Office Development in Metro Vancouver's Urban Centres (Revised)

Published by: Metro Vancouver Regional Planning

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Executive Summary

Advancing Regional Planning Goals

Actions to encourage office development in Urban Centres and areas well served by transit are key elements of the region's regional growth strategy – *Metro Vancouver 2040: Shaping Our Future (Metro 2040*). Regional policy direction in *Metro 2040* responds to office projects developed outside of Urban Centre locations, such as in suburban office parks, which 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 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 Urban Centres.

Planning policy and market forces are partially aligned. Office tenants increasingly appreciate locations that are well served by rapid transit and urban amenities, while still in some cases highway access and suburban sites are desired. 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 who need to be located by urban amenities to attract and retain talented workers.

This report explores the factors that influence regional-scale office development and occupancy decisions, and identifies challenges and opportunities for office potential in Metro Vancouver's Urban Centres. The report identifies key issues and trends affecting office space to better inform government plans and policies.

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 the office development process was gathered through a review of relevant publications, compilation of a comprehensive inventory database of office buildings in the region, and in-depth interviews with experienced industry participants, including major office investors, developers, tenants, and brokers, and municipal planning and economic development staff.¹

Office Inventory Summary

Based on the comprehensive inventory prepared by Metro Vancouver, at the end of 2018, there were approximately 80 million sq ft of office space in the region located within 1,392 buildings with more than 10,000 sq ft of office space. For clarity, individual buildings with 10,000 sq ft of office space (or less) have been excluded from the inventory, as they are challenging to measure and likely comprise only a small component of the total inventory.

 Approximately half (44% of buildings and 52% of floor area) of the office inventory is located in the City of Vancouver, with other notable sub-regions being Burnaby / New Westminster (18%; 19%), Surrey (12%; 10%), and Richmond (10%; 8%).

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¹ Note: The preparation of the earlier version 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 version of this report.

- Three-quarters (76%) of the office inventory is located on lands designated Metro 2040 'General Urban', which are intended to accommodate a wide variety of land uses including commercial.
 The remaining office inventory is located on a variety of Metro 2040 land use designations, most of which (21%) was 'Mixed Employment' lands.
- Most (88%) office space is located within either Urban Centres or within 400 metres of FTN bus / 800 metres of rapid transit service.
- The 55 million sq ft of office space located in the 26 Urban Centres is distributed as follows: the
 Metro Core (downtown Vancouver and the Broadway Corridor) dominates with a total of 37
 million sq ft (67% of Urban Centres); the next largest centres (at less than one-tenth the size) are
 Metrotown, Surrey City Centre, and Richmond City Centre.
- The 17 Municipal Town Centres contain relatively limited amounts of office space (6% of the region's total), with an average of 290,000 sq ft of office space each.

Recent Office Development Growth

Office development is impacted by many factors, primarily market demand. The office development process (approvals, design, financing, marketing, permitting, construction, and occupancy) is complex and lengthy, and cannot always be fully completed within a single economic / market cycle.

Office building completion rates vary considerably from year-to-year. There was significant office development in the 1990s to 2002. For the 2004-2012 period, development was considerably lower (with the exception of 2009), with another cycle of development peaking in 2015. Part of the significant new office supply in certain markets is due to the lack of development in the preceding period. A number of major projects have advanced, with completions in 2014-2018 (and more expected to 2022), much of it focused in downtown Vancouver.

As of 1990, there was 36 million sq ft of office space in 727 buildings in the region. During the 1990-2018 period, there was a total of 44 million sq ft of office space developed in 665 buildings, which provides for an average of approximately 1.6 million sq ft being developed per year. More than half (55%) of the 44 million sq ft of new inventory was located within 800 metres of rapid transit stations, with 36% located within the Metro Core. Of the new inventory not in Urban Centres (18 million sq ft), 10 million sq ft (57% of total) was proximate to FTN transit service, and 8 million sq ft (43%) was both not in an Urban Centre and not near FTN transit.

A large proportion of existing and new office space in the region is located in the Metro Core, centered in downtown Vancouver, and at other locations with rapid transit service. Smaller Urban Centres are generally attracting only limited office development activity. The data indicates that non-Urban Centre development peaked in the 1990-2009 period. Despite some years with a higher proportion of development in Urban Centre locations, there is not yet a clear long-term trend towards a consistently larger proportion of development occurring in Urban Centres (other than the Metro Core).

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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 (including corporate headquarters) and many smaller ones, which challenges the development of new large-scale office buildings. Although recently there has been significant growth of tech tenants. Ultimately, businesses make their individual decisions and trade-offs about accommodation costs and features.

Market Conditions and Developments

- In the past few years, the office market has been very strong with low vacancy rates and increasing lease rates, spurring considerable new major office developments, especially in downtown Vancouver.
- There has been significant growth in the tech sector, with large companies occupying large blocks
 of office space, and seeking premium accommodations and amenities found in downtown
 Vancouver.
- Although there are a number of large high-profile office projects coming to market, there are
 also smaller or mid-sized office buildings. These buildings serve local areas and may be located
 throughout the region, not necessarily in Urban Centres or near transit. Demand is limited in
 smaller Urban Centres with less accessibility and lower levels of transit service.

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 the past.
- 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 are less efficient and cost a premium. These 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.

Trends

- There has been significant growth in co-working facilities that provide spaces and services to a range of tenant types, namely WeWork and Regus / Spaces, that are responding to the desire for flexibility by business tenants.
- There has been a rise of strata development projects, rather than conventional lease 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.
- There is a continued trend towards open concept office design, in order to encourage collaboration and achieve space efficiencies, although with more attention to quality design.

Key Considerations For Office Development

Office market characteristics such as market demand and rental rates, scale, 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 well recognized, a boom in the tech sector with large American companies that are locating operations in Vancouver to access an international workforce via Canadian immigration policies, the region being a liveable 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 Vancouver Metro Core comprising downtown Vancouver and the Broadway Corridor, is experiencing strong office demand, which is leading to increasing lease rates and spurring development of additional office space coming to market. This growth is largely driving by demand by expanding tech companies, such as software, that want to be located in the core in order to attract and retain talented employees.

As the population, economic activity and workforce grows in the outer locations, 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 attract new tenants (i.e. zero-sum).

The best effort to attract tenants to outer Urban Centres may be as a value proposition - lower rents, and offering urban features / amenities but in a different location. However, from a development perspective, construction costs are still high in all locations, and land prices are increasing in all locations. As such, it is difficult to make projects financially viable in outer Urban Centres that experience low office rents and weak office demand. Consequently, most developers are concerned about being 'forced' rather than just '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 interviews, the report outlines various actions for consideration by different parties to support office space in Urban Centres. These are organized into two sections in the final chapter of this report: priority actions that can be acted on immediately, and a longer list of other areas for further exploration.

The issues most consistently expressed by interviews 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, which reduce tenanting flexibility and thus increase risk.

- **Tenant Permits** Shorten and simplify the permitting process for basic improvements needed when new office tenants occupy a premise and operate a business.
- Municipal Incentives Explore financial or regulatory incentives to encourage office development.
- 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 projects, but also identify where office components are warranted
 (or not).

Developers and tenants want to work with municipalities to build new projects. Generally, the private sector desires municipalities to allow developers the flexibly to build the type of space that is in demand, where warranted, and to allow for high densities to take advantage of 'strong' locations.

In turn, municipalities want to work with developers to build new projects to advance economic goals. Municipalities desire the private sector to, for example, help create spaces for jobs and advance 'complete community' objectives, while also ensuring that development supports infrastructure and amenity investments.

Municipalities in the region continue to make various efforts to attract office development. In some cases, these efforts match market forces, such as in downtown Vancouver where there is strong demand, especially for tech tenants, who seek to locate in areas rich 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. In some locations, however, municipalities are encouraging mixed-use development with office space components where developers state that there is very limited office market demand. Where this occurs, some developers feel that this approach introduces office supply in the hopes of generating demand that may or may not materialize.

Nevertheless, as local populations and associated workforces grow, and smaller-scale Urban Centres develop capacity and scale over time, the opportunity for providing local-serving office space will increase in these locations. Substantially, it is market forces rather than government policies that produce office development - potentially prioritizing growth to select areas requires 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 government can do to significantly impact those factors; other items that municipalities may have influence over are much less impactful.

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1.0 Introduction

1.1 Report Purpose

The purpose of this report² is to explore the factors that influence regional-scale office development and occupancy decisions, and identify challenges and opportunities for office potential in Urban Centres. The report is informed through an investigation of the market and planning 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 since 1990.

Actions to encourage office development in Urban Centres and areas well-served by transit are key elements of the region's regional growth strategy – *Metro Vancouver 2040: Shaping Our Future (Metro 2040)*. While residential development in the region has been relatively robust in recent years, with a significant amount of this development occurring in Urban Centres, office development has been limited primarily to certain locations. This report includes areas for further exploration and opportunities for Metro Vancouver, its member municipalities, developers and other organizations to work together to advance office development in Urban Centres.

1.2 Methodology and Research Questions

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

The investigation focused on larger office projects, recognizing that these tend to be the major drivers for new office development and occupation. However, it is recognized that smaller office developers and tenants are also important contributors to office growth.

The following section addresses questions about the state of the office market in Metro Vancouver, planning 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. What are the regional directions and trends for office development location?

Metro 2040, adopted in 2011, directs office development to Urban Centres, continuing the direction established in past regional plans. Focusing office development in Urban Centres benefits the regional transportation system and livability in a number of ways: encouraging transit usage and reducing vehicle commutes and employee transportation costs, protecting lands for other uses such as industrial, complementing commercial and residential land uses, and increasing the vibrancy and success of Urban Centres. It is appropriate for local serving office tenants to be located outside of Urban Centres in Frequent Transit Development Areas and local centres to best serve the needs of neighbouring residents.

Planning policy and market forces are partially aligned. The market appreciates locations that are well served by rapid transit and urban amenities, while still some tenants want highway access with ample parking. In the past, access to highways was a priority for many office tenants, and office developers built accordingly. Increasingly now, office tenants recognize the benefits to their businesses and

² This report is an update of the earlier version published in March 2015.

employees of being located near transit (particularly rapid transit stations) and urban amenities in Urban Centre locations.

Specifically, ongoing market trends include:

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

While rapid transit station accessibility is becoming increasingly desirable, the attractiveness of transit locations is not all the same. Adjacency to a rapid transit station (i.e. SkyTrain) is an improvement over a highway location with limited transit service, but those rapid transit station locations alone do not always provide a mix of supporting land uses and the presence of urban amenities. Urban Centres offer the full range of functions and amenities that stand-alone transit station locations may not provide.

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

As stated in *Metro 2040*, Urban Centres are intended to be the region's focal points for concentrated growth and transit service, and priority locations for employment and services, higher density housing, commercial, cultural, entertainment, institutional, and mixed-uses. *Metro 2040* 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:

- Improved access and use of public transit;
- Reduced reliance of vehicle use for commuting and generate less congestion;
- Complementing surrounding retail, residential, and institutional uses;
- Improved access to various amenities for office workers, such as area shops and services;
- Supporting workforce attraction and retention;
- Contributing to surrounding businesses by locating additional employees in the immediate area;
- Contributing to the general vibrancy and success of Urban Centres; and
- Supporting the development of complete communities.

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 locating in suburban office parks outside of Urban Centres, although this has changed more recently.

Typically, these office parks were located in areas far from transit services, and have a much higher proportion of employees who drive to work (90% of employees in office parks, compared to 40% in downtown Vancouver). This dispersed location pattern is challenging from a regional perspective for a number of reasons, particularly with regard to being able to provide an efficient transportation system. Secondly, more driving means more traffic congestion and makes it difficult to meet the region's 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 office jobs and activities in office parks can hamper the growth of the region's Urban Centres. Urban Centres need all types of activities in order to thrive, with employment contributing to their vibrancy and success. For employees, too, being in an Urban Centre is preferable to working in an office park, in terms of both the greater amenities and transportation options. Office tenants are increasingly selecting, and paying a premium for, urban locations in an effort to attract and retain a talented workforce.

4. How are office market trends evolving?

The Metro Vancouver office market is diverse and 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, areas with highway access, and elsewhere.

Office tenants increasingly prefer transit-accessible locations; that demand is demonstrated through lower vacancies and higher rents³. Businesses are seeking urban locations in order to help attract and retain employees. Responding to the strong demand, numerous major new office developments are currently underway in downtown Vancouver.

Downtown Vancouver, other Urban Centres, SkyTrain stations, urban office parks, and highway-oriented office parks will all continue to serve different types of office markets. However, there is an overall trend towards new developments locating near SkyTrain stations (e.g. Broadway Tech and Marine Gateway in Vancouver, the Brewery District in New Westminster), which fill an important need in the office market.

Despite ongoing and proposed development activity in many markets indicating that transit-accessible locations are increasingly in demand, there remains office parks outside of Urban Centres that are poorly connected to the transit system. These suburban office buildings have been difficult to tenant by landlords, with low rents being one of the main inducements to attract tenants. Although there has been limited office park development in the past decade, these locations can offer larger sites, which allow for greater development options, lower costs, better access to the highway network with ample parking, and other features desired by certain types of office developers and tenants.

Furthermore, office design occupants continue to strive for increased efficiencies in terms of reduced space per worker, which may have transportation impacts in terms of increasing the amount of required parking for a given amount of office floor area (although not increasing parking per worker), transit demand, and building design and the provision of onsite amenities.

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

Metro 2040 requires the region's municipalities to prepare Regional Context Statements identifying how local plans will direct office development to Urban Centres. Through Official Community Plans, area plans, zoning and other policies, and as the local approving authority, municipalities can advance this objective. Supplementing market trends, municipalities can approve office development proposals in Urban Centres, and not approve major office development projects in locations outside of Urban Centres. Additionally, in order to encourage office development in desired locations, municipalities can explore reducing barriers and advancing certain tools, such as: pre-zoning land for office use, expediting the development application process, introduce financial and regulatory incentives, and other possible means appropriate for local circumstances.

³ Jones Lang LaSalle, "Rapid Transit Office Index – Vancouver Research", 2011, 2012, 2013, 2014.

Beyond land use plans and tools, governments at all levels can provide signals to the market about appropriate locations for office development. Providing transportation and other infrastructure at the right locations to support Urban Centre development is important. Businesses want office accommodations that best meet their needs in terms of location, accessibility, facilities, design, amenities, costs, and other criteria. By improving the transit service, urban amenities, and infrastructure offerings in Urban Centres, these locations can become more attractive to office developers and tenants as locations for investment. Decisions by government agencies to situate their office facilities in Urban Centres can also spur further development interest.

1.3 Stakeholder Perspectives

There are a number of different public and private sector stakeholders who influence the development of office space in the region. These groups have different interests and priorities. Government agencies and plans can guide the market and reinforce the benefits of locating office development and jobs in Urban Centres while market trends evolve.

Metro Vancouver, as the regional government, implements the regional growth strategy (*Metro 2040*) so that growth is managed, lands are used efficiently and employment opportunities are distributed appropriately throughout the region, reflecting investments in transportation networks, infrastructure, and centres. This regional goal also means encouraging office development in regionally designated Urban Centres to encourage transit usage, coordinating with other agencies and plans, supporting complementary land uses, and focusing amenities and facilities in the Urban Centres. This development pattern will help support a prosperous and growing economy with office-based employment as an integral part of the functioning of the larger overall economy.

TransLink provides regional transportation services, including transit service 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 people and goods movement. TransLink also supports office development in Urban Centres because these areas can be more effectively serviced by transit and more readily accessed by walking and cycling, 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 taxation revenues for the municipality.

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. These senior levels of government also encourage and benefit from economic growth through tax revenue and employment levels. Also, government agencies and crown corporations are office space tenants.

Office tenants need space that is functional and affordable, in terms of size and shape, locations, and access/proximate to desired features. Office tenants balance their location preferences and building needs, along with workforce retention and recruitment issues, with financial considerations.

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

1.4 Interview Participants

Major office developers, commercial brokers, office tenants, and municipal planning and economic development staff were interviewed to learn about Metro Vancouver's office market. The objective was to gain insight about the 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 and occupying office space (see Appendix A for a list of interviewees). The interviews were conducted in November and December 2018⁴. Discussion questions were sent to the interviewees in advance of the meetings (see Appendix B for the questions).

The office developers and commercial brokers interviewed had significant experience developing or leasing large-scale office projects in the region. Office tenants and municipal staff provided additional perspectives. There were four different groups of interviewees:

- Office developers / landlords experience both in the downtown Vancouver market and markets outside of the downtown 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 because they know both the developer and tenant needs thoroughly and can speak about evolving changes over time.
- Office tenants to learn about the process and criteria tenants use to select an office location.
- Municipal staff provided the municipal perspective, outlining their role in the process of
 attracting investment and development to their communities and what they have been hearing
 from businesses and developers. They also provided insight on the experience of policy and tools
 to encourage office and the development review process.

1.5 Metro 2040 Context

The Metro Vancouver region is forecast to grow by approximately one million people and four hundred thousand jobs by 2041. To protect the region's ability to attract investment and jobs, *Metro 2040* establishes regional land use designations and overlays. The Urban Containment Boundary limits encroachment into lands designated as 'Agricultural', 'Rural', and 'Conservation & Recreation'. The *Metro 2040* 'Industrial' and 'Mixed Employment' designations protect lands for industrial and employment uses. Office and commercial uses are directed to Urban Centres and Frequent Transit Development Areas, generally located on lands designated 'General Urban'.

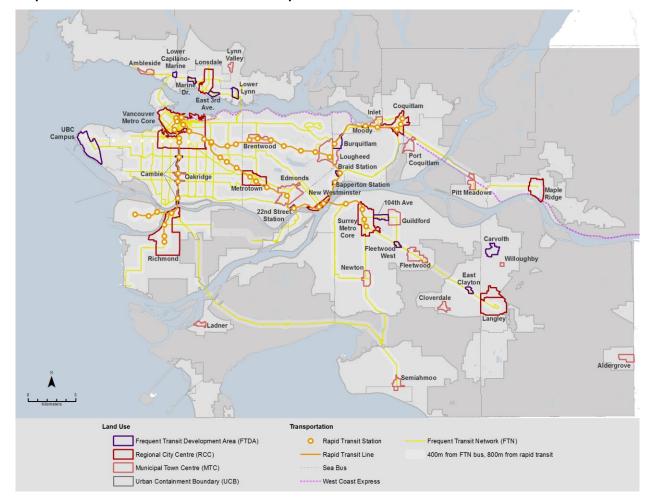
Reflecting continuing population, employment, and economic growth on Metro Vancouver's limited land base, focusing development in Urban Centres is an important element of the regional growth strategy. To build vibrant and livable communities, *Metro 2040*'s Strategy 1.2 includes specific policies about office space, including guidelines for the land use and transportation characteristics of Urban Centres and Frequent Transit Development Areas. There are three different types of Urban Centres identified in *Metro 2040*: Metro Core, Regional City Centres, and Municipal Town Centres. (See Appendix D with a summary from 2001 of the perceived strengths and weaknesses of Urban Centres relative to business parks at that time.)

The 26 Urban Centres identified by *Metro 2040* are intended as priority locations for employment and services, higher density housing, commercial, cultural, entertainment, institutional, and mixed-uses. Urban Centres are intended to emphasize place-making, an enriched public realm, and promote transit-oriented communities, where transit, cycling, and walking are the preferred modes of transportation. Orienting growth and development in this way helps to:

⁴ Note: The preparation of the earlier version 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 version of this report.

- Support an efficient land use pattern and transportation network;
- Protect natural areas, agricultural and industrial land by focusing growth in urban areas;
- Provide jobs close to where people live;
- Create complete communities that are accessible, promote transit, walking and cycling, provide
 access to a range of housing choices, 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.



Map 1.1: Metro 2040 Urban Centres and Frequent Transit Network

Urban Centre Employment Levels

Employment levels vary greatly between the 26 Urban Centres in Metro Vancouver. Figure 1.1 shows the estimated number of jobs, as well as housing and population, in 2016. Note that these are estimates, and exclude adjustments for both the National Household Survey undercount and 'no fixed workplace'. As can be seen, the Vancouver Metro Core (i.e. Vancouver downtown and Broadway) by far dominates in terms of scale, with 246,000 jobs, while Richmond's City Centre, Burnaby's Metrotown, and Surrey's Metro Centre are the next largest employment centres.

Figure 1.1: Employment, Housing, Population in Urban Centres (2016)

Urban Centres	Employment	Housing	Population
Aldergrove MTC	555	410	835
Ambleside MTC	2,965	3,725	5,355
Brentwood MTC	8,665	6,490	12,420
Cloverdale MTC	1,930	1,065	1,615
Coquitlam RCC	10,955	8,840	16,765
Edmonds MTC	6,950	12,000	26,530
Fleetwood MTC	3,585	3,875	11,280
Guildford MTC	8,435	6,270	14,625
Inlet Centre MTC	3,030	3,710	7,560
Ladner MTC	3,815	2,325	4,385
Langley RCC (Langley City)	11,925	8,135	14,870
Langley RCC (Langley Township)	8,480	935	1,845
Lonsdale RCC	15,060	16,330	28,325
Lougheed MTC (Burnaby)	4,015	7,210	15,575
Lougheed MTC (Coquitlam)	1,935	2,900	5,870
Lynn Valley MTC	1,580	1,070	2,440
Maple Ridge RCC	6,490	5,940	10,680
Metro Core MC	246,665	119,140	188,460
Metrotown RCC	19,060	16,145	29,235
New Westminster Downtown RCC	6,560	7,020	12,290
Newton MTC	4,555	1,160	2,160
Oakridge MTC	3,480	685	1,290
Pitt Meadows MTC	1,450	2,685	5,620
Port Coquitlam MTC	2,685	4,215	8,130
Richmond City Centre RCC	36,455	25,825	54,275
Semiahmoo MTC (Surrey)	2,405	2,705	4,625
Semiahmoo MTC (White Rock)	755	860	1,200
Surrey Metro Centre SMC	21,340	12,065	23,560
Willoughby MTC	195	70	115
Total	445,975	283,805	511,935

Source: Place of Work Employed Labour Force, 2016 National Household Survey

Note: Numbers exclude adjustments for both the National Household Survey undercount and 'no fixed workplace'.

Growth targets for jobs in the region for 2041 are shown in Figure 1.2. Half of all new jobs are directed to Urban Centres, with different Urban Centres anticipated to grow at different rates, plus growth in Frequent Transit Development Areas.

