE DEVELOPER CONSIDERATIONS

The office development process is complex, capital intensive, and high risk. There are many different factors that can impact the development viability of sites and the potential for an office space component. The decision-making process may be gradual and iterative as the project investigation advances. In some cases, if circumstances become too challenging, a project may be deferred, cancelled, or an alternative use or design for the site may be considered.

Developing office buildings entail large and long-term investments, extending beyond individual business cycles. Developers and investors look to fundamental trends and forces over the decades, rather than months or years, balancing expected returns and possible risks.

To attract and retain the best tenants and employees, landlords and employers need to offer the best space. New buildings (Class AAA) are more efficient, have nicer space, with better amenities, etc. Whereas older Class B and C space is harder to lease, even if rent rates are lower.

For smaller or standard office units, tenants typically do not want to spend a lot of money and time to occupy them. Constructing and permitting office space improvements can take a long time and dissuade prospective tenants. Officer brokers suggest that landlords buildout small spaces for move-in-ready / turn-key condition to be more attractive to prospective tenants by shortening and simplifying the process.

7.1. Overview of Considerations

7.1.1. Developer Objectives

There are many aspects specific to the developer / investor that are relevant to the nature of an office project. This includes the type and amount of funds available for the investment (equity vs. debt financing), the corporate structure of the development company (i.e. whether they are the developer, investor, property manager, or all), risk tolerance, investment profile and objectives, and outlook (long-term vs. short-term). Some developers may prefer to develop and sell a project, whereas others (such as investment pension funds) may prefer to build and hold a project as a long-term investment.

The time and price at which the land was purchased impacts the financial viability of a project; if the land was acquired some time ago at a lower historic price, office development may be feasible, but not if the land were acquired at a more recent (higher) market price.

7.1.2. Market and Financial Conditions

Market conditions, specifically the demand for new office space, is the main driver for the viability of office buildings. Where and when the demand for office space is weak, there will be limited new office space built by the market. Local government goals for more office space will not be realized if the market demand is not in place to support the development. The market reflects both the macro factors influencing office supply and demand in the region, and local area factors for specific districts.

Market conditions also affect the amount of building pre-leasing that is possible. Pre-leasing (or pre-sales for strata) is typically necessary to obtain project financing in order to proceed with construction. Generally, lenders will not finance a project until an adequate proportion of the building has been pre-leased. It can be challenging for office developers to secure pre-lease commitments (especially in suburban markets), because tenants may not want to commit to a new location in advance of it being built, they have other location choices available, and the relocation process is complex. Thus, some tenants may prefer to remain in their current space or move to an existing building. A slow absorption period for a building can mean a financial cost for the investor / developer. In a market such as Metro Vancouver, which has few large headquarters, it is difficult to attract new tenants to a yet-constructed building. Aside from some unique cases with large tenant committing to space in advance, developers may bring to market a limited amount of office space at a time, which is pre-leased or can be absorbed in a reasonable period.

Large office buildings (towers) are constructed all at once (with only very few exceptions), making the supply of new space very 'lumpy'. Conversely, low rise buildings can be built and leased in phases over time to match demand. Additionally, the cost of construction materials and labour may change during a development process, along with market conditions, which makes budgeting a challenge. All of these costs challenge developers when planning and evaluating the viability of a project.

Due to these financial challenges and requirements, investors in major office projects are typically pension funds, which can buy sites and hold them for long periods until the market supports a viable development. Institutional investors are typically well-financed, diversified, and interested in long-term investments and can wait longer for returns compared to merchant developers.

7.1.3. Land Availability and Cost

The challenge most cited by developers is the difficulty in acquiring sites for office development. Land costs are very high in the Metro Vancouver region and office development is usually a less profitable form of development, and values cannot compete against residential uses. If a municipal plan allows for a mixture of different uses on a site, the property will likely be priced by the vendor for the highest and best use, which may preclude the financial viability of office space. For some mixed-use projects the office component may add little net value for the developer.

In Urban Centres the properties are often smaller, thus necessitating a land assembly to create a larger viable development site. These properties usually have existing uses and businesses that may be difficult and expensive to assemble. The effort to purchase and assemble the properties from multiple owners (sometimes with individual properties each having multiple parties on title) can be time consuming and challenging. Instead, developers prefer a single larger property; these rare types of sites are usually found in out-of-centre locations, such as industrial areas and greenfield sites, or redevelopment of urban retail plazas.

7.1.4. Construction Costs

High and rising construction costs (both the labour and material components) are a challenge for all developers. According to Altus[29], in the Metro Vancouver region, the cost to construct an office building ranges from $290 to $450 per sq ft, depending on the type of building, plus parking facility costs. Furthermore, tenant improvements / fit outs are an additional $85-$250 per sq ft, varying by the building and unit type and standard.

7.2. Municipal Approvals and Costs

The extent of municipal approval requirements is also a consideration in the development process. The municipal review and design process for a major project often lasts two or more years. The construction period is typically an additional two or three years. Together, this process represents a significant period while the investor is not receiving returns. Furthermore, risks during this period in the form of difficulty in obtaining municipal approvals, higher construction costs, changing economic cycles, or dampening market demand may hamper a project. Notably, not all projects that are approved actually get built, if such variables become negative.

Municipal fees and charges can be in the form of application fees, development cost charges, community amenity contributions, etc. Municipal processes and regulations impact the development approval time and costs, and add uncertainty and risks to a project. Jurisdictions in which the development requirements are not known or clear at the outset of an application are more challenging, because the costs are not predictable and are negotiated at the time of application review. These municipal processes and costs may lead developers to shift investments to jurisdictions that have a more "business-friendly" environment.

Some developers interviewed suggested that municipal development costs could be made lower at target locations, such as in Urban Centres and at rapid transit stations to encourage office development there, and allow mixed-use development where appropriate. It was also suggested that in municipalities that charge community amenity contributions, they should only be applied for residential components, because residential uses in a project generate the need for community amenities and the profitability to fund those amenities.

7.2.1. Municipal Development Policies

Both municipalities and developers appreciate policies that provide clarity and certainty about municipal expectations and development requirements in terms of use, density, design, and costs. As developers become more familiar with municipal plans, the process may run smoother. Plans and policies vary by city and area, as one size does not fit all.

[29] Altus Group, 2023 Canadian Construction Cost Guide, 2023.

That said, flexibility is also desired. Municipal plans / policies are often seen by developers as complex and inflexible, with long approval processes prone to delays which increase holding costs. There needs to be an appropriate balance between municipal goals and developer objectives.

Developers and brokers recognize municipal objectives for community building, however are concerned about policies requiring office in places where there is little or no market demand. Most developers are opposed to municipal policies that require developments to include a certain minimum amount of office space provision. Developers and brokers believe that such requirements can create excessive office supply in sub-markets that cannot be profitably leased, which drives down rents and competes with other successful office buildings. The developer often makes most of the profit with the residential component of a mixed-use development, and may rent or sell the office space at a discount. Alternatively, the office space may instead be sold as strata tenure to investors as smaller units.

Market forces, not municipal policies / regulations, are the primary reason to build office space; demand should be the driver of supply. The market rents in an area must be high enough to support development costs and the investment, and even that still does not guarantee project viability. Developer needs for financial viability should be considered as part of municipal plans.

7.2.2. Municipal Office Space Permitting Process

For the build-out of interior office space, which comprises either starting with the shell space in a brand-new building or taking over an existing space needing some upgrades / renovations, municipal permitting for various interior work are typically required.

Many interviewees noted that the process for permitting is long and unreasonable, which delays construction commencement and extends the entire business move timeline, with associated higher costs. In the City of Vancouver, there was previously the TIPs (Tenant Improvement Permit System) which was well-regarded and allowed for easy permitting of space in existing buildings that had previously gone through the permitting process. However, the program is now largely discontinued, with the city reviewing each permit anew.

Some suggested that some simple or low risk interior construction / renovation work should be allowed to commence while the permit is under review, in order to reduce downtime. For basic renovations associated with simple improvements and renovations, the City could identify office units that can be occupied and tenanted without triggering a change in use permit. Landlords and brokers also suggested that the city allow Certified Professionals to review drawings in order to save time.

The entire process of findings a space, negotiating a lease, obtaining permits, arranging renovations, and moving, can take over a year. In most cases, the landlord offers the occupant a Tenant Improvement allowance, but this amount is only a fraction of the total cost of renovating and holding the space while unused. Improvement costs for a shell can be up to $250 per sq ft, including voice / data drops and furniture. Cold (bare minimum) space vs Warm (lighting and some improvements) space varies in terms of delivery of the completed shell space. Along with approval duration, rising construction costs and extended supply chains are also challenges.

Often, when considering a move, businesses are surprised by the time and cost, and instead may decide to simply stay in their existing space. With high costs, some tenants can be price sensitive when considering a possible move, which motivates them to stay or 'stick' in their existing space. To facilitate tenants moving into standard spaces, landlords can proactively build-out space in generic functional ways to make it easier and quicker to occupy. Whereas large international companies may not be as patient for a move to new or expanded accommodations; they can shift their operations to another international jurisdiction.

7.3. Mixed-Use, Multi-Use, Stand-Alone Projects

Mixed-use development can provide some benefits because it accommodates a wider range of uses with greater activities. In a mixed-use development, the retail component can be an amenity to the office component, and the residential occupants can help support the commercial businesses as a customer base. From the perspective of the developers, a mixed-use project (or multi-use, where the separate use buildings comprise a complex) with complementary uses, under the right conditions, can provide an opportunity for the residential component (which is typically higher value) to support or cross-subsidize the office component. This may be especially beneficial in suburban markets where it is difficult to pre-lease office space, yet the residential part can be pre-sold to secure project financing.

However, mixed-use development can also have some drawbacks. Residential and office users have different needs, due to the design requirements for the different users, preferences for floorplate sizes, and separate access facilities (lobby, elevator, parkade). This can impose extra design complications, costs, and inefficiencies. An office component within the podium of a multi-use building can lead to office floorplates that are sub-optimal – designed around the main part of the building, with the residential tower above and retail space below. In such cases, office unit sizes / depths, columns, elevators, lobbies, may not be ideal for the needs of office tenants, especially larger ones.

Tenure can also be an issue in mixed-use projects, with some parts of the building owned by occupants (condominium apartments) and other parts occupied by rental tenants (retail, office), with different tenures, terms, and interests. Mixed-use development should be considered at appropriate locations, reflecting site characteristics and market demand, and not forced into unsuitable locations. In some cases, multi-use development, with different uses in separate buildings may better serve the objective. In larger markets, standalone office buildings may be possible.

7.3.1. Other Considerations and Views

There are divergent views on the office aspect of mixed-use developments. Some interviewees noted that having a range of uses at a focused location, such as Transit-Oriented Development (TOD), provides for a desirable community. However, others reference examples of mixed-use projects poorly executed, such as commercial podiums with ground floor retail and only a few floors of office, with a high-rise residential tower above. In such situations, the residential component may be the main driver of the project, and the office is an 'afterthought' that is 'tagged on', and not given enough attention or consideration.

Successful retail is an amenity, and if done well can attract residential and office uses. Whereas if done poorly, and stratified (which is often associated with lack of cohesive property management), it can be a negative attribute of a building. Conversely, a large complex with stand-alone commercial businesses can be better designed and managed, and is typically preferred by corporate office tenants.

There was also a range of views on the appropriateness of municipalities 'forcing' rather than 'encouraging' and 'supporting' office components in new development projects. Most developers are concerned that being required to build office space in a location with weak demand may lead to long-term vacancies, while some other interviewees believe that the office market may fulfil itself once built, even though pre-lease in those locations can be difficult.

If municipalities compel an office component on a site where the developer does not believe there is a market, the outcome may be that the site will not be (re)developed; instead, a phased approach or a smaller scale office component may be a solution. Yet in other locations, some lands are zoned / designated for exclusively employment uses (office, retail, industrial, potentially combined), but at urban locations by transit, apartment rental residential could also be part of mixed-use or multi-use developments, according to some developers. Allowing residential uses could be used as a tool to create and activate the desired employment space, that could lead to projects that support a complete community.

7.4. Development Risks

Developing office towers are complex in terms of design, approval, and construction processes. This lengthy process brings risks, because as time passes, the developer faces greater uncertainty; for example, the economy can slow, the office market can soften, or construction costs can increase. Although there may be strong demand in (some) Urban Centres, urban locations can magnify development challenges because there is more regulatory approval, design review, and public engagement.

As with any investment, if risks are high, investors will require a commensurate high return. Therefore, for projects to advance which are perceived as higher risk, they will need to offer a significant profit to attract investors / developers. This may attract only a very small number of interested parties, which limits competition and development activity.

Office development risks can be exacerbated in a volatile market or where there are uncertainties associated with the approval process. One noted challenge is finding good sites available in downtown Vancouver to develop at a financially viable price for office development.

In order to arrange project financing, typically pre-leasing commitments are required. Depending on market conditions, these commitments can be difficult to arrange, especially in suburban markets or if the delivery dateline is uncertain due to the municipal approval process. Although as one interviewee noted, over time, Vancouver may be becoming less of a pre-lease market, with some developers willing to construct office buildings without pre-leases – this new supply can better accommodate office tenants wanting space with less lead time. However, that possible trend may be concluded with COVID-19 impacting the office market.

Municipal zoning that allows for a wide range of possible office tenants, or 'general office', is preferred over zones that are more restrictive and only allow certain specific types of business office uses, as this greatly reduces flexibility and increases investment risk if tenants change.

7.5. Landlord Tenanting Decisions

From a landlord leasing perspective, small and new companies are viewed as a higher risk type of tenant, with limited history and financial covenants, and a higher likelihood of not renewing their leases (as they are prone to either failing and closing, or booming and outgrowing their space). Instead, larger and established companies are the preferred types of tenants.

Some tenants may prefer an architecturally unique and high-profile building; however these buildings can be less efficient and cost more. From the investor / landlord perspective, they consider the long-term utilization and operation of the building, not just current needs.

Helping to fill the need for flexibility are the co-working providers (namely, WeWork and Regus / Spaces) that offer businesses a variety of office space accommodation options (which may be needed temporarily as a swing site for a business in between locations or for a specific project). These accommodations are available without the requirement for long-term leases, although that flexibility comes at a cost.

8.0 OFFICE DEVELOPMENT FROM THE MUNICIPAL PERSPECTIVE

Office buildings provide space for businesses, which helps to advance municipal objectives, ranging from growing employment within the community, reducing commute distances, complementing local amenities, and growing the economy of the city. Furthermore, office space and associated activity supports and enhances the build-out and success of transit-oriented Urban Centres.

