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Top floor types:
The role verticality plays in Downtown Vancouver office tenant leasing decisions

AN AVISON YOUNG SPECIAL REPORT
SUMMER 2021

Introduction

For many office tenants, the vertical positioning of their office space within a building reflects something important about their company. Whether a tenant chooses to take top-floor view space in a class AAA high rise or a small lower-level unit in a class C building, the company's size and industry are important factors affecting this critical real estate decision.

Typically, we would expect that class AAA and A buildings would attract large premier tenants, generally multi-national corporations, who take substantial blocks of space within the building. Amenities and tenant services, state-of-the art systems, transit access, and central and well-recognized locations allow these landlords to charge the highest rental rates in the market.

Conversely, class B and C buildings are older and likely lack the amenities offered by class AAA and A buildings. However, rental rates are lower, making these options more affordable for small- and medium-sized tenants.

Across all building classes, rents tend to be higher for space at the top of a building compared with space at the bottom of a

117 buildings were examined and 2,904 tenants were classified into 32 unique tenant types

building. Space in the upper third of a building is viewed as more prestigious, with panoramic views and reduced street and traffic noise leading to premium rental rates.

In this report, Avison Young examines the relationships between the vertical positioning and building class chosen by an office tenant in Downtown Vancouver and the industry or sector in which they do business. There are two major objectives of this report:

1. To assist landlords and listing agents with prospecting potential tenants based on their industry or "tenant type"

2. To allow Avison Young to predict how new office buildings currently under development in Downtown Vancouver will ultimately be occupied by tenants

Given the massive disruptions to the global office market due to measures designed to restrict the spread of COVID-19, Avison Young recognizes that it is critical that landlords effectively identify potential tenants for their vacant office spaces. With the predictive analysis outlined in this report, Avison Young intends to assist landlords and developers with pinpointing which tenant types

to target depending on the characteristics of the office building and specific space they need to lease.

In total, 117 buildings were examined and 2,904 tenants were categorized as part of this study. These tenants were classified into 32 unique tenant types based on the sector or industry in which they work. As discussed in detail in subsequent sections, Avison Young found that firms in different industries have different expectations and preferences for their office space requirements.

The data used in this report was initially gathered in late 2018. While we recognize that a great deal of change has occurred over the past three years, this analysis is intended to provide a pre-COVID-19 snapshot of the Downtown Vancouver office market tenant mix. Given the continued uncertainty in the Vancouver office market due to the fallout from the COVID-19 pandemic, we hope to update this report post-COVID-19 to examine if office tenant preferences have changed as a result.

METHODOLOGY

Tenant data was gathered for all office buildings within the Central Business District as defined by the following boundaries: the harbourfront to the north, Hamilton Street to the east, Bute Street to the west and Nelson Street to the south.
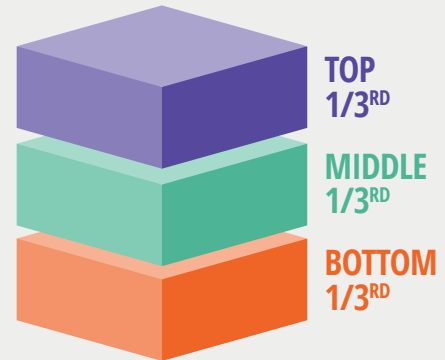
BUILDING CLASS