Figure 1.2: Metro Vancouver Employment Targets for Urban Centres

Area	2011 Jobs	2041 Jol	os	Growth
Metro Centres	283,000 2	23% 362,000	21%	79,000
Vancouver Metro Core	261,000 2	22% 313,000	18%	52,000
Surrey Metro Centre	22,000 2	2% 49,000	3%	27,000
Regional City Centres	132,000 1	11% 237,000	14%	105,000
Municipal Town Centres	74,000	6% 163,000	9%	89,000
Urban Centres Total	489,000 4	10% 762,000	43%	273,000
Frequent Transit Development Areas	TBD	412,000	24%	TBD
All other areas	TBD	579,000	33%	TBD
Metro Vancouver Region	1,209,000	1,753,00	0	491,000

Source: Metro Vancouver

2.0 Metro Vancouver Office Market Profile and Characteristics

Compared to other North American markets, the Metro Vancouver market has fewer large head offices and has many smaller-sized office tenants. The Metro Vancouver market has a range of different business sectors; a diversified market is considered healthy and beneficial if one particular sector experiences a decline. In the past, the resource sector (e.g. forestry, mining, energy) drove a lot of the office growth in the Vancouver market through both head offices and supporting services such as accounting, finance, and legal firms. More recently, there has been significant growth in the technology sector as a major office tenant type.

2.1 Sub-Regional Profiles

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

Vancouver, and specifically the Central Business District in downtown and surrounding 'core', is the business centre for the region and the province, with significant numbers of businesses also located along the Broadway Corridor. For greater context, Vancouver contains 58% of the region's office market inventory. Many of the types of businesses located in the Metro Core serve regional and provincial markets. The Metro Core has a much higher percentage of jobs in professional and commercial services and a lower percentage of jobs in retail, in comparison to the rest of the city and the region, and almost all regional centres.⁵ This distribution illustrates how very different the Metro Core is from the other sub-markets in the region.

In terms of business headquarters, of the relatively few major headquarters in the region, most are located in downtown Vancouver. Nearly all major tech companies have located in the Vancouver core in order to attract and retain talented employees. The downtown Vancouver market is experiencing a low vacancy rate reflecting strong demand, especially by tech tenants, although the steady supply of new office buildings coming on-stream over a multi-year period may cause vacancy rates to increase. Tenants of the new downtown buildings are expected to be those already in the area that are expanding or want newer premises. This new supply and tenant moves may lead to some increases in vacancies in older buildings in the area.

Outside of downtown Vancouver but still within the City of Vancouver, there is a strong office market along the Broadway corridor. Further to the east, Broadway Tech campus meets the needs of tenants that want to be accessible to downtown Vancouver and the region; it has both good transit service and is accessible to Highway 1. Broadway Tech is also attractive to tenants that need larger building floorplates and prefer low rise buildings. In south Vancouver, the more recent Marine Gateway mixed-use complex contains 260,000 sq ft of office space.

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. 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). Metrotown is viewed as a good office location due to its centrality in the region and its high level of transit service. Some businesses, however, perceive it as having high traffic congestion, which is a drawback for tenants that need to travel frequently to visit sites or clients. Brentwood is seen as a desirable area due to its good transit and road access. There is also a large office component at Canada Way and Willingdon Avenue. More office park development located far from

⁵ City of Vancouver, "Employment Make up of Core vs Rest of City and Region, Economy – Structure Step 1: Understanding Yesterday and Today", 2005.

SkyTrain stations is not predicted in Burnaby, because office tenants want the amenities and transit service found in Urban Centre and SkyTrain locations.

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). Future office development is anticipated at Braid Station. 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 provides space for both local and some regional serving tenants. Generally, the downtown 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 has a variety of office building types distributed throughout the city. The Surrey City Centre area contains few large modern office buildings, although the 2014 relocation of the City Hall to this area spurred additional development interest. Surrey Metro Centre will be a good location for office development in the future, but the area is perceived as lacking amenities, although this is improving. Also noted from some perspectives is that the area does not have good access for many of the region's employees because it is considered to be "on the other side" of the Fraser River and at the end of the SkyTrain line.

Brokers felt that the Surrey City Centre office market will grow, but it will take time. The supply of office space is small, providing limited options to interested tenants. Growth is expected to come from engineering, law, and accounting firms, and perhaps some government offices. A positive feature for this market is that the City of Surrey is perceived as being proactive and supportive of the Surrey City Centre.

Richmond currently has a large proportion of its office stock located outside of its downtown centre. This 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 have experienced high vacancy rates because of difficulties in attracting office tenants to areas with poor access to amenities and 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. Noted drawbacks to locating in downtown Richmond: traffic congestion; not many space choices (currently) for office tenants; the area is mainly zoned for retail use and therefore land prices are too high to justify redevelopment into office.

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). There is limited demand for office space in the North Shore area, as major office tenants will tend to locate in other parts of the region that are more accessible to the regional workforce and other desired features. The North Shore, and especially Lonsdale Regional City Centre, is located very close to Vancouver's Central Business District (CBD), so regional-serving office tenants have more location choice in downtown Vancouver compared to the North Shore.

Coquitlam, even with the completion of the Evergreen Rapid Transit Line in 2016, is an area viewed as being located on the edge of the region. It is expected that it will take a long time before any significant office development occurs in this area, which will be supported by the ongoing growth in population, housing and employment in the area.

The rest of the region, including the Langleys, Delta, Maple Ridge / Pitt Meadows, have very small office markets with few major office buildings. Most of these office tenants serve the local population, with the exception of some government and institutional offices.

2.2 Regional Office Market Conditions

Based on a review of current publications and the opinions from stakeholders gathered through the interviews, the Metro Vancouver office market continues to experience a period of extreme strength, driven by strong demand by tech tenants. Most of these types of tenants will only consider a location in the core area, reflecting the preferred location for their employees. These companies have occupied or pre-leased large blocks of space in new office buildings in downtown Vancouver and spurred additional developments that will be completed over the next few years.

According to industry publications at the end of 2018, the total inventory of market office space was estimated at 65 million sq ft. Note that this is the market inventory as tracked by brokerage firms, which excludes some smaller buildings and some non-market buildings such as government / institutional offices, which were included in the Metro Vancouver inventory, as explained in subsequent sections.

According to published market reports⁶, the Metro Core (downtown Vancouver and the Broadway Corridor) dominates the region in terms of office space (see Figure 2.1). Nearly half (29.5 million sq ft, or 45%) of the 65 million sq ft total market office inventory in the region is located in downtown Vancouver (CBD, Gastown / Railtown, Yaletown). The Broadway Corridor represents an additional 6.3 million sq ft (10% of regional total). The next largest market is Burnaby, with approximately 10.5 million sq ft or 16% of the regional total, followed by Surrey at 5.2 million sq ft, and Richmond at 5.0 million sq ft. The other sub-markets in the region are relatively small.

The average vacancy rate for the region at the end of 2018 was 5%, down from past periods. Downtown Vancouver had a relatively low vacancy rate (4%), while some other areas experienced notably higher vacancy rates. By historical standards, and compared to other markets in North America, these are very low vacancy rates. Average annual office rental rates per sq ft are highest in downtown Vancouver and the Broadway Corridor. Typically, building operations, maintenance, and property taxes represent an extra 50-60% of accommodation costs for tenants in addition to net rents.

Figure 2.1: Metro Vancouver Office Market Inventory by Sub-Market (Q3 2018)

	Buildings Surveyed	Office Inventory (sq ft)	% of Regional Total	Vacant Space (sq ft)	Vacancy Rate	Aski	t. Avg. ing Net ents	G	sking ross ents
Downtown Vancouver	225	29,559,447	45%	1,158,239	3.9%	\$	33.35	\$	52.61
Broadway Corridor	108	6,299,160	10%	227,686	3.6%	\$	26.38	\$	39.48
Broadway Periphery	50	2,207,134	3%	151,786	6.9%	\$	22.71	\$	36.45
Vancouver Sub Total	383	38,065,741	58%	1,537,711	4.0%				
Burnaby	122	10,478,646	16%	700,410	6.7%	\$	22.66	\$	36.68
Surrey	101	5,192,509	8%	215,719	4.2%	\$	24.14	\$	36.32
Richmond	81	4,968,955	8%	395,577	8.0%	\$	18.61	\$	29.30
North Shore	64	2,571,118	4%	141,208	5.5%	\$	22.59	\$	35.47
New Westminster	40	1,981,154	3%	166,645	8.4%	\$	20.17	\$	29.19
Coquitlam	21	664,032	1%	15,660	2.4%	\$	20.92	\$	37.81
Langley	35	1,448,737	2%	69,536	4.8%	\$	16.30	\$	26.00
Others Sub Total	464	27,305,151	42%	1,704,755	6.2%				
Metro Vancouver Total	847	65,370,892	100%	3,242,466	5.0%	\$	25.85	\$	39.55

Source: Colliers. Office Statistics Q3 2018, Metro Vancouver. 2018

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⁶ Colliers, "Metro Vancouver Office Market Statistics", Q3 2018.

As for the class (a function of the quality and location of the accommodations) of office space in the region, approximately 77% is Class A and B (average quality). Only 8% is Class AAA (top quality), of which three-quarters is located in downtown Vancouver. Rents for different classes and locations of office space vary accordingly. See Figure 2.2 for a summary of the region's office inventory by class.

Figure 2.2: Metro Vancouver Office Market Inventory by Class (Q3 2018)

	Class	Buildings Surveyed	Office Inventory (sq ft)	% of Regional Total	Vacancy Rate	Ask	jt. Avg. king Net Rents	Askir	rt. Avg. ng Gross Rents
	AAA	8	3,713,546	6%	6.0%	\$	48.00	\$	68.32
	Α	26	7,756,504	12%	3.8%	\$	38.97	\$	60.42
Vancouver Downtown	В	90	12,272,743	19%	3.0%	\$	33.75	\$	63.64
Downtown	С	101	5,816,654	9%	4.6%	\$	27.67	\$	46.32
	All	225	29,559,447	45%	3.9%	\$	33.35	\$	52.61
	AAA								
	Α	36	3,454,895	5%	5.0%	\$	32.15	\$	50.43
Vancouver	В	48	2,254,714	3%	1.9%	\$	26.51	\$	38.88
Broadway	С	24	589,551	1%	1.6%	\$	20.47	\$	29.12
	All	108	6,299,160	10%	3.6%	\$	26.38	\$	39.48
	AAA	5	1,300,230	2%	5.3%	\$	34.05	\$	49.24
	Α	155	13,958,216	21%	8.3%	\$	23.43	\$	36.50
Other	В	213	10,360,977	16%	5.2%	\$	19.06	\$	30.27
Areas	С	141	3,892,862	6%	2.4%	\$	15.46	\$	22.18
	All	514	29,512,285	45%	6.3%	\$	21.53	\$	32.10
	AAA	13	5,013,776	8%	5.8%	\$	36.25	\$	52.25
		217	25,169,615		6.5%	\$	27.25	\$	42.42
Metro	A	351	24,888,434	39%	3.8%	\$	24.49	\$	38.70
Vancouver Total	В		, ,	38%		· ·			
iolai	С	266	10,299,067	16%	3.6%	\$	23.64	\$	38.30
	All	847	65,370,892	100%	5.0%	\$	25.85	\$	39.55

Source: Colliers International. Office Statistics Q3 2018, Metro Vancouver. 2018

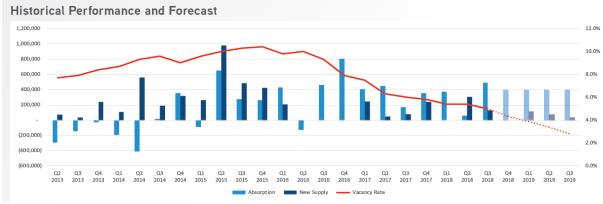
Vancouver Downtown = Downtown Core, Gastown / Railtown, Yaletown

Other Areas = Vancouver - Periphery, Burnaby, Coquitlam, Langley, New Westminster, North Shore, Richmond, Surrey

Space Absorption

Since late 2016, with high levels of space absorption, the office vacancy rate in the region has been on a steady decline from roughly 10% to 5%, as illustrated by Figure 2.3 below.⁸

Figure 2.3: Metro Vancouver Office Market Absorption and Vacancy Rates



Source: Colliers. Office Market Report, Metro Vancouver, Q3 2018. 2018

⁷ Colliers, "Metro Vancouver Office Market Statistics", Q3 2018.

⁸ Colliers, "Metro Vancouver Office Market Report", Q3 2018.

The absorption of over 0.75 million sq ft in the first half of 2018 was one of the strongest periods on record, and comparable to other peaks in 2006 and 2015 during the last waves of new development.⁹

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 has typically maintained steady new supply, a gap in product delivery and availability has formed in key markets such as downtown Vancouver, Burnaby, Richmond and, to a lesser extent, Surrey and Vancouver-Broadway. ¹¹

Despite the recent attention surrounding the tech market, which has had a major influence on vacancy rate, it is expected that lease rates and the overall evolution of Metro Vancouver will continue to grow at a steady pace, due to a healthy economy and job growth. Leasing activity will slow due to a lack of space available. Some relief is expected when the next phase of construction arrives to the market in downtown Vancouver, however much of this space will not be available until 2022.¹²

Vacancy Rates

Office vacancy rates in Metro Vancouver have declined over the past three years, to approximately 5%, and may approach record lows in the near future. Vacancy in all the markets has been tightening and that trend is expected to continue as leasing opportunities grow fewer.¹³ The downtown Vancouver vacancy rate is expected to tighten further, maintaining its position as one of the lowest in North America.¹⁴ Also, vacancy in other markets including Burnaby, Richmond and Surrey is expected to continue tightening.¹⁵

As the downtown market vacancy rate continues to decline and rental rates continue to rise as a result, growing tenants have fewer options for space and will need to be more flexible, especially ones needing large blocks of space, which are rare and are at a premium.¹⁶

Rental Rates

Lease rates have climbed sharply in markets such as downtown Vancouver that have space in high demand. Rental rates in downtown Vancouver – already among the highest in Canada – increased in 2018 and are expected to continue to rise through 2019, due to a lack of new supply and strong demand.¹⁷ Rental rates in downtown Vancouver for Class AAA space were averaging \$48 per sq ft in late 2018, significantly up from \$34 per sq ft in 2014¹⁸. Growth of lease rates in the suburban markets has been more muted. Tenants seeking large blocks of space will likely have few options other than to prelease space in the next wave of development or to backfill the space that will be vacated by tenants who relocate.¹⁹

⁹ Avison Young, "Metro Vancouver Office Market Report", Mid-Year 2018.

¹⁰ Avison Young, "Metro Vancouver Office Market Report", Mid-Year 2018.

¹¹ NAIOP Vancouver, "Office Cost of Business Survey", 2018.

¹² Cushman Wakefield, "Marketbeat Office Report Vancouver", Q3 2018.

¹³ Avison Young, "Metro Vancouver Office Market Report", Mid-Year 2018.

¹⁴ CBRE, "Canada Quarterly Statistics", Q3 2018.

¹⁵ NAIOP Vancouver, "Office Cost of Business Survey", 2018.

¹⁶ Jones Lang LaSalle, "Metro Vancouver Office Insight", Q2 2018.

¹⁷ Avison Young, "Metro Vancouver Office Market Report", Mid-Year 2018.

¹⁸ Colliers, "Metro Vancouver Office Market Statistics", Q3 2018; Q3 2014.

 $^{^{\}rm 19}$ Avison Young, "Metro Vancouver Office Market Report", Mid-Year 2018.

2.3 New Office Supply - Significant Developments

A number of major office development projects are currently underway in the region, particularly in downtown Vancouver following limited office construction in the prior decade. Most of the other recent or underway office developments are located in Urban Centres or near rapid transit stations.

This significant new office supply is responding to strong demand, which is driving lease rates higher and spurring investment in office developments.²⁰ The largest wave of new downtown Vancouver office development will have 4.3 million sq ft of space delivered by 2022 – a nearly 20% increase to the current total downtown inventory.²¹ Of that amount, 2.1 million sq ft will be delivered by 2021.²²

Notable projects in downtown Vancouver include, with expected completion year noted:²³

- The Offices at Burrard Place, 1281 Hornby St, Reliance Properties / Jim Pattison Developments, 99,000 sq ft, 2019
- Creative Space, 1410 Granville St, Westbank, 37,000 sq ft, 2019
- The Cardero, 620 Cardero St, Bosa Properties / Arpeg Holdings, 45,000 sq ft, 2019
- 402 Dunsmuir Street, Oxford Properties, 147,000 sq ft, 2020
- 400 West Georgia, Westbank / Allied, 353,000 sq ft, 2020
- The Offices at Burrard Place, 1280 Hornby St, Reliance Properties / Jim Pattison Developments, 146,000 sq ft, 2020
- Vancouver Centre II, 753 Seymour Street, GWL Realty, 368,000 sq ft, 2021
- Bosa Waterfront Centre, Bosa Developments, 320 Granville St, 375,000 sq ft, 2021
- 601 West Hastings St, PCI / Greystone, 205,000 sq ft, 2021
- 625 West Hastings St, Uptown Property Group, 120,000 sq ft, 2022
- 1133 Melville St, Oxford Properties, 532,000 sq ft, 2022
- 1090 West Pender Street, Bentall Kennedy, 530,000 sq ft, 2022
- The Post on Georgia, 349 West Georgia St, QuadReal Property, 1,700,000 sq ft, 2022/2023
- 1166 West Pender Street, Reliance Properties, 363,000 sq ft, 2023

In the rest of the region, there is another 1 million sq ft currently under construction.²⁴ Notable submarket projects include²⁵:

- In Vancouver's Broadway corridor new development continues to break ground, however most of the new office space being delivered in the next two years has already been leased or sold;
- Burnaby, the second largest office market in Metro Vancouver, has only a single project completing in the last half of 2018 with no other deliveries until 2022;
- Richmond, which has not built any new office space for lease in more than a decade (some other buildings have been strata tenure), will have to wait until 2020 for new supply; and
- Surrey has only two projects set to deliver by 2020, one of which is currently 45% pre-leased and the other may be sold as strata office.

²⁰ Colliers, "Metro Vancouver Office Market Statistics", Q3 2018.

²¹ Avison Young, "Metro Vancouver Office Market Report", Mid-Year 2018.

²² BOMA BC Leasing Guide: Commercial Real Estate Office Space - Patrick Blennerhassett, "THE NEXT PEAKS - More than two million square feet of new office space to tower into Vancouver's skyline by 2021", 2018.

²³ Source: Avison Young Research Department - Vancouver 2018.

²⁴ Colliers, "Metro Vancouver Office Market Statistics", Q3 2018.

²⁵ Avison Young, "Metro Vancouver Office Market Report", Mid-Year 2018.

2.4 Office Tenant Types – Growth of Tech Sector

According to brokerage reports, the following sectors made up the bulk of office tenants in 2018. 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%.²⁶ However, by Q3 2018 Technology demand dropped to 22.4%, due primarily to pre-leasing deals in upcoming supply (see Figure 2.4).²⁷ The Education sector, which represented less than 1% of tenant demand two years prior increased to 14%.

This sector mix differs from the demand profile in late 2014: Financial Services & Accounting, Tech and Digital Media, and Architecture, Engineering & Construction, and Legal Firms.²⁸ In 2004 tech companies represented just 8.6% of downtown tenancies, a period when the sector was primarily located in suburban offices with large floorplates.²⁹

Major new tenants in the Vancouver market are oriented towards tech, notably:

- "This is the first time where we have seen global Fortune 1000 companies that want to have a presence in Vancouver.... Companies like Amazon, Microsoft, WeWork (the co-working giant) and other big U.S. or international tech firms are hungry for large, local footprints".³⁰
- Amazon took about 563,000 sq ft of pre-leased space. The e-commerce giant leased 416,000 sq ft at the old Canada Post building redevelopment, and 147,000 sq ft at 401 West Georgia.³¹
- Kabam will be the lead office tenant for the new Vancouver Centre 2, leasing close to a third of the building's 345,000-square-foot floor space across seven floors.³²

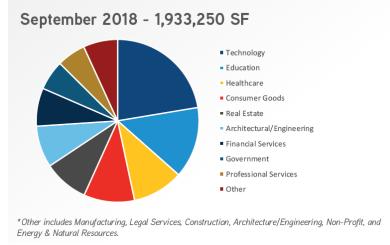


Figure 2.4: Metro Vancouver Office Space Demand by Sector

Source: Colliers, "Metro Vancouver Office Market Report", Q3 2018

CBRE's 2018 tech-sector report ranks Vancouver the fourth in Canada overall, and top when it comes to value for money in terms of talent.³³ The top Canadian tech talent markets were Toronto, Ottawa, Montreal, Vancouver and Waterloo. These locations possess the strongest combination of attributes

²⁶ Colliers, "Metro Vancouver Office Market Report", Q2 2018.

²⁷ Colliers, "Metro Vancouver Office Market Report", Q3 2018.

²⁸ Avison Young, "Metro Vancouver Office Market Report", Mid-Year 2014.

²⁹ Business in Vancouver - Peter Mitham, "Vancouver tops for tech talent, but rental costs erode affordability", December 5 2018.

³⁰ Vancouver Sun - Evan Duggan, "Commercial Real Estate: 'I've never seen demand as high' for Vancouver office space", October 30 2018.

³¹ Vancouver Sun - Evan Duggan, "Commercial Real Estate: 'I've never seen demand as high' for Vancouver office space", October 30 2018.

³² Business in Vancouver - Tanya Commisso, "Mobile game developer to lease seven floors in Vancouver Centre II office tower", November 22 2018.

³³ Business in Vancouver - Peter Mitham, "Vancouver tops for tech talent, but rental costs erode affordability", December 5 2018.

that the technology sector needs to flourish, especially when it comes to a high concentration of tech employment.³⁴

The Vancouver tech market trends, as copied from the CBRE report, states:³⁵

- Vancouver's digital technology hub is poised for growth with \$1.4 billion of investments and 50,000 tech-related jobs being committed over the next 10 years through the Innovation Supercluster Initiative.
- Dubbed as one of the top five Virtual Reality hubs globally, Vancouver has over 200 companies
 driving its virtual, mixed and augmented reality ecosystem which has increased three-fold over
 the last five years. It is poised for stronger growth through tax incentives from the provincial
 government, equal to 17.5% of annual employee wages incurred by these firms.
- The BC government has approved a feasibility study of high-speed rail connecting Vancouver, Seattle and Portland. The rail connection promises to facilitate greater collaboration and stronger economic ties between the three cities in the Cascadia Innovation Corridor.

