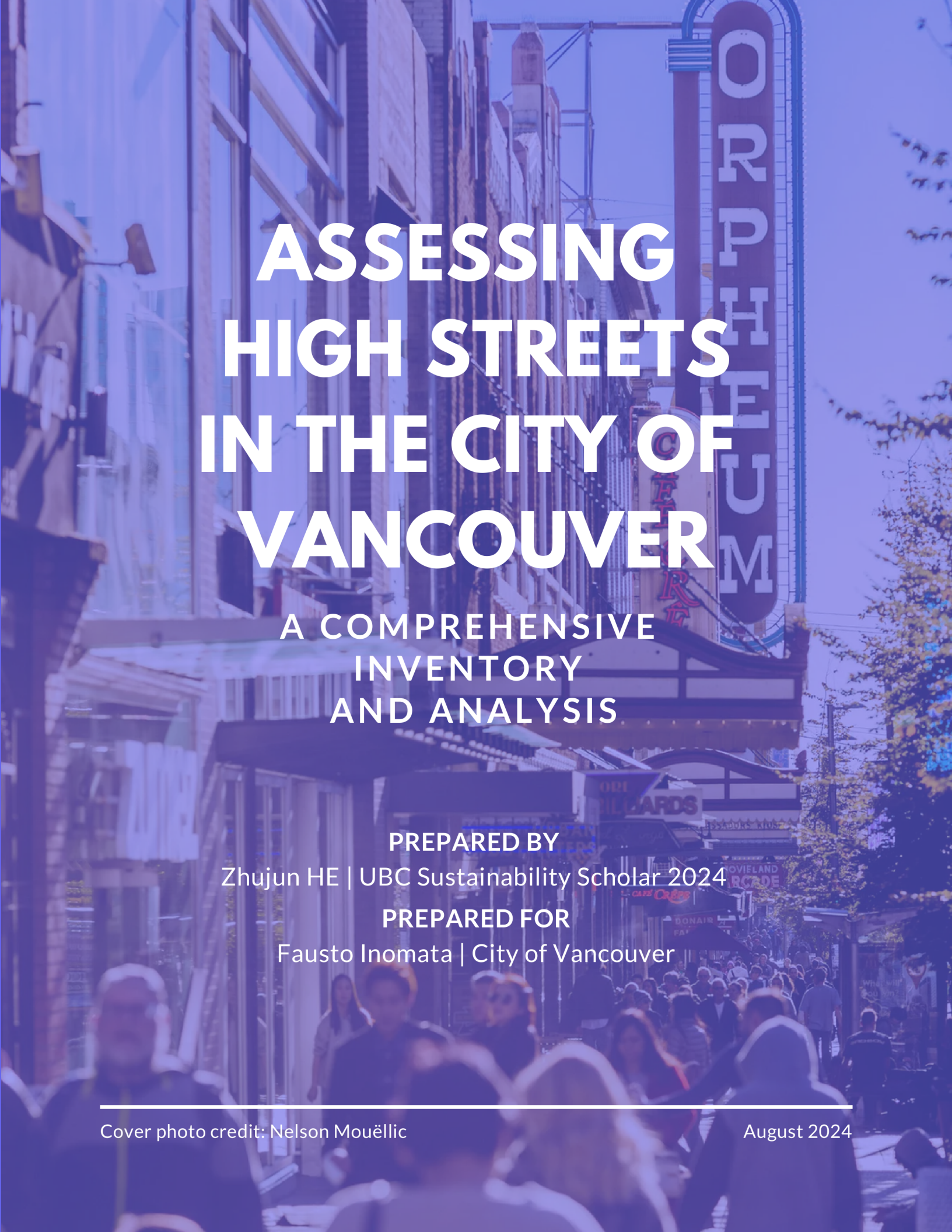

ASSESSING HIGH STREETS IN THE CITY OF VANCOUVER

A COMPREHENSIVE INVENTORY AND ANALYSIS

PREPARED BY

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PREPARED FOR

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Cover photo credit: Nelson Mouëllic

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Disclaimer

This report was produced as part of the UBC Sustainability Scholars Program, a partnership between the University of British Columbia and various local governments and organizations to provide graduate students with opportunities to do applied research on projects that advance sustainability and climate action across the region.

This project was conducted under the mentorship of City of Vancouver staff. The opinions and recommendations in this report and any errors are those of the author and do not necessarily reflect the views of the City of Vancouver or the University of British Columbia.

All photos used in this report belong to the author unless credited otherwise.

Land Acknowledgement

I acknowledge that the work for this project on the inventory of the public realm of high streets in the City of Vancouver took place on the unceded ancestral lands of the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh Úxwumixw (Squamish), and səlilwətaɬ (Tsleil-Waututh) Nations. These Indigenous Peoples have lived on these lands since time immemorial and continue to steward these lands and waters. As we work to document and understand the public spaces of Vancouver's high streets, it is important to recognize the ongoing presence of these First Nations and the recent history and present of erasure and genocide against those Nations. Through this work, I was able to notice a lack of self-determined cultural visibility of xʷməθkʷəy̓əm, Sḵwx̱wú7mesh Úxwumixw, səlilwətaɬ in the high street's public realm, with some important exceptions.

Special Thanks

I want to express my deep gratitude to my mentors from the City of Vancouver: Fausto Inomata, Hema Ramnani, and Christopher Son. Their generous support, patience, and guidance throughout this project have been invaluable. This report would not have been possible without their expertise and commitment to this important research topic.

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It has been an honor to contribute alongside the City of Vancouver's dedicated professionals. Their expertise and passion for inclusive public spaces have been truly inspiring. I am grateful for this enriching experience and hope the insights gained will advance the crucial conversations around reimagining Vancouver's urban realm.

I also deeply appreciate the steadfast support of my family, my partner, and UBC classmates, whose understanding and encouragement have been essential to completing this important research.

Executive Summary

Purpose and Background

Vancouverites increasingly value high-quality public spaces that are inviting, interesting, and creatively designed. These spaces benefit community health, spur economic activity, foster social connections, and enhance city life. This project aims to inventory and assess Vancouver's high streets, establishing a foundation for future improvements. It will analyze these streets through public realm, regional connectivity, and retail focus lenses, identifying and categorizing high streets and ethnocultural districts. The research seeks to provide clear tools and frameworks to guide future urban planning and public engagement efforts.