CLASS AAA   **CLASS A**   **CLASS B**   **CLASS C**

TENANT TYPE INCLUDING BUT NOT LIMITED TO

Legal   Accounting   Techonology   Mining   Real Estate   Finance/Insurance

TENANT SIZE

SMALL UNDER 2,000 SF

MEDIUM UNDER 2,000 - 9,000 SF

LARGE UNDER 10,000 - 49,000 SF

SUPER LARGE 50,000 SF AND OVER

VERTICAL LOCATION

TOP 1/3RD

MIDDLE 1/3RD

BOTTOM 1/3RD

BUILDING & TENANT RELATIONSHIPS

1   TENANT TYPE **VS** BUILDING CLASS

2   TENANT TYPE **VS** VERTICAL LOCATION

3   TENANT TYPE **+** TENANT SIZE **VS** BUILDING CLASS

4   TENANT TYPE **+** TENANT SIZE **VS** VERTICAL LOCATION

Tenant results

2,904 TENANTS WERE OBSERVED

FINANCE & INSURANCE
3,190,795 SF / 418 TENANTS

TECHNOLOGY
2,327,790 SF / 267 TENANTS

LEGAL
2,245,355 SF / 316 TENANTS

MINING
1,236,006 SF / 313 TENANTS

REAL ESTATE
1,044,398 SF / 210 TENANTS

ACCOUNTING
965,790 SF / 106 TENANTS

OTHER TENANT TYPES

Architecture / Interior Design, Association, Construction, Consulting, Education, Engineering, Employment, Foreign Consulate, Government, Health & Beauty, Immigration, Logistics, Miscellaneous and Natural Resources

Finance/Insurance

BREAKDOWN BY BUILDING CLASS

21% AAA	31% A	38% B	10% C

VERTICAL LOCATIONS OF THE TENANTS

- 148 TOP
- 165 MIDDLE
- 105 BOTTOM
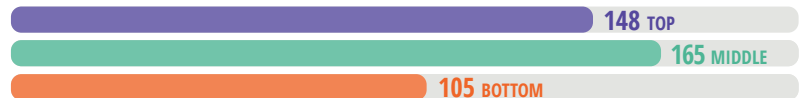
Technology

BREAKDOWN BY BUILDING CLASS
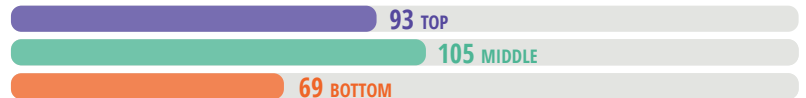
10% AAA	22% A	36% B	32% C

VERTICAL LOCATIONS OF THE TENANTS

- 93 TOP
- 105 MIDDLE
- 69 BOTTOM

Legal

BREAKDOWN BY BUILDING CLASS (% of tenants)

11% AAA	32% A	43% B	14% C

VERTICAL LOCATIONS OF THE TENANTS

- 152 TOP
- 112 MIDDLE
- 52 BOTTOM

Partnership. Performance.
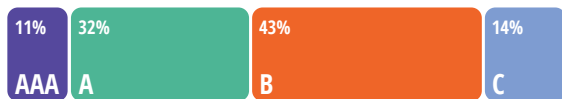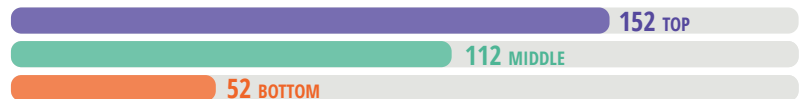
Six largest tenants types include 56% of all tenants observed in Downtown Vancouver

Downtown Vancouver's office leasing market is heavily concentrated in the top-six tenant types, which include Accounting, Finance/Insurance, Legal, Mining, Real Estate, and Technology firms; these tenants have collectively taken more than 11 million square feet (msf) of space within the CBD and represent 1,630 individual tenants (56% of all tenants observed for this report). In total, Avison Young has categorized the tenants observed in our analysis into 32 distinct tenant types. However, we will

focus our analysis on the top six tenant types given the significance of these industries to the Vancouver economy and their impact on the Downtown Vancouver office market. As well, these large tenant types are particularly critical to office developers as they take up large blocks of space that anchor new buildings and are also more likely to invest in their space for the long term.

Across all 32 tenant types, larger tenants tend to prefer to lease office space in class AAA and A buildings, while smaller tenants typically lease in class B and C buildings. This trend is not particularly surprising as smaller tenants will tend to gravitate to less expensive rental rates offered in lower-quality buildings, while large and super-large tenants are typically willing to pay the higher rental rates demanded for newer buildings in prime locations that offer amenities to their employees.

Notably, super-large tenants also generally prefer to be located in the top third of the buildings in which they take office space.