Perspectives of Interviewees

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, and need a downtown 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. At the same time, but not receiving the same profile, are the many small office tenants in the market, each taking up 3,000-8,000 sq ft of space.
- Large tech companies are increasingly comfortable with locating in Vancouver, given that it is a known location, an international city, west coast time zone, many amenities, and access to an international workforce. The presence of new large tech companies (such as Amazon, etc) are attracting more tech companies, 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.

2.5 Average Size of Office Tenants

Compared to other North American markets, Metro Vancouver has relatively few large head offices and is made up 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 7,400 sq ft in 2012 and 7,200 sq ft in 2014, with 54% of all office space occupied by tenants under 20,000 sq ft in size (see Figure 2.5).³⁶

³⁴ CBRE, "2018 Scoring Canadian Tech Talent", 2018.

³⁵ CBRE, "2018 Scoring Canadian Tech Talent", 2018.

³⁶ Source: CBRE Research Department – Vancouver, 2012.

Figure 2.5: Distribution of Office Tenant Sizes in Downtown Vancouver (2012)

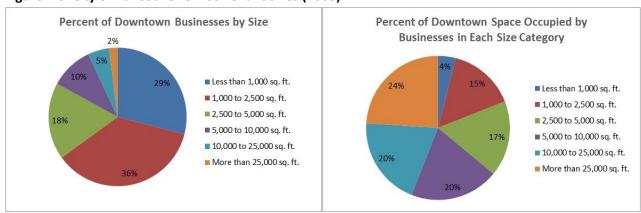
Size Category (sq ft)	Total Floor Area (sq ft)	Percentage of Market
0 - 1,999	1,268,821	5.4%
2,000 - 4,999	3,462,762	14.7%
5,000 - 9,999	4,300,629	18.3%
10,000 - 19,999	3,623,708	15.4%
20,000 - 39,999	2,216,191	9.4%
30,000 - 49,999	2,856,467	12.2%
50,000 - 74,999	2,176,555	9.3%
75,000 - 99,999	1,535,275	6.5%
100,000 - 199,999	1,283,576	5.5%
200,000 +	760,550	3.2%
Total	23,484,534	100%

Source: CBRE Research Department - Vancouver

According to Colliers in 2012, the average tenant size in downtown Vancouver was 4,500 sq ft, and 11,500 sq ft in suburban areas.³⁷

In 2005, the City of Vancouver conducted a survey of businesses in downtown Vancouver³⁸. Survey results show that while most businesses occupy small office spaces, the majority of total downtown office space is held by businesses in large spaces. As shown in Figure 2.6, 83% of businesses occupied less than 5,000 sq ft. However, these businesses occupied only about one-third of total downtown office space, with 64% of all office space occupied by businesses with over 5,000 sq ft.

Figure 2.6: City of Vancouver Office Tenant Sizes (2005)



Source: City of Vancouver Survey of Metro Core Businesses, 2005. Business Lease Sizes.

It was estimated that just over 1% of all jobs in Metro Vancouver were in head offices, with an average of 36 employees per head office.³⁹

³⁷ Source: Colliers Research Department – Vancouver, 2012.

³⁸ City of Vancouver, "Business Space Needs in the Metro Core Today, Land Use and Development – Profile Step 1: Understanding Yesterday and Today", 2006.

³⁹ City of Vancouver, "Head Offices in Vancouver, Economy – Structure Step 1: Understanding Yesterday and Today", 2006.

2.6 Growth of Co-working in Vancouver

Co-working firms such as WeWork and Regus/Spaces have rapidly become one of the largest tenant types in the Vancouver core. These two companies have been responsible for an inordinate amount of leasing activity since 2017 and in part have accelerated the need for additional office development. Ocworking is accommodating the evolving nature of work, and making a very illiquid asset (real estate) liquid and flexible. Co-working is providing space in some cases for no-fixed-address workers who previously worked at home, or other arrangements. Co-working is said to also facilitate and accelerate collaboration, innovation, and synergies between businesses and empowers people to work in interesting places.

Co-working is expanding exponentially around the world, but mostly in cosmopolitan gateway cities, according to one source.⁴¹ As stated by one local office broker: "Vancouver is a phenomenal co-working market. We're a branch-office town, we're not a head-office town, and as a result we've got a tremendous number of entrepreneurs trying to find really interesting space."⁴²

WeWork

WeWork entered the Vancouver market in Fall 2017 with its first location at Three Bentall Centre, and has since expanded with another location at Two Bentall Centre. A third location has also opened in Grant Thornton Place on Seymour Street, and another location at Westbank's Main Alley tech campus is scheduled to open in early 2019. A WeWork co-working office location in South Vancouver will be the company's first location outside of the downtown Core, located at Marine Gateway mixed-use complex next to SkyTrain's Marine Drive Station. There is also a longer-term plan to turn the upper levels of the Hudson's Bay Company's flagship store in downtown Vancouver into a WeWork office. WeWork launched a 200-per-cent expansion to their local footprint in 2018, and has plans to double once again in 2019.

Regus / Spaces

Regus is a well-established provider of office space and related business services. 'Spaces' is a separate brand from Regus (both operated by IWG), intended to provide: "Creative Workspaces With A Unique Entrepreneurial Spirit". Spaces Gastown was completed in late 2018; a six-floor co-working space on Hastings Street that can accommodate up to 500 members. Another Spaces location of 80,000 sq ft is being developed on Granville Street, along with another 40,000 sq ft at a new building on Great Northern Way, both set to open in early 2019.⁴⁵

Spaces Gastown is in a former warehouse with Romanesque architecture - it has a modern Dutch-inspired interior with large collaborative areas, team rooms, phone booths, dedicated co-working spaces, fully-equipped meeting rooms and furnished private offices. Faces goes on to state: "We're also looking at additional amenities as well that help support the members in that real live-work-play environment, whether it's fitness facilities, other types of amenities, directly in that space". Spaces is also taking 120,000 sq ft at the new 400 West Georgia Street tower being developed by Allied and Westbank, which will be completed in 202248. The press release boasts about the type of amenities

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⁴⁰ Avison Young, "Metro Vancouver Office Market Report", Mid-Year 2018.

⁴¹ RENX - Evan Duggan, "Opinions split on future of booming co-working model", November 15 2018.

⁴² BOMA BC Leasing Guide: Commercial Real Estate Office Space - Peter Mitham, "Shared Space - Co-working providers are changing how tenants lease space", 2018.

⁴³ DailyHive - Kenneth Chan, "WeWork to open a new co-working office at South Vancouver's Marine Gateway", November 2 2018.

⁴⁴ Province - Evan Duggan, "Commercial real estate: Co-working just keeps growing", October 2 2018.

⁴⁵ Province - Evan Duggan, "Commercial real estate: Co-working just keeps growing", October 2 2018.

⁴⁶ Colliers, "SPACES, Amsterdam-born creative workspace, officially opens its first co-working location in Vancouver", September 11 2018.

⁴⁷ BOMA BC Leasing Guide: Commercial Real Estate Office Space - Peter Mitham, "Shared Space - Co-working providers are changing how tenants lease space", 2018.

⁴⁸ Province - Evan Duggan, "Commercial real estate: Co-working just keeps growing", October 2 2018.

tenants and employees increasingly want: The building features lush living walls, glass floors, operable windows, a number of patios with breathtaking views, a two-storey landscaped rooftop terrace, and a spectacular fresh air lobby designed to resemble a rainforest.⁴⁹

Impacts on the Vancouver Office Market

The wave of co-working operators in downtown Vancouver started in 2017. Co-working brands currently account for about 830,000 sq ft of office space in Vancouver.⁵⁰ WeWork claims 261,000 sq ft in downtown Vancouver, while IWG has 446,000 sq ft across Metro Vancouver under the Regus and Spaces banners.⁵¹

Their business model fills a gap in which tenants want short-term flexibility, and landlords desire stability. According to one broker: "Those two forces are always opposing one another. Co-working steps in the middle and essentially solves it." However, the belief in co-working facilities is not universal: one prominent leaser stated that about half of the industry stakeholders and observers think the rise of co-working brands such as WeWork and Spaces are little more than a fad, while the other half think it is for real. 53

Perspectives of Interviewees

The growth of co-working office space in the Metro Vancouver market has been significant in the last few years. This has particularly been reflected in the rapid rise of WeWork, and the more established Regus with its newer brand 'Spaces'. Co-working operators provide a flexible space and service to a range of tenant types. Tenants include: 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. Although there is much attention given to the tech tenant, there is a wide range of business sector types.

Co-working offers tenants, called members, ready-to-go full-service office accommodations, taking care of all details such as furniture, wifi, space planning, support services, reception, etc, that would otherwise have to be managed by the business. The co-working space eliminate 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 long-term commitment, the tenant also has the flexibility to grow, contract, or move as their business evolves.

2.7 Growth of 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. Purchasing office space can be an investment opportunity for owner-occupiers who are struggling to find 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.⁵⁴

Bosa Development set in late 2017 an office strata price record in downtown Vancouver with the presale of half of its Waterfront Centre at an average of more than \$2,000 per sq ft; the tower will complete

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⁴⁹ Colliers, "SPACES announces largest North American locations coming to The Well (Toronto) and 400 West Georgia (Vancouver)", September 18 2018.

⁵⁰ RENX - Evan Duggan, "Opinions split on future of booming co-working model", November 15 2018.

⁵¹ BOMA BC Leasing Guide: Commercial Real Estate Office Space - Peter Mitham, "Shared Space - Co-working providers are changing how tenants lease space", 2018.

⁵² Province - Evan Duggan, "Commercial real estate: Co-working just keeps growing", October 2 2018.

⁵³ RENX - Evan Duggan, "Opinions split on future of booming co-working model", November 15 2018.

⁵⁴ Colliers, "Metro Vancouver Office Market Report", Q3 2018.

in 2021.⁵⁵ In other parts of the region, new shell office space sells for more than \$1,200 per sq ft. Richmond's new office development is expected to be led by strata projects.⁵⁶

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; the unique project achieved high prices because everything lined up, in terms of the site, the project, and the development.⁵⁷

Meanwhile, Reliance Properties is including 100,000 sq ft of strata in its multi-tower Burrard Place mixed-use complex at Burrard, Hornby, and Drake Streets. In terms of the decision about building strata vs lease office space, the developer states: "It's not so much picking one over the other, it's about balancing the relationship between what we keep and what we sell it's a good diversification for the project."⁵⁸

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

- Strata office space has not yet had a huge impact on the downtown Vancouver office market as almost all new construction continuing to target tenants, despite the early successes of the Bosa Waterfront Centre and Burrard Place.⁵⁹
- This is a clear sign that the definition of an office investor in Metro Vancouver has shifted forever. 60
- Strata projects will gain a larger profile in the market as land prices influence developers to build strata office as prevailing rental rates are not adequate for development pro formas given land prices.⁶¹
- Most of the strata office that is being built and sold downtown would likely end up on the leasing market anyway.⁶²

Other considerations or implications of strata vs lease tenure:

- As is common in office strata, the owner is responsible for finishing the concrete shell of the space, which can cost up to \$180 per sq ft for Class AAA offices.⁶³
- Strata unit buyers can set up a so-called nominee company that owns the legal title of the strata unit, which can be used to avoid the property transfer tax when sold at a future date because the company rather than the property is sold and thus no land title change.⁶⁴
- Strata units compared to leases are less flexible to meet the expansion and contraction needs of the tenant, and more difficult to dispose of compared to terminating a lease. 65

Perspectives of Interviewees

The stratification of commercial space, including office, retail, and industrial, is a growing and relatively new phenomenon in the Metro Vancouver market. Some of the drivers for this trend are a desire for users to be able to own and control their space, and also interest by investors. There have been some

⁵⁵ BOMA BC Leasing Guide: Commercial Real Estate Office Space, "Briefs", 2018.

⁵⁶ BOMA BC Leasing Guide: Commercial Real Estate Office Space - Frank O'Brien, "Shape-Shifting Office Sector Defines Intelligent Design", 2018.

⁵⁷ Vancouver Sun - Evan Duggan, "Waterfront Centre's strata units represent price pinnacle: analysts", December 12 2018.

⁵⁸ Vancouver Sun - Evan Duggan, "Waterfront Centre's strata units represent price pinnacle: analysts", December 12 2018.

⁵⁹ Avison Young, "Metro Vancouver Office Market Report", Mid-Year 2018.

⁶⁰ BOMA BC Leasing Guide: Commercial Real Estate Office Space - Frank O'Brien, "Shape-Shifting Office Sector Defines Intelligent Design", 2018.

⁶¹ Avison Young, "Metro Vancouver Office Market Report", Mid-Year 2018.

⁶² Vancouver Sun - Evan Duggan, "Waterfront Centre's strata units represent price pinnacle: analysts", December 12 2018.

⁶³ BOMA BC Leasing Guide: Commercial Real Estate Office Space, "Briefs", 2018.

⁶⁴ BC Business, "On the fence about leasing or buying commercial real estate?", September 28 2018.

 $^{^{65}}$ BC Business, "On the fence about leasing or buying commercial real estate?", September 28 2018.

recent high profile and high value office strata project sales. However, there is question by some interviewees about the depth of demand for this market.

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, and thus cannot be accommodated within a strata building.

2.8 International Investment in Real Estate

The Vancouver market is a well-known destination for foreign investment in real estate, both residential and commercial. During the first half of 2018, Vancouver investment sales totalled \$5.6 billion; the second highest since 2013, behind only 2017.⁶⁶ These values include significant office building transactions.

According to CBRE, Canada's improving macroeconomic conditions and a tight labour market support a positive outlook for the office sector with fundamentals to remain healthy across the country. Specifically for Vancouver and the office market: "Downtown and suburban office yields are expected to remain aggressive as fundamentals look to further improve over the near to mid-term".⁶⁷

Foreign investors tend to invest in premium real estate locations and assets. City size, economic importance, and real estate market liquidity and transparency affect capitalization rates and the level of foreign real estate investment. ⁶⁸ Significant purchases of commercial real estate assets in the Vancouver market have been made by international investors, making a long-term investment in the future of the City. Some of these transactions have had very high values, and have arguably bid up prices (and driven down capitalization rates). This observation is supported by academic literature.

An analysis⁶⁹ of macro-economic variables indicate that as population increases, cap rates decrease because of investors' expectation of rental growth. Conversely, cap rates increase with each increase in the risk premium since investors will demand higher profit for a greater uncertainty of the market. One of the strongest predictors of the cap rate is the location of a property. All else being equal, properties in more central or CBD locations have much lower cap rates than their counterparts in suburban and more peripheral locations. Overall the movements of office cap rates are shaped by submarkets and property characteristics, such as CBD vs suburban location, building age, parcel size, and number of floors.

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⁶⁶ Business in Vancouver - Peter Mitham, "City's commercial real estate investment headed for record year", September 19 2018.

⁶⁷ CBRE, "Canadian Cap Rates & Investment Insights", Q3 2018.

⁶⁸ JRER - Pat McAllister, Anupam Nanda, "Do Foreign Buyers Compress Office Real Estate Cap Rates?", 2016.

⁶⁹ University of Cambridge - Monica Chuangdumrongsomsuk, Franz Fuerst, "Determinants of Cap Rates in US Office Markets", 2016.

3.0 Office Building Inventory

Metro Vancouver first compiled an office building inventory database for the region in 2012, based on multiple sources, including proprietary databases from brokerage firms, BC Assessment Authority and local municipalities. Data was consolidated as best as possible given the multiple data sources to provide for a comprehensive inventory of the office buildings in the region, although some data gaps, inconsistencies, and limitations may exist. Known buildings that were demolished were removed from the inventory. In late 2018, the database was further enhanced and updated.

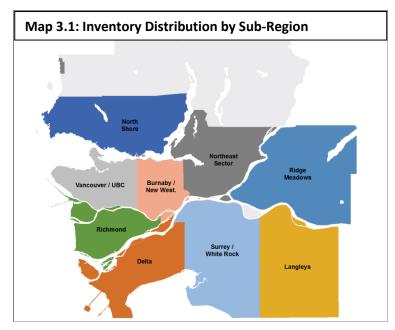
The database includes all buildings in the Metro Vancouver region with at least 10,000 sq ft of office space. The database includes some mixed-use buildings with office components over this size threshold. In total, the inventory is larger than most of the published brokerage firm reports because it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

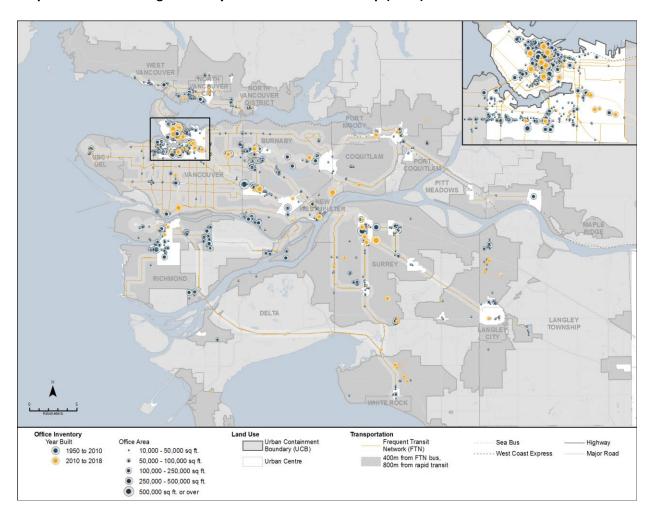
Urban Centre locations are identified in *Metro 2040*; boundaries are defined by the respective member municipalities. To provide for consistency, all numbers in this report have been generated using the confirmed current Urban Centre boundaries.

The Frequent Transit Network (FTN), maintained by TransLink, current as of late 2018, was used for establishing transit service levels (note that the Evergreen Line to Coquitlam was not yet completed at the time of the previous (2015) inventory; the database has been updated to reflect reclassification of buildings at new SkyTrain stations). The FTN comprises bus and rapid transit corridors that provide users with reliable service at least every 15 minutes throughout the day and over the entire week. The FTN provides a network of routes around which municipalities can focus population and job growth. Transit service can be in the form of bus or rapid transit (SkyTrain). The distance 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 to access these forms of transit. (The amount of office space located near West Coast Express Stations was negligible and not analyzed for this inventory.)

Based on the comprehensive inventory prepared by Metro Vancouver, at the end of 2018, there was approximately 80 million sq ft of office space in the region located within 1,392 buildings with more than 10,000 sq ft of office space. Summary numbers have been rounded. (See Appendix C for supplemental data tables.)

Map 3.1 the sub-regions, and Map 3.2 shows the distribution of office buildings throughout the Metro Vancouver region. The larger the symbol and the greater the number of symbols indicate office building grouping. Larger buildings are concentrated in downtown Vancouver.





Map 3.2: Office Building Inventory in Metro Vancouver Map (2018)

3.1 Office Inventory by Sub-Region and Land Use Designation

Figure 3.1 shows the amount of office space within each sub-region, as well as the distribution within the region. Approximately half (44% of buildings and 52% of floor area) of the office inventory was located in Vancouver, with other notable sub-regions being Burnaby / New Westminster (18%; 19%), Surrey (12%; 10%), and Richmond (10%; 8%).

Metro 2040 establishes regional land use designations, including 'General Urban', 'Mixed Employment', and 'Industrial'. Three-quarters (76%) of the office inventory is located on lands designated 'General Urban', which is intended to accommodate a wide variety of land uses including Urban Centres. Of the balance, most (21%) is located on 'Mixed Employment' which can accommodate various commercial uses. A relatively small amount (3%) is located on 'Industrial' lands, which are primarily intended for industrial related activities.

Figure 3.1: Inventory Distribution by Sub-Region Table

Sub-Area	Number	Distribution	Sq Ft	Distribution	Avg Size
Vancouver/UBC	612	44%	41,500,000	52%	67,800
Burnaby/New West	251	18%	15,400,000	19%	61,400
Surrey/White Rock	164	12%	8,200,000	10%	50,000
Richmond	141	10%	6,700,000	8%	47,500
North Shore	115	8%	4,200,000	5%	36,500
Langleys	57	4%	1,900,000	2%	33,300
Northeast Sector	38	3%	1,400,000	2%	36,800
Delta	11	1%	400,000	1%	36,400
Ridge - Meadows	3	0%	100,000	0%	33,300
Total	1392	100%	79,800,000	100%	57,300

3.2 Office Building Size

The following Figures 3.2 and 3.3 show the distribution of buildings by office component size. As can be seen, most office buildings are under 100,000 sq ft in size, with the majority of the balance in the 100,000 to 250,000 sq ft range. There are very few buildings over 250,000 sq ft. Of the entire inventory, the average size is 57,000 sq ft and the median size is 31,000 sq ft.

Specifically over the more recent 1990-2018 period, 665 office buildings were constructed with 44 million sq ft. Approximately half (53%) were under 50,000 sq ft, and another 31% were between 50,000 sq ft and 100,000 sq ft. However, smaller buildings under 50,000 sq ft only represented 22% of the total new office space. Some 24 buildings over 250,000 sq ft were built during that period. The buildings over 250,000 sq ft are fewer but much larger, and thus comprise 20% of the total new space for the period. Of this 1990-2018 inventory, the average size is 66,000 sq ft and the median size is 45,000 sq ft, both of which are higher than the older stock.

Figure 3.2: Distribution of Office Buildings by Size - Entire Inventory

Building Size	Count	%	Sq Ft	%	Avg Size
500,000+	6	0%	3,900,000	5%	642,000
250,000-499,999	37	3%	12,200,000	15%	330,000
100,000-249,999	150	11%	22,700,000	28%	151,000
50,000-99,999	272	20%	18,800,000	24%	69,000
10,000-49,999	927	67%	22,300,000	28%	24,000
Total	1392	100%	79,900,000	100%	57,000

Figure 3.3: Distribution of Office Buildings by Size - Built 1990-2008

Building Size	Count	%	Sq Ft	%	Avg Size
500,000+	3	0%	2,000,000	5%	683,000
250,000-499,999	21	3%	6,600,000	15%	315,000
100,000-249,999	80	12%	11,800,000	27%	147,000
50,000-99,999	206	31%	14,100,000	32%	68,000
10,000-49,999	355	53%	9,700,000	22%	27,000
Total	665	100%	44,200,000	100%	66,000

As can be seen in Figure 3.4, in terms of distribution since 1950, there was a pattern of the larger buildings (over 300,000 sq ft) being completed during the 1970s and 1980s, and then resuming again after 2010.