Key Findings and Conclusions

The key findings reveal a diversity in public realm elements, regional connectivity, and retail focus along Vancouver's high streets, which impact public life, pedestrian flow and commercial vitality.

The analysis reveals that high streets in downtown Vancouver perform strongly overall, with balanced scores across various criteria. However, some segments show significant variations, especially in retail focus, indicating a need for improvement. Downtown segments outperform non-Downtown ones in commercial density, public facilities, and transportation convenience, due to a higher concentration of retail shops, corporate headquarters, and a well-developed transportation network, enhancing economic activity and accessibility.

High-scoring segments display diverse strengths, excelling in multiple areas rather than relying on a single factor. For instance, Granville St. excels in public realm quality, while Broadway leads in regional connectivity. This multifaceted approach is crucial for achieving high scores.

Segments with balanced development show minimal differences across retail focus, public realm, and regional connectivity. However, there remains significant potential for further enhancement across most segments.

Future Research Recommendations

Based on these insights, the primary recommendations include developing a multidimensional evaluation toolkit to better define and categorize high streets in Vancouver. This would involve creating clear classification criteria that consider public realm elements, regional connectivity, and retail composition. Concurrently, the project team could conduct additional field research and data collection to expand the evidence base. This would entail surveying a wider range of high streets and gathering more detailed information on physical features, business mixes, and user experiences.

Implementing this multifaceted approach is expected to significantly influence Vancouver's urban planning and public space enhancements by providing data-driven insights. This could support the city in formulating more inclusive and sustainable policies, ultimately improving residents' quality of life. Additionally, the outcomes will serve as a crucial reference for future urban development, promoting economic and social vitality and steering Vancouver towards becoming an even greener and more livable city.

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1. Introduction and objectives

1.1 About this project

This project is a collaborative initiative between the City of Vancouver's High Street Inventory program, within the Street Activities Branch in Engineering Services, and the UBC Sustainability Scholars program.

This project focuses on conducting an inventory of existing and potential public spaces along high streets in the city of Vancouver. The initiative aims to inform public realm improvements by analyzing various aspects of these high streets. By engaging in this research, the project seeks to contribute to the development of more vibrant, inclusive, and sustainable urban environments.

1.2 Research objective

The research objective of the project is to conduct a comprehensive inventory of existing high streets in Vancouver, assessing them from the public realm, regional connectivity, and retail focus perspectives to define the city's high streets. The project will categorize these high streets based on the assessment of various factors and investigate and identify any ethno-cultural areas within the commercial districts. Ultimately, the project aims to create a toolkit that includes categorization and mapping of features, which will facilitate subsequent urban planning efforts and enhance public engagement in the development process.

1.3 Scope of the inventory

The scope of this project is to conduct a comprehensive inventory of high streets across Vancouver. The primary objectives are to answer two main questions:

Question 1 - Where are the high streets in Vancouver?

This involves identifying and mapping the high streets throughout the city.

Question 2 - What are the strengths and challenges of these high street environments?

The inventory will delve into a multi-dimensional assessment of the public realm, evaluating elements like streetscape design, transportation networks, green infrastructure, and the mix of businesses. This analysis will uncover the unique assets as well as pain points experienced within different commercial districts.

By addressing these two core questions, the project aims to provide a comprehensive understanding of Vancouver's high street landscape.

1.4 Methodology

Figure 1 Comprehensive Methodology for the Inventory of High Street Public Realm

1.4.1 Data collection

The research drew from various city datasets, including the annual storefront survey, as well as conducted on-site observations and visits to gather comprehensive information on commercial activity and physical conditions across the municipality.

1.4.2 Inventory

Building on the data collection, the team compiled an inventory of potential high street segments, mapping and cataloging areas with concentrations of ground-floor commercial uses, consistent street frontages, and other indicators of vibrant pedestrian-oriented environments.

1.4.3 Categorization

The identified high street segments were then classified according to specific criteria, such as retail focus, public realm quality, and regional connectivity. This allowed for a more nuanced understanding of the varying typologies and functions of these commercial corridors.

1.4.4 Evaluation

For each dimension, a scoring rubric was developed to systematically evaluate the high street segments, enabling a comparative analysis. The evaluation findings were then synthesized to provide a holistic assessment of the high street network, uncovering key insights and identifying the shared characteristics, spatial patterns, and their potential to reflect ethnocultural and urban development-related features.

This comprehensive methodology allowed the research to gain a deep understanding of the high street environments in Vancouver, laying the groundwork for the development of targeted strategies and recommendations.

2. Project background

2.1 Historical context

2.1.1 The “streetcar city”

The high streets in Metro Vancouver evolved from the streetcar lines planned by the pre-city transit company. These high streets now form the backbone of the regional transit system, with bus routes running along them. However, the areas off the high streets are largely single-family homes, which have become unaffordable. As densification is needed, the high streets will face increased demand as transportation corridors. Upgrades to the existing bus routes on these streets could help accommodate this growing ridership and support the densification of surrounding neighborhoods.