Results are highlighted below for the top-six tenant types located in Downtown Vancouver office buildings. These breakdowns are provided using two different metrics: number of individual tenants and square footage. Results can vary substantially if only one of these metrics is examined as not all tenants will take the same amount of space. For example, a tenant type characterized by a small number of tenants with a large amount of square footage taken likely comprises a few large or super-large firms that heavily influence the results for that sector. In contrast, a tenant type with many tenants that have taken a small amount of aggregate space is likely dominated by smaller firms.
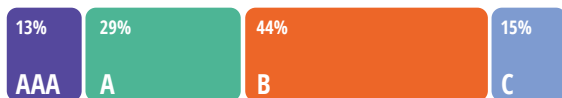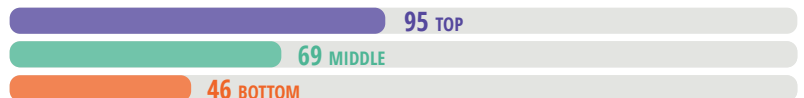
Mining

BREAKDOWN BY BUILDING CLASS

11%	23%	53%	13%
AAA	A	B	C

VERTICAL LOCATIONS OF THE TENANTS

124 TOP
111 MIDDLE
78 BOTTOM
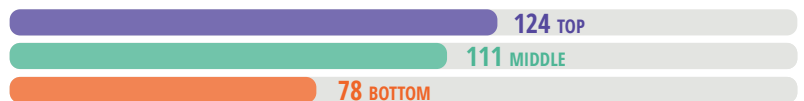
Real Estate

BREAKDOWN BY BUILDING CLASS

13%	29%	44%	15%
AAA	A	B	C

VERTICAL LOCATIONS OF THE TENANTS

95 TOP
69 MIDDLE
46 BOTTOM

Accounting

BREAKDOWN BY BUILDING CLASS (% of tenants)

6%	24%	50%	21%
AAA	A	B	C

VERTICAL LOCATIONS OF THE TENANTS

33 TOP
46 MIDDLE
27 BOTTOM

Predictive analysis

Avison Young believes this predictive model can provide useful insights for landlords and listing agents who are looking to effectively target marketing for their available space. Rather than reaching out to every potential prospect, landlords can focus on tenants in the categories that have been historically interested in the building class and vertical profile of office space they have available.

Tenant preferences have been classified based on the Downtown Vancouver office tenant mix data collected for this report. As described previously, Avison Young has analyzed the various tenant types based on the number of individual tenants, as well as the square footage taken by the entire group. Avison Young has characterized tenant-type verticality preferences as per the following definitions:

- **Flexible –** tenant types who are flexible do not exhibit a clear inclination for one vertical profile. These tenant types may have a split preference between two vertical profiles or exhibit no distinctive preference between any of the profiles.

- **Preferred –** these tenant types prefer a particular vertical profile. Both the number of tenants and the square footage taken in this single vertical profile must exceed the numbers for the second largest vertical profile.

- **Essential –** tenant types who require space in a particular vertical profile exhibit a strong and obvious preference for a taking space in single verticality. Measured in percentage terms,

both the number of tenants and the square footage taken in this single vertical profile must exceed the numbers for the second largest vertical profile by at least 10%.

Understanding tenant verticality preferences is critical for landlords and listing agents

Examining these preferences by tenant type is critical to predicting what type of user may be interested in a particular block of office space. By starting their prospecting with the tenant types holding the strongest preference for a space within a specific vertical profile and building class, landlords can increase their chances of filling vacant space quickly and efficiently. While we have focused on the largest six tenant types in this report given their importance within the Downtown Vancouver market, Avison Young may elect to share the results for the remaining 26 tenant types upon request.

Finance / Insurance
(flexible between top/middle profiles)

Finance/Insurance tenants represent the largest tenant type by far in Downtown Vancouver, with over 100 more tenants and 850,000 sf leased than the second largest tenant type. Generally, Finance/Insurance tenants do not display a strong preference for a particular verticality profile, with a slight inclination for the top or middle third of a building compared with the lower levels.

Super-large and large Finance/Insurance tenants show an overwhelming preference for class AAA and A office buildings, while medium and small firms show a preference for class A and B space. Class C buildings are not popular among Finance/Insurance tenants.