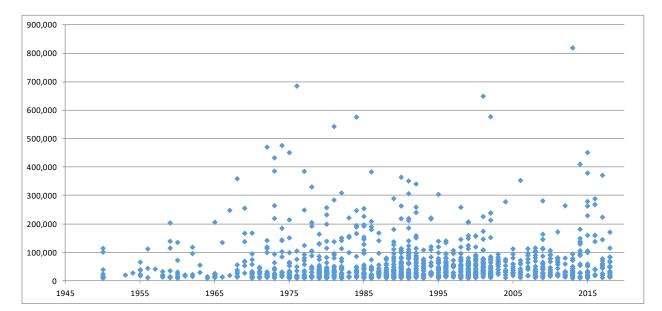
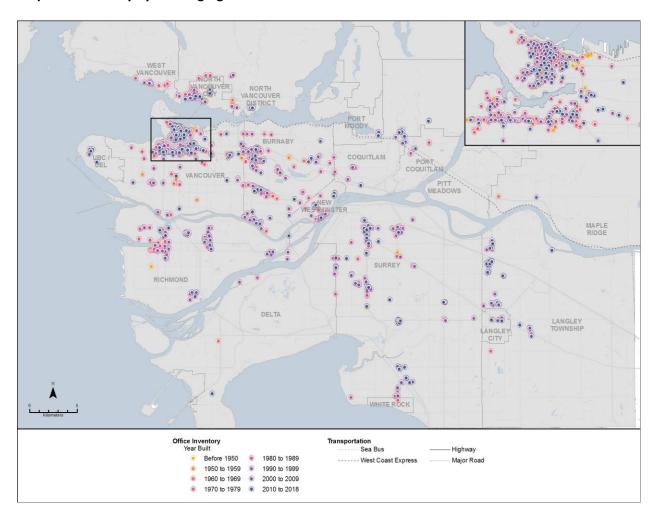


Figure 3.4: Building Year Built by Office Component Size (1950-2018)

3.3 Office Building Inventory Year Built

Based on the available records, the age of the building by year built has been compiled (in the form of completions) (see Map 3.3). Note that in some cases buildings have been substantially renovated. Where building data is available for substantial renovations, the year renovated has replaced the initial year built. For the 80 million sq ft office space inventory, all but approximately 2 million sq ft (2% of the inventory) has known building year built data. Note that 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 3.3: Inventory by Building Age



Completion rates vary considerably from year to year. Figures 3.5 and 3.6 show the building age distribution, with significant office development in the 1990s to 2002. During the 2004-2012 period, the development of new office projects was considerably lower (with the exception of 2009), with another cycle of development peaking in 2015.

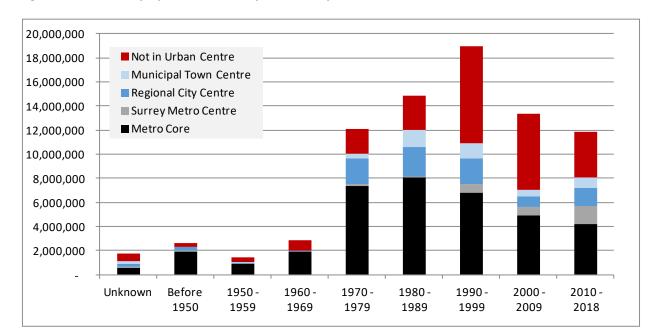
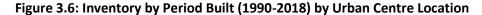
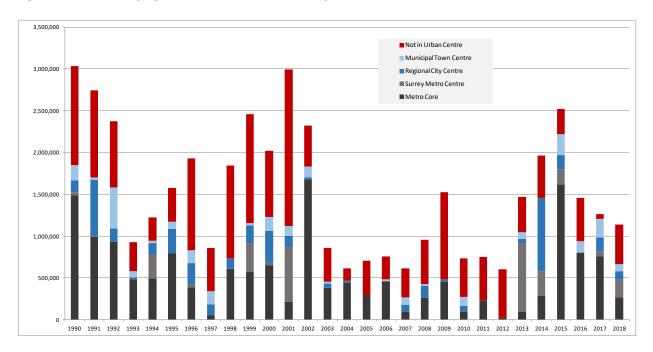


Figure 3.5: Inventory by Period Built (by Decade) by Urban Centre Location





Office Building Inventory Year Built by Location

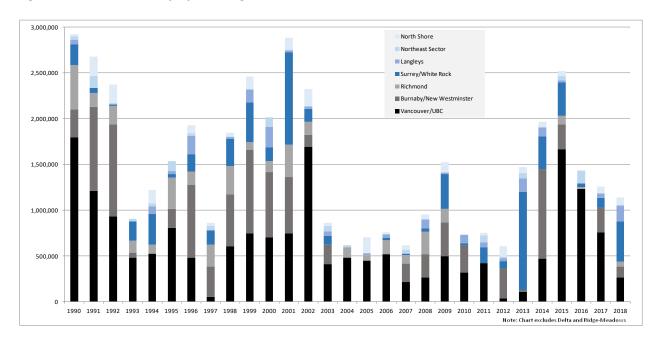
Figures 3.7 and 3.8 show the distribution of growth by sub-region as well as the location of the new office by period built. There was a total of 44 million sq ft of office space developed in 665 buildings during the 1990-2018 period, which provides for an average of approximately 1.6 million sq ft per year.

Much of the development since 1970 was within the City of Vancouver, and to a lesser extent Burnaby / New Westminster. More recently, growth rates have been lower, with a higher proportion of development in Burnaby, New Westminster, and Surrey.

20,000,000 18,000,000 16,000,000 14.000.000 North Shore Northeast Sector 12,000,000 Langleys 10,000,000 Surrey/White Rock 8,000,000 ■ Burnaby/New West 6,000,000 ■ Vancouver/UBC 4,000,000 2.000.000 Note: Chart excludes Delta and Ridge Meadows Before 1950 1950 - 1959 1960 - 1969 1970 - 1979 1980 - 1989 1990 - 1999 2000 - 2009 2010-2018

Figure 3.7: New Inventory by Sub-Region by Decade

Figure 3.8: New Inventory by Sub-Region (1990-2018)



3.4 Office Inventory Relative to Urban Centres and Transit Service

Figure 3.9 shows the distribution of the office space inventory relative to both Urban Centres and Frequent Transit Network (FTN). Most (88%) office space is located within either Urban Centres or within 400 metres of FTN bus / 800 metres of rapid transit service. Most of the inventory in the Metro Core and the Regional City Centres (88% and 61%, respectively) is within 800 metres of SkyTrain stations, whereas half (50%) of the office space in Municipal Town Centres is near rapid transit. Of the inventory not in Urban Centres (25 million sq ft), 62% is proximate to FTN transit service (bus or rapid transit). Approximately 10 million sq ft (12%) of the total 80 million sq ft inventory is neither in an Urban Centre nor near FTN transit.

40,000,000 ■ Not Near FTN Service 35,000,000 ■ Within 400m of FTN Bus Service Only 30,000,000 ■ Within 800m of Rapid Transit Station 25,000,000 20,000,000 15,000,000 10,000,000 5,000,000 Metro Core Surrey Metro Regional City Municipal Town Not in Urban Centre Centre Centre Centre

Figure 3.9: Inventory by Urban Centres and Transit Service

Office Inventory Relative to Urban Centres

Figures 3.10 and 3.11 show the distribution of office space by sub-region relative to Urban Centre types. Of the total inventory in the region (80 million sq ft), 68% or 55 million sq ft was located in Urban Centres. Nearly two-thirds of this inventory (62%) was located in Metro and Regional City Centres (most of which located within the Metro Core), and only a small amount (6%) was located in Municipal Town Centres. The balance, 32% or 25 million sq ft, was not located in Urban Centres.

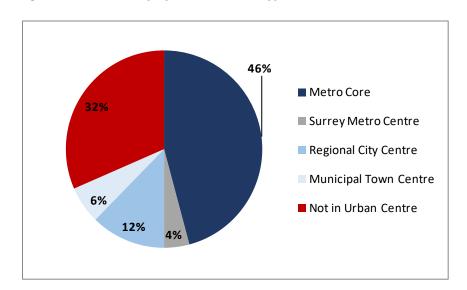
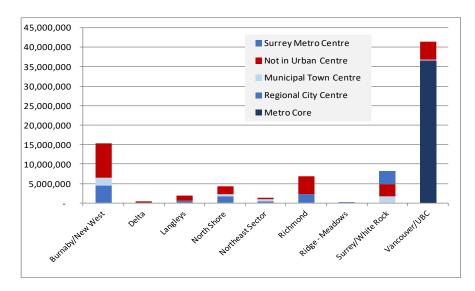


Figure 3.10: Inventory by Urban Centre Type (2018)

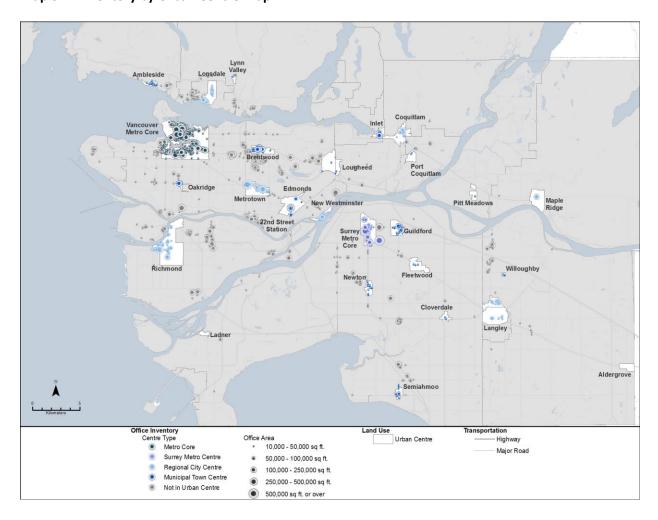
The 55 million sq ft of office space located in the 26 Urban Centres was distributed as follows: the Metro Core (downtown Vancouver and the Broadway Corridor) dominates with a total of 37 million sq ft or 67% of the total office space in Urban Centres in the region. The next largest centres (at less than one-tenth the size) are Metrotown and Surrey City Centre at approx 3 million sq ft each, and Richmond City Centre at 2 million sq ft. The 17 Municipal Town Centres contain relatively limited amounts of office space (6% of the region's total), with an average of 290,000 sq ft of office space each.

Figure 3.11: Inventory by Sub-Region and by Urban Centre Type



Map 3.4 and Figure 3.12 show that for Vancouver, the majority of space is within Urban Centres, whereas for Burnaby/New Westminster, North Shore, Richmond, and Surrey, a significant proportion of office space is not located in Urban Centres.

Map 3.4: Inventory by Urban Centre Map



Office Inventory Relative to Transit Service

Relative to the FTN, some 49 million sq ft (61%) of office space was located within 800 metres (10-minute walk) of a rapid transit station, and 20 million sq ft (25%) located within 400 metres (5-minute walk) of FTN bus. The balance, 12 million sq ft (14%) of office space, was located beyond the FTN service area.

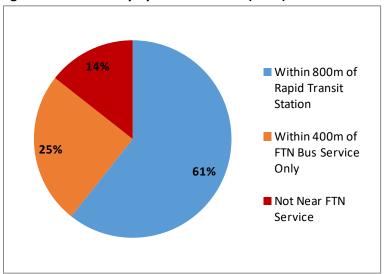


Figure 3.12: Inventory by Transit Service (2018)

Figure 3.13 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, and the balance is served by FTN bus. For other sub-regions, the proportional amount 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.

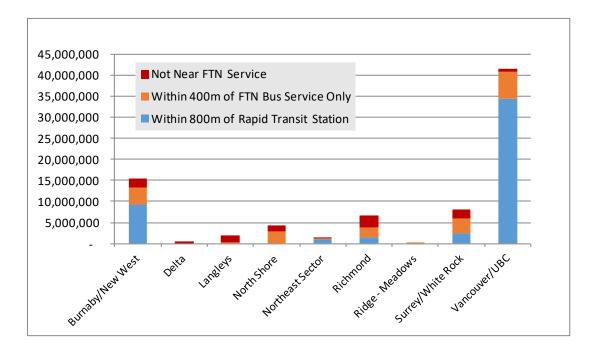


Figure 3.13: Inventory by Sub-Region and Transit Service (2018)

3.5 Newer Inventory Relative to Urban Centres and Transit Service

Figures 3.14 to 3.18 show the growth in office space between 1990-2018 relative to both Urban Centres and the FTN. More than half (55%) of the 44 million sq ft of new inventory (built between 1990-2018) was located within 800 metres of rapid transit stations, with 36% located within the Metro Core (all of which having access to FTN transit). Of the new inventory not in Urban Centres (18 million sq ft), 10 million sq ft (57% of total) was proximate to FTN transit service, and 8 million sq ft (43%) was both not in an Urban Centre and not near FTN transit.

Urban Centres

Of the total growth for the 1990-2018 period, 59% was within Urban Centres (compared to 68% for the entire stock). The balance, 41% of new office development was located outside of Urban Centres, with a range of transit service access.

The distribution of office development by Urban Centre type has varied from year to year over the past decades. Despite some years with a higher proportion of development in Urban Centre locations, as indicated based on the data that non-Urban Centre development peaked in the 1990-2009 period, there is not yet a clear long-term trend towards a consistently larger proportion of development occurring in Urban Centres (other than the Metro Core).

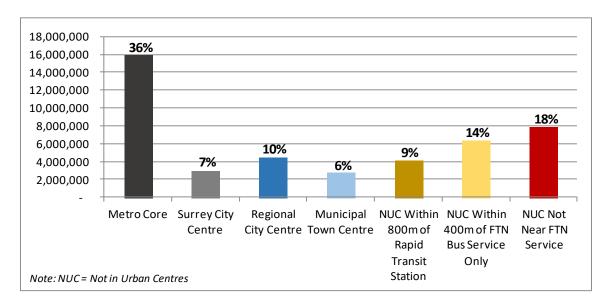
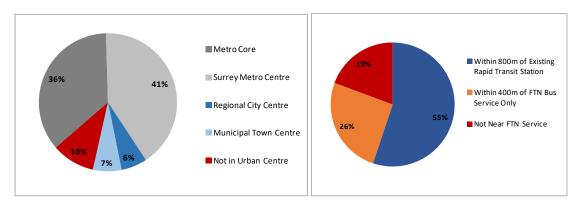


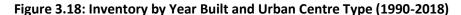
Figure 3.14: Growth in Inventory in Urban Centres and by Transit Service (1990-2018)

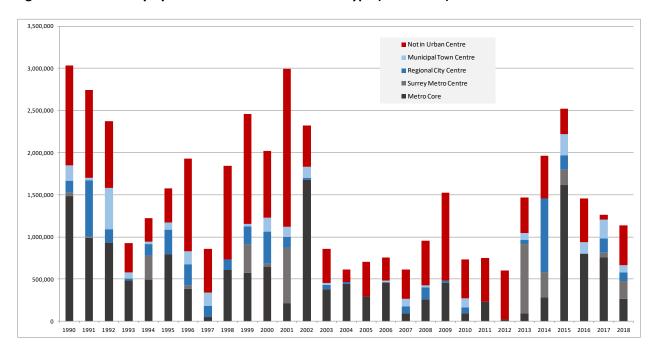
Figure 3.15: Growth by Urban Centre (1990-2018) Figure 3.16: Growth by Transit Service (1990-2018)



20,000,000 18,000,000 ■Not in Urban Centre Municipal Town Centre 16,000,000 Regional City Centre 14,000,000 ■Surrey Metro Centre 12,000,000 ■ Metro Core 10,000,000 8,000,000 6,000,000 4,000,000 2,000,000 Unknown 1950 -1960 -1970 -1980 -1990 -2000 -2010 -Before 1950 1959 1969 1979 1989 1999 2009 2018

Figure 3.17: Growth of Inventory in Urban Centres (1990-2018)

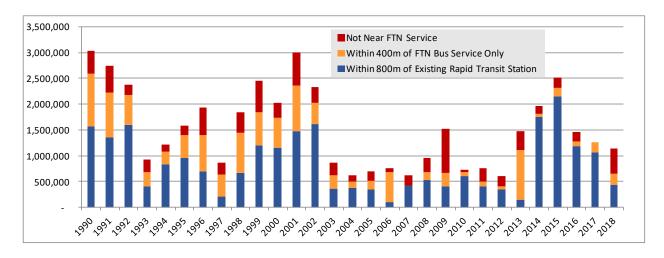




Frequent Transit Network

Figure 3.19 shows the office space growth in the region between 1990 and 2018 relative to the FTN (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. Of the total growth for the 1990-2018 period, approximately 55% of new office space development was located within 800 metres of rapid transit, and 26% within 400 metres of FTN bus. The balance, 19% of new office development was located in areas not accessible to the FTN. The distribution of office development by FTN type has varied from year to year. Over the past decades, various major projects have been completed which impacted the annual results.

Figure 3.19: Inventory by Year Built and Transit Service (1990-2018)



4.0 Office Tenant Considerations

Office tenants are not all the same; the types of businesses and their accommodation needs vary, as do the sub-sectors and local characteristics. Some tenants need to be located in downtown Vancouver, some tenants 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.

Business Needs

Business (re)location is a significant decision and action by most tenants. Different businesses with different needs are looking for different types of office accommodations. This list of criteria can include the following, with the need to potentially rank them in terms of importance:⁷⁰

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
- 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)

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⁷⁰ Adapted from: Colliers, "Office Leasing Guide", 2016.

4.1 Overview of Tenant Considerations

Workforce Demographics and Residential Location

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

Place of residence of the employees may impact business location decisions as well. 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 more affordable, and prefer an work location in Burnaby or Surrey. Companies sometimes use a postal code mapping analysis to determine where employees live within the region.

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 new workplace. Businesses that are new to the region also consider locations that are within convenient proximity to good neighbourhoods, housing and schools for their workers.

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 cubicles or open concept space. There is an overall industry trend towards using office space more efficiently and increasing the density of employees. Space efficiencies may be through smaller office sizes, more cubicles, open concept design, fewer enclosed offices, and more efficient office design with modern furniture and equipment. Usually associated with this reduction in private office space per employee are larger shared common areas.

Larger businesses generally prefer office buildings with larger floorplates that allow their employees to be spread over fewer numbers of floors. Larger floorplates allow for a more efficient design, such as the need for fewer reception areas, meeting rooms, and common facilities. Some businesses have quasi-industrial or non-office components, such as those that support manufacturing, storage or warehouse functions, which they want in proximity to their office function. These types of businesses may also be satisfied with Class B or C office space, rather than Class A. Such types of office/light industrial flex spaces are less likely to be found in Urban Centres. Therefore, these businesses may favour an office park type building (i.e. flex space) and location (i.e. proximity to highways) to fulfil this need.

Employee Trips and Visitor Traffic

Some businesses have employees who spend their entire day at their office desk, whereas others have employees who often travel for meetings or site visits. 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 pay a premium for a more accessible location than others.

The Value of Prestige Locations

Some businesses want a high prestige central business district office location (i.e. downtown Vancouver) and are able and willing to pay a premium. For example, a large law firm may want a downtown location close to its clients and other businesses. This proximity benefits the company and employees in terms of

meeting time, availability to a larger number of other businesses, and provides more opportunities for face-to-face interactions. Proximity to urban amenities is strongly desired by tech tenants.

Some 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 have clients who visit the office, so a downtown location is not necessary.

Customer Market

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

Surrounding Uses

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

Tenure and Leases

The nature of tenure itself impacts office markets. It is important to note that most businesses lease rather than own their office 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 that is growing. A lease provides for lower costs and less commitment than ownership.

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

Office space is usually leased for terms of five to ten year periods. The tenant must have a reasonable understanding of their office space needs, which reflect their business and staffing needs, over this longer term, and then commit to leasing the space for this period. This can be a challenge for businesses, especially those that expand and contract significantly in response to changes in business or economic cycles. 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. Co-working operators are filling this need for flexibility, and have grown significantly in the last few years.

For a new office building or complex, there may be concerns by the tenants about being the first tenant in the building. By 'pioneering' a new building or area, while initial tenants may receive leasing incentives, they may be located alone in a building for some time surrounded by temporary vacancies, construction activity, or lacking full amenities.

Business Costs

Tenants are generally sensitive to costs, and this is especially true for branch offices, where the head office is located in another city and makes the final decision about accommodations. According to rough estimates by interviewees, office accommodation costs (e.g. rent, property management and property taxes) are approximately 5% of a business' total operating cost. Staffing costs are usually by far the largest single business cost. However, cost is not the sole deciding factor, and if space is not in a good location, 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 are only willing to pay a premium if there is a value or benefit to them. For some businesses, even removing the aspect of cost, an Urban Centre location may not meet their needs as well as an alternative location.

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 cost to the tenant, sometimes part of which may be reimbursed by the landlord as a tenant improvement inducement.

In some cases cost savings can be generated for a business by consolidating operations into a single site and utilizing a more efficient building design. In these cases, even if the rent is higher per sq ft, if they require less space the extra cost may not be as significant.

Perspectives of Interviewees

For the office buildings themselves, smaller businesses prefer smaller floorplates in order to avoid being one of many tenants on a large floor, while larger businesses want an entire floor for efficiency. Also, there is a range of utility offered by buildings, with some designs focused on architectural interest, while others focused on efficiencies. Ultimately some tenants are willing to pay a premium for unique and high profile spaces that may supplement their corporate branding, while other businesses want a simpler space that effectively meets their needs.

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. This demand for high-quality office space is spurring new developments, focused in downtown Vancouver, but also in other areas such as Marine Gateway and Surrey City Centre that are served by transit and incorporate amenities.

4.2 Amenities

The market for office space has changed in recent years, with tenants demanding a workplace to appeal to workers. This is particularly the case in a competitive labour market where highly skilled workers are key, such as tech / software (and competition amongst building owners for tech and knowledge-based tenants). Competition in the office market was once primarily determined by location, transit access, and parking availability. While those factors are still important, tenants seem more focused on facilities and amenities in the building.⁷¹

To attract and retain employees, employers often seek space and buildings that provide key amenities and vibrancy. Because of this trend, interior office build-outs feature open plans with fewer private offices, typically resulting in less area per employee. While these types of workers are often satisfied with more compact workspaces, they seek a more interactive, collaborative and vibrant office environment, rather than isolated individual offices. The common element in these amenities is that they "activate" the spaces by creating opportunities for socialization and the opportunity to work in a wider range of places. Providing activated spaces and many amenities has become a necessity, not a

⁷¹ NAIOP Research Foundation - Richard Peiser, Raymond Torto, "Activating Office Building Common Spaces for Competitive Advantage", 2017.

luxury, in urban buildings and premier suburban buildings, but much less so in buildings where low rent is the priority.⁷²

Perspectives of Interviewees

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 (following the trend set by 745 Thurlow Street, many new office buildings are also providing rooftop decks). It is especially desirable if the facilities are within the same building, highlighting the interest in mixed-use developments. In some cases, older buildings are being retrofitted by landlords in order to stay current and competitive.