Municipal governments, through their economic development and planning functions, can encourage and regulate development in all its forms in their communities. This includes promoting the community as a location for investment and directing office development to Urban Centres. Municipal economic development staff may help increase the profile of the community, promote economic opportunities, and share information to attract investment, while planning staff may establish the necessary land use plans and review development applications. In practice, municipal economic development offices may be more interested in attracting development to their municipality in general rather than to specific locations within Urban Centres, while planning staff are more interested in land use and design integration.

Ideally, government departments work in concert to facilitate desired investment and development, recognizing that there are different types of business tenants requiring different types of premises. However, the ability of municipal governments to attract business activity is limited, as developers and tenants invest in locations that are desirable from a market perspective, and government policies and tools have a minor impact on influencing market fundamentals. All of the interviewees recognized that the regional office market is limited and grows incrementally (with downtown Vancouver being a unique sub-market), making it a challenge to attract office development to many other Urban Centres.

Some of the planning, regulatory and fiscal tools noted in this report have been used by municipal governments at different times. As for policy, some plans require a certain amount of a development to be reserved for office or employment space. Another approach are policies that encourage office development, and provide for bonus density in exchange for the provision of office space. A common policy lever is to permit or require office (and retail) space as part of a mixed-use project; but municipal representatives indicate that this is sometimes resisted by the developer where office space is not in demand or deemed profitable.

Fiscal incentives have been tried as well. Lowering permitting fees seems to be the easiest tool, compared to the challenges of lowering municipal charges or property taxes. Municipal representatives interviewed noted that lowering Development Cost Charges (DCCs) is not an easy matter given the legislative requirements of DCC bylaws. Property tax exemptions for office space or providing “tax holidays” are not allowed under provincial legislation. Although in some jurisdictions, revitalization tax exemption programs have been used as an incentive to attract development in support of economic growth in the downtown. Lowering property tax rates or providing municipal grants equivalent to a portion of property taxes owing for the creation of new office space has been used as an incentive in some jurisdictions, and is an option to consider where appropriate.

Some municipal staff interviewed cited a number of challenges with attracting and growing businesses that occupy office space: high employee housing costs and other costs of living; high business costs; numerous building, development and permitting regulations; limited amount of skilled workers available; and difficulty in accessing capital to grow businesses. In some cases, businesses find it challenging to remain in a smaller municipality; as they grow the number of employees or their needs evolve, they cannot find adequate space, and need a more central location.

8.1. Long Range Municipal Plans

Municipalities have land use plans and policies that are supportive of long-term community building, and require some space devoted for employment uses, such as office. As the area population and economy grow, those employment spaces will be needed. Having a long-term land use vision is important, yet some flexibility is helpful. For example, exact uses may evolve over time, phasing can change, and also consideration of broader economic issues. In addition to plans and actions to enhance area amenities and features, municipal economic development initiatives may help to attract businesses and workers to Urban Centres.

In the immediate term, outside of Vancouver, municipalities are generally attracting mixed-use projects with office in podium buildings (usually 2-6 levels). Gradually, over the longer-term, more standalone office buildings on lands designated for such are expected to be built as the demand for office space grows, providing accommodations for more businesses and larger office tenants.

Still, tensions remain between developers and municipalities about how much office is the right amount. City policy requirements for office space in a mixed-use development can be significant. In some cases, office-supportive uses or functions such as retail or amenities can be counted towards that space.

Developers also say that planners need to be less prescriptive. Rather than only allowing a very specific or limited form of office use in certain areas, allow all types of office uses and let the market determine specific uses. In the past, the concern was that tech tenants could not pay as much rent as regular office tenants; now the situation has reversed.

Other suggestions by developers included: letting the downtown emerge as a new innovative district; allowing greater flexibility and facilitate quick permitting, as was done with street patios during the pandemic; testing new initiatives as pilot projects, temporary uses, experiments, etc.; and set an overall tone for a business-friendly environment, and positivity about investment.

Proactive municipality incentives could include efforts to attract entrepreneurs, including package of lifestyle / workstyle improvements by making the place special and unique, such as creative districts, entertainment features, improved transit, etc. A major anchor / institution (such as a government agency) can attract additional activity and create critical mass for an area to support market office development. Universities, possibly focused on technical skills training aspect, including employers involved in informing the curriculum, can help incubators expand, and grow the workforce and business ecosystem.

8.2. Metro Vancouver Regional Government Role

Municipal staff appreciate Metro Vancouver as a creditable source about the need for employment and job-supporting lands and their protection, and to defend against ongoing pressures for conversion to other uses. Namely, focusing office development to Urban Centres, and protecting industrial lands for industrial uses. This can and should include the provision of resources, references, guidelines, best practices, etc., that can help with local planning initiatives, however municipalities do not want regional policies that impose additional requirements or that limit municipal flexibility.

The regional growth strategy recognizes the long-term intent for further growth of Surrey and specifically Surrey City Centre, and the city appreciates enhancing this action. Through continued population growth in the region shifting east, Surrey is increasingly a major and connected centre for the Fraser Valley area.

9.0 FUTURE CONSIDERATIONS FOR OFFICE IN URBAN CENTRES

This section outlines various actions by different parties to support office space development and occupancy in Urban Centres. These items are organized into two parts: immediate priority actions, and a list of other areas for further exploration. All of these actions require a combination of technical solutions and political and industry support coordinated between the public and private sectors.

Municipalities in the Metro Vancouver region continue to undertake various efforts to attract office development. In some cases, these policy efforts match market forces, such as in downtown Vancouver where there is strong demand, especially for tech sector tenants who seek locations with rapid transit and urban amenities. In other places, market demand is spurring office development at SkyTrain locations that are not necessarily in Urban Centres. Elsewhere, municipalities are encouraging and requiring mixed-use development with office space components even where developers state that there is limited office market demand. Municipalities are requiring supply in the hopes of generating demand.

Municipalities want to attract office investment to their Urban Centres, while developers want to build development that fulfils market demand, and businesses want accommodations that meet their operational needs. Ultimately, office development is a large and long-term investment, with the main decision factors being market forces and values, specifically: land prices, construction costs, and lease rates.

9.1. Priority Actions

The issues most consistently expressed in interviews and supported by research, and which can be advanced in the shorter term with a relatively high potential of effectiveness, include:

9.1.1. Development Approval Process

Streamline the development review / approval process, reduce the uncertainties and risks, and manage municipal charges / fees.

- By providing a streamlined development application process and reducing regulatory barriers, the review process will benefit from less risk, time, and costs for developers. This will encourage and facilitate investment in municipalities with approval processes that are clear, consistent, and predictable.
- This is in response to the challenges developers experience; interviewee suggestions ranged from removing obstacles to development by simplifying the approval process, and allow higher densities where appropriate.
- As argued by several developers, the supply of office space in Vancouver is constrained by a slow approval process, in addition to the need to recognize market forces and business cycles. A quicker approval process would allow for more responsive office developments to meet market demand. Projects take a very long time - many years from

concept to completion - with approvals taking a significant part of that process, which makes it more difficult to make investment decisions that respond to market signals.

9.1.2. Land Use Planning

Encourage, but do not mandate, mixed-use projects with office components. Allow market demand to inform the supply of office development built in specific locations.

- Municipal government plans need to prioritize office development at Urban Centre (and secondarily to FTDA) locations and provide supportive and consistent policies. Plans that clearly designate "CBDs" in Urban Centres help provide direction and focus on where office development should go. If sites are designated / zoned for office uses only and this is not consistent with the market, they may remain undeveloped for a significant time.
- Municipalities can assist office development in Urban Centres by assembling lands in key areas and selling these to developers as prepared sites ready for development.
- Granting increased development rights for larger sites may encourage land assembly.
- Municipalities can help by providing the infrastructure, amenities, and facilities desired by businesses and workers in Urban Centres. Municipalities can also invest in initiatives that improve downtowns, such as façade improvement and crime reduction programs, urban design upgrades, supporting business improvement associations, and downtown promotional events.

9.1.3. Zoning Definition

Allow general office uses, rather than overly specific / limiting types of office uses. This would improve tenanting flexibility and decrease landlord risk.

- Interviewees stressed the importance of municipalities establishing zoning specifically for office uses in priority locations where there is market demand. Developers and brokers repeatedly stated that municipal zoning bylaws should not be overly prescriptive or restrictive about the specific type of office use permitted; rather, allow for 'general office', which could be used by different types of tenants to provide flexibility as the economy and market evolve.
- They also suggested flexibility for office zones to allow other supportive and ancillary activities.

9.1.4. Tenant Permits

Shorten and simplify the permitting process for basic interior renovations and improvements needed when new office tenants occupy a premise and operate a business.

- The tenant representatives interviewed had a number of suggestions for municipal actions. They requested consultation on government initiatives that could impact businesses (e.g. permitting and approval requirements and processes), and asked that governments keep business costs down, have competitive property tax rates, and improve processes for obtaining business licences.

- In terms of permitting, for office tenants moving into a building, the time to get a permit can be many months, for simple tenant improvement and occupancy permits. Building code requirements can trigger costly upgrades that make it difficult to bring existing space up to new standards, especially with older buildings.
- This lengthy, expensive, and cumbersome requirement can be costly for both the landlord and tenant. Accordingly, some tenants decide to stay in their current space rather than move.
- Cities are encouraged to simplify this permitting system, similar to the past City of Vancouver Tenant Improvement Permit System[30], but applicable to a wider range of buildings. Also, that municipalities should allow Certified Professionals to review drawings to expedite the approval process.

9.1.5. Municipal Incentives

Explore financial, regulatory, and other incentives to encourage office development.

- Municipalities could offer incentives for office development in Urban Centres, such as providing bonus density, reducing development fees, expediting development review processes, or lowering property taxes, and utilizing revitalization tax exemption programs, as appropriate. There may be lessons learned from some municipal programs with incentives to encourage rental and affordable housing developments.
- Other incentive or benefits may be in the form of improving the features and amenities of Urban Centres, ranging from enhanced urban design, investments in infrastructure and facilities, public spaces, transportation upgrades, etc., which all improve the desirability of the area.

9.1.6. Research

Undertake further relevant research and case studies / best practices / innovation profiles into topics such as mixed-use development, such as identifying opportunities to integrate office space into mixed-use and multi-use projects, but also identify where office components may or may not be warranted.

- Interviewees appreciated research and reference publications by Metro Vancouver about office, industrial, and employment matters. Specific possible additional areas for research: explore more consistent municipal zoning provisions across the region, explore how better to achieve a balance of housing and employment growth objectives, and document local market conditions.

9.2. Other Areas for Exploration

The following are potential additional areas and actions that could be explored by Metro Vancouver, municipalities, developers, and other organizations to encourage and facilitate office development in Urban Centres. Generally, these initiatives support sound land use

[30] TIPs is an alternative permit-issuing process for renovation projects which require a building permit or a development-building permit.

planning and policy development, an increase in technical research and information sharing, and further enhancing coordination and collaboration. Participation by all stakeholders is required to achieve success. Some of these actions are shorter term while others are longer term, and plans to encourage office development in Urban Centres must recognize market fundaments and tenant and developer needs, while advancing both local and regional goals. These actions are organized by the relevant level of government and can be advanced through inter-agency and industry collaboration.

9.2.1. Metro Vancouver

- Advance and implement the regional growth strategy and regional context statements with supportive municipal plans and policies that direct investment, jobs, and development to Urban Centres and secondarily to Frequent Transit Development Areas, and restrict significant office development in out-of-centre locations.
- Work with municipalities, other agencies, and the development community to consider possible refinements to regional policies to best support the goal of attracting office development to Urban Centres.
- Promote the importance of business and office space in the region as part of a healthy economy supporting prosperity in the form of investment, employment, and taxation. This can be through advancing and implementing the goals, strategies, and actions in the regional growth strategy and ensuring that municipal plans, including regional context statements, official community plans, area plans, and economic strategies, highlight the importance and value of office space to the economy and community.
- Document and share regional economic issues and explore advancing initiatives that support economic and employment growth, including office-based businesses, and promote the region as a destination for investment. This can include encouraging efforts by municipalities and the province to retain and attract businesses to the region and office space to Urban Centres through an environment that is conducive to business investment and growth.
- Collect and promote case studies and best practices about ways municipalities and developers can encourage and support office growth in Urban Centres.
- Maintain and share data, statistics, and other information resources about office buildings and Urban Centres that may be of use for municipalities, businesses, investors, developers, and tenants. Specifically, periodically update the inventory of office buildings in the region.
- Encourage, as appropriate, municipalities to:
    - Streamline the development and permit application processes – review, costs, time, risk – in general and specifically for office development in Urban Centres. This may include developing guidelines to facilitate a clear and timely review process.
    - Develop incentive programs for office development in Urban Centres. This may include conducting research about possible incentives and sharing materials with municipalities to inform them about available tools.
    - Prepare development policies and design guidelines to support office development in Urban Centres. This could include guidelines or templates benefiting municipalities, or hosting education / information sharing events.

- Encourage TransLink to continue to improve transit service to Urban Centres, and where appropriate, improved local transit service to connect existing office parks located in urban areas to the Frequent Transit Network or commuter level transit service.
- Work with TransLink and member municipalities to develop appropriate transportation and land use policies that support the development of office space in Urban Centre locations.
- Work with the provincial and federal governments to encourage them to locate their major office accommodations and appropriate facilities in transit-oriented, Urban Centre locations.
- Continue to support coordination on economic issues at the regional level. Activities such as data collection, research, information sharing, and networking to supplement municipal efforts.

9.2.2. Municipal Governments

- Fostering a business-friendly environment by promoting the importance of office space as part of a healthy economy supporting prosperity in the form of employment and taxation. This can be done through municipal official community plans and area plans as well as economic strategies that respond to the needs of business, specifically office tenants, and best ways to accommodate this form of development within the community.
- Promote the infill and intensification of Urban Centres through municipal plans and policies as opportunities for developers and businesses to invest.
- Ensure that municipal policies and zoning clearly identify and promote the CBD within each Urban Centre. Consider which areas can accommodate large scale office uses, and which are best for local serving office.
- Through official community plan or other council policy, not support or approve significant office developments in locations outside of Urban Centres.
- Within the context of overarching municipal and regional goals and objectives, consider reviewing zoning bylaws for office uses to:
    - Ensure that they do not unduly limit office development potential on Urban Centre lands.
    - Pre-zone lands for office uses, and not allow other unrelated uses, in appropriate locations. This would send clear direction to landowners and developers about the desired long-term use for those lands. This could also include establishing higher density zoning or bonus density provisions for office space use or a density transfer program.
    - Allow different forms of office building designs, such as larger floorplate low-rise office spaces which may be in demand and more efficient than smaller floorplates, while respecting local conditions.
    - Ensure requirements that mixed-use buildings include an office component only apply where appropriate and where the market supports it.
    - Implement flexible zoning that allows for 'general office' uses, rather than specific and restrictive types of office uses.
    - Limit office uses and amounts to a scale that are accessory to industrial uses in designated industrial areas.