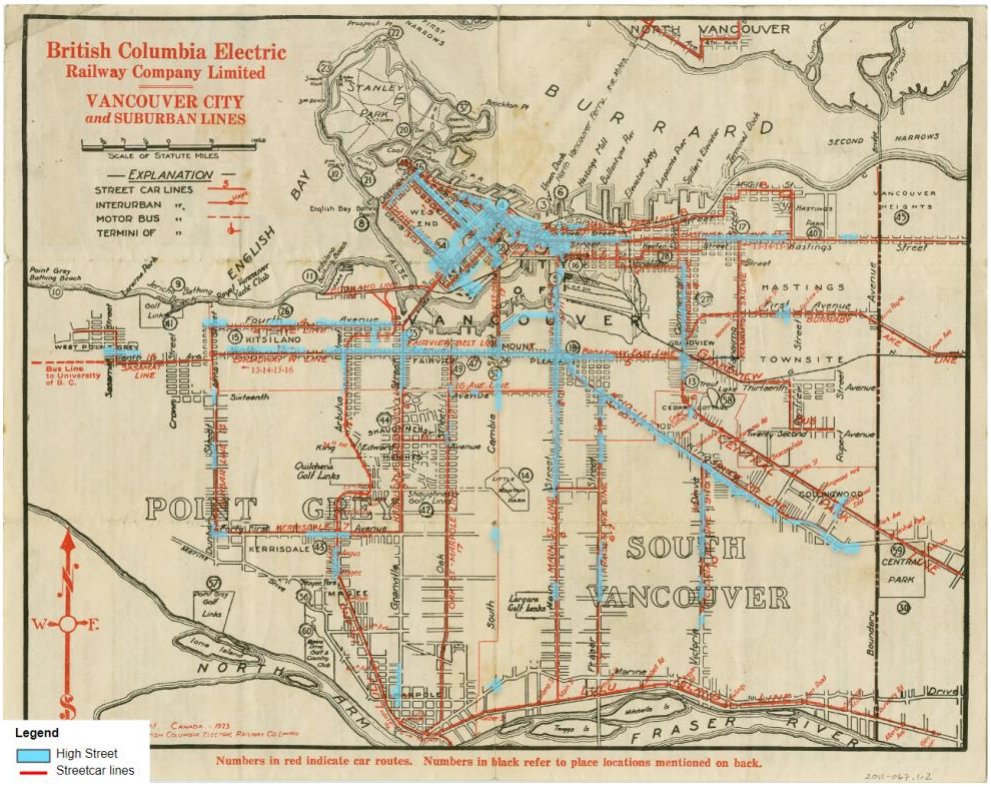

Figure 2 Historical Map – Vancouver City and Suburban Lines, 1923
(Source: https://transitmap.net/vancouver-city-suburban-lines-1923/)

2.1.2 Post-World War II Expansion

After World War II, Vancouver saw significant suburban growth and the rise of car culture, leading to the expansion of retail hubs beyond the original downtown core. Robson Street became a hub for European immigrant-owned businesses, earning it the nickname "Robsonstrasse." However, in the 1960s, Vancouver diverged from the car-centric path of many North American cities, rejecting highway projects and instead investing in public transit. This shift towards a more walkable, transit-oriented approach set Vancouver on a course towards a more sustainable and livable urban environment.

3.1.3 The 1986 World Expo

The 1986 World Expo was a pivotal event that shaped Vancouver's retail landscape, spurring investment and redevelopment in the downtown core. This marked a shift away from proposed highway projects, as the city began prioritizing a more walkable, transit-oriented approach. The late 1980s construction of the SkyTrain system reinforced this transition, providing high-capacity public transit that connected commercial hubs along the existing high streets. By consolidating and strengthening these corridors, the SkyTrain helped make them more accessible and attractive for businesses and residents. These transformative changes have continued to guide the evolution of Vancouver's high streets as the city balances growth, sustainable transportation needs, and maintaining vibrant, walkable commercial areas.

2.2 Related policy context

2.1.1 Metro 2050 - Regional Growth Strategy

The Metro Vancouver 2050 regional growth strategy outlines several key goals and strategies that are relevant to enhancing the public realm of high streets in the region. The plan was then accepted by all members, and adopted by the Metro Vancouver Board in February 2023. Several of its goals and strategies align with high streets improvements, including:

- Goal 1: Create a Compact Urban Area
- Goal 2: Support a Sustainable Economy
- Goal 3: Protect the Environment, Address Climate Change, and Respond to Natural Hazards
- Goal 5: Support Sustainable Transportation Choices

2.1.2 The Vancouver Plan

The Vancouver Plan outlines several key strategies, each with a corresponding vision, that are relevant to enhancing the public realm of high streets in the city. The plan was approved by the City Council in July 2022.

Strategy 1: Enhance Public Spaces and Greening
The vision for this strategy is to create "vibrant, inclusive, and climate-resilient public spaces that bring people together."

Strategy 2: Advance Sustainable Transportation
The vision is to develop "a sustainable, accessible, and equitable transportation system."

Strategy 3: Support a Diverse, Inclusive Economy
The vision is to foster "a thriving, diverse, and inclusive economy that works for everyone."

2.2 Examples of high street documents developed by the City

2.2.1 Broadway Plan

The Broadway Plan is the first area plan in Vancouver informed by the Metro Vancouver 2050 regional growth strategy. Covering the area from Vine Street to Clark Drive, and 1st Avenue to 16th Avenue, the plan was approved by Vancouver City Council in June 2022 and came into effect in September 2022. As the first local plan aligned with the regional framework, the Broadway Plan sets the stage for future area

plans to integrate regional priorities, including enhancing the public realm along key corridors like Broadway.

Overall Guiding Principles

- Support Reconciliation with First Nations and Urban Indigenous Peoples:
- Foster a Robust and Diverse Economy

Guiding Principles for Diverse and Distinctive Neighborhoods

- Support Affordable, Diverse, Equitable and Inclusive Complete Neighborhoods
- Encourage Contextual Design
- Recognize and Enhance the Area's Distinctive Neighborhoods and Places

Guiding Principles for Transportation, Streets and Public Spaces

- Enhance Broadway as a Great Street
- Provide and Support Healthy Transportation Options
- Create and Enhance Parks and Public Spaces

2.2.2 Storefront Annual Report

The annual storefront survey conducted by the City of Vancouver has provided a valuable foundation for this research. Beginning in 2020, the city launched this inventory in response to recommendations from the 2019 Retail-Commercial District Small Business Study. The goal was to systematically track storefront uses along the city's high streets and commercial clusters.

This ongoing annual survey has allowed the city to collect detailed data on the composition and health of local shopping areas. Key concepts and metrics captured in the storefront inventory include the classification of business types occupying ground-floor commercial units, analysis of vacancy rates and "healthy" occupancy levels, as well as tracking changes in the mix of uses and business turnover over time.

By building this comprehensive storefront dataset, the city has gained important insights into the dynamics of its commercial districts. This data has now been leveraged to inform the identification and analysis of high street environments across Vancouver, as outlined in the previous section.

The annual storefront report serves as an invaluable source for understanding the current state of the city's retail landscape. Findings from this ongoing monitoring effort have helped shape the scope and approach of the high street research, allowing the exploration of these critical commercial corridors in greater depth.

3. Understanding high streets in Vancouver

3.1 Definitions and clarifications

3.1.1 High streets

High Streets + Commercial Hubs are mainly mixed-use, with street-level shops and residential or office buildings above. Many of these areas serve important social, cultural, and economic functions and will be expanded and enhanced in the future. Planning for these areas often requires balancing the need for goods movement with the need for walking, biking, transit service, and public space.

High Streets + Commercial Hubs were identified in a consultant study as areas with existing retail-commercial space. Through the Vancouver Plan, the city will seek opportunities to expand these areas over the long term.