4.3 Accessibility and the Value of Locating in Urban Centres or Near Transit

Location is very important to tenants; if the location is poor, it can lead to operating inefficiencies and high 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, particularly SkyTrain. Since the 2010 Winter Olympics and construction of the Canada Line, there has been a marked increase in interest and acceptance of SkyTrain for commuting. Office tenants have increasingly prioritized proximity to SkyTrain stations as an important criterion in selecting office accommodations. Light rail is typically preferred over bus, as bus service is seen as less permanent and not as reliable and comfortable as SkyTrain. From the tenant perspective, this means rapid transit, with one interviewee stating that "bus service was not comparable to SkyTrain." Office developers are aware of the trend towards increased tenant appreciation of rapid transit access and are responding accordingly.

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). Also, the availability of amenities for employees, such as proximity to shops, restaurants, gyms and recreational facilities are of increasing importance for businesses and workers.

Tenants report that they generally prefer an Urban Centre location because transit accessibility and urban amenities are seen as being very important to employees. However, if cost is important, then sometimes they cannot afford the premium to be in an Urban Centre compared to being in an office park. As there is not an abundance of office space for large businesses in Urban Centres, finding desired large spaces can be a challenge.

Tenants want employees to be able to commute to work with ease, and increasingly want to be located near frequent transit. They note that younger employees 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 transit station or Urban Centre.

In terms of rents, average asking rents are approximately 30% higher near rapid transit vs away from rapid transit⁷³. 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.

⁷² NAIOP Research Foundation - Richard Peiser, Raymond Torto, "Activating Office Building Common Spaces for Competitive Advantage", 2017.

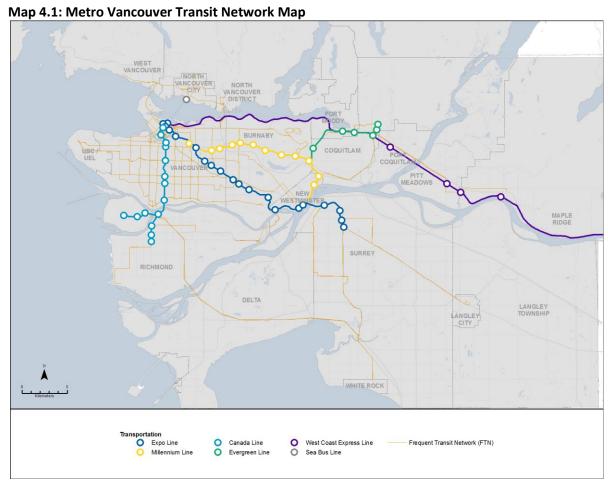
⁷³ Jones Lang LaSalle, "Rapid Transit Office Index – Vancouver Research", 2011, 2012, 2013, 2014.

In late 2014⁷⁴, a report by Jones Lang LaSalle estimated that 85% of new office supply added to the suburban inventory during the prior 12 months was situated within 500 metres of a rapid transit station. Furthermore, the report noted that the "abundance of new supply in office buildings within 500 metres of rapid transit stations is in response to the increasing demand for such product, however the prevalence of speculative developments has resulted in a significant amount of un-leased space coming to market and a corresponding increase in overall vacancy."

Transit accessible locations mean that there is less need for on-site parking. However, developers caution that because of the greater space efficiencies in new buildings, parking requirements do not necessarily need to be reduced, as there are more workers per sq ft (e.g. some offices accommodate 1 employee per 100-150 sq ft, compared to the previous standards of 1 employee per 200-250 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.

Perspectives of Interviewees

Access to SkyTrain and amenities are ever-more important from the perspective of tenants, with an eye to attracting and retaining employees. A SkyTrain station (network shown on Map 4.1) is often no longer enough — business tenants want to be downtown and in close proximity to more amenities. Furthermore, desired accessibility to SkyTrain can mean less than the standard 400 metres (5-minute) or 800 metres (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.



⁷⁴ Jones Lang LaSalle, "Rapid Transit Office Index – Vancouver Research", 2014.

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4.4 Extent of Tenant Movement Between Geographic Areas

Interviewees and the publications expressed 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, some stated that with increasingly high prices in the CBD, tenants may be tempted to move to less expensive locations. Conversely, in an effort to attract and retain a skilled workforce, other businesses (especially tech) 'need' to be in the downtown.

Given the limited current supply available in the downtown (especially large blocks of space), some companies are looking elsewhere, including the suburban markets.⁷⁵ Demand spillover from the downtown core has strengthened suburban market fundamentals with vacancy contracting and average net asking rents increasing.⁷⁶

The suburban market can offer large blocks of quality space to companies willing to be flexible. Back office employees that are not required to be downtown could be relocated to the suburban markets such as Burnaby, Richmond, and Surrey.⁷⁷ In particular, occupier demand continues to be seen in the Surrey and New Westminster submarkets as they achieve generational low vacancies in late 2018.⁷⁸ However, with region-wide low vacancy rates, even the suburbs can only offer limited relief.⁷⁹

According to another source⁸⁰, as downtown markets continue to thrive, especially in Toronto and Vancouver, where office vacancy rates are amongst the lowest in North America, it is often misconstrued that this is at the expense of suburban markets. Instead, the opposite is observed: Suburban office markets are benefiting from the strength of their downtown counterparts. There has been a noticeable spillover effect as tenants seeking lower rents and newer and larger blocks of space are choosing suburban markets. Some established companies are also moving to the suburbs to attract an older, more experienced workforce.

Perspectives of Interviewees

Tenants moving between sub-markets is relatively rare. Once a business has been operating at a location for a long time, and employees are used to it, it is difficult to change locations. Relatively few businesses consider relocating to outside of the CBD such as to a perimeter of the core, or open a separate location in an outer location to serve local clients and workforce, due to the downtown market being effectively full and higher rental rates. Most businesses that want or need to be downtown are already there and will stay, and most businesses in outer locations also stay put.

Given that there have been very few new suburban office buildings constructed in the last decade, vacancy rates have been declining as space fills up in these buildings due to a generally strong economy. Businesses in those suburban locations, when considering relocating as their leases expire, typically renew at the same location once they fully understand the much higher costs (both net rent and operating) that would be associated with a relocation to say downtown.

A more central location for businesses is best to access the region's workforce - namely Vancouver or Burnaby that is nearly equally accessible from much of the region. Simple geography has resulted in much of Burnaby and downtown Vancouver being the central area and readily accessible via the SkyTrain and highway networks. Ultimately businesses make decisions and tradeoffs about rent costs vs

⁷⁵ Jones Lang LaSalle, "Metro Vancouver Office Insight", Q2 2018.

 $^{^{76}}$ CBRE, "Canada Quarterly Statistics", Q3 2018.

⁷⁷ Jones Lang LaSalle, Metro Vancouver Office Insight, Q2 2018.

⁷⁸ CBRE, "Canada Quarterly Statistics", Q3 2018.

⁷⁹ Cushman Wakefield, "Marketbeat Office Report Vancouver", Q3 2018.

⁸⁰ CBRE, "North American Suburban Office Market Trends: A Macro Perspective - Where Are We Now?", Spring 2017.

staffing costs. Some can offer higher salaries in suburban locations if rents are lower, and these locations may be closer to where the workers live.

Additional considerations about the market were expressed by interviewees, a number of which inform 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 increasing numbers of 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 small communities / sub-markets still
 have limited scale and thus limited demand.
- 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 network. Office businesses want to be by other office businesses, making it difficult to establish new areas.
- There is still a need for suburban office space. Some tenants like a campus feel low rise and accessible to certain amenities, instead of overly urban and high rise. However, businesses that want / need to be in the CBD are there and will pay for it.
- The existing suburban market is seen as having two different types of tenant groups. First, tech /
 engineering firms, including some branch offices owned by American companies, which may not
 be willing to pay more rent. They may realize only after the fact that a suburban location costs
 them staff turnover. Secondly, local serving non-tech businesses may have a workforce that is
 more suburban, that appreciates the shorter commute and lower costs.
- For Coquitlam City Centre, there is the potential to densify with multi-residential, but the office
 market is currently not strong. 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. Although Coquitlam
 has the SkyTrain, it is seen as a branch line at the edge of the system.
- On the North Shore, transportation access is a challenge for constructing new office buildings, and also for office tenants accessing the regional workforce.
- Surrey has the potential to accommodate some smaller local serving firms and satellite offices. Achievement of a critical mass is likely necessary to enable more office development over time.
- 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.
- 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 but in a different location. However, from a development perspective, construction costs are still high in all locations, and land prices are increasing; so with low office rents in areas with weak office demand, it is difficult to make suburban office development viable.

5.0 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 component. The decision-making process may be gradual and iterative as the project investigation and feasibility is completed. Preliminary positive signs may encourage the investor / developer to purchase the land and advance a development application; however this can change with market conditions, development costs, and municipal reviews. In some cases, if conditions become too challenging, a project may be deferred, cancelled, or an alternative use or design for the site may be considered.

5.1 Overview of Considerations

Developer Objectives

There are many aspects specific to a developer and investor that are relevant to the nature of an office project. This includes the type and amount of funds available for investment (equity vs. debt), the corporate structure of the development company (i.e. whether they are solely 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) prefer to develop and hold a project as a long-term investment. The time and price at which a property was purchased impact the financial viability of a project; if the land was acquired a long time ago at a low price, office development may be feasible, but not if the land were acquired at more recent (higher) market price.

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 developed. Local government plans that direct office space to specific locations will not be realized if the market demand is not in place to support a new office building. The market reflects both the macro factors influencing supply and demand in the region, and local area factors for specific sites. Demand is heavily influenced by factors such as the proximity to centres, business areas, highways, and rapid transit, surrounding uses and amenities, and land availability.

Market demand also affects the amount of building pre-leasing that is possible. Pre-leasing (or pre-sales for strata) is usually 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. Typically, it is 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, tenants may prefer to remain in their current location or move to an existing building. A slow office space absorption period for a new building can mean a financial loss for the investor / developer. In a market such as Metro Vancouver, which has few large corporations, it is difficult to attract new tenants to a yet-constructed building. Instead, developers will seek to bring to market a reasonable amount of office space at a time, which is pre-leased or can be absorbed in a short 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 to match demand. Also, concrete high rises are generally more complex and expensive to design and build, compared to low rise tilt-up buildings. Additionally, the cost of construction materials and labour may change during a development process. For example, the cost of raw materials reflects national or global

economic cycles, with substantial price fluctuations. All of these costs challenge developers when planning and evaluating the financial 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, such as pension funds, are typically well-financed, diversified, and interested in long-term investments and can wait longer for returns compared to other developers.

Land Availability and Cost

The challenge most cited by developers was 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 and retail uses. If a municipality's plans allow for a mixture of different land uses on the site, the property will likely be priced by the landowner vendor for the highest and best use, which may preclude the potential to develop office space. For some mixed-use projects the office component may be the lost leader and add little 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 to move 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, challenging, and expensive. Instead, developers prefer a single larger property – these types of sites are usually found in out-of-centre locations, such as industrial areas and greenfield sites.

Construction Costs

High and rising construction costs (both the labour and material components) are a challenge for all developers. According to Altus⁸¹, for Metro Vancouver the per sq ft cost range increased by \$5 between 2017 to 2018 for office buildings under five storeys with surface parking (2018: \$200-\$265 per sq ft) as well as for class A office towers from five to 30 storeys (2018: \$270-\$340 per sq ft) and 31 to 60 storeys (2018: \$295-\$390 per sq ft). Noting that high rise buildings can cost about 50% more than low rises to construct, this influences the potential size and location of developments. The impact of rising construction costs is significant and will be one of the key factors contributing to rising rental rates. 82

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 more years. Together, this process represents a significant period while the investor is not receiving returns. Further, risks during this period in the form of higher construction costs, difficulty in obtaining municipal approvals, changing economic cycles, or dampening market demand may cause a project to be suspended.

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 total development approval time and costs, and add uncertainty and risks to a project. Jurisdictions in which the development requirements are not known at the outset of a development application are more challenging, because the costs are not predictable and are negotiated at the time of development. These

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⁸¹ Altus Group, "2018 Canadian Construction Cost Guide", 2018.

⁸² Avison Young, "Metro Vancouver Office Market Report", Mid-Year 2018.

municipal processes and costs may lead developers to shift investments to jurisdictions that have a more "business-friendly" environment.

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

5.2 Mixed-Use vs. Stand-Alone Projects

Mixed-use development can provide some benefits because it accommodates a wider range of uses with greater activities. In mixed-use projects, residential uses can help offset the costs and reduce the risk of building the office space. Mixing employment space with other uses is a growing practice; connecting uses with other activities in and around the building can make urban mixed-use locations highly valued.⁸³

In a mixed-use development, the retail component can be an amenity to the office component, and the residential component can help support the retail 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 the 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) for residents and businesses. Mixed-use projects can impose extra design complications, costs, and inefficiencies that may not be of interest to all developers. Additionally, in some cases requiring an office component where market demand is weak may lead to the office space being vacant and underused for an extended period.

Tenure can also be complex in mixed-use projects, with some parts of a building owned by occupants (condominium apartments) and other parts occupied by rental tenants (retail and office), with different tenures 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, multiuse development, with different uses in separate proximate buildings may better serve the objective.

There are certain municipalities that are contemplating requiring developers to provide a larger percentage of office space, as part of mixed-use developments, without the consideration of demand in those markets, according to NAIOP (Commercial Real Estate Development Association). While municipalities often want to create more job space, in reality the demand for office space is limited in certain markets and office projects may not be viable.⁸⁴

Perspectives of Interviewees

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

⁸³ Gensler, "Design Forecast 2014: Top Trends Shaping Design", 2013.

⁸⁴ NAIOP Vancouver, "Office Cost of Business Survey", 2018.

for a desirable community. However others reference examples of mixed-use projects executed poorly, such as commercial podiums with ground floor retail and a floor or two 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 rest is an 'afterthought' that is 'tagged on', and not given enough attention or consideration. Designing a building with multiple uses within it can be a challenge in terms of optimizing floorplates and column configurations, although offers the potential for shared parking facilities.

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 management, it can be a negative attribute of a building. Conversely, a large complex with stand-alone commercial businesses can be designed and managed better, and is typically preferred by corporate office tenants.

There was also a range of views on the appropriateness of municipalities 'forcing' rather than just 'encouraging' and 'supporting' office components in new 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 believed that the office market will fulfil itself once built, yet 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 only employment uses, where office and industrial, potentially combined, may be appropriate; whereas at urban locations by transit, apartment rental residential could also be permitted as part of mixed-use developments, according to some developers. In certain markets, the residential component offsets the office component costs. In those cases, permitting residential uses could be used as a tool to create the employment space desired, that could lead to mixed-use projects that support a complete community.

5.3 Development Risks

Compared to developing other types of projects including office parks, 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 change, the office market can soften, or construction costs can increase. Although there may be strong demand in (some) Urban Centres, these locations are considered by developers to magnify these challenges because there is more regulatory approval, design review, and public consultation.

As with any investment, if risks are high, investors will require a commensurate high return. Thus for projects to advance which are perceived as higher risk, they will need to offer a significant profit to attract investors and developers, or the project may not proceed. This may attract only a very small number of interested parties, which limits competition and development activity.

Perspectives of Interviewees

Office development risks can be exacerbated in a volatile market or where there are uncertainties associated with the approval process. One noted challenge was finding good available sites in downtown Vancouver to develop, and institutional investors / developers (such as pension funds) being outbid by strata developers, driving up land prices.

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 date is uncertain due to the lengthy municipal approval process. Although as one

interviewee noted, over time, Vancouver is becoming less of a pre-lease market, with more developers willing to construct office buildings without pre-leases – this new supply can better accommodate office tenants wanting space with less lead time.

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

Institutional investors/developers are generally not in the market to buy and sell properties, but rather to buy or build properties for long-term investments. Land prices can be driven up by non-institutional developers - merchant developers, who can pay a higher price than institutional ones, as they may have a higher risk tolerance. This financial background also informs decisions about mixed-use developments, where institutional investors want a long-term hold, thus may prefer rental vs strata projects (for both the commercial and residential components).

5.4 Landlord Tenanting Decisions

From a landlord leasing perspective, smaller tech companies have always been viewed as a risky type of tenant, with limited history and financial covenants, and a high 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, and in the tech sector, this includes the recognized brands such as Amazon, Microsoft, Apple, etc.

Some tenants may prefer an architecturally unique and high-profile building; however these buildings are less efficient and often cost a premium. From the investor / landlord perspective, they need to consider the long-term utilization and operation of the building, not just current trends.

Helping to fill the need for flexibility are the growing 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 spaces are available without the requirement for long-term leases, although that flexibility comes at a premium.

Developers have different opinions on co-working operators as a tenant for their buildings; some see it as filling a space and bringing positive activity to the building, while other landlords expressed possible concern with the financial strength of these operators during an economic downturn, and potentially being a competitor with their existing tenants.

6.0 Office Development from the Municipal Perspective

Office development provides 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.

Municipal governments, through their economic development and planning functions, can encourage and regulate development 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 planning and 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 office 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 these decisions. All of those interviewed recognize 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 other Urban Centres.

Some of the planning, regulatory and fiscal tools noted in this report have been used by various 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 suggest that the office component is sometimes resisted by the developer as office space is not in demand or 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 no easy matter given the legislative requirements of DCC bylaws. Lowering property taxes for office space or providing "tax holidays" are rarely considered as a tool because provincial legislation would need to be changed to permit this and office is not seen as a use that needs financial assistance in this way. One municipal interviewee noted that overall tax rates in the region are generally competitive compared to other North American jurisdictions, and that businesses rarely request property tax reductions or mention that property tax rates are hindering their location decisions.

Some municipal staff interviewed cited a number of challenges with attracting and growing businesses that occupy office space. These challenges include: high employee housing costs and other costs of living in Metro Vancouver; high business costs; numerous building, development and permitting regulations; lack of supply of local talent; and difficulty in accessing venture capital to grow businesses. In some cases, businesses find it challenging to remain in a municipality as they grow the number of employees or their needs evolve, because they cannot find adequate space.

7.0 The Changing Nature of Office Work

7.1 Corporate Headquarters - Canada and Vancouver

Large office tenants are usually needed to warrant major office development and pre-lease space to finance new office buildings. Other major Canadian cities/regions have many major corporate headquarters consuming large blocks of office space that are able to commit to new office buildings; this is not generally the case in Metro Vancouver, which has more small and mid-sized corporate offices. However recently 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 Vancouver⁸⁵:

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:⁸⁶

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.'⁸⁷ 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.⁸⁸ Head offices act as anchors to the surrounding community by utilizing local suppliers, providing leadership and sponsorship of charitable organizations and the arts, and helping to establish business clusters of expertise and ideas.⁸⁹

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.

⁸⁵ 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.

⁸⁶ Business Council of British Columbia - Jock Finlayson, Karen Graham, "Corporate Headquarters and Head Office Employment in British Columbia: 2006 Update", 2006.

⁸⁷ Statistics Canada - John Baldwin, W. Mark Brown, "Foreign Multinationals and Head Office Employment in Canadian Manufacturing Firms", June 2005.

⁸⁸ Federal Reserve Bank of Chicago, Economic Perspectives - T. Klier, W. Testa, "Location Trends of Large Company Headquarters During the 1990s", Q2 2002.

⁸⁹ International Financial Centre, British Columbia Newsletter - Ian Heine, "The Loss of Head Offices in BC", June 2006.

The presence of a corporate headquarters can have numerous direct and indirect effects on a local economy⁹⁰. They tend to have more 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 as91:

- 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 probability of receiving new headquarters increases with the number of same-industry headquarters 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. However, higher head office wages in a location and higher wages in the intermediate service input sectors deter investment, as do high corporate taxes.⁹²

Economic geography theory suggests that the choice of headquarters location is a competition between the corporate need to be in proximity to customers, 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 agenda. Moving headquarters entails substantial costs - property acquisition and business interruptions, employee relocation, hiring, and training. A value-maximizing manager should weigh benefits against costs to strategically locate headquarters. However, agency theories suggest that managers, at times, make corporate decisions not to maximize firm value but to extract private benefits.⁹³

Corporate Mergers and Acquisitions - Changes to Head Offices

Data indicates that head offices are subject to significant entry, exit, and relocation considerations and implications. A potential implication of corporate mergers with, and acquisitions by, foreign companies is a loss of head offices in Canada, or a loss of the higher-value, strategic planning functions within head offices – this is referred to as a 'hollowing out' of corporate Canada.⁹⁴

⁹⁰ Fraser Forum - Hugh MacIntyre, Jason Clemens, Nadeem Esmail, "Corporate headquarters in Canada", January/February 2013.

⁹¹ 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.

⁹² 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.

⁹³ Queen's University - Paul Calluzzo, Wei Wang, Serena Wu, "Catch Me If You Can: Financial Misconduct around Corporate Headquarters Relocations", 2015.

⁹⁴ 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.

Although, acquisition by a foreign company does not necessarily result in the loss of head offices. After an acquisition, it may be the case that only the corporate headquarters are consolidated while separate head offices are maintained, or several or all regional head offices are combined. The decision to consolidate or abandon a head office depends on economies of scale, costs of travel, communications, and the shipment of goods. The location of each head office after an acquisition will typically remain or move close to the majority of production and sales units, either in Canada or abroad.⁹⁵

Corporate Headquarters Employment in Canada

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

Many new and foreign corporations are attracted to Toronto as a national office location or Calgary as a Western Canada regional office location, rather than necessarily Vancouver. 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.

Based on 2011 census data of the 2,773 head offices in Canada, British Columbia was home to approximately 12% (in line with its share of the national population), while Alberta hosted 15%, Quebec 20%, and Ontario 40%. Quebec slightly underperformed relative to its population, Alberta outperformed, and Ontario performed in line with its share of Canada's population.⁹⁶

Using a different methodology a few years later, when measured as the rate of head offices per 100,000 people, BC punches below its weight at 7.0 head offices per 100,000 people, while Ontario had 8.4 and Alberta had 10.3.97

As expected, head offices are concentrated in the leading commercial cities: Metro Toronto accounted for 64% of Ontario's head offices (the lowest of the four major cities), while Metro Vancouver was home to 76% of British Columbia's head offices (highest of the four). 98

When counting head office employment (as opposed to the number of firms) Metro Vancouver/BC noticeably lags other major provinces and metro areas. BC head office jobs amount to only 7% of the national figure, which is a full 5% points below the province's share of the national population. ⁹⁹ Most of those offices are small, averaging about 60 people. ¹⁰⁰

Vancouver Headquarters

Over the last 25 years, 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 occasional relocation of companies to other jurisdictions. This has been offset to a

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⁹⁵ University of British Columbia, Sauder School of Business, Competition Policy Review Panel Research Paper Summary - Keith Head, John Ries,

[&]quot;Head Office Location: Implications for Canada", 2008.