    - Discourage significant office developments in locations outside of Urban Centres.
- Explore specific economic development initiatives to attract office investment; an ‘open for business’ approach for office development will encourage developers and businesses to consider investments in these communities.
- Invest in public infrastructure and facilities / amenities in Urban Centres to attract private sector investments. This could include investments in transportation and other infrastructure and community facilities / amenities that benefit businesses and workers.
- Consider offering greater development rights for larger sites to encourage land assembly for office development.
- Investigate implementing a program that fast-tracks building interior and occupancy permits for tenants (modelled on the previous City of Vancouver’s “TIPs” program) as well as using Certified Professionals to review applications.
- Explore pre-servicing areas to be ‘building-permit ready’ for office buildings.
- Review property tax rates to support competitive business costs, and consider other appropriate financial incentives for new office buildings.
- Support Business Improvement Associations which may assist with promoting and improving business districts to make Urban Centres more attractive for office tenants.
- Locate municipal offices and facilities in Urban Centres; interviewees noted the City of Surrey’s relocation of city hall to Surrey City Centre as a positive example.

9.2.3. Provincial / Federal Governments

- Share available data about office and employment development and related economic matters, through BC Assessment Authority, BC Stats and other applicable agencies.
- Locate provincial, federal and other government agency offices as well as major institutional facilities such as universities and hospitals in Urban Centres, where possible.
- Province – assist with review of property tax rates for office space to support competitive business costs. This may include leading a taskforce with stakeholders to review possible adjustments to property tax rates and policies.
- Province – support economic development initiatives that retain and attract businesses to the region. This may be through working with Metro Vancouver / Invest Vancouver and stakeholders to explore preparing a regional economic strategy and advancing initiatives that support economic and employment growth in the region, including efforts to retain large businesses and grow smaller businesses, and promote the region as a destination for investment.
- Invest in necessary infrastructure and facilities / amenities in Urban Centres to attract private sector investments. This could include investments in transportation and other infrastructure and community facilities / amenities that benefit businesses and workers.
- Develop implementation agreements or memorandums of understanding consistent with the regional growth strategy directing government investments to Urban Centres as well as other supportive actions.
- Province - help with training an educated workforce.
- Federal - allow immigration or temporary visas for skilled workers needed by growing businesses.

9.2.4. Development Community

- Share information and research with local governments to foster a better understanding of the development process. This may include periodic meetings to exchange information and ideas between the public and private sectors or other types of special events.
- Development groups, such as NAIOP, UDI, ULI, and BOMA, could work with local governments to inform municipal plans and policies that are supportive of office development in Urban Centres. This could include sharing expertise about the office development financial and market requirements for land use plans and policies to include viable office space components.
- Work with municipalities and Metro Vancouver to identify and address regulatory barriers and challenges for office development in Urban Centres.
- Explore the potential for mixed-use and multi-use developments with office components, where appropriate.
- Consider the commuting needs of employees and access via different transportation modes for office development, including the potential for transportation demand management strategies to encourage transit usage.
- Further explore financial and market viability of office development opportunities at Urban Centre locations, especially beyond the Vancouver Metro Core, rather than non centre locations for office projects.
- Apply lessons from other jurisdictions about office development in Urban Centres to the Metro Vancouver region.
- Promote the benefits of locating in Urban Centres to office developers, investors, businesses, tenants, and workers.

Appendix A: List of Interviewees

Organization	Name / Title
Altus Group	Andrew Petrozzi, Research Director for Western Canada
CoStar	Paul Richter, Director of Market Analytics, Western Canada
Hemson Consulting	Adam Mattinson, Consultant
Regus / IWC	Alex Kanaan, Team Lead Area Sales Manager
WeWork	Sean Lemckert, Portfolio Manager
GWL Realty Advisors	Wendy Waters, Vice President, Research Services & Strategy Anthio Yuen, Senior Director, Research Services & Strategy Sara Obidi, Research Analyst, Research Services & Strategy Peter Jenkins, Director of Leasing
Hudson Pacific Properties	Chuck We, Senior Vice President, Western Canada David Haugen, Senior Director Leasing
Oxford Properties	Ted Mildon, Director, Office Leasing
PCI Developments	Dan Turner, Executive Vice President Jarvis Rouillard, Senior Vice President
QuadReal Property Group	Jeff Rank, Senior Vice President - Leasing
Avison Young	Glenn Gardner, Principal - Office Sales & Leasing
Colliers	Rob Chasmar, Senior Vice President Shalisha Senkow, Associate Vice President, Workplace Advisory Russell Whitehead, Senior Vice President, Planning & Placemaking Susan Thompson, Associate Director, Research Adam Jacobs, National Senior Director of Research
CRESA	Ross Moore, Senior Vice President & Managing Broker
Cushman & Wakefield	Paul Carrothers, Vice President, Office Svetlana Lebedeva, Research Manager
CBRE	Eli Applebaum, Vice President
JLL	Mark Chambers, Executive Vice President of Office Leasing Shawna Rogowski, National Research Manager - Office
City of Burnaby	Chun Nam Law, Strategic Initiatives Planner Ian Wasson, Senior Planner Jesse Dill, Senior Planner Lily Ford, Senior Planner
City of Coquitlam	Andrew Merrill, Director Development Planning Genevieve Bucher, Director Community Planning Andre Isakov, Economic Development Manager
City of Richmond	John Hopkins, Director, Policy Planning Suzanne Carter-Huffman, Senior Planner

	Jill Shirey, Manager Economic Development
City of Surrey	Patrick Klassen, Community Planning Manager Preet Heer, Community Planning Manager Andrew Dong, Community Planner
City of Vancouver	Matthew Bourke, Planner III - City-Wide & Regional Planning Chris Clibbon, Planner II - City-Wide & Regional Planning Thien Phan, Senior Planner - Rezoning Centre John Grottenberg, Planner III - Special Projects Office Sean Martinez, Planner II - City-Wide & Regional Planning Nathan Bunio, Planner - City-Wide & Regional Planning
Vancouver Economic Commission	Bryan Buggey, Director - Strategic Initiatives and Sector Development James Raymond, Manager - Research & Analysis

Thank you to the interviewees who provided their insights to inform this report.

Interviews were conducted by Eric Aderneck, Senior Planner, Metro Vancouver, between mid-September 2022 and mid November 2022.

The preparation of the earlier edition of this report was informed by other interviews at that time. Comments that are still relevant are retained in the updated edition of this report.

Appendix B: Interview Discussion Questions

The following questions were provided to interviewees in advance of meetings for their preparation, noting that not all questions applied to all interviews.

Views on Metro Vancouver Office Market Issues and Trends:

1. What are the region's major strengths and weaknesses regarding office development and tenancy?
2. What are the greatest barriers / challenges to growing the corporate / headquarter office market in the region?
3. What are major issues or trends facing the office development market in Metro Vancouver (such as: impacts of COVID-19 and associated Work-From-Home vs Back-to-Office patterns, changing nature of work, tenure / co-working, tenant needs, lease values, land values, construction costs, building designs, regulatory / permitting, etc.), and how is this evolving?
4. For office tenants that are moving to the region, where are they moving from, and what are they seeking?
5. For office tenants that are expanding within the region, do they typically stay in the same geographic area or move, and what are they seeking?
6. Which sub-markets within the region compete / complement with each other, and which do not?
7. To what extend could office development and office tenants be guided to other Urban Centres outside of the City of Vancouver Metro Core?
8. How has the new supply of office buildings in the region, particularly in downtown Vancouver, impacted office market and tenancy?
9. Any notable observations about the sectors and sizes of office tenants seeking accommodations, and the type of desired spaces and features?

Questions for Developers and Brokers (some questions relate to tenants):

1. What are the key considerations / criteria for selecting a site for an office building development, and how might this be evolving (such as area features/amenities, proximity to transit, proximity to highways, availability of parking, mixed use vs single use complex, building designs, land values, lease rates, etc.)?
2. What are office tenant key selection criteria, and how has this changed?
3. Has the premium that tenants are willing to pay to locate in Urban Centres / near transit / amenities vs other locations without these features changed over the past five years (or since 2020 due to COVID-19)?
4. What do developers and tenants perceive to be positive or negative qualities associated with Urban Centres?
5. How does the market differentially consider Urban Centres, SkyTrain stations (historic, new, or planned), or proximity to frequent bus transit routes?
6. What are challenges or barriers to developing in Urban Centres vs other locations?

7. Could efforts by municipalities to reduce costs (such as reduced DCCs, application fees, approval processes timelines, etc.) or enhance services / amenities have a significant impact on office development / tenancy decisions?
8. What could municipalities or Metro Vancouver do to encourage additional office developments in Urban Centres?

Questions for Municipal Staff (Planning and Economic Development):

1. What are some notable municipal experiences or examples (both successes and challenges) to attract office development to cities or more specifically to Urban Centres?
2. What sorts of policies or programs does the city have in place to encourage office development in Urban Centres (or other target locations), and how do developers respond to those?
3. Has there been a notable shift (in the past five years, or since 2020 due to COVID-19) towards more office development occurring in Urban Centre locations vs suburban / highway oriented locations?
4. How do developers consider municipal and regional plans when selecting an office development site?
5. What if any planning research / policy could help support more office development in Urban Centres?

Appendix C: Corporate Headquarters and Major Office Employers

Large office tenants, such as corporate headquarters or major branch facilities, are usually required to warrant large office developments through pre-leasing space to finance new office buildings. Other major Canadian cities/regions have more corporate headquarters (HQs) that are able to commit to new office space; this is not generally the case in Metro Vancouver, which has more small and mid-sized offices. However, over the past few years significant tech companies have entered the Vancouver market and taken up large blocks of office space.

The Importance of Head Offices

The role of head offices and their associated benefits are described in this section, copied from a report focusing on trends in office headquarters and particularly in Vancouver[31]:

> *While head offices only employ a few hundred workers, they generate indirect benefits to the local economy. Their employees are highly-skilled, contribute more to the tax base, and support innovative activities. There is also likely to be additional employment generated by related businesses in the business service industry. The majority of head offices outsource accounting, legal, and advertising services. Expenditures on outsourcing for these three services amount to 65% of the wage bill of head offices, mostly on advertising. Jobs related to head office activities tend to require high skills, pay high wages and contribute strongly to tax revenues. Head office activities are innovative and innovation may generate knowledge spillovers and above-normal profits. Head offices of major corporations can be philanthropic, funding arts, education, and other community programs.*

Further, the following text is taken from a report on office headquarters in British Columbia and Vancouver by Business Council of British Columbia:[32]

> *The choice of head office location carries significance for the company and host jurisdiction alike. Of course, the presence of head offices also matters in a substantive way, not just symbolically. 'Head offices function as centres of command and control for corporations; they are often where key decision-makers are located.'[33] There are sound economic reasons why cities, states and provinces are keen to host the headquarters of large firms. To begin with, head offices bring high paying jobs, both directly but also indirectly because they are an important source of demand for locally provided producer services – e.g., law, accounting, engineering, executive search, etc.[34] Head offices act as anchors to the surrounding community by utilizing local suppliers, providing leadership*

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[31] University of British Columbia, Sauder School of Business, Competition Policy Review Panel Research Paper Summary - Keith Head, John Ries, Head Office Location: Implications for Canada, 2008.

[32] Business Council of British Columbia - Jock Finlayson, Karen Graham, Corporate Headquarters and Head Office Employment in British Columbia: 2006 Update, 2006.

[33] Statistics Canada - John Baldwin, W. Mark Brown, Foreign Multinationals and Head Office Employment in Canadian Manufacturing Firms, June 2005.

[34] Federal Reserve Bank of Chicago, Economic Perspectives - T. Klier, W. Testa, Location Trends of Large Company Headquarters During the 1990s, Q2 2002.

> *and sponsorship of charitable organizations and the arts, and helping to establish business clusters of expertise and ideas.*[35]
>
> *Indeed, the evidence suggests that the concentration of numerous head offices in a particular city or region often has a "cluster" effect, as corporate networks are formed, supplier industries develop tight linkages with headquarters operations, and ideas and best practices are shared among business leaders. These kinds of business clusters contribute to the development of vibrant communities.*

The presence of a corporate headquarters can have numerous direct and indirect effects on a local economy[36]. They tend to have higher-paying jobs, and can attract other businesses that serve the corporation's needs and those of its well-paid employees. From the corporation's perspective, there are efficiency gains to be had from sharing services and having a concentration of knowledge.

Headquarter Location Decision Factors

Researchers have identified the main determinants of head office location as[37]:

- International accessibility
- A skilled workforce
- High quality of life to attract international staff
- Low corporate and personal taxes
- Excellent information and communication technology infrastructure
- Well-developed business support services (legal, accounting, public relations)
- Low risk (in terms of crime, exchange rates, regulatory and tax changes)
- Proximity to customers
- Proximity to production operations
- Cost and availability of office space

The propensity of attracting additional headquarters increases with the number of same-industry headquarters and activities in a region. The presence of specialized intermediate service providers including business services (such as advertising, employment agencies, computer services, legal services, engineering, and management services), and financial services (such as commercial banks, security and commodity brokers) exerts a positive and significant influence on the probability of receiving headquarters investment.

Economic geography theory suggests that the choice of headquarters location is a competition between the corporate need to be in proximity to customers and suppliers, high-level professional services and infrastructure, and motives for cost and tax savings. Headquarters relocation can thus add value to a firm and falls into a firm's value creation program. However, moving headquarters entails substantial costs - property acquisition and business interruptions, employee relocation, hiring, and training.

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[35] International Financial Centre, British Columbia Newsletter - Ian Heine, The Loss of Head Offices in BC, June 2006.
[36] Fraser Forum - Hugh MacIntyre, Jason Clemens, Nadeem Esmail, Corporate Headquarters in Canada, January/February 2013.
[37] University of British Columbia, Sauder School of Business, Competition Policy Review Panel Research Paper Summary - Keith Head, John Ries, Head Office Location: Implications for Canada, 2008.

Attracting and Retaining Corporate Headquarters
To encourage headquarter development, the best response is to promote policies aimed at fostering a knowledge-based economy and a competitive business environment, such as investment in education, basic research, R&D promotion, and competitive taxes. This will benefit the economy as a whole along with helping to attract and grow head offices and associated employment.[38]

Experience from other jurisdictions can be summarized as a common set of factors (or conditions) that are necessary for a city-region to be successful in attracting new – and growing local – corporate offices. Research suggests that the most important factors are:[39]

- A clear regional vision and well-defined and well-executed investment attraction strategy;
- Aligned leadership by local business and civic leaders, acting as ambassadors for the city-region;
- A competitive overall business environment (tax burden, regulatory complexity, and immigration rules);
- Political and regulatory stability / certainty;
- World-class infrastructure (transport and telecommunications links), a high quality of life, and availability of good educational, health and financial / professional services;
- An effective investment promotion / attraction agency (ideally, a one-stop shop to communicate comparative advantage and facilitate investment); and
- An available skilled workforce.