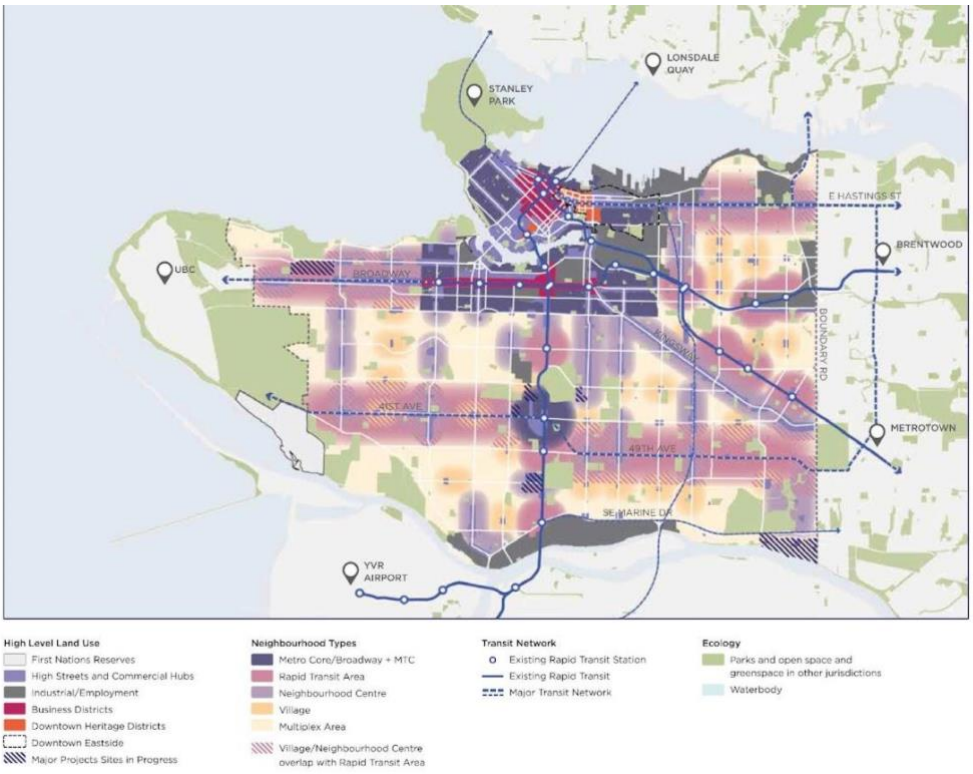

Figure 3 Land use strategy map showing High Streets and Commercial Hubs
(Source: Vancouver Plan)

3.1.2 Village

The "villages" in the Broadway Policy Plan refer to cherished neighborhood shopping areas characterized by distinctive, low-rise structures. These villages feature a variety of local businesses, including shops, restaurants, small offices, and lively sidewalks, creating walkable spaces for shopping, working, and recreation both day and night.

The Broadway Policy Plan specifically highlights the West 4th, South Granville, and Main Street villages as key local business areas and social gathering spots. To minimize redevelopment pressures on existing

businesses, these villages will undergo incremental changes, with building heights generally limited to four to six stories. Enhancements such as active ground-floor commercial uses and public realm improvements—like wider sidewalks and seating areas—will foster pedestrian interest and create vibrant streetscapes. West 4th, despite spanning only two blocks, is included in this inventory due to its unique character and significance, ensuring its distinctive nature is acknowledged and preserved within the broader policy framework.

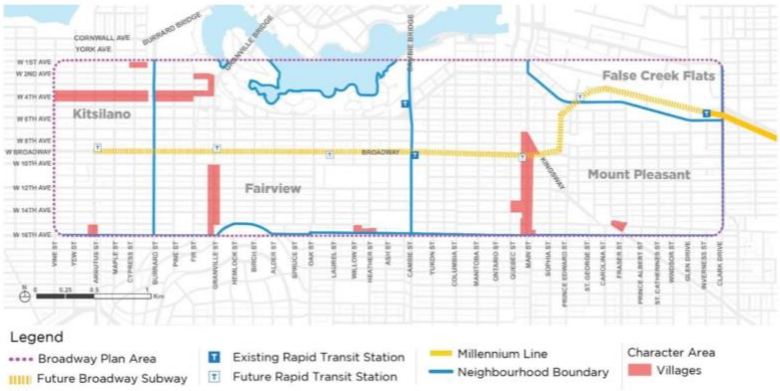

Figure 4 Shopping villages
(Source: Broadway Plan)

4.1.3 Business Improvement Areas

Business Improvement Areas (BIAs) are specially funded and managed business districts in Vancouver. There are currently 22 BIAs in the city, representing thousands of commercial property owners and local businesses.

Figure 5 Business Improvement Areas
(Source: City of Vancouver Storefronts Report 2023)

BIAs are non-profit organizations run by groups of property owners and business tenants. Their goal is to promote and improve their respective business districts through activities focused on:

- Business development and promotion
- Tourism attraction
- Safety and security
- Street beautification and infrastructure

Many BIAs in Canada have formed merchant associations, which are volunteer groups of dedicated local business owners working to enhance their commercial district. The BIA structure provides greater resources, as all businesses and property owners within the BIA boundary are required to contribute to and benefit from the collective efforts.

3.1.4 Downtown and non-downtown areas

In our study, it is crucial not only to examine the definitions related to the high street itself but also to consider whether different areas exhibit unique characteristics, such as Downtown and Non-downtown areas. Downtown is Vancouver's primary job center and features zoning that is predominantly Comprehensive Development, Residentia, and Commercial, which contrasts with the largely residential zoning found in most of Vancouver. Additionally, high streets located in Downtown tend to be more average in length compared to those in other areas.