FINANCE & INSURANCE	#	SF
Top	148	1,200,847
Middle	165	991,991
Bottom	105	997,957

Legal tenants strongly prefer the top verticality profile

Technology
(flexible between middle/bottom profiles)

Technology tenants are the second largest tenant type found in Downtown Vancouver and have been swiftly leasing office space during the last few years. The technology sector is bifurcated between a few multinational corporations with super-large space requirements and numerous small- and medium-sized companies that need significantly smaller office space. To put this in perspective, just 2% of the technology companies in Downtown Vancouver have taken more than 40% of the square footage leased by this tenant group.

Technology companies are quite flexible with their leasing choices but tend to lease office space in the middle or bottom third of office buildings. While flexible in terms of verticality preferences, technology firms generally exhibit similar preferences for building quality to their large tenant type peers. Super-large technology tenants have a strong preference for class AAA and A space, while smaller tenants are accommodating of buildings of varying quality.

TECHNOLOGY*	#	SF
Top	93	734,825
Middle	105	684,168
Bottom	69	773,798

* These figures do not include a 135,000-sf lease of the entire building at 555 Robson Street by a technology tenant.

Legal
(top vertical profile essential)

Legal tenants of all sizes display strong verticality and building quality preferences when making leasing decisions. Law firms tend to prefer office space in the top third of an office building, while space in the bottom third of a building is particularly undesirable. For example, eight of the top 10 largest law firms in Downtown Vancouver (on a square footage basis) have chosen to locate their office space in the top verticality profile.

Legal firms also favour high quality buildings, irrespective of the size of the firm. Super-large and large law firms are primarily located in class AAA and A buildings. Class C buildings are not attractive locations for legal tenants, as even small- and medium-sized law firms prefer to lease space in higher quality class A and B buildings.

LEGAL	#	SF
Top	152	1,209,615
Middle	112	790,068
Bottom	52	245,672

Predictive analysis

Mining
(top vertical profile preferred)

The real estate decisions made by the mining industry in Downtown Vancouver are heavily influenced by small- and medium-sized firms, which make up a substantial portion of the tenant base. Like legal tenants, mining companies also show a preference for the top vertical profile of their office buildings, albeit to a lesser degree. Large and super-large mining tenants are mainly concentrated in the top third of buildings, while medium and small tenants exhibit more flexible verticality preferences.

Like the other large tenant types, mining tenants prefer to locate their office space in high quality buildings and largely eschew class C buildings. Large and super-large mining companies are highly concentrated in class AAA and A buildings, while medium and small tenants primarily have space in class A and B buildings.

MINING	#	SF
Top	124	656,751
Middle	111	370,019
Bottom	78	209,236

Accounting firms heavily favour the middle verticality profile

Real Estate
(top vertical profile preferred)

By number of tenants, real estate firms prefer office space in the top vertical profile of a building; however, on a square footage basis there is not much variation between the three vertical profiles. Consistent with the behaviour of other large tenant types, super-large and large real estate firms prefer to lease space in high quality class AAA and A buildings, while smaller tenants gravitate towards class B and C buildings instead.

Real estate is another industry that is characterized by an abundance of small and medium firms. On average, small- and medium-sized real estate tenants take up more space than their equivalents in other major tenant types, while large and super-large tenants take less space on average than their peers in other sectors. Curiously, despite being the fifth-largest tenant type in Downtown Vancouver, there is only one super-large real estate firm in our dataset.

REAL ESTATE	#	SF
Top	95	360,805
Middle	69	329,480
Bottom	46	354,113

Accounting
(middle vertical profile essential)

Accounting firm tenants strongly prefer office space in the middle of their buildings, irrespective of the quality of the building. The accounting field is quite bifurcated, with a handful of super-large and large firms (including the "Big Four") that lease large amounts of office space, and dozens of medium and small firms that have a much smaller footprint.

Accounting firms exhibit similar preferences to other large tenant types in terms of building quality; super-large accounting firms prefer class AAA and A space, while smaller firms seek out class B and C space. Interestingly, a significant portion of large accounting tenants lease space in class B buildings, which is unusual compared with other tenant types.