Metro Vancouver Headquarter Attributes
The number of corporate headquarters in the Metro Vancouver region has declined or stayed constant over the past two decades, despite a growing population, workforce, and economy. This is due in part to past natural resource sector companies based in BC closed, relocated, or consolidated. These HQs have not been fully replaced by local companies expanding to national or international scale HQ operations, or HQs relocating to the region from elsewhere.

That noted, there have been significant 'branch' offices that have come to Vancouver and expanded. These are associated with the tech sector (software, animation, gaming, film, etc., and more recently bio-tech / life sciences), notably Microsoft and Amazon. Vancouver's proximity to Seattle and California and being in the same time zone are noted attractions, along with relatively low costs (both accommodations and labour), ease of entry for international talent, and favorable USD/CDN currency conversation rates.

Although high cost by Canadian comparison, Vancouver is not exceptionally expensive compared to other international cities. Most immigration, which is high in Canada, goes to Toronto and Vancouver. To attract international skilled workers to North America, visas to

[38] Statistics Canada - Desmond Beckstead, Mark Brown, Insights on the Canadian Economy: Head Office Employment in Canada, 1999 to 2005, 2006.
[39] Business Council of British Columbia, Canadian Head Office Survey: How Do Metro Vancouver and British Columbia Stack Up?, 2016.

Canada are easier to obtain than USA. According to some views, Canada now stands on its own as a destination, not just as a steppingstone to USA.

These features are incentives for tech companies to locate major branch operations in Vancouver, but not enough to attract full HQs. While virtually all large cities / regions want additional HQs, that may not be readily possible for Vancouver, nor as needed, given the diverse economy and growth of the tech sector.

Vancouver is now on the international map, yet has lower cost compared to San Francisco and Seattle, for example. This is a consideration for decisions by international companies about where to locate their operations and staff teams. One interviewee believed that if during an economic slowdown international tech companies start to layoff staff, they would do so first in cities where costs (which comprise mostly labour) is highest, before Vancouver.

Specifically, with a growing tech sector is an expanding workforce comprising both local university graduates and international immigrants. Some of these businesses and employees in the region may lead to spinoff / start-up businesses that further grow the local employment market and expand the associated economic ecosystem. (Associated with this growth in workforce is a need for increased housing supply, particularly well-located rental apartments close to employment centres, along with investments in transit, and enhanced amenities.)

The growing tech sector tenants are as large as some corporate HQs in terms of office sizes. These large ‘lumpy’ amounts of space are both substantial to build and to occupy all at once. In the past, it was extremely rare for a single tenant to occupy 400,000 sq ft of office space in the Metro Vancouver region. Companies like Amazon have pre-leased and absorbed such blocks of space, driving the development demand to build it. And now that there is an increasing number of large office buildings and modern spaces, they can accommodate other growing tenants.

Few HQ tenants in Vancouver means many smaller tenants, providing for a more diversified (and some say resilient) tenant market not dominated by a few large players, and thus less risk for office developers and landlords. The Vancouver office market, long known for small tenant sizes, is growing both through the noted large tech tenants and some expanding local companies (such as tech, apparel / clothing, as well as various professional services).

A sectoral or economic decline is not likely to affect all the many small tenants in the same way. Furthermore, smaller tenants are less able to readily rid excess office space, whereas large HQs with huge blocks of space can unload surplus space multiple floors at a time.

Relative to other major office markets in Canada, Vancouver is seen as distinct. Toronto is larger and is the financial capital of the country, and increasingly an international destination for such activities and firms. Calgary is associated with the oil and gas sector, with its periodic swings that can greatly impact the dependent business economy and office market.

Seattle is well-known for Microsoft and other software companies, but is in a league ahead of Vancouver. Vancouver’s Asian connections are often noted as a feature, however given geo-political strains with China, not necessarily as strong or relevant as in the past. While Vancouver is appreciated by residents for its nice weather and quality of life, that is not the main consideration for corporate location decisions; rather good value for the business, even if employees face high housing costs.

Also, according to some sources, for commute patterns in Vancouver versus some other city-regions, the commute lengths (as well as tolerance for such by workers) is notable lower in Vancouver. That may be a function of the relatively good transit service including SkyTrain in the Metro Vancouver region.

Other Considerations

The strengths of the Metro Vancouver regional economy that particularly relate to the office market, as noted by interviewees, include: a 'Vancouver' brand that is well recognized, growth in the tech sector with large American companies locating facilities in Vancouver to access an international workforce via Canadian immigration policies, the region being a livable and desirable place with many amenities, and a strong educational system that fosters talent.

In terms of challenges or weaknesses of the region, high cost of housing and living were noted by many interviewees, as well as high land and construction costs for development, and excessively long and uncertain approval processes that increase risks for building projects.

Although Vancouver is known for high housing prices and office rental rates (by Canadian standards), compared to some other cities from where businesses and employees are moving from, such as San Francisco or New York City, it is not more expensive.

Corporate Headquarters and Employment

There is a fundamental fact about the Metro Vancouver office market – there are relatively few large corporate headquarters and associated office employees. Over the past few decades, mainly due to changes in the resource sectors, which represented a significant number of the headquarter offices in the region, these businesses have declined. Since then, the tech sector has grown, however not necessarily in the form of headquarter operations.

Many foreign corporations are attracted to Toronto as a national office location or Calgary as a Western Canada regional office location, rather than necessarily Vancouver. However, this is evolving, with less office demand in Calgary, due to fluctuations in the resource economy. There are a number of factors that challenge Metro Vancouver and British Columbia as a location for office headquarters compared to other Canadian centres, namely higher real estate costs, high costs of doing business, and high housing prices which can impose challenges in relocating and attracting staff. Yet on the other hand, Metro Vancouver region offers many benefits as earlier noted.

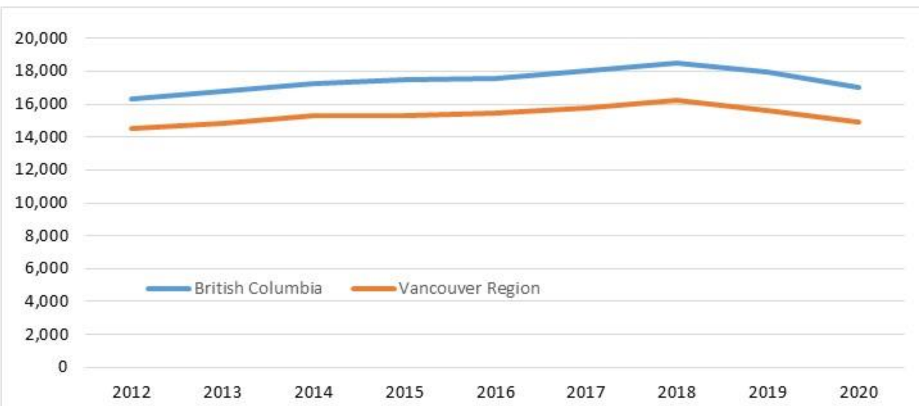
The below table and figure contains data from 2012 to 2020, showing the number of corporate headquarters located in Canada, British Columbia, and Metro Vancouver. Approximately 77% of corporate headquarters in the province of British Columbia are located within the Metro Vancouver region. Because the companies in the Metro Vancouver region are larger than the provincial average, they comprise approximately 88% of the HQ jobs in the province. While the population and employment of the province and the region have increased, growth in headquarters and associated jobs has been relatively flat.

Table: Corporate HQ Offices and Jobs – Canada, British Columbia, Metro Vancouver

Corporate Head Offices	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	***% Change***
Canada	2,793	2,773	2,759	2,736	2,728	2,729	2,737	2,736	2,694	*-3.5%*
British Columbia	319	319	313	311	307	308	313	319	314	*-1.6%*
Vancouver Region	244	242	239	237	239	239	242	247	241	*-1.2%*
Head Office Jobs	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	***% Change***
Canada	222,339	224,779	230,394	227,293	227,416	228,130	226,631	223,565	210,262	*-5.4%*
British Columbia	16,343	16,813	17,289	17,459	17,593	18,027	18,524	17,953	17,055	*4.4%*
Vancouver Region	14,513	14,840	15,281	15,290	15,423	15,783	16,261	15,605	14,898	*2.7%*
Population	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	***% Change***
Canada	34,714,222	35,082,954	35,437,435	35,702,908	36,109,487	36,545,236	37,065,084	37,601,230	38,007,166	*9.5%*
British Columbia	4,566,769	4,630,077	4,707,103	4,776,388	4,859,250	4,929,384	5,010,476	5,094,796	5,158,728	*13.0%*
Vancouver Region	2,418,938	2,459,426	2,507,414	2,544,484	2,582,202	2,616,904	2,658,582	2,709,277	2,746,491	*13.5%*

Source: Statistics Canada. Table 17-10-0135-01, Population estimates, July 1, by census metropolitan area and census agglomeration, 2016 boundaries

Chart: Head Office Jobs – British Columbia and Metro Vancouver



Metro Vancouver Headquarters

Over the last few decades, the Metro Vancouver region has seen the disappearance of some sizable businesses, due to consolidation in industries like mining and forestry, take-overs of large BC-based enterprises, and the relocation of companies to other jurisdictions. This has been offset to a significant extent by the growth of other BC-based enterprises, which have evolved from small firms to become larger organizations, as well as growth in the tech sector, although these are not necessarily corporate HQs.[40]

The following figure shows for the 2012 to 2020 period the number of corporate headquarters and number of headquarter jobs in the Metro Vancouver region. The number of corporate headquarters declined slightly and the number of headquarter jobs increased slightly during this decade. This was while the overall population and labour force of the region continued to grow. Thus, the number of headquarter jobs in the Metro Vancouver region as a proportion of total employment has stayed flat or declined.

[40] Business Council of British Columbia, Developing a Stronger Corporate Head Office Cluster, 2017.

Table: Corporate HQ Offices and Jobs – Metro Vancouver, 2012-2020

Geography	2012	2013	2014	2015	2016	2017	2018	2019	2020	% Change
Vancouver - HQs	244	242	239	237	239	239	242	247	241	-1.2%
Vancouver - HQ jobs	14,513	14,840	15,281	15,290	15,423	15,783	16,261	15,605	14,898	2.7%
Vancouver Region Population	2,418,938	2,459,426	2,507,414	2,544,484	2,582,202	2,616,904	2,658,582	2,709,277	2,746,491	13.5%
HQs per 1000 residents	0.101	0.098	0.095	0.093	0.093	0.091	0.091	0.091	0.088	-13.0%
HQ jobs per 1000 residents	6.00	6.03	6.09	6.01	5.97	6.03	6.12	5.76	5.42	-9.6%
Statistics Canada. Table 33-10-0110-01 Head offices and head office employment										

Using the same data and analysis, the number of headquarter jobs per 1,000 residents in the major business centres in Canada is shown in the below figure. Toronto has by far the greatest concentration of headquarters and associated employment in Canada, followed by Montreal, Calgary, and Vancouver.

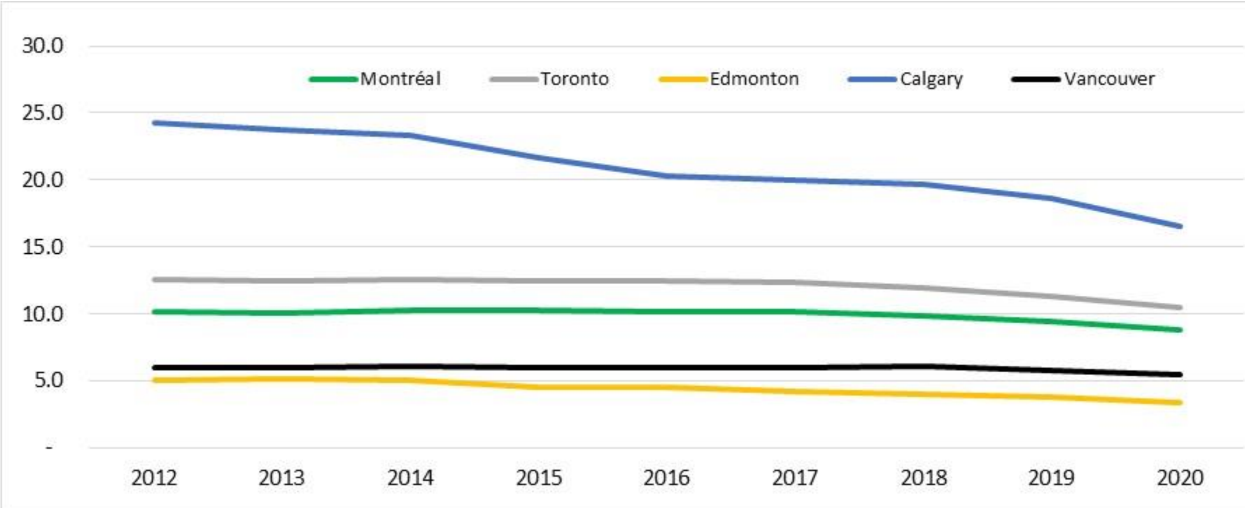
All Canadian metro regions experienced a decline in the number of headquarter jobs as a proportion of total employment during the 2012 to 2020 period, although Vancouver declined the least (it was the only geography not to decline in absolute numbers). Thus, Metro Vancouver's share of total headquarter employment in Canada increased slightly over this period, in part due to greater declines in other jurisdictions (and a total overall decline in Canada). Nevertheless, Metro Vancouver has a lower ratio of corporate headquarter jobs as compared to most other Canadian metro regions, apart from Edmonton.