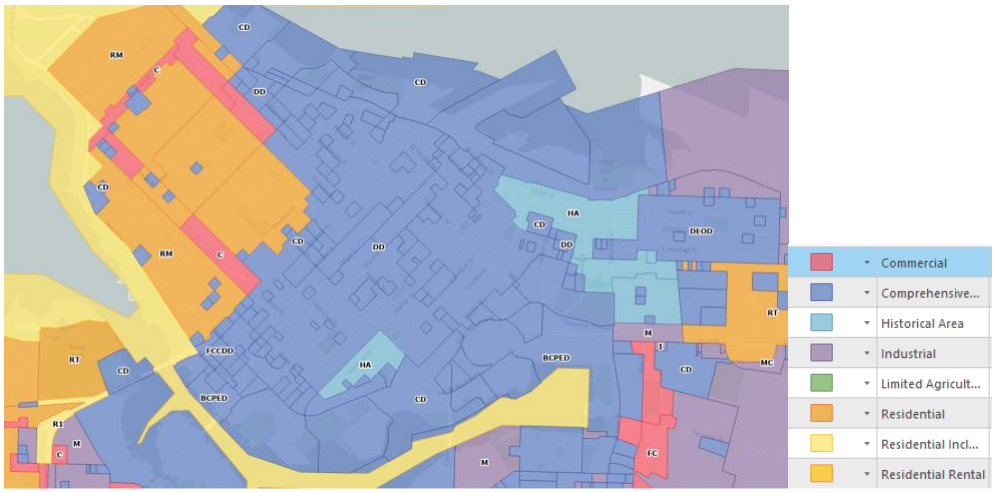

Figure 6 Zoning in Downtown area
(Source: VanMap, Zoning)

4.1.5 Ethnocultural community areas (according to Vancouver Plan)

The inventory should pay particular attention to areas that are identified as Ethno-cultural Community Areas. These are commercial districts or neighborhoods that have a concentration of cultural heritage assets, services, and/or businesses catering to or owned by specific racialized ethnic communities, such as Black and African descent, Punjabi, Chinese, or Vietnamese communities, as well as white ethnic communities like Greek, Italian, or Ukrainian.

The City has issued formal recognition or apologies for historic and contemporary forms of legislative and municipal discrimination, erasure, and displacement affecting these Ethno-cultural Community Areas. As of 2022, the areas officially designated as such include Chinatown, Hogan's Alley, Punjabi Market, and Paueru-gai.

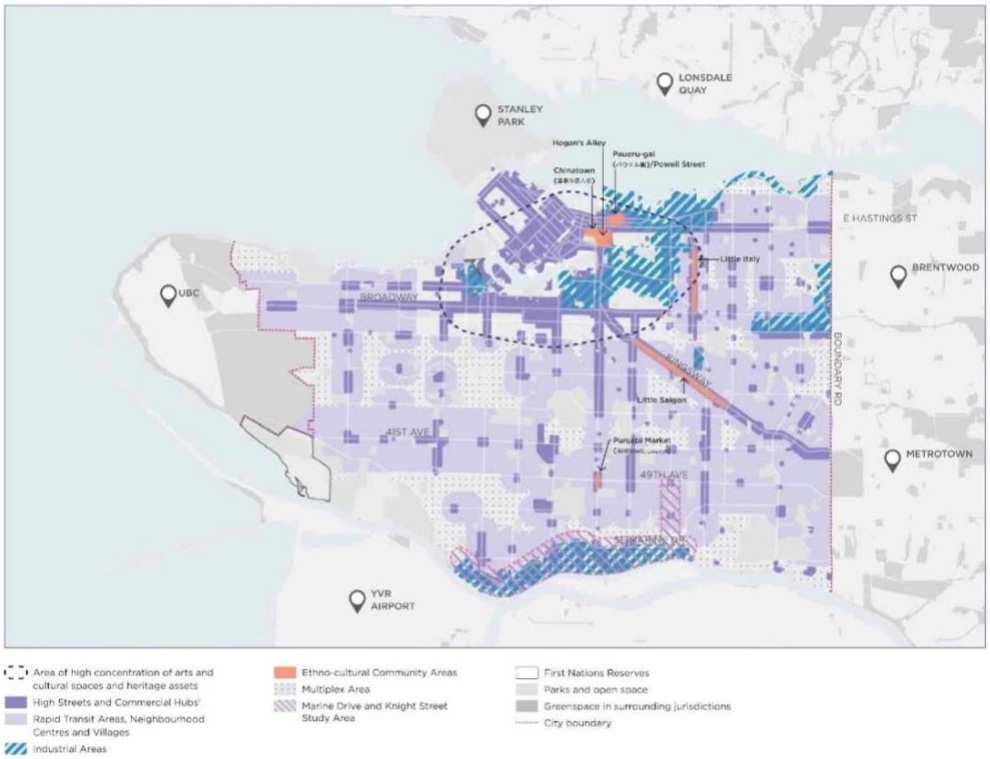

Figure 7 Areas where certain policies support arts, culture, and heritage
(Source: Vancouver Plan)

3.2 Utilization of the Information

Understanding and analyzing the above definitions, including High Streets, Villages, Business Improvement Areas, Downtown and Non-downtown areas, and Ethnocultural Community Areas, has provided a comprehensive framework for understanding the current state of high streets in Vancouver. By examining these concepts from spatial, historical, socioeconomic, and cultural perspectives, I have gained valuable insights into the unique characteristics and dynamics of these areas.

This foundational knowledge is instrumental in identifying, locating, selecting, and segmenting high streets for further study. It also aids in refining the criteria for evaluating high streets from various angles, ensuring a more nuanced and accurate assessment. This approach helps to capture the multifaceted nature of high streets, considering their diverse roles and impacts within the urban fabric of Vancouver.

4. Data collection

4.1 The dimensions of data collection

In the initial stages of this inventory, the need for a comprehensive and integrative approach to data collection and analysis was recognized. Faced with the complexity of the urban environment and the multifaceted nature of public space, a guiding framework was sought that could capture the various dimensions influencing the performance and quality of the high street public realm. To this end, the Urbanism Integrated Knowledge Paradigm was adopted as the primary analytical model for this study.