ACCOUNTING	#	SF
Top	33	328,482
Middle	46	522,261
Bottom	27	115,048

Case study: The Stack

1133 MELVILLE STREET, VANCOUVER

At 532,000 sf, The Stack is one of the largest office developments currently under construction in Downtown Vancouver and is expected to be delivered by Oxford Properties and the Canadian Pension Plan Investment Board towards the end of 2022. While the building is only 40% preleased at this time, our model has accurately predicted the vertical positioning of space taken by the first three tenants.

As anticipated, legal firms Blake, Cassels & Graydon and DLA Piper took space in the upper third of the building profile, while Big Four accounting firm Ernst & Young decided to locate their offices in the middle of the building. Based on our predictive analysis, Avison Young would expect a large or super-large Finance/Insurance or Technology tenant could be a good candidate for the remaining large blocks of space in the middle and bottom of The Stack.

BLAKE, CASSELS & GRAYDON
FLOORS 31-36

DLA PIPER
FLOORS 24-28

ERNST & YOUNG
FLOORS 19-23
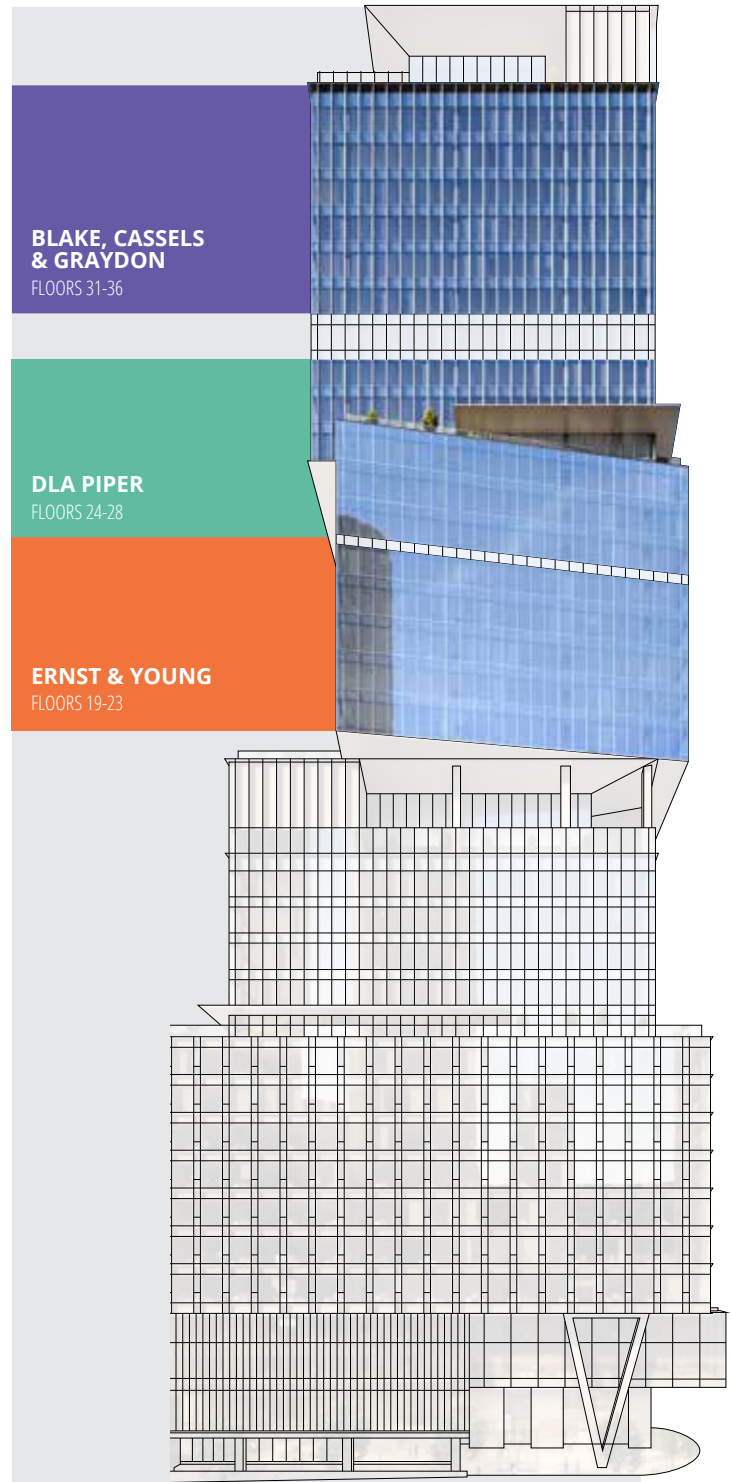
Other major office developments

Downtown Vancouver's office development pipeline is historically strong with nearly 3.9 msf of leasable office space across 13 projects expected to be delivered by 2023.