Table: Corporate HQ Offices and Jobs – Major Canadian Markets, 2012-2020

Number of Head Offices	2012	2013	2014	2015	2016	2017	2018	2019	2020	# Change	% Change
Montréal	397	392	386	381	381	385	385	383	379	**-18**	**-4.5%**
Toronto	718	702	696	695	697	696	698	705	697	**-21**	**-2.9%**
Edmonton	120	119	118	113	114	115	117	120	115	**-5**	**-4.2%**
Calgary	222	216	215	210	209	213	212	204	197	**-25**	**-11.3%**
Vancouver	244	242	239	237	239	239	242	247	241	**-3**	**-1.2%**
Total	***1,701***	***1,671***	***1,654***	***1,636***	***1,640***	***1,648***	***1,654***	***1,659***	***1,629***	***-72***	***-4.2%***
Vancouver as % of Total	***14.3%***	***14.5%***	***14.4%***	***14.5%***	***14.6%***	***14.5%***	***14.6%***	***14.9%***	***14.8%***	***0.4%***	***3.1%***
Head Office Employment	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	***# Change***	***% Change***
Montréal	40,824	41,106	41,977	42,189	42,225	42,619	41,925	40,719	38,638	**-2,186**	**-5.4%**
Toronto	73,380	73,673	75,475	75,281	76,436	77,167	75,681	73,278	68,670	**-4,710**	**-6.4%**
Edmonton	6,242	6,559	6,658	6,138	6,148	5,924	5,739	5,518	4,951	**-1,291**	**-20.7%**
Calgary	31,572	31,935	32,284	30,604	29,161	29,068	29,251	28,222	25,606	**-5,966**	**-18.9%**
Vancouver	14,513	14,840	15,281	15,290	15,423	15,783	16,261	15,605	14,898	**385**	**2.7%**
Total	**166,531**	**168,113**	**171,675**	**169,502**	**169,393**	**170,561**	**168,857**	**163,342**	**152,763**	***-13,768***	***-8.3%***
Vancouver as % of Total	***8.7%***	***8.8%***	***8.9%***	***9.0%***	***9.1%***	***9.3%***	***9.6%***	***9.6%***	***9.8%***		
HQ Jobs per 1000 Residents	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	***# Change***	***% Change***
Montréal	10.1	10.1	10.3	10.3	10.2	10.2	9.8	9.4	8.8	**-1.3**	**-12.6%**
Toronto	12.5	12.4	12.6	12.5	12.5	12.4	11.9	11.3	10.5	**-2.1**	**-16.5%**
Edmonton	5.1	5.2	5.1	4.6	4.5	4.3	4.1	3.8	3.4	**-1.7**	**-33.3%**
Calgary	24.3	23.7	23.3	21.6	20.3	19.9	19.7	18.6	16.6	**-7.7**	**-31.7%**
Vancouver	6.0	6.0	6.1	6.0	6.0	6.0	6.1	5.8	5.4	**-0.6**	**-9.6%**
Average	**11.2**	**11.2**	**11.2**	**11.0**	**10.8**	**10.7**	**10.4**	**9.9**	**9.2**	**-2.1**	**-18.4%**

Source: Statistics Canada. Table 17-10-0135-01, Population estimates, July 1, by census metropolitan area and census agglomeration, 2016 boundaries

Chart: Headquarter Employment per 1000 Residents by Metro Region, 2012-2020



The following figure shows the amount of market office space (according to Colliers reports as of Q3 2022) and the regional population (according to census as of May 2021) for the major business centres in Canada. Calculating a ratio between the two values indicates the average amount of office floor space per resident in these metro regions. Based on this method, Metro Vancouver had 27 sq ft of market office space per resident, which is notably lower than Toronto at 38 sq ft and Calgary at 46 sq ft. (Note that these calculations exclude non-market office space such as government offices and institutions, which would likely be higher in government capital cities like Ottawa and Edmonton.)

The lower amount of office space reflects the fact that Metro Vancouver has a relatively limited corporate employment profile compared to the other Canadian cities, adjusted for population.

Table: Canadian Major Cities Office Space and Population Ratios

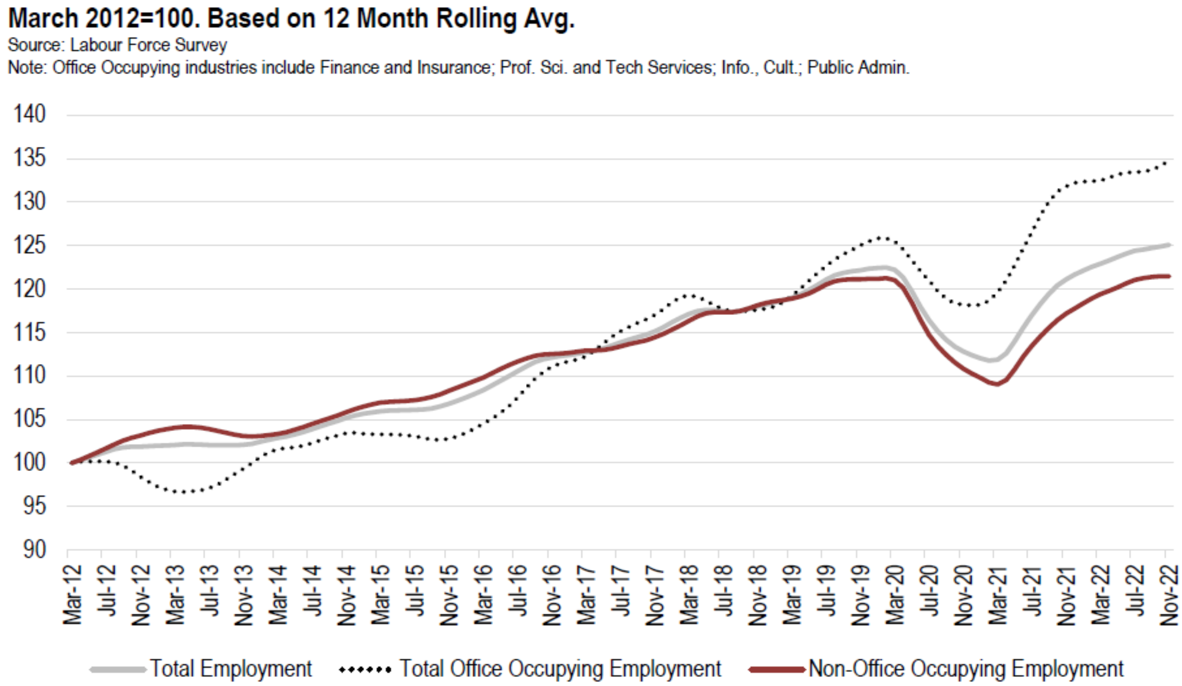
Region	Office Space Sq Ft	Regional Population	*Office SF per Pop.*
Montreal	99,011,837	4,342,213	*22.8*
Ottawa	44,275,821	1,125,306	*39.3*
Toronto	251,824,021	6,572,524	*38.3*
Edmonton	30,186,393	1,480,754	*20.4*
Calgary	72,107,737	1,559,284	*46.2*
Vancouver	75,178,790	2,773,148	*27.1*

Note: Source: Statistics Canada. Table 17-10-0135-01. Population estimates, July 1, by census metropolitan area and census agglomeration, 2016 boundaries. Colliers Office Market Reports Q3 2022, Montreal, Ottawa, Toronto, Edmonton, Calgary, Vancouver. Ottawa office inventory and population does not include Gatineau. Office space is amount tracked in the market, not necessarily total inventory.

Office Employment Growth

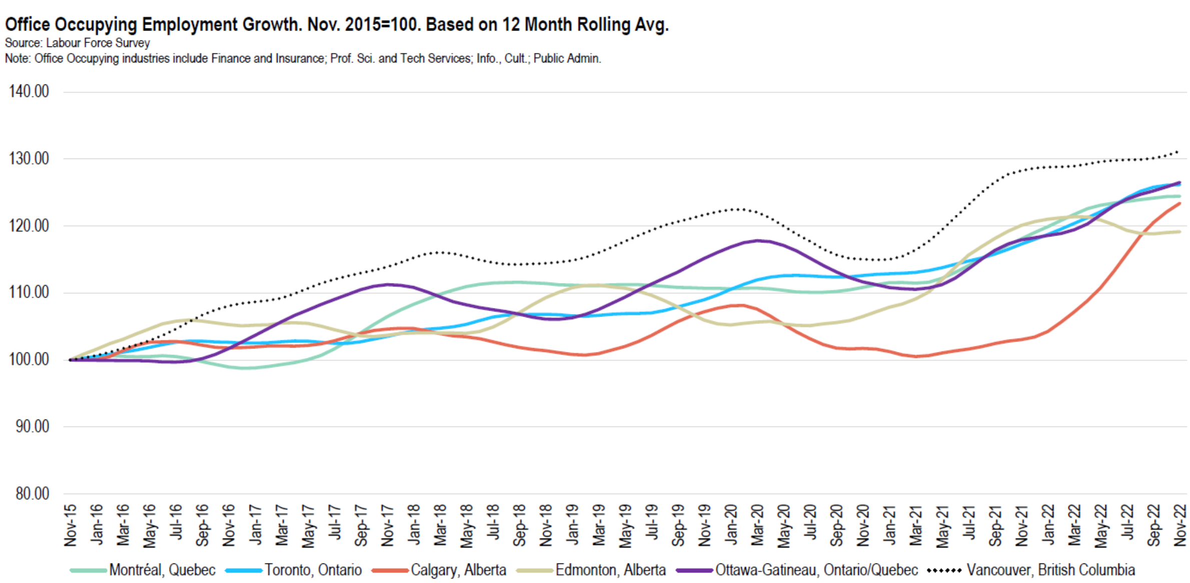
The below figure shows the growth in employment in the Metro Vancouver region between 2012 and 2022. According to the classification of the labour force survey data, this shows that office type employment has grown faster that non-office employment, particularly between 2019 and 2022. All else being equal, this would indicate additional demand for office space to accommodate this growth in office employment, although adjusted for the fact that some employees may be working from home due to COVIC impacts. (Source: GWL Realty Advisors)

Chart: Metro Vancouver Office-Oriented Employment, 2012-2022



Comparing employment growth in Metro Vancouver with other major markets in Canada, between 2015 and 2022, percentage-wise Metro Vancouver grew faster and more consistently than the other markets. This may be a reflection of the strong growth in the tech sector in Vancouver during this period. (Source: GWL)

Chart: Vancouver Office Employment Growth, 2015-2022



Appendix D: The Evolution of Employment

For most businesses, their employees are key. With increasing attention to attracting and retaining talented staff in a competitive environment, especially in the tech sector, businesses are responding by selecting accommodations that have the location and features that employees want. The new and younger workforce, who sees work as a lifestyle and more than just a place to work and get paid, are no longer satisfied with a staid space. Instead, they want to work in a 'cool' place.

In some cases, COVID accelerated pre-existing trends and in other cases created new trends regarding workplaces.

Although real estate costs have risen, for most businesses accommodation costs are relatively small compared to staffing cost. Thus, looking holistically, businesses realize that paying a premium for a better location will result in benefits through higher employee satisfaction and retention. That said, for other businesses, perhaps with a workforce that is accustomed to commuting by car, a downtown location may not be desired or ideal.

Attracting Employees - The 'War for Talent'
Most work now is fundamentally different than it was in past decades, and the pace of change, fuelled by technology, economic and cultural trends, continues to accelerate. Amid this changing environment, companies must continuously maintain a competitive advantage to retain and attract talent.[41] The majority of workplaces in the past was dull, demotivating and incapable of effectively supporting collaborative or concentrated knowledge work. According to one publication: "In an attempt to create 'one size fits all' what resulted was 'one size fits nobody'".[42]

According to CBRE, agile real estate strategies incorporate:[43]

- **Diverse workplace design solutions**, fuelled by technology, to ensure the highest and best use of committed leased or owned space for the given requirements.
- **Flexible space solutions**, solving for requirements that are uncertain, transient or short-term.
- **Experience-led amenities, services and programming**, supported by technology, that offer substantive value to tenants beyond building location.
- **Diverse lease models** that range from long-term traditional leases and short-term turnkey solutions to on-demand, shared workspaces.

For occupiers and landlords, that means a focus on creating environments that enhance the workday experience. Across many industries, companies are adapting to the changing nature of work by refocusing on a workplace that offers balance, variety, and a sense of purpose. "It's not just about desks, offices, and conference rooms anymore, it's about engagement — specifically

[41] CBRE, The Agile Advantage, 2018.
[42] CBRE, FAST FORWARD 2030: The Future of Work and the Workplace, 2014.
[43] CBRE, The Agile Advantage, 2018.

a focus on the individual and supporting the uniqueness and value that comes from each person."[44]

The newest office designs are offering choices in when and where to work, placing more emphasis on purpose, providing places for social interaction, and adding interactivity that engages people.[45]

Considerations for Occupiers:[46]

- Commit to long-term requirements that are reasonably certain, and explore flexible space solutions for the rest.
- Focus on density and mobility in the workplace over traditional per-seat metrics.
- Design a workplace based on functionality for today and adaptability for the future.
- Invest resources into technology-enabled amenities, services and programming focused on the employee.
- Choose landlords committed to enhancing the overall experience of the building.

Considerations for Owners and Investors:[47]

- Build shared amenity floors that promote efficiency within traditional, tenant-leased environments.
- Provide the technology that tenants need to be successful and employees need to be engaged.
- Commit to the tenant experience journey through amenities, services and bespoke programming.
- Consider flexible space solutions to support evolving tenant demands.

Flexibility - From 'Workplaces' to 'Places to Work'

According to CBRE's view of the future, reference to the high-performance workplace will no longer refer to only space within the corporate office, although that will still remain a dominant part of where people work. "In 2030, we will think more about 'places to work' rather than the 'workplace'."[48]

Concepts such as 'the third place' (i.e. working in coffee shops and other public places) and co-working centres (i.e. work centres, often with memberships) could be considered as an extension of a corporation's core workplace.

Mobile technology has made "work from anywhere" a reality. The potential benefits of teleworking include increased productivity levels, reduced commuting times and costs, a wider pool of potential employees and improved employee job satisfaction linked to a better work/life balance.[49] Recent moves to more outcome-based work are making it possible to

[44] Gensler Dialogue ISSUE 31 - Vernon Mays, The Workplace Is Your Key Recruiting Tool, 2018.
[45] Gensler Dialogue ISSUE 31 - Vernon Mays, The Workplace Is Your Key Recruiting Tool, 2018.
[46] CBRE, The Agile Advantage, 2018.
[47] CBRE, The Agile Advantage, 2018.
[48] CBRE, FAST FORWARD 2030: The Future of Work and the Workplace, 2014.
[49] Griffith University: Peter Ross, Susan Ressia, Neither Office nor Home: Co-working as an Emerging Workplace Choice, 2015.

further decouple 'work' from a particular 'place'. Businesses have begun to rethink how they make use of their real estate to best facilitate work, by doing 'more with less'.[50]

At the same time, "going to the office" has other important qualities, such as being part of a community of people who exchange ideas and facilitate learning and co-creation, and thus spur innovation. For many workers today, co-working spaces offer the flexibility to combine mobile work with the connectedness and identity found in traditional offices.[51]

Activity-based working (ABW) describes a way to design space around different kinds of activities, or 'how' work gets done. In ABW spaces, employees select spaces suitable for the work task at hand. ABW offers a range of configurations geared towards different activities: creative team collaboration, meetings, quiet work, reflection, rest, and integrating workspace with hospitality amenities such as cafes.[52]

Real Estate as a Service - Rise of Co-working Operators

Prior to the COVID pandemic, co-working experienced exponential growth and established a global identity.[53] Co-working represents the rise of the real-estate-as-a-service model; real estate is transforming from a space utilization business to a service business.[54] The expansion of co-working employment has been described as a decentralised yet reflexive global movement.[55] Specifically, it reflects the decline in the number of traditional office workers and an increase in freelance and contract office workers.[56]

The stereotypical co-working space may be the opposite of traditional corporate workspaces, with a focus on technology, socializing, and informal 'play' spaces. However, new more sophisticated co-working spaces now provide concepts more relevant to larger organizations.