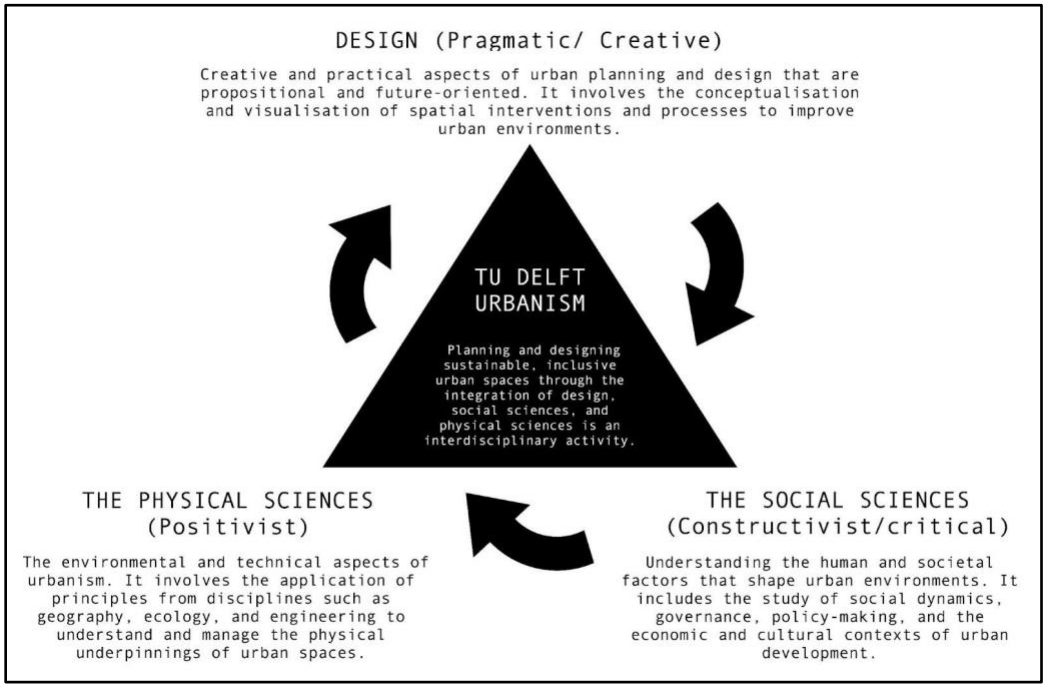

Figure 8 Integrated Knowledge Paradigm
(Source: Rocco, R. (2024). The TU Delft Urbanism Integrated Knowledge Paradigm. Zenodo.)

Spatial Dimension: the physical, design-oriented, and configurational aspects of the urban environment. This includes factors such as the layout, form, and distribution of buildings, streets, public spaces, and other physical elements that shape the built environment.

Table 1 Definition of features of Spatial Dimension

Feature	**Definition**
Number of blocks	The total count of blocks that make up a particular segment.
Road width	The measurement of the distance across the road from curb to curb.
Sidewalk width	The measurement of the distance across the sidewalk from edge to edge.
Patio	The situation of outdoor seating areas associated with cafés or restaurants, typically extending into the sidewalk or street.

Number of bus stops	The number of designated locations where buses pick up and drop off passengers. Rapid Bus Stops: Designated locations for high-frequency, limited-stop bus services designed to move quickly across the city.
Number of rapid bus stops	The number of designated locations for high-frequency, limited-stop bus services designed to move quickly across the city.
Number of skytrain stations	The number of transit stations for Vancouver's automated rapid transit system, providing metro-style rail services.
Number of public bike share stations	The number of locations where public bicycles are available for rent and return, encouraging cycling as a mode of transportation.
Number of priority Missing Curb Ramp	The number of locations identified as needing curb ramps to improve accessibility for those with mobility impairments.
Number of bench	The number of seating installed for pedestrians to rest.
Number of drinking fountains	The number of public fixtures providing free drinking water for pedestrians.
MRN (Major Road Network)	If there are roads designated for supporting regional transportation and goods movement along the segments.
Bikelane	If there are designated lanes on the roadway of the high street segment specifically for bicycle use.

Environmental Dimension: the ecological, technical, and resource-related aspects of the urban system. This involves examining the natural and built elements that contribute to the environmental performance, sustainability, and resilience of the urban landscape.

Table 2 Definition of features of Environmental Dimension

Feature	**Definition**
Gardens	If there are areas designated for growing plants, flowers, and vegetables, which can be public or private.
GRI	If there are systems and structures designed to manage rainwater runoff sustainably, often incorporating vegetation and soil.
Park	If there are publicly accessible green spaces designated for recreation and leisure activities.
Urban forest canopy coverage	How is the proportion of an area covered by the tree canopy, contributing to ecological and aesthetic benefits.

Socio-economic Dimension: the human and societal factors that influence the urban environment. This includes the study of social dynamics, governance, policy-making, economic activities, and cultural contexts that collectively shape the development and use of urban spaces.

Table 3 Definition of features of Socio-economic Dimension

Feature	Definition
Number of Automotive Goods & Services storefronts	the number of storefronts of Gas stations, Tire and Lube Services, and Vehicle Rentals.
Number of Comparison Goods storefronts	the number of storefronts of Thrift and Second-hand Merchandise, Sporting Goods, Pets & Pet Supplies, Appliances, Furniture/Home Furnishings, Bookstores, Bicycle Shops, Home Improvement, Art Gallery/Framing, Clothing Apparel, Toys, and Hobbies.
Number of Convenience Goods storefronts	the number of storefronts Liquor Stores, Cannabis Stores, Supermarket, Grocery, Pharmacy, Convenience Store, Bakery, Florist, Butchers, Health & Beauty Items, and Pharmacies.
Number of Service Commercial storefronts	the number of storefronts of Barbershops, Beauty Salons, Travel Agencies, Physios, Massage, Acupuncture, Chiropractors, Storefront Medical and Dental, Insurance, Realtor, Investment Brokers, Financial Services, Banks, Credit Unions, Accountants, Legal Services, and Notaries.
Number of Food & Beverage storefronts	the number of storefronts of all food and beverage establishments, such as restaurants, cafes, bars, pubs, and specialty food stores. It encompasses both sit-down and take-out dining options.
Number of Entertainment and Leisure storefronts	the number of storefronts of businesses and activities focused on recreation, entertainment, and leisure. Examples include theaters, cinemas, fitness centers, art galleries, and other cultural/artistic venues.
Number of Non-retail storefronts	the number of storefronts of businesses and services that are not primarily focused on retail sales. This can include professional offices, personal services (e.g., hair salons, medical clinics), financial institutions, and other non-commercial uses.
Number of Unknown & vacant & vacant UC storefronts	the ratio of storefronts where the business type is unknown, or the space is currently vacant or under construction. It represents commercial spaces that are not actively being used for retail, food/beverage, or other identified purposes.

4.2 Limitation of the data

The data collected across spatial, environmental, and socio-economic dimensions provides a comprehensive framework, but faces several limitations:

4.2.1 Data accessibility

Some desired data, particularly commercial performance and community engagement metrics may not be publicly available. Accessing this would require partnerships with local organizations, which was beyond the scope of this study.

4.2.2 Socio-economic nuances

Socio-economic factors, such as community composition and governance, have qualitative and context-specific elements that are challenging to capture through quantitative data alone. In-depth stakeholder engagement would be required to gain a richer understanding.