Amazon made the largest splash in the prelease market; taking more than 1 msf in The Post redevelopment. Unlike many tenants in the tech sector, Amazon has consistently reaffirmed its commitment to its physical office locations and has been willing to lease entire buildings to create its own "campus" within a city (Amazon also leased the entire building at 402 Dunsmuir Street, as well as eight floors and seven floors within nearby Telus Garden and The Exchange, respectively). Amazon has grown rapidly during the last decade and vertical positioning does not seem to be a critical factor; rather, finding substantial new class AAA space near other Amazon offices appears to be the current priority. While this makes Amazon an incredibly interesting tenant to examine, it does render our verticality model's predictions ineffective in this case.

Co-working firms were heavily impacted by COVID-19. When this data was collected in 2018, co-working firms had aggressive plans for growth within the Downtown core and throughout Metro Vancouver. These plans have been scaled back considerably since 2020. Our model suggests that specifically in class AAA buildings, large co-working tenants have tended to lease space in the bottom and middle third of the building profile, which matches the prelease WeWork currently has in place for in B6's middle and bottom thirds.

Other tenants who preleased space in office developments currently under construction also appear to have taken space based on our model's predicted preferences for vertical positioning within a building. As anticipated, technology firms Apple and Kabam preleased space in the middle and bottom of two new developments, while PI Financial, a Finance/Insurance tenant type, has preleased space in the top third of Vancouver Centre II.

Two notable exceptions to the model emerged. BentallGreenOak (BGO) took space in the bottom third of 1090 West Pender Street while the model predicted it would prefer the top third of the building. One mitigating factor could be that BGO owns the building it is planning to occupy, so it likely wants to lease the more lucrative upper floors to other tenants. The other exception was Deloitte. Accounting firms have typically demonstrated a preference for space in the middle third of buildings; however, Deloitte elected to take space at the top of 410 West Georgia Street instead. Excluding the Amazon deals, our model predicted the vertical profile of tenants in new office developments with an 82% accuracy rate.

Here are the remaining prominent prelease commitments of 2+ floors in upcoming Downtown Buildings.

Deloitte Summit - 410 W. Georgia Street
Deloitte (floors 16-25)
Apple (floors 10-13)

VCII - 733 Seymour Street
B2Gold* (floors 27-29)
PI Financial (floors 24-26)
Kabam (floors 7-13)
B2Gold has subsequently decided to sublease this space

B6 - 1090 West Pender Street
Colliers (floors 28-29)
WeWork (floors 10-15)
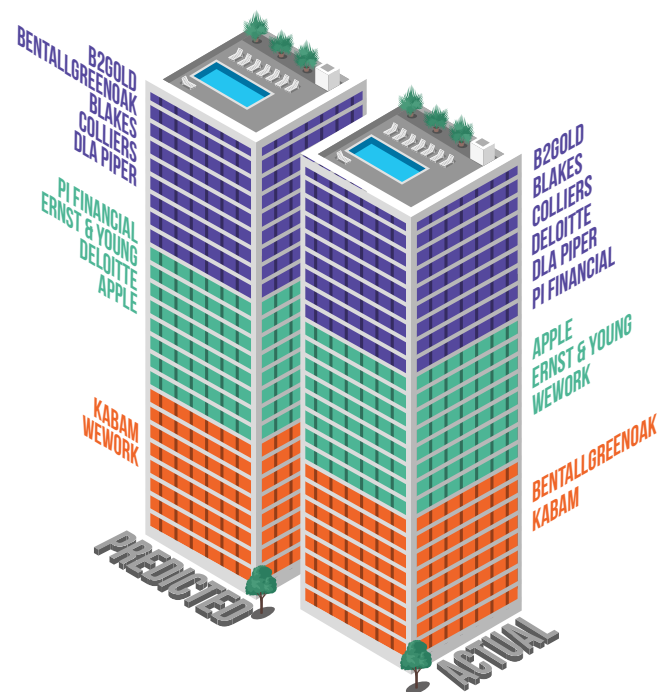BentallGreenOak (floors 7-9)
WeWork (floors 3-6)