Unlike renting space in traditional offices, members of co-working spaces are not required to sign long-term leases, pay any deposits or spend large capital outlays on fit-outs, yet receive the right to use the office space and associated facilities.[57] People co-work for a broad range of reasons, including its relative cost, rental flexibility, the nature of their precarious work, the need for social interaction, the ability to engage in project work collaboration, and a better separation of work and home life.[58] Flexible office space arrangements are particularly attractive to small businesses that have difficulty acquiring the capital required for traditional real estate leases and are more uncertain about future space needs.

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[50] University of Sydney, Co-working Spaces Australia: The new places where people work, businesses grow, and corporates connect, 2017.
[51] University of Sydney, Co-working Spaces Australia: The new places where people work, businesses grow, and corporates connect, 2017.
[52] University of Sydney, Co-working Spaces Australia: The new places where people work, businesses grow, and corporates connect, 2017.
[53] Cornell University / Cornell Real Estate Review - Daniel Wright, "Match Made in Heaven: Investment Benefits of Co-working Spaces in Historic Sacred Places", 2018.
[54] ULI Urban Land - John Egan, "Co-working Spaces Seen as Key Tenant for Houston Office", December 7 2018.
[55] City University of London - J. Merkel, "Co-working in the City", 2015.
[56] Cushman Wakefield, CO-WORKING and Flexible Office Space, 2018.
[57] European Real Estate Society - Chris Eves, Dulani Halvitigala, Hera Antoniades, "Co-working Space v. The Traditional Office Space: Challenges and Opportunities in Sydney", 2018.
[58] Griffith University: Peter Ross, Susan Ressia, Neither Office nor Home: Co-working as an Emerging Workplace Choice, 2015.

Co-working space is commonly a collaborative space in an office-like environment. The space can be in the form of very short office leases / agreements, used independently or collaboratively. The intent of co-working spaces includes a sense of community, encouraging greater productivity, providing access for mobile and freelance workers, and offering affordable solutions to start-ups unable to enter into long-term leases.[59] The fundamental concept of co-working is: create accessible, fully fitted out, office space on short-term leases.[60] Co-working providers are meeting the need with finished space that removes the hassle that small companies often face when they need to accommodate changing space requirements.[61]

Co-working spaces are shared working environments in which independent knowledge-workers gather to create knowledge and benefit from it, thereby "working alone, together" – or as one operator terms it: "*Work For Yourself, Not By Yourself!"*[62]

WeWork states: "It's about attracting and retaining talent among an increasingly liquid and digital workforce. We want people to make a life, not just a living."[63] Co-working with open concept work environments, with living-room style common areas and perks such as micro-roasted coffee, craft beer on draft and social events, also appeals to the millennial workforce, which has surpassed the Baby Boomer generation in size.[64]

In the face of long-term work fragmentation and outsourcing, co-working provides knowledge-workers with local communities and greater opportunities for collaboration with those communities.[65] However, simply putting people together in an open office space does not guarantee collaboration between co-worker members.[66] Coworkers frequently work alone in a shared space without much interaction, mutual support, or community orientation, which gives co-working hosts a special role in facilitating team work.[67]

Corporate occupiers can use co-working within their real estate portfolio, either as a provider of space at a single location or, on the other end of the spectrum, as an integrated partner across an entire portfolio. Large business occupiers are considering co-working for several reasons:[68]

- **Flexibility:** Co-working offers companies the option to quickly and easily expand or shrink their office portfolios on the margins. Co-working "swing space" can be used to manage space if a company needs to ramp up hiring or reduce headcount quickly.

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[59] European Real Estate Society - Chris Eves, Dulani Halvitigala, Hera Antoniades, Co-working Space v. The Traditional Office Space: Challenges and Opportunities in Sydney, 2018.
[60] Cushman Wakefield, CO-WORKING and Flexible Office Space, 2018.
[61] BOMA BC Leasing Guide: Commercial Real Estate Office Space - Peter Mitham, "Shared Space - Co-working providers are changing how tenants lease space", 2018.
[62] Griffith University - Peter Ross, Susan Ressia, "Neither Office nor Home: Co-working as an Emerging Workplace Choice", 2015.
[63] ULI Urban Land - Leslie Braunstein, Inside the Office Space Revolution, October 26 2017.
[64] Altus Group, Top 10 Real INSIGHTS, 2018.
[65] White Rose Research / Journal of Business and Technical Communication - C. Spinuzzi, Z. Bodrožić, G. Scaratti, et al., Co-working is about community but what is 'community' in co-working?, 2018.
[66] Griffith University: Peter Ross, Susan Ressia, Neither Office nor Home: Co-working as an Emerging Workplace Choice, 2015.
[67] City University of London - J. Merkel, Co-working in the City, 2015.
[68] Cushman Wakefield, CO-WORKING and Flexible Office Space, 2018.

- **Talent Attraction/Retention:** Many employees are attracted to the "feel" of a co-working environment. Co-working can be a part of a company's human resources workplace planning which offers employees flexibility to work from outside the traditional, "corporate" office and in a desirable location. With the heightened focus on employee experience in a highly competitive job market, co-working can be a tool in attracting and retaining talent.
- **Cost Savings:** Even at a higher cost per square foot, flexible office space can help reduce overall commercial real estate costs in the long run. With a small, but growing proportion of a global portfolio in co-working, the remaining long-term, traditional leases can be tighter since organizations don't need to allow for as much expansion space that is not utilized or is underutilized for the first several years of the lease term. Co-working allows for the rest of the portfolio to be right-sized.
- **Innovation:** Specific teams or departments can be located in co-working facilities in order to develop a separate culture. These innovation labs can be a strategic tool for collaboration and creativity and/or can be designed to encourage employees to connect with other businesses outside of their organizations that may be future partners or customers.
- **Subleasing:** Corporate occupiers have partnered with real estate services firms or co-working providers to manage and monetize unused space by turning it into co-working space. This can be a creative alternative to leaving a location underutilized or subletting to a single tenant with a traditional sublease structure.

The demand for flexibility is not going to decline, especially considering the not-yet-fully known long-term implications of the COVID pandemic disruption.

Location of Co-working Facilities
Analysis indicates the majority of co-working spaces are located either in the heart of the Central Business District or the CBD fringe, with specific locations for the creative industries positioned furthest away from the CBD. In those cases, co-working operators are utilizing premium grade buildings.[69]

In other cases, commercial landlords may consider this as an opportunity to transform difficult-to-lease premises into co-working vibrant hubs. Instead of negotiating rental discounts with individual tenants, landlords are able to lease these spaces to co-working operators who bring credibility to buildings. As a result, co-working spaces can be attractive to landlords with underperforming or underutilized assets located in less desirable areas as they allow landlords to improve office space performance.[70]

Landlords
Historically with the preference to lease spaces to large-scale corporations and professional service firms, landlords were cautious in welcoming co-working operators into their buildings.

[69] European Real Estate Society - Chris Eves, Dulani Halvitigala, Hera Antoniades, Co-working Space v. The Traditional Office Space: Challenges and Opportunities in Sydney, 2018.
[70] European Real Estate Society - Chris Eves, Dulani Halvitigala, Hera Antoniades, Co-working Space v. The Traditional Office Space: Challenges and Opportunities in Sydney, 2018.

A co-working model can be considered an amenity to a building, and attract people and other tenants. Yet, while traditional office space is incorporating elements of the co-working environment, many landlords are not embracing it completely. States one office market expert: “Don’t underestimate how concerned the landlords are about the tenant profile, because once a building has a reputation, it’s hard to change. You want to set the tone early on. So the question is, do you want those co-working operators to set the tone of the building?”[71]

While an economic downturn may reduce the demand for co-working among freelancers, entrepreneurs, and small businesses, it also will likely cause large occupiers to think even more seriously about the need for flexibility in their office portfolios.[72]

[71] BOMA BC Leasing Guide: Commercial Real Estate Office Space - Peter Mitham, Shared Space - Co-working providers are changing how tenants lease space, 2018.
[72] Cushman Wakefield, CO-WORKING and Flexible Office Space, 2018.

Appendix E: Office Space Design

Well-designed office environments can offer workplace productivity benefits because of the opportunities they create for interaction and knowledge exchange, but research has highlighted noise, distraction and loss of privacy as significant productivity negatives associated with open plan layouts.[73] More recently, the significant impacts associated with COVID and the desire for physical separation to prevent contagions and the increase in online meetings have spurred further changes to office designs.

Space Design Trends

The design of office space continues to evolve. Layouts from decades ago with spacious private enclosed offices and large boardrooms, were replaced by cubicles and then open space layouts fitting more and more people into a tighter space. This extreme office space rationing was driven by cost saving initiatives. However, such designs were not generally desirable by employees, and in some cases leading to increased employee turnover, outweighing the savings in accommodation costs (note: for most office businesses, labour may be about 80% of their total costs, and space accommodations under 5%).

COVID has demonstrated that while some work can be done from anywhere, other types of work is best done at the office. For employees who are usually mobile, be it often travelling or working from home, a dedicated office space may be an unnecessary 'luxury', while employees who do concentrated work require quiet rooms. Business leaders increasingly recognize that people may have one job, but with multiple roles and tasks, may need different types of spaces / places.

The previous trend towards open concept office and maximum space efficiencies are now decidedly reversed with COVID, with the need for physical separation of workers in order to reduce the spread of communicable disease. Small workstations have been replaced by larger ones as well as more space for collaborative team activities. With fewer employees at work in person, physical separation increased and the employee densities decreased. Now that more employees are returning to work, there is a growing need to make the work place safe, comfortable, and attractive, with the definition of those standards evolving.

Workstations and Amount of Space per Worker

The end result is that the amount of space per employee may be pulled in two directions: higher, due to larger workstations and more common spaces, and lower due to desk sharing and fewer employees in the office (assuming the unused floor space can be sub-let). The net effect may be overall mixed or negligible, but how the space is designed and used has changed considerably. The footprint of office space is not actually reduced if a personal workstation is still required for each employee (even if the employee is not there five days a week), plus common areas, etc. Greater flexibility and more options allow people to change locations throughout the day depending on their task or activity. Accordingly, there may not be a change in office space demand directly commensurate with the number of employees, or as much space savings reductions as earlier rounds (pre-COVID) of space re-designs.

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[73] Journal of Corporate Real Estate / Sheffield Hallam University - Barry Haynes, Louise Suckley, Nick Nunnington, Workplace productivity and office type: an evaluation of office occupier differences based on age and gender, 2017.

Proactive businesses are developing work place strategies to best meet their needs and those of their employees, both in the current term and into the future. Through assessing the type of work performed, needs of the employees, often informed through targeted interviews and employee surveys, satisfying requirements for both collaborative teamwork and individual quiet work, these strategies inform the amount of space that businesses need, along with design and location considerations.

If employers want to attract employees to the office, an effective and pleasant workspace should be provided – hoteling is not that. In theory, if people only come to work a few days per week and share space, this could mean less demand for office space. However, hot desk / hoteling is not popular with employees. It is widely viewed that COVID has proved hoteling to be largely a failure. Such workplace practices may be in response to the business trying to ration space and reduce costs, such as accommodating a growing workforce or moving to a smaller space that they can more efficiently utilize.

Attempts at hyper efficiency cannot always be achieved because businesses may need extra space in case of expansion. And for a small business, it is difficult to readily reduce the amount of space occupied and leased – depending on building size and floorplate, it may be possible to only do so by a floor at a time, rather than smaller areas.

Booking systems and software may be used to optimize space allocation, however requires advanced room reservations which takes away from opportunities for spontaneity and flexibility. The booking system is most effective if users ensure they cancel room booking when no longer needed, and still allocate some space available for unscheduled meetings, such as small breakouts rooms and individual phone booth stations that do not require advanced booking.

Communication and Interaction

Open-plan office layout is supposed to facilitate communication and interaction between coworkers, promoting workplace satisfaction and team work effectiveness. However, open-plan layouts are more disruptive due to uncontrollable noise and loss of privacy. According to workplace satisfaction surveys, enclosed private offices clearly outperformed open-plan layouts in most aspects of Indoor Environmental Quality, particularly acoustics, privacy, and proximity. Benefits of enhanced 'ease of interaction' were smaller than the penalties of increased noise level and decreased privacy from open-plan configuration.[74]

Some research results contradict the industry-accepted wisdom that open-plan layout enhances communication between colleagues and improves occupants' overall work environmental satisfaction. Moreover, the increase of overall workspace satisfaction due to the positive impact of ease of interaction in open-plan office layouts failed to offset the decrease by

[74] University of Sydney - Jungsoo Kim, Richard de Dear, Workspace satisfaction: The privacy-communication trade-off in open-plan offices, 2013.

negative impacts of noise and privacy. This implies the need for a certain level of privacy and acoustical quality.[75]

Workers in enclosed office spaces are more productive due to privacy and limited distractions, and those in open plan spaces were more productive because of access to informal meeting spaces. The productivity of those in enclosed shared spaces, however, suffered more due to crowding and interruptions, although work interactions and knowledge exchange were enhanced from this close proximity. Internal noise and proximity to colleagues had a similar impact on office occupiers regardless of the type of office. With such contrasting results, there is insufficient evidence to suggest that the productivity benefits of open plan office environments outweigh the productivity penalties, according to this research.[76]

Rather than prompting increasingly vibrant face-to-face collaboration, open architecture appeared to trigger a natural human response to socially withdraw from officemates and interact instead over email and instant message.[77]

Floor Plan Design

Increasingly, architects and designers are designing spaces to do more than simply house innovation-oriented activities. Their goals are also to "create communities," "facilitate collaboration" and "create serendipitous encounters."[78]

Regarding space design, it is recommended to provide:[79]

- A variety of workspaces, with an adequate mix of places supporting communication and collaboration and places supporting concentration and privacy, individually and for groups;
- Separations between open communication areas and working areas;
- Enough acoustic and visual privacy in open environments; sufficient acoustic materials and measures;
- Not too large open spaces, but smaller open zones with a good overview, alternating with enclosed spaces or panels;
- Short distances to places that are frequently needed by employees (e.g. spaces for ad hoc meetings for 2-4 persons);
- Natural materials and light colours and materials;
- Lots of daylight;
- Appropriate it facilities for different types of activities, including filing; and
- Clear behavioural rules to enable proper use of the workplaces.