4.2.3 Limited primary research

The inability to undertake extensive surveys and interviews with local stakeholders is a key limitation. Gaining insights into public perceptions and priorities would have required significant time and resources, which were not feasible within the project constraints.

Given these limitations, the data inventory should be viewed as a starting point. Addressing the gaps through further research and stakeholder engagement could yield valuable insights to inform more holistic and responsive placemaking strategies.

5. Inventory of high streets

5.1 The distribution of high streets

Data from the storefronts source in the Open Vancouver database was mapped to identify the spatial distribution of storefronts across the city. Street segments with consecutive storefronts covering a distance of at least 2 city blocks were located. Additionally, commercial streets defined in policy plans were included, even if they had less than 2 consecutive storefronts, such as W 16th Ave 600-700 block. All these qualifying street segments were counted and designated as "high streets".

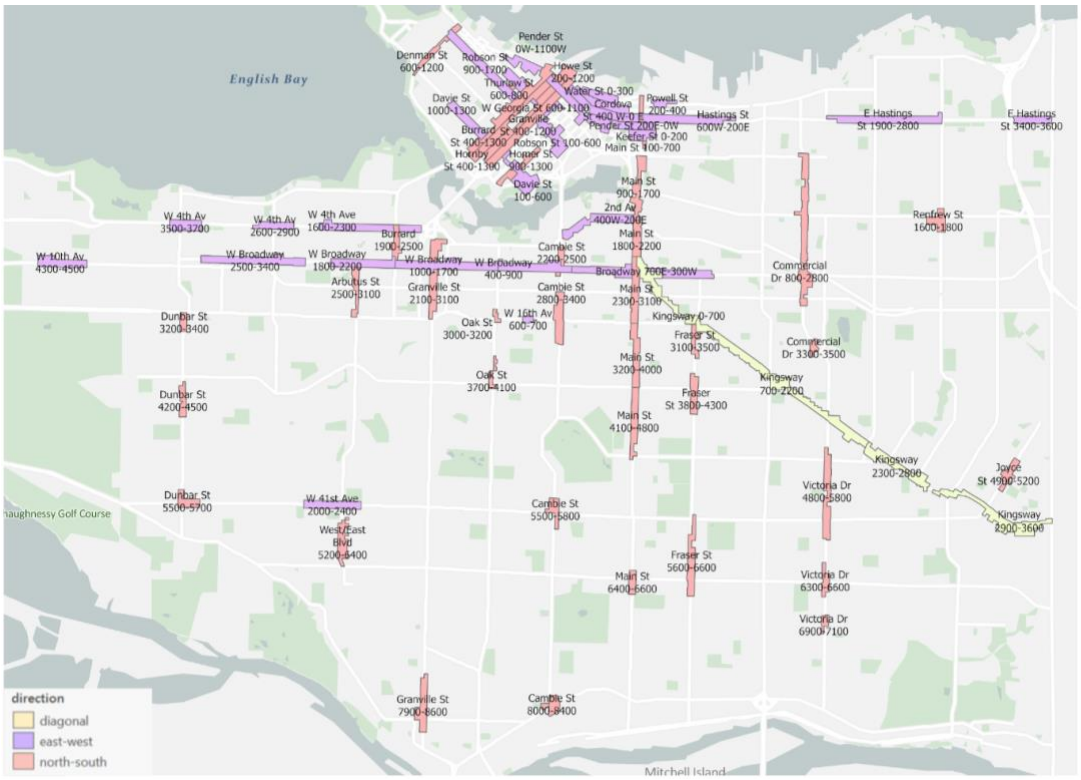

Figure 9 The high street segmentations are based on land use and policy boundaries

5.2 The list of high streets

Table 4 The list of high streets

Name	if DT area	Direction	# of blocks
W 16th Av 600-700	no	east-west	2
W 10th Av 4300-4500	no	east-west	3
Dunbar St 5500-5700	no	north-south	3
Cambie St 8000-8400	no	north-south	3
E Hastings St 3400-3600	no	east-west	3
W 4th Av 3500-3700	no	east-west	3
Commercial Dr 3300-3500	no	north-south	3
Dunbar St 3200-3400	no	north-south	3
Main St 6400-6600	no	north-south	3

Oak St 3000-3200	no	north-south	3
Renfrew St 1600-1800	no	north-south	3
Victoria Dr 6900-7100	no	north-south	3
Keefer St 0-200	yes	east-west	3
Thurlow St 600-800	yes	north-south	3
Powell St 200-400	yes	east-west	3
Cambie St 2200-2500	no	north-south	4
Cambie St 5500-5800	no	north-south	4
Joyce St 4900-5200	no	north-south	4
Dunbar St 4200-4500	no	north-south	4
W 4th Av 2600-2900	no	east-west	4
Victoria Dr 6300-6600	no	north-south	4
Pender St 200E-0W	yes	east-west	4
Davie St 1000-1300	yes	east-west	4
Water St 0-300	yes	east-west	4
Dunsmuir St 600-900	yes	east-west	4
Broadway 700E-300W	no	east-west	5
W Broadway 1800-2200	no	east-west	5
W 41st Ave 2000-2400	no	east-west	5
Main St 1800-2200	no	north-south	5
Oak St 3700-4100	no	north-south	5
Fraser St 3100-3500	no	north-south	5
Cordova St 400 W-0 E	yes	east-west	5
Homer St 900-1300	yes	north-south	5
W Broadway 400-900	no	east-west	6
Kingsway 2300-2800	no	diagonal	6
Fraser St 3800-4300	no	north-south	6
West/East Blvd 5200-6400	no	north-south	6
Burrard 1900-2500	no	north-south	6
W Georgia St 600-1100	yes	east-west	6
Robson St 100-600	yes	east-west	6
Davie St 100-600	yes	east-west	6
Cambie St 2800-3400	no	north-south	7
Arbutus St 2500-3100	no	north-south	7
Main St 100-700	yes	north-south	7
Denman St 600-1200	yes	north-south	7
Kingsway 0-700	no	diagonal	8
2nd Av 400W-200E	no	east-west	8
Main St 4100-4800	no	north-south	8
W Broadway 1000-1700	no	east-west	8