⁹⁶ Business Council of British Columbia, "Canadian Head Office Survey: How Do Metro Vancouver and British Columbia Stack Up?", 2016.

⁹⁷ Business Council of British Columbia, "Canadian Head Office Survey: How Do Metro Vancouver and British Columbia Stack Up?", 2016.

⁹⁸ Business Council of British Columbia, "Canadian Head Office Survey: How Do Metro Vancouver and British Columbia Stack Up?", 2016.

⁹⁹ Business Council of British Columbia, "Canadian Head Office Survey: How Do Metro Vancouver and British Columbia Stack Up?", 2016.

 $^{^{100}}$ BC Business, "Why some corporate head offices put down roots in Vancouver", August 2 2017.

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.¹⁰¹

Figure 7.1 contains data from 1990, 2000, and 2011, showing the number of corporate headquarters located in Canada's five main corporate centres. Toronto has by far the greatest concentration of corporate headquarters with 32.6% of Canada's top 500 corporations. Calgary ranked second, Montreal third, and Vancouver fourth. According to this source, over the 1990-2011 period, Calgary gained head offices, while Toronto and Montreal lost head offices. Vancouver gained a slight number of head offices during this period.¹⁰²

Figure 7.1: Corporate Headquarter Overview (1990, 2000, 2011)

	1990		2000		2011	
City	# of top 500 HQs	% of top 500 HQs	# of top 500 HQs	% of top 500 HQs	# of top 500 HQs	% of top 500 HQs
Montreal	96	19.2%	92	18.4%	75	15.0%
Toronto	186	37.2%	190	38.0%	163	32.6%
Winnipeg	18	3.6%	18	3.6%	14	2.8%
Calgary	44	8.8%	50	10.0%	81	16.2%
Vancouver	45	9.0%	41	8.2%	52	10.4%

Source: FP Magazine, 1991, 2001, and 2012.

According to a 2014 publication¹⁰³ using different study methodology and dates, 95 of Canada's top 500 companies are headquartered in Vancouver. Vancouver, though viewed as Canada's Asian Gateway, was behind the financial and resource hubs of Toronto and Calgary, which had 254 and 132, respectively. According to this data, Metro Vancouver led Canada in increasing (in percentage terms) its head office count between 2004 and 2014 (Figure 7.2), but Vancouver's rising head-office count illustrates that quantity is not the same as size, as few of the largest of the top Canadian companies are located in Vancouver.

Figure 7.2: Head Office Count in Canada (2004, 2014)

Region	2004	2014	Increase
Toronto	175	254	45.1%
Calgary	89	132	49.3%
Vancouver	49	95	93.9%
Montreal	71	79	11.3%
Edmonton	14	24	71.4%
Ottawa	15	14	-6.7%

Source: Financial Post FP500, 2014 Database

Calculating the amount of market office space per population in the major city-regions in Canada indicates that Metro Vancouver has about 25 sq ft of office per resident (up from 23 in 2014), which is lower than Toronto at 31 sq ft and Calgary at 49 sq ft, and also below the average of 29¹⁰⁴ (see Figure 7.3). The lower amount of office space indicates that Metro Vancouver has a relatively limited corporate employment profile compared to the other cities, adjusted for population.

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¹⁰¹ Business Council of British Columbia, "Developing a Stronger Corporate Head Office Cluster", 2017.

¹⁰² Fraser Forum - Hugh MacIntyre, Jason Clemens, Nadeem Esmail, "Corporate headquarters in Canada", January/February 2013.

¹⁰³ Business in Vancouver - Frank O'Brien, "Vancouver leads nation in head-office growth", October 20 2014.

¹⁰⁴ Comparison of office market inventories according to brokerage report publications divided by regional populations.

Figure 7.3: Canadian Major Cities Office Space and Population Ratios

Regions	2018 Inventory	2017 Population	Office sq ft per pop.
Toronto	197,792,173	6,346,088	31.2
Montreal	85,086,693	4,138,254	20.6
Vancouver	64,706,860	2,571,262	25.2
Calgary	73,300,041	1,488,841	49.2
Edmonton	31,192,296	1,411,945	22.1
Ottawa	40,868,167	1,040,346	39.3
Average	82,157,705	2,832,789	29.0

Source:

Colliers 2018 Q3 Office Update - National Markets Over 1 Million Population

Census Canada, Annual population estimates by census metropolitan area, July 1, 2017

Vancouver's apparent recent growth in attracting head offices could be a trend, building on the region's strengths such as intellectual capital, technological expertise and access to the expanding Asian economy, and Vancouver's location, climate and beauty. Vancouver may be Canada's priciest city in which to run a business, but some local companies still remain. Although housing costs are high and commercial property taxes are on the rise, some CEOs say the advantages offset those drawbacks.

Vancouver companies tend not to grow to the level of major players in Seattle and Portland. In those cities, large companies pay high salaries and create enormous wealth, which generates spinoff businesses.¹⁰⁷

Vancouver is facing an office space crunch with declining vacancy rates and rising lease rates. While more supply is on the way, some stakeholders are concerned that the lack of available space will push Vancouver off the radar screens of international companies seeking to expand. ¹⁰⁸

Attracting and Retaining Corporate Headquarters

To encourage further headquarter development, the best policy response is to continue to promote policies aimed at fostering a knowledge-based economy and a competitive business environment, such as investment in education and basic research, R&D promotion, and low corporate taxes. This will benefit the economy as a whole and have the bonus benefit of attracting head offices.¹⁰⁹

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:¹¹⁰

- 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;

¹⁰⁵ Business in Vancouver - Frank O'Brien, "Vancouver leads nation in head-office growth", October 20 2014.

¹⁰⁶ BC Business, "Why some corporate head offices put down roots in Vancouver", August 2 2017.

¹⁰⁷ BC Business, "Why some corporate head offices put down roots in Vancouver", August 2 2017.

¹⁰⁸ Vancouver Courier - Glen Korstrom, "Large firms are finding it challenging to find appropriate Vancouver office space as vacancy rates decline and lease rates soar", November 21 2018.

¹⁰⁹ Statistics Canada - Desmond Beckstead, Mark Brown, "Insights on the Canadian Economy: Head Office Employment in Canada, 1999 to 2005", 2006.

¹¹⁰ Business Council of British Columbia, "Canadian Head Office Survey: How Do Metro Vancouver and British Columbia Stack Up?", 2016.

- 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.

While Metro Vancouver scores well on some factors known to attract corporate offices (i.e. a high quality of life, solid infrastructure, a skilled workforce), there are several impediments as well, including:¹¹¹

- A fragmented regional governance structure (including over the regional transportation network), which in practice has made it very hard to articulate and promote a clear regional vision that can appeal to local corporate decision-makers as well as to those elsewhere who might consider investing in the region;
- A complex tax structure, which in some respects is nonetheless reasonably competitive against other provinces in Canada;
- A cumbersome immigration system that results in frustrating delays for permanent immigration classes (recent changes appear to be alleviating some of the backlog, and the Provincial Nominee Program has provided welcome and effective relief for some employers and prospective employees);
- A reputation as a high-cost jurisdiction for some sectors, compounded by the perception that Vancouver is "not a city for global business"; and
- A high cost of living, especially for housing, that hurts Metro Vancouver's reputation in the eyes of many businesses and current/prospective employees.

Perspectives of Interviewees

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, a boom 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 liveable and desirable place with many amenities, and a strong education system that fosters talent.

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

Although some interviewees noted that while 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.

7.2 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.¹¹²

As the needs of the modern tenant becomes defined as trophy or Class A office space by mass transit and robust amenities, older properties are increasingly challenged to compete, especially 1980s-era

¹¹¹ Business Council of British Columbia, "Canadian Head Office Survey: How Do Metro Vancouver and British Columbia Stack Up?", 2016.

¹¹² New York Times - Nick Corasaniti, "As Office Parks Empty, Towns Turn Vacancies Into Opportunities", May 29 2018.

campus settings. Some outdated properties may still appear attractive to tenants who are very value-conscious or who are seeking a specific type of space. 113

There are many factors that signify building obsolescence. Some of these types of obsolescence can be cured, 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 - conversion of other uses or redevelopment.¹¹⁴

7.3 The Evolution of Employment

According to academics, the expansion of co-working employment has been described as a decentralised yet reflexive global movement. Specifically, it reflects the decline in the number of traditional office workers and an increase in freelance and contract office workers. Co-working spaces can be described as a bottom-up solution for coping with structural changes in the labour market and in the organization of work, particularly the creative industries, and typical for mobile, project-based, freelance and self-employed work that could be carried out 'anywhere' with a computer and Internet access. 117

The coworkers are not just 'workers' or 'professionals' – rather, mostly 'non-employee enterprises', meaning individuals who run a self-enterprise with no employees. Within this environment, the so-called 'freedom' afforded by co-working comes at the cost of insecure work, linked to short-term projects and contracts. Working in a shared workspace benefits freelancers and self-employed in a competitive and volatile job market; as stated by one source: "coping with the insecurities and precariousness of creative labour conditions." 120

People co-work for a broad range of reasons, including its relative cheapness, 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. Flexible office space arrangements are particularly attractive to small businesses that have more difficulty acquiring the capital required for traditional leases and are more uncertain about future space needs. These small businesses are propelling increases in office space demand. Job growth in office-using industries—information, financial activities, and professional & business services—is also being increasingly driven by businesses with fewer than 50 employees. 122

The five broad societal drivers influencing change in the way people are living and working are illustrated in Figure 7.4.

¹¹³ NGKF Newmark Knight Frank, "Suburban Office Obsolescence", 2015.

¹¹⁴ NGKF Newmark Knight Frank, "Suburban Office Obsolescence", 2015.

¹¹⁵ City University of London - J. Merkel, "Co-working in the City", 2015.

¹¹⁶ Cushman Wakefield, "CO-WORKING and Flexible Office Space", 2018.

¹¹⁷ City University of London - J. Merkel, "Co-working in the City", 2015.

¹¹⁸ Ephemera Journal - Alessandro Gandini, "The rise of co-working spaces: A literature Review", 2015.

¹¹⁹ Griffith University - Peter Ross, Susan Ressia, "Neither Office nor Home: Co-working as an Emerging Workplace Choice", 2015.

¹²⁰ City University of London - J. Merkel, "Co-working in the City", 2015.

¹²¹ Griffith University - Peter Ross, Susan Ressia, "Neither Office nor Home: Co-working as an Emerging Workplace Choice", 2015.

¹²² Cushman Wakefield, "CO-WORKING and Flexible Office Space", 2018.

Figure 7.4: Factors That Will Influence Change



Source: CBRE, The Workshop Global Report, 2013.

7.4 **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. 123 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'". 124 Now, by creating workplace solutions that reflect how people work and what they value, organizations can drive measurable improvements in employee satisfaction and business productivity while reflecting their brands and value. 125

The evolving nature of work has implications for real estate, creating a new wave of expectations and opportunities. Infusing agility into real estate will help stakeholders embrace change, while supporting the evolving needs of their organizations and employees. 126

According to CBRE, agile real estate strategies incorporate: 127

- 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

¹²³ CBRE, "The Agile Advantage", 2018.

¹²⁴ CBRE, "FAST FORWARD 2030: The Future of Work and the Workplace", 2014.

¹²⁵ CBRE, "The Evolving Workplace How Office Space is Changing", 2014.

¹²⁶ CBRE, "The Agile Advantage", 2018.

¹²⁷ CBRE, "The Agile Advantage", 2018.

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 a focus on the individual and supporting the uniqueness and value that comes from each person." 128

From features like coffee bars to green spaces, providing employees with a great workspace is paramount. 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. The providing places for social interaction, and adding interactivity that engages people.

Initial Considerations for Occupiers: 131

- 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.

Initial Considerations for Owners and Investors: 132

- 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.

Perspectives of Interviewees

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.

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 an older workforce that is accustomed to commuting by car, a downtown location may not be desired or ideal.

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

According to CBRE's view of the future, in the year 2030, 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'." 133

¹²⁸ Gensler Dialogue ISSUE 31 - Vernon Mays, "The Workplace Is Your Key Recruiting Tool", 2018.

¹²⁹ CBRE, "It's Not Just An Office, It's An Experience", 2018.

¹³⁰ Gensler Dialogue ISSUE 31 - Vernon Mays, "The Workplace Is Your Key Recruiting Tool", 2018.

¹³¹ CBRE, "The Agile Advantage", 2018.

¹³² CBRE, "The Agile Advantage", 2018.

¹³³ CBRE, "FAST FORWARD 2030: The Future of Work and the Workplace", 2014.

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. Work has become a consumer experience - youth workers increasingly seek happiness over money.¹³⁴

Scarcity of talent and an increase in the number of freelancers means that companies have to become more flexible about working. Remote work or contract-based work arrangements can help companies attract the right talent and fulfill current needs to remain competitive. 135

Mobile technology has made "work from anywhere" a reality. The potential benefits of teleworking include increased productivity levels, reduced commuting times and costs (and associated reduced employee stress), a wider pool of potential employees and improved employee job satisfaction linked to a better work/life balance. Recent moves to more outcome-based work are making it possible to 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'. 137

Lean, agile and authentic corporations will adapt quickly, leverage technology and will have the values, purpose and opportunities that will attract the best talent. The 'Lean concept' overall goal is to free up time and provide more efficient work. This is done by creating a better workflow, visualizing order, reducing deadlines and waste, implementing continuous improvements and increasing flexibility. 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. 140

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. Activity-based working (ABW) describes a way to design space around different kinds of activities, or 'how' work gets done. In ABW spaces, employees no longer 'own' a particular space but rather 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. ¹⁴¹

7.6 Rise of Co-working Operators

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, 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

¹³⁴ CBRE, "FAST FORWARD 2030: The Future of Work and the Workplace", 2014.

¹³⁵ Altus Group, "Top 10 Real INSIGHTS", 2018.

¹³⁶ Griffith University - Peter Ross, Susan Ressia, "Neither Office nor Home: Co-working as an Emerging Workplace Choice", 2015.

¹³⁷ University of Sydney, "Co-working Spaces Australia: The new places where people work, businesses grow, and corporates connect", 2017.

¹³⁸ CBRE, "FAST FORWARD 2030: The Future of Work and the Workplace", 2014.

¹³⁹ Design Organisation and Management / International Design Conference – R. M. Sastre, T. A. Saurin, M. E. S. Echeveste, I. C. de Paula, R. Lucena, "Lean Office: Study On The Applicability Of The Concept In A Design Company", 2018.

¹⁴⁰ University of Sydney, "Co-working Spaces Australia: The new places where people work, businesses grow, and corporates connect", 2017.

¹⁴¹ University of Sydney, "Co-working Spaces Australia: The new places where people work, businesses grow, and corporates connect", 2017.

leases. 142 The fundamental concept of co-working is: create accessible, fully fitted out, office space on short-term leases. 143

Co-working has experienced exponential growth and established a global identity in only the last decade. 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. 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. By creating an infrastructure for connection, according to one source, co-working individuals report increased happiness and productivity.

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. 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!" —

There are suggestions that the co-working phenomenon is the new office market disrupter or the 'Uber' of the office market. The concept is not new, even if the excitement around the concept is. Regus (now IWG) was founded in 1989 and remains the largest provider of flexible office space in terms of floor area. However, the newcomer WeWork (founded in 2010) is arguably the most influential and fastest-growing in the co-working space. ¹⁵⁰

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." 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. 152

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.¹⁵³ However, simply putting people together in an open office space does not guarantee collaboration between coworker members.¹⁵⁴ Coworkers frequently work alone in a shared space without much

¹⁴² European Real Estate Society - Chris Eves, Dulani Halvitigala, Hera Antoniades, "Co-working Space v. The Traditional Office Space: Challenges and Opportunities in Sydney", 2018.

¹⁴³ Cushman Wakefield, "CO-WORKING and Flexible Office Space", 2018.

¹⁴⁴ Cornell University / Cornell Real Estate Review - Daniel Wright, "Match Made in Heaven: Investment Benefits of Co-working Spaces in Historic Sacred Places", 2018.

¹⁴⁵ ULI Urban Land - John Egan, "Co-working Spaces Seen as Key Tenant for Houston Office", December 7 2018.

¹⁴⁶ BOMA BC Leasing Guide: Commercial Real Estate Office Space - Peter Mitham, "Shared Space - Co-working providers are changing how tenants lease space", 2018.

¹⁴⁷ Cornell University / Cornell Real Estate Review - Daniel Wright, "Match Made in Heaven: Investment Benefits of Co-working Spaces in Historic Sacred Places", 2018.

¹⁴⁸ European Real Estate Society - Chris Eves, Dulani Halvitigala, Hera Antoniades, "Co-working Space v. The Traditional Office Space: Challenges and Opportunities in Sydney", 2018.

¹⁴⁹ Griffith University - Peter Ross, Susan Ressia, "Neither Office nor Home: Co-working as an Emerging Workplace Choice", 2015.

¹⁵⁰ Cushman Wakefield, "CO-WORKING and Flexible Office Space", 2018.

¹⁵¹ ULI Urban Land - Leslie Braunstein, "Inside the Office Space Revolution", October 26 2017.

¹⁵² Altus Group, "Top 10 Real INSIGHTS", 2018.

¹⁵³ 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.

¹⁵⁴ Griffith University - Peter Ross, Susan Ressia, "Neither Office nor Home: Co-working as an Emerging Workplace Choice", 2015.

interaction, mutual support, or community orientation, which gives co-working hosts a special role in facilitating team work.¹⁵⁵

Types of Tenants in Co-working Space

Historically, co-working space has been composed of freelancers and entrepreneurs. This is changing as large corporations begin to lease from shared office spaces such as WeWork and Regus. This trend is likely to continue. WeWork believes the majority of large companies will have shared office space by 2020.¹⁵⁶

Jones Lang LaSalle predicts that co-working will make up 30% of the U.S. office market by 2030. Along those lines, a recent survey by Cushman Wakefield and CoreNet Global found that corporate real estate professionals expect 23% of their global employees to be taking advantage of co-working within the next five years.¹⁵⁷

According to other research, the percentage of WeWork members who work for companies with more than 100 employees quadrupled from 2010 to 2017; they now account for 12% of members. Over the same time period, freelancers/independent workers' share of memberships decreased from 68% to 39%. In 2017, half of all members worked for companies with fewer than 100 employees. This matches the trend in the broader industry in which freelancers have moved from 55% of all memberships in 2012 down to only 41% in 2017. 158

Corporate users, which are increasingly the targeted audience of co-working providers, typically cannibalize traditional office space in some form when utilizing co-working space. While the specifics are hard to quantify, researchers have attempted to estimate the magnitude of new demand by applying the professional status of co-working members: 41% are freelancers, 36% are employees of a company, 16% are employers (i.e., entrepreneurs and business owners with staff), and 7% are categorized as "other." Findings imply that approximately 30%-40% of new co-working leases is new net absorption for the market. The co-working opportunities are at a cost for traditional office landlords.

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:¹⁶⁰

- **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.
- 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

¹⁵⁵ City University of London - J. Merkel, "Co-working in the City", 2015.

¹⁵⁶ Cornell University / Cornell Real Estate Review - Daniel Wright, "Match Made in Heaven: Investment Benefits of Co-working Spaces in Historic Sacred Places", 2018.

¹⁵⁷ ULI Urban Land - John Egan, "Co-working Spaces Seen as Key Tenant for Houston Office", December 7 2018.

¹⁵⁸ Cushman Wakefield, "CO-WORKING and Flexible Office Space", 2018.

¹⁵⁹ Cushman Wakefield, "CO-WORKING and Flexible Office Space", 2018.

¹⁶⁰ Cushman Wakefield, "CO-WORKING and Flexible Office Space", 2018.

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. Occupiers will trim space from their traditional lease structures and augment the portfolio with co-working space on the margins. ¹⁶¹

Location of Co-working Facilities

The 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.¹⁶²

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 are attractive to landlords with underperforming or underutilised assets located in less desirable areas as they allow landlords to improve office space performance.¹⁶³

Landlords

Historically with the preference to lease spaces to large-scale corporations and professional service firms, landlords have been cautious in welcoming co-working operators into their buildings. However, co-working spaces have the potential to create benefits to landlords that are both tangible and intangible. 164

Many landlords are being challenged by the co-working practice as it is a new working phenomenon where traditional office space requirements and leasing principles may no longer apply. Landlords may allocate a portion of their portfolio to co-working by developing that expertise internally or by partnering with existing co-working providers. Here

A co-working model like Spaces or Regus 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

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¹⁶¹ Cushman Wakefield, "CO-WORKING and Flexible Office Space", 2018.

¹⁶² European Real Estate Society - Chris Eves, Dulani Halvitigala, Hera Antoniades, "Co-working Space v. The Traditional Office Space: Challenges and Opportunities in Sydney", 2018.

¹⁶³ European Real Estate Society - Chris Eves, Dulani Halvitigala, Hera Antoniades, "Co-working Space v. The Traditional Office Space: Challenges and Opportunities in Sydney", 2018.

¹⁶⁴ European Real Estate Society - Chris Eves, Dulani Halvitigala, Hera Antoniades, "Co-working Space v. The Traditional Office Space: Challenges and Opportunities in Sydney", 2018.

¹⁶⁵ European Real Estate Society - Chris Eves, Dulani Halvitigala, Hera Antoniades, "Co-working Space v. The Traditional Office Space: Challenges and Opportunities in Sydney", 2018.

¹⁶⁶ Cushman Wakefield, "CO-WORKING and Flexible Office Space", 2018.