[75] University of Sydney - Jungsoo Kim, Richard de Dear, Workspace satisfaction: The privacy-communication trade-off in open-plan offices, 2013.
[76] Journal of Corporate Real Estate / Sheffield Hallam University - Barry Haynes, Louise Suckley, Nick Nunnington, "Workplace productivity and office type: an evaluation of office occupier differences based on age and gender", 2017.
[77] Royal Society Publishing - Ethan S. Bernstein, Stephen Turban, The impact of the 'open' workspace on human collaboration, July 2 2018.
[78] Brookings Institution and Project for Public Spaces - Julie Wagner, Dan Watch, Innovation Spaces: The New Design of Work, 2017.
[79] Delft University of Technology - Sandra Brunia, Iris De Been, Theo Van der Voordt, Accommodating new ways of working: lessons from best practices and worst cases, 2016.

Single storey or same floor locations are preferred over multiple storeys as research shows that vertical separation has a more severe effect on separation than horizontal.[80]

Theoretically, providing less space per worker can translate into less total office space to support the same number of people, however this may have other negative consequences. Where possible, the ideal is to ensure every employee has their own dedicated desk, even if they're not in the office every day. It provides them with certainty of their work location, a place for their belongings, and a form of appreciation. Where this is not possible, employees may have to share work stations, which could be done at an office-wide, departmental, or team level with either unassigned work stations or scheduling of workers on specific days. This may optimize the accommodation efficiency, but limit interactions to only employees who overlap, rather than everyone.

Implementation

When leaders communicate the value of the new office space beforehand, proactively help workers acclimatize, and give employees leeway to adapt the space, workers are more enthusiastic about the change, have a better sense of how they should use it, and feel more place identity. Survey data reveals that workers who believed the space was designed to foster creativity, increase collaboration, enhance flexibility, and promote communication had more place identity.[81]

Rather than arguing over 'open' vs. 'closed' spaces, practitioners focus on creating the best working environment to support the needs of the specific organization, which is also evolving. The idea that 'one size fits all' when it comes to work environments is dead: "The workplace design industry is filled with over-simplified conversations about open vs. closed plan offices."[82]

Potential Backlash

Companies may be starting to see that squeezing more employees into less space can be counterproductive. At a panel about open space design, one executive stated: "The initial swing was too far. People are coming back and adding a little more space."[83] There is a backlash against the one-size-fits-all mindset, and focus on corporate efficiencies that pack more workers into less space.[84] As employee salaries account for the greatest expenses in a business, the penalty resulting from displaced employees is very likely to be more expensive than providing extra workstations.[85]

Prior to the COVID pandemic, open space / open concept office design was widely implemented, based on the multiple goals of encouraging employee collaboration and using space more efficiently. However, there is also increasing recognition that open concept may not be appropriate for all types of businesses or employees, especially where focused and

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[80] Brookings Institution and Project for Public Spaces - Julie Wagner, Dan Watch, Innovation Spaces: The New Design of Work, 2017.

[81] Harvard Business Review - Brandi Pearce, Pamela Hinds, How to Make Sure People Won't Hate Your New Open Office Plan, January 2018.

[82] Work Design Magazine - Bob Fox, 2018 Workplace Trend Predictions, February 15 2018.

[83] ULI Urban Land - Patrick J. Kiger, "Workplaces May Not Shrink Further, but They May Gain Flexibility", May 3 2018.

[84] New York Times - Steve Lohr, "Don't Get Too Comfortable at That Desk", October 6 2017.

[85] 9 University of Sydney - Jungsoo Kima, Christhina Candidoa, Leena Thomas, Richard de Dear, "Desk ownership in the workplace: The effect of non-territorial working on employee workplace satisfaction, perceived productivity and health", 2016.

contemplative work is required, and that how the space is designed and programmed is also important. For a variety of different types of activities, workers need a variety of spaces; ranging from a desk, a private or quiet space, a phone booth for calls, meeting rooms, flex spaces, plus on-site amenities.

There is the risk from the business' perspective of overstating the benefit of open space at the loss of work quality environment, which may lead to higher turnover if poorly implemented. The focus is now more on providing the right types of spaces for employees, and using the space differently, rather than trying to use less space.

Also, open space can actually be expensive to provide, as the outfitting and improvements can be significant, and the requirements for building systems, such as HVAC, higher. Open concept with higher employee densities requires better building systems, commonly found in newer buildings and not old ones with sub-standard systems. Changing employee densities may also impact the amount of parking required.

Office Space per Employee
According to numerous sources,[86] in the years prior to COVID there was an ongoing trend towards less office space per employee. Increasingly, workers were moved from private enclosed offices to open workstations. Also, for additional efforts at space efficiency, some companies adopted open floor plans in which employees do not have permanently designated space; through hotelling and remote working they use unassigned office space / desks as needed. With reduced private office space, usually more and larger meeting areas and rooms are required ('collaborative space'). This arrangement, along with more efficient office space planning / design, modern furniture, equipment, technology and other features, allow for less average office space per worker. However, some academics note that stated targets by office space planners are overly ambitious or assume a stable workforce, which is not always the case.[87]

Office space per worker differs by industry sector as well as occupation. Businesses with higher levels of staffing changes and turnover can be harder to plan for, while businesses with a more homogeneous and stable workforce are easier to plan. Office space planning can be challenged by the growth rate of businesses, and can have 'shadow space' – space leased but not occupied to accommodate changes in space needs for the business as the number of employees change. Optimal office space decisions are harder for longer-term leases in which the amount of office space is fixed while business demands can vary reflecting changing economic and business cycles. Longer term leases prevent businesses from readily downsizing space until the lease expires, and thus are generally more likely to have excess capacity and lower utilization rates. This is further challenged by the fact that workforces are diverse and not all office space is the same and substitutable.[88] The risk of having too little office space must be weighed against the cost of having too much.

[86] CoreNet Global Research - Facilities Management News, Office Space per worker to drop to 100 sq ft or below for many companies within five years, March 2 2012.
[87] University of San Diego - Norman Miller, Estimating Office Space per Worker, Draft May 1 2012.
[88] University of San Diego - Norman Miller, Estimating Office Space per Worker, Draft May 1 2012.

Newer office space that is built-to-suit is more efficient than older space that has changed occupants (second generation tenants), and larger buildings tend to be more efficient than smaller ones. Thus when businesses move from an older accommodation to a new one, they typically require less total space, especially when operations are consolidated. Generally, more expensive office real estate markets are likely to press businesses to use space more efficiently, compared to lower cost markets.

Space Utilization by Sector

According to an American research report, office space per worker peaked near 370 sq ft at the end of 2009, a year or so after the great recession. In the years that followed, leases finally expired and firms were able to downsize space ('shadow inventories') that was no longer needed.[89] A similar pattern may occur associated with the COVID pandemic and subsequent years.

According to CBRE for Canada in 2012[90], the average amount of office space (net leasable floor space) per employee by sub-sector was as follows:

- Call Centres 100 sq ft
- Tech 120 sq ft
- Architecture & Engineering 170 sq ft
- Finance 170 sq ft
- Law Enforcement 200 sq ft
- Social Services 200 sq ft
- Biotech & Science 220 sq ft
- Legal 340 sq ft

Trends and Considerations

Firms retaining a multi-level hierarchy of management, with private dedicated office space configuration as a signal of rank will find it harder to use space efficiently.[91]Other factors beyond the number of employees influence space demand including, but not limited to, workspace utilization levels, relative rent levels and cycles, tenant type, occupant employee turnover, firm growth rates and culture.[92] Temporary office space, using conference rooms, co-working facilities, or letting employees work at home, may alleviate some pressure when a firm reaches capacity, but temporary space alternatives are fairly expensive compared with long-term leased space.[93]

One issue for landlords faced with high density office tenants is the need for greater parking per 1,000 sq ft of floor space. While traditional models of parking supply suggest three to four cars per 1,000 sq ft, this figure will likely need to be increased when space per worker is down to 150 sq ft or less.[94] However in a more urban location with transit, this number may differ.

[89] University of San Diego - Norman Miller, Estimating Office Space per Worker, Draft May 1 2012.
[90] Source: CBRE Research Department – Vancouver, 2012.
[91] University of San Diego - Norman Miller, Workplace trends in office space: implications for future office demand, 2014.
[92] University of San Diego - Norman Miller, Workplace trends in office space: implications for future office demand, 2014.
[93] University of San Diego - Norman Miller, Changing Trends in Office Space Requirements: Implications for Future Office Demand, 2013.
[94] University of San Diego - Norman Miller, Workplace trends in office space: implications for future office demand, 2014.

As noted by one academic in multiple publications:

- The long-term observer of corporate real estate planners has perpetually heard discussions on how to do more with less space and bring down real estate occupancy costs.[95]
- Few firms will ever be able to hit their target allocations of space per worker. The reasons are quite straightforward. Firms must anticipate growth and turnover, time to fill positions, and the types of spaces that are required. Seldom can any firm forecast growth rates or unexpected shrinkages of workers so accurately that this alone results in some over-consumption of space relative to average needs.[96]
- Based on reduced space usage, the demise of the office market has been exaggerated, and a continuation of space demand in excess of the targets espoused by some large corporations and space planners is more likely to be seen.[97]
- Overall, we should expect a greater spread of square feet per worker figures over the next several years, as some firms reduce footprints significantly while others maintain current practices with private dedicated space.[98]
- Ultimately, landlords are not selling space but rather productivity, which will command rental premiums.[99]

[95] University of San Diego - Norman Miller, Changing Trends in Office Space Requirements: Implications for Future Office Demand, 2013.
[96] University of San Diego - Norman Miller, Estimating Office Space per Worker, Draft May 1 2012.
[97] University of San Diego, Real Estate Issues - Norman Miller, Downsizing and Workplace Trends in the Office Market, 2013.
[98] University of San Diego - Norman Miller, Workplace trends in office space: implications for future office demand, 2014.
[99] University of San Diego, Real Estate Issues - Norman Miller, Downsizing and Workplace Trends in the Office Market, 2013.

Appendix F: Supplemental Office Inventory Data Tables

Geography	Metro Core / Surrey Centre	Regional City Centre	Municipal Town Centre	Not in Urban Centre	Total
Vancouver/UBC	38,300,000	-	200,000	4,500,000	**43,000,000**
Burnaby/New West	-	4,100,000	1,900,000	7,500,000	**13,500,000**
Surrey/White Rock	3,400,000	-	2,000,000	3,800,000	**9,200,000**
Richmond	-	1,700,000	-	3,100,000	**4,800,000**
North Shore	-	1,800,000	300,000	1,200,000	**3,300,000**
Langleys	-	600,000	-	1,700,000	**2,300,000**
Northeast Sector	-	400,000	400,000	500,000	**1,300,000**
Ridge/Meadows	-	300,000	-	-	**300,000**
Delta	-	-	-	200,000	**200,000**
Total	**41,700,000**	**8,900,000**	**4,800,000**	**22,500,000**	**77,900,000**

Sub-Region	Within 800m of Rapid Transit Station	Within 400m of FTN Bus Service Only	Not Near FTN Service	Total
Vancouver/UBC	36,700,000	5,700,000	600,000	**43,000,000**
Burnaby/New West	8,100,000	4,100,000	1,300,000	**13,500,000**
Surrey/White Rock	2,500,000	4,400,000	2,300,000	**9,200,000**
Richmond	1,800,000	1,900,000	1,200,000	**4,900,000**
North Shore	900,000	1,800,000	600,000	**3,300,000**
Langleys	-	200,000	2,200,000	**2,400,000**
Northeast Sector	800,000	300,000	200,000	**1,300,000**
Ridge/Meadows	-	300,000	-	**300,000**
Delta	-	100,000	100,000	**200,000**
Total	**50,800,000**	**18,800,000**	**8,500,000**	**78,100,000**

Geography	Within 800m of Rapid Transit	Within 400m of FTN Bus Service	Not Near FTN Service	Total
Metro Core	34,500,000	3,700,000	200,000	**38,400,000**
Surrey Metro Centre	2,500,000	900,000	-	**3,400,000**
Regional City Centre	7,000,000	1,400,000	500,000	**8,900,000**
Municipal Town Centre	2,200,000	2,500,000	100,000	**4,800,000**
Not in Urban Centre	4,600,000	10,300,000	7,600,000	**22,500,000**
Total	**50,800,000**	**18,800,000**	**8,400,000**	**78,000,000**

Urban Centre Type	Number	*Distribution*		Sq Ft	*Distribution*	Avg. Size	Average Size
Metro Core	514	*38%*		38,300,000	*49%*	74,500	74,513.62
Surrey Metro Centre	35	*3%*		3,400,000	*4%*	97,100	97,143
Regional City Centre	173	*13%*		8,900,000	*11%*	51,400	51,445
Municipal Town Centre	106	*8%*		4,800,000	*6%*	45,300	45,283
Not in Urban Centre	510	*38%*		22,600,000	*29%*	44,300	44,314
Total	**1338**	***100%***		**78,000,000**	***100%***	**58,300**	**58,296**

Sub-Region	Before 1950	1950 to 1959	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1999	2000 to 2009	2010 to 2019	2020 to 2022	Total
Vancouver/UBC	3,370,000	1,290,000	2,760,000	8,560,000	8,190,000	5,950,000	4,840,000	4,870,000	3,140,000	42,970,000
Burnaby/New West	130,000	310,000	210,000	1,710,000	3,490,000	3,860,000	1,960,000	1,420,000	370,000	13,460,000
Surrey/White Rock	-	20,000	150,000	670,000	920,000	2,150,000	1,920,000	2,940,000	400,000	9,170,000
Richmond	-	-	50,000	540,000	1,700,000	1,340,000	810,000	160,000	230,000	4,830,000
North Shore	60,000	60,000	120,000	650,000	1,070,000	430,000	520,000	400,000	10,000	3,320,000
Langleys	-	-	20,000	120,000	90,000	460,000	750,000	690,000	300,000	2,430,000
Northeast Sector	-	-	30,000	270,000	210,000	200,000	220,000	370,000	-	1,300,000
Ridge/Meadows	-	-	-	70,000	50,000	-	160,000	-	-	280,000
Delta	-	-	-	30,000	80,000	50,000	-	80,000	-	240,000
Total	**3,560,000**	**1,680,000**	**3,340,000**	**12,620,000**	**15,800,000**	**14,440,000**	**11,180,000**	**10,930,000**	**4,450,000**	**78,000,000**