The Post - 349 W. Georgia Street
Amazon (South tower)

The Post - 308 Dunsmuir Street
Amazon (North tower)

OTHER TENANT TYPES

Summary

In this report, we outlined a model for predicting tenant verticality and building class preferences based on an occupant's tenant type and size. Six major tenant types, including Accounting, Finance/Insurance, Legal, Mining, Real Estate, and Technology, were examined in detail in this report due to their substantial presence in the Downtown Vancouver office market.

While some findings were not surprising, such as super-large and large tenants preferring higher quality class AAA and A office space and small-sized tenants typically leasing space in class B and C buildings, some results were more unexpected. The two biggest Downtown Vancouver tenant types, Finance/Insurance and Technology, are flexible occupiers of office space and do not display a preference for one particular verticality. On

the other hand, Mining and Real Estate tenants do show a slight predilection for taking space in one vertical profile, specifically in the top third of a building. Finally, professional services tenant types like accounting and legal firms show strong preferences for the middle and top vertical profiles respectively, a preference that shows up regardless of the size of the individual companies.

The best way to test any model is to apply it to a real-life situation, which we demonstrated in our case study on preleasing in new Downtown Vancouver office developments. Generally, our model had an 82% accuracy rating in predicting the vertical profile of the spaces that tenants have preleased in various office buildings that are currently under construction. However, owner-occupier situations, tenants taking entire office buildings, and

variations between expected and actual verticality preferences did lead to a few circumstances where our model did not accurately predict the vertical profile chosen by a particular tenant.

Despite these challenges, Avison Young believes this model can be useful to landlords and brokers when marketing office space for lease. The six major tenant types in Downtown Vancouver exhibit clear preferences when selecting office space, which could allow for more effective prospecting and marketing based upon on the verticality and building quality characteristics of the available space.

Conclusion

This report is intended to provide readers with a pre-COVID-19 snapshot of the office tenant mix within Downtown Vancouver. Given the enormous economic and societal changes that have taken place since March 2020, it would be unwise to assume that all past trends will carry on going forward.

However, construction of new office developments has continued throughout the pandemic relatively unabated. With large blocks of new supply coming onto the market in the face of an uncertain outlook for demand from office users, landlords will need to have as much information as possible to attract and compete for highly desirable tenants.

It is difficult to predict if verticality preferences for various tenant types will change in a post-COVID-19 environment. At this time, corporate leaders are attempting to make difficult decisions about how their company will operate going forward and how much physical office space remains part of that equation.

Many questions remain unanswered in these uncertain times. To attract employees back to the office, will firms invest in better office space with more amenities geared towards the health and wellness of employees? Will office location matter as much to employees if they work from home more frequently? Will tenants require more space in the future to accommodate increased social distancing between employees or will less space be needed going forward due to evolving employer attitudes towards working from home?

Similarly, will verticality matter to tenants in the same way it has in the past? Perhaps cash-rich technology firms will take advantage of increased vacancies in Downtown Vancouver to secure premium space higher in a building than they would have considered previously. Similarly, companies now looking for smaller office space due to employee desire for a hybrid work-from-home/office model may seek out more expensive real estate to house their smaller footprint. On the other hand, companies that will remain centred at the office post-pandemic may have to invest in more space than before and may choose to offset this increased cost by locating in less-expensive real estate at the bottom of an office building.

Avison Young plans to update our dataset in 2022-23 so a comparative analysis pre- and post-COVID-19 can be completed. This work would allow us to examine the impact of COVID-19 on the Downtown Vancouver office market, assess the impact of the first wave of major new office developments, and determine if there have been any important changes to tenant preferences.

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