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?" ¹⁶⁷

According to one publication, the market currently seems to be comfortable with 15%-30% of a building being allocated to a co-working provider with relatively strong credit. Anything above that may be viewed adversely. In the future, the range of comfort may increase as investors and lenders have more experience with significant co-working occupancy.¹⁶⁸

The lease structure also matters. Profit-sharing leases are also becoming more common and create more potential upside and downside for the building owner. Most co-working companies do not have substantial credit histories and could end up giving back space if membership declines. ¹⁶⁹

While an eventual economic downturn may reduce the demand from 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 portfolios.¹⁷⁰

Impacts on Buildings

Co-working practice may also offer lower tenant improvement and fit-out costs as many co-working operators prefer to lease a 'blank canvas' where they are able to rearrange the premises to meet their specific requirements and preferred fit-outs.¹⁷¹

There are also hidden costs that landlords need to take into account. Co-working spaces typically experience greater wear and tear due to their higher densities and communal nature — from physical systems such as HVAC and elevators, as well as washrooms, to services such as security and cleaning. The average life of co-working fit-outs is also less than the 10 years typically attributed to standard office fit-outs. All this implies higher property management and maintenance costs for buildings. ¹⁷²

To accommodate higher occupant density, many landlords are required to invest substantial capital on building upgrades and expansions before leasing spaces to co-working operators. However, it is difficult to conduct a cost-benefit analysis for such upgrades as there is no quantitative evidence available on the impacts of leasing space to co-working providers.¹⁷³

When introducing co-working spaces into multi-tenanted buildings, landlords need to consider and address several issues such as appropriate tenant mix, compatibility between different end-users, relationships among other tenants and end-users, clarity as to the use of building common areas, and security issues within the building. By leasing office spaces to co-working operators on long-term leases landlords completely lose the control over the end-users of their premises.¹⁷⁴

¹⁶⁷ BOMA BC Leasing Guide: Commercial Real Estate Office Space - Peter Mitham, "Shared Space - Co-working providers are changing how tenants lease space". 2018.

¹⁶⁸ Cushman Wakefield, "CO-WORKING and Flexible Office Space", 2018.

¹⁶⁹ Cushman Wakefield, "CO-WORKING and Flexible Office Space", 2018.

 $^{^{\}rm 170}$ Cushman Wakefield, "CO-WORKING and Flexible Office Space", 2018.

¹⁷¹ European Real Estate Society - Chris Eves, Dulani Halvitigala, Hera Antoniades, "Co-working Space v. The Traditional Office Space: Challenges and Opportunities in Sydney", 2018.

¹⁷² Cushman Wakefield, "CO-WORKING and Flexible Office Space", 2018.

¹⁷³ European Real Estate Society - Chris Eves, Dulani Halvitigala, Hera Antoniades, "Co-working Space v. The Traditional Office Space: Challenges and Opportunities in Sydney", 2018.

¹⁷⁴ European Real Estate Society - Chris Eves, Dulani Halvitigala, Hera Antoniades, "Co-working Space v. The Traditional Office Space: Challenges and Opportunities in Sydney", 2018.

There are concerns that the co-working practice might have negative implications on the long-term demand for leased office premises and could also reduce the demand for expansion space, resulting in smaller but more stable tenant requirements.¹⁷⁵

7.7 Office Space Design – Open Concept

Open plan office environments can offer workplace productivity benefits because of the opportunities that they create for interaction and knowledge exchange, but recent research has highlighted noise, distraction and loss of privacy as significant productivity negatives.¹⁷⁶

There is an ongoing debate about open offices, and the balance between encouraging creativity, interaction and camaraderie, while acknowledging that open offices can encourage employees to avoid one another.¹⁷⁷ Open office is a continuum, explained by one writer, as follows¹⁷⁸:

- The absolute worst is when you have dozens of people from all different departments in the same room. Sales, marketing, support, administration, programmers, designers, what have you. These departments have very different needs for quiet or concentration or use of phones or open conversation. Mixing them together is peak bad open office design.
- Less bad but still not great is to again have dozens of people in the same room, but from largely the same functions or complementary ones. Programmers, designers, writers together. The problem here is that even within the same domain, different people will have very different sensibilities about what's a reasonable level of conversation or interruption.
- And probably least bad is small team rooms of fewer than ten people, preferably fewer than six. Some people who don't like the open office at all might even still enjoy this configuration.

Open-plan office layout is commonly assumed to facilitate communication and interaction between coworkers, promoting workplace satisfaction and team work effectiveness. On the other hand, 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 in acoustics, privacy and proximity issues. Benefits of enhanced 'ease of interaction' were smaller than the penalties of increased noise level and decreased privacy resulting from open-plan office configuration.¹⁷⁹

Some research results categorically contradict the industry-accepted wisdom that open-plan layout enhances communication between colleagues and improves occupants' overall work environmental satisfaction. Moreover, the increment of overall workspace satisfaction due to the positive impact of ease of interaction in open-plan office layouts failed to offset the decrements by negative impacts of noise and privacy. This implies that even though occupants are satisfied with interactions in open-plan layout, their overall workspace satisfaction will eventually decrease, unless a certain level of privacy and acoustical quality are provided.¹⁸⁰

Those in enclosed office spaces were more productive due to privacy and limited distractions, and those in open plan spaces were more productive because of their access to informal meeting spaces. The

¹⁷⁵ European Real Estate Society - Chris Eves, Dulani Halvitigala, Hera Antoniades, "Co-working Space v. The Traditional Office Space: Challenges and Opportunities in Sydney", 2018.

¹⁷⁶ 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.

¹⁷⁷ Harvard Business Review - Rebecca Knight, "Staying Focused in a Noisy Open Office Rebecca Knight", October 11 2018.

¹⁷⁸ Medium Corporation - David Heinemeier Hansson, "The open-plan office is a terrible, horrible, no good, very bad idea", 2018.

¹⁷⁹ University of Sydney - Jungsoo Kim, Richard de Dear, "Workspace satisfaction: The privacy-communication trade-off in open-plan offices", 2013.

¹⁸⁰ University of Sydney - Jungsoo Kim, Richard de Dear, "Workspace satisfaction: The privacy-communication trade-off in open-plan offices", 2013.

productivity of those in enclosed shared offices 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.¹⁸¹

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. In the open layout, employees interacted face-to-face 72% less. Meanwhile, they emailed and messaged amongst themselves 56% more, sending more messages and longer messages.

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." An amalgamation of views on innovation space included these attributes: "strengthen interactions, communication, and collaboration; open, transparent and contextually responsive."

As stated in one publication: "Through design, architects and business leaders are essentially being asked to re-wire the social, if not organizational culture, as much as to adhere to strict building codes." By having a range of different spaces office occupiers can choose the most appropriate space to best undertake that particular work task. 186

Regarding space design, it is recommended to provide: 187

- 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 (e.g. Pantries) 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.

¹⁸¹ 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.

¹⁸² Royal Society Publishing - Ethan S. Bernstein, Stephen Turban, "The impact of the 'open' workspace on human collaboration", July 2 2018.

¹⁸³ Lydia Belanger, "The Surprising Reason Why an Open Office Space May Not Be Great for Your Company", July 25 2018.

¹⁸⁴ Brookings Institution and Project for Public Spaces - Julie Wagner, Dan Watch, "Innovation Spaces: The New Design of Work", 2017.

¹⁸⁵ Brookings Institution and Project for Public Spaces - Julie Wagner, Dan Watch, "Innovation Spaces: The New Design of Work", 2017.

¹⁸⁶ 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.

¹⁸⁷ 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.¹⁸⁸

Theoretically, providing less space per person can translate into fewer buildings to support the same number of people. Improvement of office space efficiency will contribute to the reduction of resources consumption associated with construction, maintenance and operation of office buildings. 189

Implementation

When leaders communicate the value of the space beforehand, proactively help workers acclimatize, and give employees leeway to adapt the space, workers are more enthusiastic about the space, 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. Place identity affects not only how people feel but also how they perceive the physical features of a space.¹⁹⁰

In contrast, when workers were not provided with a clear vision of the space beforehand, they were more likely to perceive it as a way to cut costs and express more resistance and dissatisfaction.¹⁹¹ Cost and efficiency are important, but should not be the driver; rather it's about what will build the most value: "Space is in many ways similar to fashion or technology – things go in and out of style."¹⁹²

Rather than arguing over open vs. closed spaces, practitioners focus on creating the best working environment to support the needs of the specific organization. The idea that 'one size fits all' when it comes to work environments is dead: "The workplace design industry is filled with over-simplified conversation about open vs. closed plan offices." ¹⁹³

Companies are responding by shrinking personal space and investing in more collaborative areas. Workplaces typically allot 150 sq ft per person, 33% less than 225 sq ft in 2010. Some workplaces are shrinking to as little 60 sq ft per employee by eliminating assigned desks and designated personal space. "Hotelling" and "hot desking" policies grant employees access to space on an as-needed basis.¹⁹⁴

By one estimate, companies will achieve over a 50% cost savings (e.g. furniture, power, lighting, materials) using an open office design compared with designing private offices. There are also greater space efficiencies, saving as much as 100 sq ft when converting one private office space to a work-station.¹⁹⁵

It is expected that as managers take into account lessons from pre- and post-occupancy evaluations, the number of satisfied employees will increase. 196

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

¹⁸⁸ Brookings Institution and Project for Public Spaces - Julie Wagner, Dan Watch, "Innovation Spaces: The New Design of Work", 2017.

¹⁸⁹ 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.

¹⁹⁰ Harvard Business Review - Brandi Pearce, Pamela Hinds, "How to Make Sure People Won't Hate Your New Open Office Plan", January 2018.

¹⁹¹ Harvard Business Review - Brandi Pearce, Pamela Hinds, "How to Make Sure People Won't Hate Your New Open Office Plan", January 2018.

¹⁹² Work Design Magazine - Bob Fox, "2018 Workplace Trend Predictions", February 15 2018.

¹⁹³ Work Design Magazine - Bob Fox, "2018 Workplace Trend Predictions", February 15 2018.

¹⁹⁴ Work Design Magazine - Ari Kepnes, "Working From Home Is Now 'Homing From Work'", October 10 2018.

¹⁹⁵ Brookings Institution and Project for Public Spaces - Julie Wagner, Dan Watch, "Innovation Spaces: The New Design of Work", 2017.

¹⁹⁶ 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.

far. People are coming back and adding a little more space."¹⁹⁷ There is a backlash against the one-size-fits-all mindset, and focus on corporate efficiencies that pack more workers into less space. ¹⁹⁸ 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. ¹⁹⁹

Perspectives of Interviewees

Open space or open concept design office is being 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 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, thus the demand for new buildings. Higher densities may impact the amount of parking required. Open concept also requires more expensive office furniture.

7.8 Office Space per Employee - Drive for Efficiencies

According to numerous sources,²⁰⁰ there is an ongoing trend towards less office space per employee. Increasingly, workers do not have private enclosed offices, but instead have cubicles or open offices. Also, more companies are adopting open floor plans in which employees do not have permanently designated space; through hotelling and remote working they use unassigned office space as needed and sometimes also short-term overflow space. 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.²⁰¹

Office space per worker differs by industry sector as well as occupation. Businesses with higher levels of staff turnover can be harder to plan for, while businesses with a more homogeneous workforce are easier to plan. Furthermore, 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 until the lease expires, and thus are generally more likely to have excess capacity and lower

¹⁹⁷ ULI Urban Land - Patrick J. Kiger, "Workplaces May Not Shrink Further, but They May Gain Flexibility", May 3 2018.

¹⁹⁸ New York Times - Steve Lohr, "Don't Get Too Comfortable at That Desk", October 6 2017.

¹⁹⁹ 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.

²⁰⁰ 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.

²⁰¹ University of San Diego - Norman Miller, "Estimating Office Space per Worker", Draft May 1 2012.

utilization rates. This is further challenged by the fact that workforces are not homogeneous and not all office space is the same and substitutable.²⁰² The risk of having too little office space must be weighed against the cost of having too much.

Newer office space built to suit is more efficient than older space that has changed tenants (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. It is estimated that in the U.S., office rent as a percentage of total business operating costs is approximately 2-3%.²⁰³ Additionally, in some cases, companies are moving from larger suburban offices to smaller urban offices, which may have less space per worker but are efficiently designed and near many amenities that employees value.

Reduced office space requirements per person may have an impact on office space demand. Also impacting office demand are changes in the workforce composition and proportional size of sub-sectors. Nevertheless, no matter the amount of office space required, the type and location of the space is also evolving.

Recent Trends

Large corporations have embarked on a path towards more efficient use of space seeking to achieve higher utilization rates. According to one academic, decreases in total office consumption per worker will take time, and it is likely that more efficient use of space will require many years of transition²⁰⁴, noting collaborative workspace requirements and management preferences.²⁰⁵

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.²⁰⁶

Moving forward, the expectation is that some firms will achieve square footage per worker of less than 100 sq ft, but given the cultural impediments and the challenges of predicting growth rates, figures averaging 150–180 sq ft per worker are more likely to be seen.²⁰⁷

Space Utilization by Sector

Significant differences in space per worker by industry should not be surprising. Figure 7.5 shows the typical spread among industry sectors in the U.S.; average footprints have shrunk by 24% from 2003 to 2013.

²⁰² University of San Diego - Norman Miller, "Estimating Office Space per Worker", Draft May 1 2012.

²⁰³ University of San Diego - Norman Miller, "Estimating Office Space per Worker", Draft May 1 2012.

²⁰⁴ University of San Diego - Norman Miller, "Changing Trends in Office Space Requirements: Implications for Future Office Demand", 2013.

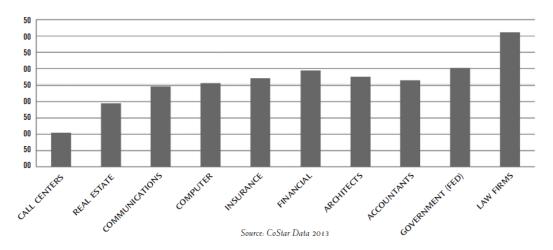
²⁰⁵ University of San Diego - Norman Miller, "Workplace trends in office space: implications for future office demand", 2014.

²⁰⁶ University of San Diego - Norman Miller, "Estimating Office Space per Worker", Draft May 1 2012.

²⁰⁷ University of San Diego, Real Estate Issues - Norman Miller, "Downsizing and Workplace Trends in the Office Market", 2013.

²⁰⁸ University of San Diego, Real Estate Issues - Norman Miller, "Downsizing and Workplace Trends in the Office Market", 2013.

Figure 7.5: Office Space per Worker by Industry - Median Square Feet Per Worker 2013



Source: Real Estate Issues - Norman Miller, "Downsizing and Workplace Trends in the Office Market", 2013.

According to CBRE for Canada in 2012²⁰⁹, the average amount of office space (net leasable floor area) 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

The information for the Metro Vancouver market indicates increased efficiencies through desk sharing and telecommuting, resulting in a downward trend in average space per employee from 200 to 150 sq ft.²¹⁰

Potential Future Extent

Office hotelling or sharing models, telecommuting, working in open cubicles facilitated by high speed communication and electronic file storage support the aim of lowering occupancy.²¹¹ The reduction in space per worker is paralleled by a need to retrofit existing space to provide more collaborative team space and healthier, productive environments.²¹² Corporations will require more space with more collaborative formats than the corporate real estate planner may anticipate.²¹³

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 just as second-generation tenants do not fit as efficiently into any given space as first-generation tenants.²¹⁴

²⁰⁹ Source: CBRE Research Department – Vancouver, 2012.

²¹⁰ Source: CBRE Research Department – Vancouver, 2012.

²¹¹ University of San Diego - Norman Miller, "Changing Trends in Office Space Requirements: Implications for Future Office Demand", 2013.

²¹² University of San Diego, Real Estate Issues - Norman Miller, "Downsizing and Workplace Trends in the Office Market", 2013.

²¹³ University of San Diego - Norman Miller, "Changing Trends in Office Space Requirements: Implications for Future Office Demand", 2013.

²¹⁴ University of San Diego - Norman Miller, "Workplace trends in office space: implications for future office demand", 2014.

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. Temporary office space, using conference rooms, 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. ²¹⁶

One problem for landlords faced with high space utilization 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 doubled when space per worker is down to 150 sq ft or less.²¹⁷ However in a more urban location with transit, this number may differ.

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.²¹⁸
- 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.²¹⁹
- 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.²²⁰
- 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.²²¹
- Ultimately, landlords are not selling space but rather productivity, which will command rental premiums.²²²

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²¹⁵ University of San Diego - Norman Miller, "Workplace trends in office space: implications for future office demand", 2014.

²¹⁶ University of San Diego - Norman Miller, "Changing Trends in Office Space Requirements: Implications for Future Office Demand", 2013.

²¹⁷ University of San Diego - Norman Miller, "Workplace trends in office space: implications for future office demand", 2014.

²¹⁸ University of San Diego - Norman Miller, "Changing Trends in Office Space Requirements: Implications for Future Office Demand", 2013.

²¹⁹ University of San Diego - Norman Miller, "Estimating Office Space per Worker", Draft May 1 2012.

²²⁰ University of San Diego, Real Estate Issues - Norman Miller, "Downsizing and Workplace Trends in the Office Market", 2013.

²²¹ University of San Diego - Norman Miller, "Workplace trends in office space: implications for future office demand", 2014.

²²² University of San Diego, Real Estate Issues - Norman Miller, "Downsizing and Workplace Trends in the Office Market", 2013.

8.0 Future Considerations for Office in Urban Centres

This chapter outlines various actions by different parties to support office space in Urban Centres. These items are organized into two sections: priority actions, and a longer list of other areas for further exploration. All of these items 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 make various efforts to attract office development. In some cases, these efforts match market forces, such as in downtown Vancouver where there is strong demand, especially for tech tenants, who seek to locations in areas rich 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, however, municipalities are encouraging mixed-use development with office space components in locations where developers state that there is very limited office market demand. Municipalities are, from the developer's perspective, creating 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 in locations that meet their operational needs. Ultimately office development is a large investment decision, with the main factors being: land values, construction costs, and lease rates. Building on the actions identified in this report, and through further discussion by municipal staff, elected officials, and industry representatives, efforts to support office development in Urban Centres can be advanced.

8.1 Priority Actions

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

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 review process and reducing regulatory barriers, the approval process will benefit from less risk, time, and costs for developers. This will encourage investment in municipalities with approval processes that are clear, consistent, predictable, and fair. This recommendation is in response to the challenges developers experience; interviewee suggestions ranged from removing obstacles to development by simplifying the approval process, specifically reducing timelines, costs, uncertainty and associated risks, and having policies that support and permit office space in locations where the demand is present, be it mixed-use projects or stand-alone developments. Also, to readily allow higher densities where appropriate.
- As argued by a number of developers, the supply of office space in Vancouver is constrained by a slow approval process. A quicker approval process would allow for more responsive office developments to fulfil 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.

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.

 Municipal government plans need to prioritize office development at Urban Centre and FTDA locations and ensure supportive and consistent policy, not at additional locations. Plans that clearly designate "CBDs" in Urban Centres help provide direction on where office development

- should go. If sites are designated / zoned for office use only, and this is not consistent with the market, the site 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 office development. Also, granting
 increased development rights for larger sites may encourage land assembly.
- Municipalities can also help by providing the infrastructure, amenities and facilities desired by
 office businesses and workers. Municipalities can also invest in initiatives that improve
 downtowns, such as facade clean-up and crime reduction programs, business improvement area
 associations, and downtown promotional events.

Zoning Definition - Allow general office uses, rather than overly specific/limiting types of office business uses, which reduce tenanting flexibility and thus increase risk.

Interviewees stressed the importance of municipalities establishing zoning for office uses in
priority locations where there is demand for office (following from the above recommendation).
Interviewees repeatedly stated that municipal zoning bylaws should not be overly specific about
the 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 ancillary activities.

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

- The tenant representatives had a number of suggestions for government actions. They requested
 consultation on government initiatives that could impact businesses (e.g. infrastructure projects
 that affect access to their business), and asked that governments keep business costs down, have
 reasonable 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 months, for simple tenant improvement and occupancy permits. Building code requirements can trigger costly upgrades that make it difficult to bring space up to new standards. This can be especially troublesome with older buildings. This lengthy, expensive, and cumbersome requirement can be costly for both a landlord and tenant. Accordingly, some tenants decide to stay in their current space rather than move, and others prefer to move to a new building. Cities are encouraged to simplify this permitting system, similar to the City of Vancouver Tenant Improvement Permit System (TIPS) program²²³, but applicable to a wider range of buildings.

Municipal Incentives - Explore financial or regulatory 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 offering property tax relief for a specific time period. In some cases, a municipality may want to further reduce costs for development in select target areas. There may be lessons learned from some municipal programs with incentives to encourage rental housing in new developments.

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 projects, but also identify where office components are warranted (or not).

Interviewees appreciated research and reference publications by Metro Vancouver about office
and employment matters. Specific possible additional areas for research: exploring potentially
more consistent municipal zoning across the region, and explore how better to achieve a balance
and combination of housing and employment growth, with not an undue focus on one or the
other, and respecting local market conditions.

²²³ TIPS is an alternative permit-issuing process for renovation projects which require a building permit or a development-building permit.

8.2 Other Areas for Exploration

The following are potential 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 planning and policy development, an increase in technical research and information sharing, and a continuing development of partnerships to advance communications. 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 realities and office tenant and developer needs, while advancing both local and regional goals. These actions are organized by the responsible level of government and can be advanced through inter-agency and industry collaboration.

Metro Vancouver

- Advance and implement Metro 2040 and regional context statements with supportive municipal plans and policies that direct investment to Urban Centres and prevent significant office development in out-of-centre locations.
- Work with municipalities, the development community, and others to consider possible refinements to regional land use policy to best support the goal of attracting office development to Urban Centres.
- Promote the importance of 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 *Metro 2040* and ensuring that municipal plans, including regional context
 statements, official community plans, area plans, and economic strategies, highlight the value of
 office space to the economy and community.
- Explore 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 establishing an environment that is conducive to business investment and growth.
- Collect and promote case studies and best practices about ways municipalities and developers can direct office growth to Urban Centres.
- Maintain and share data, statistics, and other information resources about Urban Centres that
 may be of use for municipalities, business investors, developers, and tenants. Specifically, update
 the inventory of office buildings in the region and publish summaries of results.
- Encourage, as appropriate, municipalities to:
 - Streamline the development application process 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 technical research about possible incentives and sharing materials with municipalities to inform them about available tools.
 - Prepare development and design plan/policy 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 provide improved transit service to Urban Centres, and where appropriate, improved local transit service to connect existing office parks located in urban areas to the FTN.
- Work with TransLink 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 office accommodations and appropriate facilities in Urban Centre locations.
- Continue to support more coordination on economic issues at the regional level. Activities such
 as data collection, research, information sharing, and networking were noted and would be of
 benefit to supplement municipal efforts.