Municipality	Number	*Distribution*	Sq Ft	*Distribution*	Avg. Size
City of Burnaby	162	*12%*	11,280,000	*14%*	69,600
City of Coquitlam	29	*2%*	800,000	*1%*	27,600
City of Delta	10	*1%*	240,000	*0%*	24,000
City of Langley	10	*1%*	220,000	*0%*	22,000
City of Maple Ridge	6	*0%*	270,000	*0%*	45,000
City of New Westminster	52	*4%*	2,190,000	*3%*	42,100
City of North Vancouver	59	*4%*	2,310,000	*3%*	39,200
City of Pitt Meadows	1	*0%*	10,000	*0%*	10,000
City of Port Coquitlam	9	*1%*	220,000	*0%*	24,400
City of Port Moody	4	*0%*	280,000	*0%*	70,000
City of Richmond	96	*7%*	4,840,000	*6%*	50,400
City of Surrey	177	*13%*	9,080,000	*12%*	51,300
City of Vancouver	617	*46%*	42,770,000	*55%*	69,300
City of White Rock	6	*0%*	110,000	*0%*	18,300
District of North Vancouver	18	*1%*	570,000	*1%*	31,700
District of West Vancouver	19	*1%*	450,000	*1%*	23,700
Township of Langley	56	*4%*	2,190,000	*3%*	39,100
UBC/UEL	7	*1%*	200,000	*0%*	28,600
Total	**1338**	***100%***	**78,030,000**	***100%***	**58,300**

Geography	General Urban	Industrial	Mixed Emp	Total	*% In General Urban*
City of Burnaby	5,390,000	5,790,000	100,000	11,280,000	*48%*
City of Coquitlam	740,000	50,000	-	800,000	*93%*
City of Delta	240,000	-	-	240,000	*100%*
City of Langley	220,000	-	-	220,000	*100%*
City of Maple Ridge	270,000	-	-	270,000	*100%*
City of New Westminster	2,170,000	-	10,000	2,190,000	*99%*
City of North Vancouver	2,000,000	310,000	-	2,310,000	*87%*
City of Pitt Meadows	10,000	-	-	10,000	*100%*
City of Port Coquitlam	200,000	-	20,000	220,000	*91%*
City of Port Moody	280,000	-	-	280,000	*100%*
City of Richmond	1,900,000	2,880,000	60,000	4,840,000	*39%*
City of Surrey	6,470,000	2,290,000	320,000	9,080,000	*71%*
City of Vancouver	37,780,000	2,870,000	2,120,000	42,770,000	*88%*
City of White Rock	110,000	-	-	110,000	*100%*
District of North Vancouver	570,000	-	-	570,000	*100%*
District of West Vancouver	450,000	-	-	450,000	*100%*
Township of Langley	830,000	1,310,000	50,000	2,190,000	*38%*
UBC/UEL	200,000	-	-	200,000	*100%*
Total	**59,830,000**	**15,500,000**	**2,680,000**	**78,030,000**	***77%***

Geography	Office Sq Ft	# Buildings	Avg Building Size
City of Burnaby	**11,275,000**	**162**	**70,000**
Metrotown	3,134,000	30	104,000
Brentwood MTC	1,218,000	14	87,000
Edmonds MTC	578,000	7	83,000
Lougheed Burnaby MTC	70,000	2	35,000
Not in Urban Centre	6,276,000	109	58,000
City of Coquitlam	**797,000**	**29**	**27,000**
Coquitlam City Centre	399,000	11	36,000
Lougheed Coquitlam MTC	17,000	1	17,000
Not in Urban Centre	381,000	17	22,000
City of Delta	**243,000**	**10**	**24,000**
Ladner MTC	12,000	1	12,000
Not in Urban Centre	231,000	9	26,000
City of Langley	**221,000**	**10**	**22,000**
Langley City Centre (in Langley City)	221,000	10	22,000
City of Maple Ridge	**266,000**	**6**	**44,000**
Maple Ridge City Centre	266,000	6	44,000
City of New Westminster	**2,185,000**	**52**	**42,000**
New Westminster City Centre	957,000	24	40,000
Not in Urban Centre	1,228,000	28	44,000
City of North Vancouver	**2,306,000**	**59**	**39,000**
Lonsdale	1,792,000	44	41,000
Not in Urban Centre	515,000	15	34,000
City of Pitt Meadows	**11,000**	**1**	**11,000**
Pitt Meadows MTC	11,000	1	11,000
City of Port Coquitlam	**219,000**	**9**	**24,000**
Port Coquitlam MTC	102,000	5	20,000
Not in Urban Centre	116,000	4	29,000
City of Port Moody	**284,000**	**4**	**71,000**
Inlet Centre MTC	284,000	4	71,000
City of Richmond	**4,839,000**	**96**	**50,000**
Richmond City Centre	1,699,000	36	47,000
Not in Urban Centre	3,140,000	60	52,000
City of Surrey	**9,081,000**	**177**	**51,000**
Surrey Metro Centre	3,392,000	35	97,000
Guildford MTC	966,000	22	44,000
Newton MTC	360,000	13	28,000
Fleetwood MTC	298,000	5	60,000
South Surrey MTC (Semiahmoo)	232,000	7	33,000
Cloverdale MTC	65,000	3	22,000
Not in Urban Centre	3,768,000	92	41,000
City of Vancouver	**42,774,000**	**617**	**69,000**
Metro Core	38,326,000	514	75,000
Oakridge MTC	183,000	3	61,000
Not in Urban Centre	4,265,000	100	43,000
City of White Rock	**107,000**	**6**	**18,000**
White Rock MTC	39,000	2	20,000
Not in Urban Centre	67,000	4	17,000
District of North Vancouver	**569,000**	**18**	**32,000**
Lynn Valley MTC	82,000	2	41,000
Not in Urban Centre	487,000	16	30,000
District of West Vancouver	**454,000**	**19**	**24,000**
Ambleside MTC	267,000	12	22,000
Not in Urban Centre	187,000	7	27,000
Township of Langley	**2,192,000**	**56**	**39,000**
Langley City Centre (in Langley Twp)	420,000	12	35,000
Willoughby MTC	49,000	2	25,000
Not in Urban Centre	1,723,000	42	41,000
UBC/UEL	**199,000**	**7**	**28,000**
Not in Urban Centre	199,000	7	28,000
Total	**78,022,000**	**1,338**	**58,000**

Geography	General Urban	Mixed Employment	Industrial	Total
City of Burnaby	**5,387,000**	**5,786,000**	**103,000**	**11,275,000**
Metrotown	3,134,000	-	-	3,134,000
Brentwood MTC	1,218,000	-	-	1,218,000
Edmonds MTC	578,000	-	-	578,000
Lougheed Burnaby MTC	70,000	-	-	70,000
Not in Urban Centre	387,000	5,786,000	103,000	6,276,000
City of Coquitlam	**743,000**	**54,000**	**-**	**797,000**
Coquitlam City Centre	399,000	-	-	399,000
Lougheed Coquitlam MTC	17,000	-	-	17,000
Not in Urban Centre	327,000	54,000	-	381,000
City of Delta	**243,000**	**-**	**-**	**243,000**
Ladner MTC	12,000	-	-	12,000
Not in Urban Centre	231,000	-	-	231,000
City of Langley	**221,000**	**-**	**-**	**221,000**
Langley City Centre (in Langley City)	221,000	-	-	221,000
City of Maple Ridge	**266,000**	**-**	**-**	**266,000**
Maple Ridge City Centre	266,000	-	-	266,000
City of New Westminster	**2,175,000**	**-**	**10,000**	**2,185,000**
New Westminster City Centre	957,000	-	-	957,000
Not in Urban Centre	1,218,000	-	10,000	1,228,000
City of North Vancouver	**1,996,000**	**310,000**	**-**	**2,306,000**
Lonsdale	1,792,000	-	-	1,792,000
Not in Urban Centre	205,000	310,000	-	515,000
City of Pitt Meadows	**11,000**	**-**	**-**	**11,000**
Pitt Meadows MTC	11,000	-	-	11,000
City of Port Coquitlam	**202,000**	**-**	**17,000**	**219,000**
Port Coquitlam MTC	102,000	-	-	102,000
Not in Urban Centre	99,000	-	17,000	116,000
City of Port Moody	**284,000**	**-**	**-**	**284,000**
Inlet Centre MTC	284,000	-	-	284,000
City of Richmond	**1,899,000**	**2,876,000**	**65,000**	**4,839,000**
Richmond City Centre	1,699,000	-	-	1,699,000
Not in Urban Centre	199,000	2,876,000	65,000	3,140,000
City of Surrey	**6,465,000**	**2,295,000**	**321,000**	**9,081,000**
Surrey Metro Centre	3,392,000	-	-	3,392,000
Guildford MTC	966,000	-	-	966,000
Newton MTC	342,000	-	18,000	360,000
Fleetwood MTC	88,000	210,000	-	298,000
South Surrey MTC (Semiahmoo)	232,000	-	-	232,000
Cloverdale MTC	31,000	-	34,000	65,000
Not in Urban Centre	1,415,000	2,084,000	269,000	3,768,000
City of Vancouver	**37,782,000**	**2,868,000**	**2,124,000**	**42,774,000**
Metro Core	35,401,000	1,017,000	1,908,000	38,326,000
Oakridge MTC	183,000	-	-	183,000
Not in Urban Centre	2,198,000	1,851,000	216,000	4,265,000
City of White Rock	**107,000**	**-**	**-**	**107,000**
White Rock MTC	39,000	-	-	39,000
Not in Urban Centre	67,000	-	-	67,000
District of North Vancouver	**569,000**	**-**	**-**	**569,000**
Lynn Valley MTC	82,000	-	-	82,000
Not in Urban Centre	487,000	-	-	487,000
District of West Vancouver	**454,000**	**-**	**-**	**454,000**
Ambleside MTC	267,000	-	-	267,000
Not in Urban Centre	187,000	-	-	187,000
Township of Langley	**825,000**	**1,313,000**	**53,000**	**2,192,000**
Langley City Centre (in Langley Twp)	420,000	-	-	420,000
Willoughby MTC	49,000	-	-	49,000
Not in Urban Centre	357,000	1,313,000	53,000	1,723,000
UBC/UEL	**199,000**	**-**	**-**	**199,000**
Not in Urban Centre	199,000	-	-	199,000
Total	**59,827,000**	**15,501,000**	**2,693,000**	**78,021,000**

Geography	Within 800m of Rapid Transit	Within 400m of FTN Bus Service Only	Not Near FTN Service	Total
City of Burnaby	**6,630,000**	**3,410,000**	**1,240,000**	**11,280,000**
Metrotown	3,130,000	-	-	3,130,000
Brentwood MTC	1,220,000	-	-	1,220,000
Edmonds MTC	450,000	120,000	10,000	580,000
Lougheed Burnaby MTC	70,000	-	-	70,000
Not in Urban Centre	1,760,000	3,290,000	1,230,000	6,280,000
City of Coquitlam	**440,000**	**170,000**	**180,000**	**790,000**
Coquitlam City Centre	400,000	-	-	400,000
Lougheed Coquitlam MTC	-	20,000	-	20,000
Not in Urban Centre	40,000	160,000	180,000	380,000
City of Delta	**-**	**140,000**	**100,000**	**240,000**
Ladner MTC	-	-	10,000	10,000
Not in Urban Centre	-	140,000	90,000	230,000
City of Langley	**-**	**220,000**	**-**	**220,000**
Langley City Centre (in Langley City)	-	220,000	-	220,000
City of Maple Ridge	**-**	**270,000**	**-**	**270,000**
Maple Ridge City Centre	-	270,000	-	270,000
City of New Westminster	**1,500,000**	**660,000**	**30,000**	**2,190,000**
New Westminster City Centre	960,000	-	-	960,000
Not in Urban Centre	540,000	660,000	30,000	1,230,000
City of North Vancouver	**900,000**	**1,120,000**	**290,000**	**2,310,000**
Lonsdale	880,000	910,000	-	1,790,000
Not in Urban Centre	20,000	210,000	290,000	520,000
City of Pitt Meadows	**-**	**10,000**	**-**	**10,000**
Pitt Meadows MTC	-	10,000	-	10,000
City of Port Coquitlam	**60,000**	**130,000**	**30,000**	**220,000**
Port Coquitlam MTC	-	100,000	-	100,000
Not in Urban Centre	60,000	20,000	30,000	110,000
City of Port Moody	**280,000**	**-**	**-**	**280,000**
Inlet Centre MTC	280,000	-	-	280,000
City of Richmond	**1,770,000**	**1,900,000**	**1,170,000**	**4,840,000**
Richmond City Centre	1,610,000	-	90,000	1,700,000
Not in Urban Centre	160,000	1,900,000	1,090,000	3,150,000
City of Surrey	**2,510,000**	**4,280,000**	**2,290,000**	**9,080,000**
Surrey Metro Centre	2,510,000	880,000	-	3,390,000
Guildford MTC	-	970,000	-	970,000
Newton MTC	-	360,000	-	360,000
Fleetwood MTC	-	300,000	-	300,000
South Surrey MTC (Semiahmoo)	-	230,000	-	230,000
Cloverdale MTC	-	-	60,000	60,000
Not in Urban Centre	-	1,540,000	2,220,000	3,760,000
City of Vancouver	**36,710,000**	**5,470,000**	**600,000**	**42,780,000**
Metro Core	34,470,000	3,690,000	160,000	38,320,000
Oakridge MTC	180,000	-	-	180,000
Not in Urban Centre	2,050,000	1,780,000	440,000	4,270,000
City of White Rock	**-**	**110,000**	**-**	**110,000**
White Rock MTC	-	40,000	-	40,000
Not in Urban Centre	-	70,000	-	70,000
District of North Vancouver	**-**	**290,000**	**280,000**	**570,000**
Lynn Valley MTC	-	80,000	-	80,000
Not in Urban Centre	-	210,000	280,000	490,000
District of West Vancouver	**-**	**440,000**	**20,000**	**460,000**
Ambleside MTC	-	270,000	-	270,000
Not in Urban Centre	-	170,000	20,000	190,000
Township of Langley	**-**	**-**	**2,190,000**	**2,190,000**
Langley City Centre (in Langley Twp)	-	-	420,000	420,000
Willoughby MTC	-	-	50,000	50,000
Not in Urban Centre	-	-	1,720,000	1,720,000
UBC/UEL	**-**	**200,000**	**-**	**200,000**
Not in Urban Centre	-	200,000	-	200,000
Total	**50,795,000**	**18,820,000**	**8,420,000**	**78,035,000**

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SERVICES AND SOLUTIONS FOR A LIVABLE REGION