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 for business, specifically office space, and best ways to accommodate
 this form of development within the community.
- Promote Urban Centres through municipal plans and policies as opportunities for developers and businesses to invest.
- Ensure that official community plan policies and zoning clearly identify and promote the CBD in each Urban Centre. Consider which areas can accommodate large scale region-servicing office uses, and which are local serving office designations.
- Through official community plan or other council policy, not support significant office developments proposed in locations outside of Urban Centres.
- Within the context of overarching municipal and regional goals and objectives, consider reviewing office zoning bylaws to:
 - o Ensure that they do not unduly limit office development potential on Urban Centre lands.
 - Pre-zone lands for office uses, or not allow other uses, in select 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 more in demand and more efficient than smaller floorplates, while respecting local conditions.
 - Ensure requirements for mixed-use buildings with an office component only apply where appropriate.
 - Implement zoning that allows for 'general office' uses, rather than more specific and restrictive types of business uses.
 - Allow only office uses that are accessory to industrial uses in designated industrial areas.
 - Not allow significant office developments in locations outside of Urban Centres.
- Consider 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 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 and occupancy permits for tenants (modelled on the City of Vancouver's "TIPS" program).
- Explore pre-servicing areas to be 'building-permit ready' for office buildings.
- Review property tax rates to support competitive business costs, and consider possible 'property tax holiday' (possibly via a grant) or Tax Increment Financing 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.
- Be leaders by locating municipal facilities in Urban Centres. Interviewees noted the City of Surrey's relocation of city hall to Surrey City Centre and the City of New Westminster's civic centre / office tower in their downtown as positive examples.

Provincial / Federal Governments

- Share available data about office and employment lands development and related economic matters, through BC Assessment Authority and BC Stats and other applicable agencies.
- Locate provincial, federal and government agency offices as well as major institutional facilities such as universities and hospitals in Urban Centres.
- Province assist with review of property tax rates for office space to support competitive business costs. This may include leading a task group of 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 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 *Metro* 2040 directing government investments to Urban Centres as well as other supportive actions.
- Province help with training an educated workforce.
- Federal government allow increased immigration or at least temporary visas for skilled workers needed by growing businesses.

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, ULI, UDI, and BOMA, could work with local governments to
 prepare 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 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 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.
- Further explore financial and market viability of development opportunities at Urban Centre locations, especially beyond the 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, tenants, and workers.

Appendix A: List of Interviewees

Organization	Name / Title				
Bentall Kennedy	Tony Astles, President - Real Estate Services				
Oxford Properties	Chuck We, Vice President - Vancouver Office				
'	Ted Mildon, Director - Office Leasing				
PCI Developments	Dan Turner, Executive Vice President				
Quad Real Property Group	Jeff Rank, Senior Vice President - Leasing				
GWL Realty Advisors Inc.	Geoff Heu, Vice President, Development - Western Canada				
Avison Young	Andrew Petrozzi, Principal & Vice-President, Research (BC) Glenn Gardner, Principal - Consulting & Advisory, Office Sales & Leasing				
Colliers	Rob Chasmar, Senior Vice President				
Cushman & Wakefield	Hendrik Zessel, Executive Managing Director & Western Canada Leader				
JLL Jones Lang LaSalle	Mark Chambers, Executive Vice President of Office Leasing				
Regus	Alex Kanaan, Team Lead Area Sales Manager				
WeWork	Michael Harold, Manager of Public Affairs - West				
City of Coquitlam	Andrew Merrill, Manager Community Planning				
City of Vancouver	Matthew Bourke, Planner III - City-Wide & Regional Planning Michael Naylor, Planner III - Rezoning Centre Chris Clibbon, Planner II - City-Wide & Regional Planning Marten Hansen, Planner I - 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 input for this report.

Eric Aderneck, Planning Consultant, conducted the interviews in November and December 2018.

The preparation of the earlier version 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 version of this report.

Appendix B: Interview Discussion Questions

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 office market in the region?
- 3. What are major trends or issues facing the office development market in Metro Vancouver (such as tenant needs, land and rental values, stratification, co-working / changing nature of work, building and floor plan designs, regulatory, construction costs, etc), and how is this evolving?
- 4. For office tenants that are moving to Metro Vancouver, where are they moving from, and what are they seeking?
- 5. For office tenants 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 against each other, and which do not?
- 7. To what extend could office development and tenants be guided to other Urban Centres outside of the Vancouver Metro Core?
- 8. How has the significant new supply of office buildings in the region, particularly in downtown Vancouver, impacted office tenancy?
- 9. Any notable observations about the sectors and sizes of office tenants seeking accommodations, and the type of desired spaces and features?

Discussion Questions for Developers and Brokers

- 1. What is the process and considerations / evaluation criteria for selecting a site for an office development, and how might this be evolving (such as area features/amenities, proximity to transit and/or highway network, availability of parking, mixed use vs single use building designs, land values / rent rates, etc)?
- 2. What are features of a site that are absolute requirements, vs desirable, vs not necessary?
- 3. What are office tenant key selection criteria (such as accommodation / location / feature)?
- 4. 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 last five years?
- 5. What do developers and tenants perceive to be the positive or negative qualities associated with Urban Centres?
- 6. How does the market differentially consider Urban Centres, SkyTrain stations (current, new, or proposed), or proximity to frequent bus routes?
- 7. What are challenges or barriers to developing in Urban Centres vs other locations?
- 8. Could efforts by municipalities to reduce development costs (such as reduced DCCs, application fees, approval processes, etc) or enhance services / amenities have a significant impact on office development decisions?
- 9. What could municipalities or governments do to encourage office developments in Urban Centres?
- 10. What if any regional planning research or policy by Metro Vancouver could help support efforts to locate new office development in Urban Centres?

Discussion Questions for City Staff

- 1. What are some notable municipal experiences or examples (both successes and challenges) to attract office development to the city 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, or to what extent, a shift (in the last five years) towards more office development occurring in Urban Centre locations vs suburban / highway oriented locations?
- 4. How do developers consider municipal and regional plans/regulations when selecting an office development site?
- 5. What if any regional planning research or policy by Metro Vancouver could help support efforts to locate office development in cities and within Urban Centres?

Appendix C: Supplemental Office Inventory Data Tables

Sub-Region	Metro Core / Surrey Centre	Regional City Centre	Municipal Town Centre	Not in Urban Centre	Total
Burnaby/New West	-	4,400,000	2,100,000	8,900,000	15,400,000
Delta	-	-	-	400,000	400,000
Langleys	-	700,000	-	1,200,000	1,900,000
North Shore	-	1,800,000	400,000	2,000,000	4,200,000
Northeast Sector	-	500,000	400,000	500,000	1,400,000
Richmond	-	2,300,000	-	4,500,000	6,800,000
Ridge - Meadows	-	100,000	-	-	100,000
Surrey/White Rock	3,300,000	-	1,800,000	3,000,000	8,100,000
Vancouver/UBC	36,600,000	-	200,000	4,700,000	41,500,000
Total	39,900,000	9,800,000	4,900,000	25,200,000	79,800,000

Sub-Region	Within 800m of Rapid Transit Station	Within 400m of FTN Bus Service Only	Not Near FTN Service	Total
Burnaby/New West	9,300,000	4,100,000	2,000,000	15,400,000
Delta	-	100,000	400,000	500,000
Langleys	-	300,000	1,600,000	1,900,000
North Shore	-	2,900,000	1,300,000	4,200,000
Northeast Sector	900,000	200,000	300,000	1,400,000
Richmond	1,500,000	2,300,000	2,900,000	6,700,000
Ridge - Meadows	-	100,000	-	100,000
Surrey/White Rock	2,400,000	3,500,000	2,300,000	8,200,000
Vancouver/UBC	34,400,000	6,400,000	700,000	41,500,000
Total	48,500,000	19,900,000	11,500,000	79,900,000

	Within 800m of	Within 400m of FTN	Not Near FTN	Total
	Rapid Transit Station	Bus Service Only	Service	
Metro Core	32,100,000	4,300,000	200,000	36,600,000
Surrey Metro Centre	2,400,000	900,000	-	3,300,000
Regional City Centre	5,900,000	2,200,000	1,600,000	9,700,000
Municipal Town Centre	2,500,000	2,200,000	200,000	4,900,000
Not in Urban Centre	5,600,000	10,200,000	9,600,000	25,400,000
Total	48,500,000	19,800,000	11,600,000	79,900,000

Urban Centre Type	Number	Distribution	Sq Ft	Distribution	Avg. Size
Metro Core	500	36%	36,600,000	46%	73,200
Surrey Metro Centre	40	3%	3,300,000	4%	82,500
Regional City Centre	197	14%	9,700,000	12%	49,200
Municipal Town Centre	114	8%	5,000,000	6%	43,900
Not in Urban Centre	541	39%	25,300,000	32%	46,800
Total	1392	100%	79,900,000	100%	57,400

Municipality	Number	Distribution	Sq Ft	Distribution	Avg. Size
City of Burnaby	192	14%	12,940,000	16%	67,400
City of Coquitlam	27	2%	860,000	1%	31,900
City of Delta	11	1%	430,000	1%	39,100
City of Langley	10	1%	280,000	0%	28,000
City of Maple Ridge	2	0%	120,000	0%	60,000
City of New Westminste	59	4%	2,450,000	3%	41,500
City of North Vancouver	74	5%	2,920,000	4%	39,500
City of Pitt Meadows	1	0%	10,000	0%	10,000
City of Port Coquitlam	7	1%	270,000	0%	38,600
City of Port Moody	4	0%	280,000	0%	70,000
City of Richmond	141	10%	6,730,000	8%	47,700
City of Surrey	162	12%	8,170,000	10%	50,400
City of Vancouver	603	43%	41,170,000	52%	68,300
City of White Rock	2	0%	40,000	0%	20,000
District of North Vancou	19	1%	740,000	1%	38,900
District of West Vancouv	22	2%	550,000	1%	25,000
Township of Langley	47	3%	1,600,000	2%	34,000
UBC/UEL	9	1%	320,000	0%	35,600
Total	1392	100%	79,880,000	100%	57,400

Sub-Region	Unknown	Before 1950	1950 - 1959	1960 - 1969	1970 - 1979	1980 - 1989	1990 - 1999	2000 - 2009	2010 - 2018	Total
Burnaby/New West	170,000	340,000	350,000	300,000	1,990,000	2,350,000	5,100,000	2,510,000	2,280,000	15,390,000
Delta	20,000	-	-	60,000	20,000	90,000	230,000	-	20,000	440,000
Langleys	80,000	-	-	20,000	20,000	90,000	530,000	500,000	660,000	1,900,000
North Shore	190,000	220,000	40,000	100,000	660,000	880,000	880,000	760,000	470,000	4,200,000
Northeast Sector	30,000	-	-	40,000	170,000	170,000	430,000	230,000	340,000	1,410,000
Richmond	250,000	50,000	-	20,000	1,080,000	1,570,000	2,190,000	1,420,000	160,000	6,740,000
Ridge - Meadows	10,000	-	-	10,000	-	-	-	110,000	-	130,000
Surrey/White Rock	300,000	60,000	10,000	-	330,000	990,000	1,970,000	1,870,000	2,680,000	8,210,000
Vancouver/UBC	710,000	1,960,000	1,040,000	2,320,000	7,810,000	8,770,000	7,630,000	5,970,000	5,270,000	41,480,000
Total	1,760,000	2,630,000	1,440,000	2,870,000	12,080,000	14,910,000	18,960,000	13,370,000	11,880,000	79,900,000

Municipality	General Urban	Industrial	Mixed Emp	Grand Total
City of Burnaby	5,860,000	430,000	6,650,000	12,940,000
City of Coquitlam	860,000	-	-	860,000
City of Delta	180,000	250,000	-	430,000
City of Langley	280,000	-	-	280,000
City of Maple Ridge	120,000	-	-	120,000
City of New Westminster	2,450,000	-	-	2,450,000
City of North Vancouver	2,040,000	-	880,000	2,920,000
City of Pitt Meadows	10,000	-	-	10,000
City of Port Coquitlam	270,000	-	-	270,000
City of Port Moody	280,000	-	-	280,000
City of Richmond	2,540,000	370,000	3,820,000	6,730,000
City of Surrey	6,230,000	150,000	1,790,000	8,170,000
City of Vancouver	36,900,000	1,350,000	2,910,000	41,170,000
City of White Rock	40,000	-	-	40,000
District of North Vancouver	650,000	80,000	-	740,000
District of West Vancouver	550,000	-	-	550,000
Township of Langley	660,000	70,000	870,000	1,600,000
UBC/UEL	320,000	-	-	320,000
Grand Total	60,240,000	2,700,000	16,920,000	79,880,000

		Within 400m of		
	Within 800m of Existing	FTN Bus Service	Not Near FTN	
Municipality	Rapid Transit Station	Only	Service	Total
City of Burnaby	7,680,000	3,320,000	1,950,000	12,950,000
Brentwood MTC	1,360,000	-	-	1,360,000
Edmonds MTC	540,000	70,000	10,000	620,000
Lougheed Burnaby MTC	70,000	-	40,000	110,000
Metrotown	3,080,000	-	-	3,080,000
Not in Urban Centre	2,630,000	3,250,000	1,900,000	7,780,000
City of Coquitlam	530,000	150,000	180,000	860,000
Coquitlam Town Centre	500,000	-	-	500,000
Lougheed Coquitlam MTC	20,000	450,000	-	20,000
Not in Urban Centre	20,000	150,000	180,000	350,000
City of Delta Not in Urban Centre	-	80,000	350,000 350,000	430,000
City of Langley	-	80,000 280,000	550,000	430,000 280,000
Langley Town Centre (in Langley Cit	-	280,000	-	280,000
City of Maple Ridge	_	120,000	_	120,000
Maple Ridge Town Centre	<u>-</u>	110,000	_	110,000
Not in Urban Centre	-	10,000	-	10,000
City of New Westminster	1,660,000	750,000	50,000	2,460,000
New Westminster Downtown	1,290,000	-	-	1,290,000
Not in Urban Centre	370,000	750,000	50,000	1,170,000
City of North Vancouver	-	2,260,000	660,000	2,920,000
Lonsdale	-	1,800,000	· -	1,800,000
Not in Urban Centre	-	460,000	660,000	1,120,000
City of Pitt Meadows	-	10,000	-	10,000
Pitt Meadows MTC	-	10,000	-	10,000
City of Port Coquitlam	60,000	50,000	160,000	270,000
Port Coquitlam MTC	-	20,000	40,000	60,000
Not in Urban Centre	60,000	20,000	120,000	200,000
City of Port Moody	280,000	-	-	280,000
Inlet Centre MTC	280,000	-	-	280,000
City of Richmond	1,470,000	2,310,000	2,940,000	6,720,000
Richmond City Centre	1,080,000	-	1,190,000	2,270,000
Not in Urban Centre	390,000	2,310,000	1,750,000	4,450,000
City of Surrey	2,430,000	3,410,000	2,320,000	8,160,000
Surrey Metro Centre	2,430,000	870,000	30,000	3,330,000
Cloverdale MTC Fleetwood MTC	-	90,000	30,000	30,000
Guildford MTC	-	•	-	90,000
Newton MTC	_	1,060,000 410,000	_	1,060,000 410,000
South Surrey MTC (Semiahmoo)	<u> </u>	210,000	-	210,000
Not in Urban Centre		780,000	2,260,000	3,040,000
City of Vancouver	34,400,000	6,080,000	690,000	41,170,000
Metro Core	32,100,000	4,300,000	160,000	36,560,000
Oakridge MTC draft concept	180,000	-	-	180,000
Not in Urban Centre	2,120,000	1,770,000	530,000	4,420,000
City of White Rock	· · · · · · · · · · · · · · · · · · ·	40,000	· -	40,000
White Rock MTC	-	40,000	-	40,000
District of North Vancouver	-	60,000	680,000	740,000
Lynn Valley MTC	-	-	80,000	80,000
Not in Urban Centre	-	60,000	600,000	660,000
District of West Vancouver	-	550,000	-	550,000
Ambleside MTC	-	330,000	-	330,000
Not in Urban Centre	<u>-</u>	220,000	-	220,000
Township of Langley	-	-	1,600,000	1,600,000
Langley Town Centre (in Langley To	-	-	410,000	410,000
Willoughby MTC	-	-	40,000	40,000
Not in Urban Centre	-	-	1,150,000	1,150,000
UBC/UEL	-	320,000	-	320,000
Not in Urban Centre	40 === 000	320,000	44 500 000	320,000
Total	48,515,000	19,785,000	11,580,000	79,880,000

Appendix D: 2001 Urban Centres Strengths and Weaknesses

The following strengths and weaknesses of Urban Centres relating to business parks were defined in a 2001 report²²⁴, and are copied for reference. Although some of these points are still valid, the recent strong desire for tenants to be located by rapid transit and urban amenities is overpowering the noted weaknesses and driving interest in Urban Centres.

Town Centres' Weaknesses:

Office tenants and developers listed several challenges with the regional town centres including:

- High land costs and high rent levels. This is often due to competition from alternative potential projects such as residential and retail land uses. Business parks have a much lower land cost.
- In the town centres there are few large vacant sites wherein a developer can generate a master planned, phased project, which enjoys economies of scale. In business parks most projects are large scale and master planned and thus efficient and cost effective.
- The regional town centres tend to be in older urban areas, which have been subdivided extensively. This has resulted in numerous small, expensive, and inefficient properties often with outdated improvements, such as an old one or two level retail building on site.
- Limited demand for high-rise, multi-tenant buildings by large tenants. The region and the province simply do
 not have many very large-scale business tenants, compared to similar and larger cities in North America.
 Without huge anchor office tenants, who will take five or more floors of an office tower, a high rise project
 typical of a regional town centre cannot proceed.
- Congested parking, with only 1 or 2 stalls per 1,000 sq ft of space, compared to 3 in business parks.
- Traffic congestion on local arterial roads reduces the regional accessibility of the regional town centres. This is
 in part due to the locations, which are not on major highways. It is expected that eventually congestion will
 reduce the convenience of the business parks also and thus make town centres transit connections a more
 attractive factor when making a location decision.
- Higher property taxes due to the higher land values in some of the regional town centres. This is largely due to the small sized sites and the alternate uses (residential and retail), which are possible on town centre land.
- Undesirable businesses or persons or other bad neighbourhood effects are evident in several town centres. In business parks, tenants are proximate to other similar businesses and do not need to deal with issues related to urban decay or social problems.
- The town centre locations are not ideal for office tenants who serve the entire region, due to the lack of highway access.
- The provision of good transit and the close proximity of retail and services are not as important to major office businesses, as would be expected.
- Proximity to major high-density residential areas is not deemed to be an important locational factor for most office tenants.
- Many of the larger international, high tech businesses have similar single tenant, build to suit, office buildings in every major city in the world. Most of these firms will not compromise their module building design or the need for a highway location and 30 minute access to the international airport. A new, single tenant, build to suit building, within a regional town centre, would be very difficult to develop at a reasonable cost or within a reasonable time frame, or with a flexible ownership plan.
- With the notable exception of the central area, the urban centres offer few measurable benefits to high tech businesses except transit and proximity to services.

Town Centres' Strengths:

Office tenants and developers see several positive characteristics:

- Transit services.
- Residential nearby.
- Convenient services and retail.
- A town centre location tends to be more suitable for local area serving businesses such as accountants and lawyers. The town centres have service areas, which are very similar to the retail trade areas of the regional shopping centres, which anchor the commercial district.

²²⁴ Royal LePage Advisors Inc, "The GVRD Office Market Supply: Demand and Spatial Distribution", 2001.

• The longer-term potential to offer a more attractive and unique urban environment with an ambiance that employees will enjoy and request of the office employer. This already exists in the central area, where locational factors can outweigh the additional costs for some tenants.

Recommended Action Plan

The following measures could be implemented by provincial, regional and local levels of governments, in order to make existing regional town centre locations more attractive. Many of these measures come at a cost (in some cases significant) that would have to be assessed in terms of the benefits that would accrue.

- Provide larger development sites by encouraging site assembly and high-density zoning. In some instances
 government owned sites are available or for some areas selective road closures could be facilitated, creating
 large new sites.
- Reduce red tape and speed approvals, in order to reduce developer costs and uncertainty. This would be a critical step in attracting developers as enthusiastic partners in new projects.
- Lower land costs by creating office and employment zoning. Control mixed-use zoning, whereby some sites can only be used for office (rather than high-rise residential). Restricting residential uses would depress land values and make low-rise, build to suit, single tenant, owner occupied buildings possible.
- Reduce the cost of parking by providing municipal parkades, which can be shared by surrounding projects.
- Take actions to lower property taxes in town centres. The most direct course would be to stabilize land values.
- Ensure that the town centres have multiple fibre-optic cable providers. This is a critical locational issue for many high tech firms.
- Major electrical service for high-energy consumption is also important. Some high tech businesses require many times the industry average of 10 watts of electrical power per sq ft.
- Emphasize town centre's traffic links with major highways. This can be done via marketing and by lobbying to ensure that links to the highway network are improved at every opportunity.
- Encourage greater diversity in terms of retail service, recreational opportunities and cultural amenities.
- A high-rise, multi-tenant building, typical of town centres, can cost 40% more per square foot to build than a low-rise business park building. Any actions which reduce the need for large scale, concrete construction would make development more flexible and cost effective.
- The development of large new facilities, such as a hospital, university, library, art or sports complex should be focused in the town centres. This will act to encourage office tenants to locate nearby and make the town centres more attractive.
- Maintain high standards for infrastructure and cleanliness, orderliness, etc. in town centres. It is important
 that the town centres not be associated with crime or undesirable social problems. Large business tends to
 locate in areas which are safe and clean and have a pleasant and consistent appearance.
- Improve urban design to reflect a more attractive, pedestrian-oriented, environment. This is critical to efforts which model the town centres as smaller scale versions of the central business district.
- Coordinate lobbying efforts by developers, municipalities and various levels of government. This would be
 focussed on infrastructure issues such as transit and road improvements and also on the location decision for
 major institutions. If government incentives are being provided to attract certain businesses into the region,
 then perhaps the leverage of this benefit can extend to requesting that the business locate in a town centre.
- Any increase to the cost of automobile travel makes transit more attractive, which in turn makes office
 development in some of the town centres more attractive. Over the longer term traffic congestion will
 decrease the advantages of business parks and make the town centres a more attractive location option for
 office tenants.
- Encourage rapid town centre growth, so that they can be large enough to have some of the attractions of the central area and thus become self-sustaining.
- As the supply of vacant business park lands diminishes and costs go up, the virtues of the centrally located town centre development sites will become more apparent.

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