Kingsway 2900-3600	no	diagonal	8
W 4th Ave 1600-2300	no	east-west	8
Granville St 7900-8600	no	north-south	8
Main St 2300-3100	no	north-south	9
Main St 3200-4000	no	north-south	9
Main St 900-1700	no	north-south	9
Granville St 400-1200	yes	north-south	9
Robson St 900-1700	yes	east-west	9
W Broadway 2500-3400	no	east-west	10
E Hastings St 1900-2800	no	east-west	10
Burrard St 400-1300	yes	north-south	10
Hornby St 400-1300	yes	north-south	10
Granville St 2100-3100	no	north-south	11
Fraser St 5600-6600	no	north-south	11
Victoria Dr 4800-5800	no	north-south	11
Howe St 200-1200	yes	north-south	11
Pender St 0W-1100W	yes	east-west	12
Kingsway 700-2200	no	diagonal	16
Hastings St 600W-200E	yes	east-west	16
Commercial Dr 800-2800	no	north-south	21

5.3 Profiling high street examples

West 4th Avenue (1600 - 2300) is one of the shortest segments among the 69 identified high street segments, spanning only two blocks, but its uniqueness and importance warrant its inclusion in the study. Functioning as the neighborhood high street, West 4th Village is a well-frequented Kitsilano shopping district for both residents and tourists, owing to its variety of small and local enterprises, including shops, service providers, eateries, and cafés, as well as its vibrant public life. The structures are typically low-rise, spanning 1-3 stories, and feature engaging street facades with large transparent windows, patios, and storefront displays. Recent developments are scarce and consist of both retail/service and mixed-use buildings (residential with retail/service on the ground floor).

Figure 10 Location and street view of W 4th Avenue, 1600 - 2300

The Burrard Street commercial district (400-1300 blocks) in downtown Vancouver stretches for approximately 10 blocks, making it a sizable shopping destination. This neighborhood is a treasure trove of unique stores, high-end fashion retailers, and invaluable services, offering a one-stop experience at the Waterfront Centre Shops. Conveniently situated near the financial district, hotels, and cruise terminal, the area attracts a steady flow of business professionals, locals, and visitors. With its mix of fashion, convenience services, and souvenirs, Burrard Street has become a popular shopping hub for those seeking to maximize their time in downtown Vancouver.

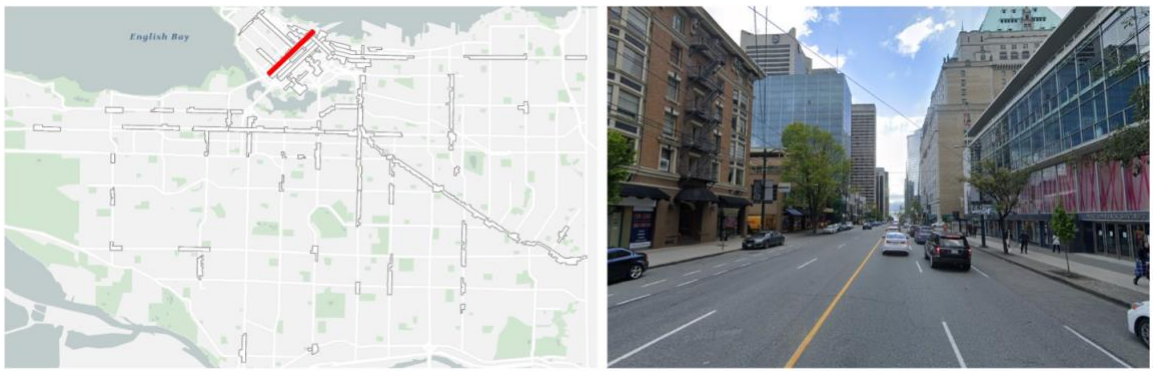

Figure 11 Location and street view of Burrard Street 400 - 1300

Situated along a heritage boulevard, the segment of Cambie Street (2800-3400) extends from West 12th to West 19th Avenue, making it a well-connected commercial district. With access to major transit like the 99 B-Line and Canada Line, Cambie Village is aptly known as the "Heart of Vancouver." The Cambie Village Business Association, comprising local property owners and merchants, organizes regular events featuring live music, including jazz and band performances, further enlivening this vibrant neighborhood.

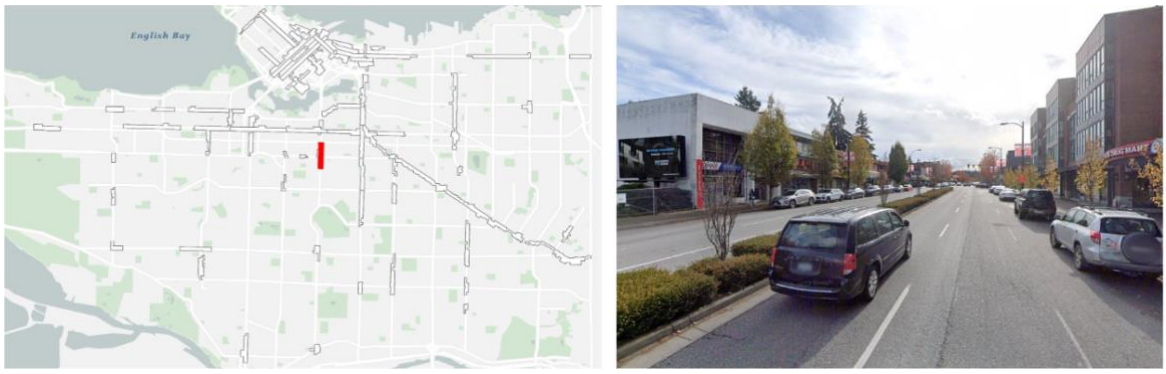

Figure 12 Location and street view of Cambie Street 2800-3400

6. Categorization based on function

6.1 Evaluation criteria

The evaluation is conducted based on the following criteria and their respective factors.

6.1.1 Criteria

When evaluating the **Retail Focus** of a given area, it is important to assess the concentration and variety of retail establishments. This includes

- Assess the concentration and variety of retail establishments.
- Evaluate the overall service capacity of the retail establishments.
- Assess the economic vitality through vacancy rates.

Regional Connectivity evaluation focuses on the convenience and accessibility for non-automobile users to reach the street.

- Examine the accessibility and convenience of public transit.
- Assess the integration with Major Road Network.
- Evaluate the availability, safety, and ease of use of cycling paths and amenities.

The **Public Realm** evaluation focuses on the comfort and amenity convenience for pedestrians while shopping, such as the comfort, facilities, and convenience.

- Assess the quality and availability of public spaces.
- Evaluate amenities such as parks, plazas, and pedestrian areas.
- Consider the aesthetic appeal and environmental sustainability of public spaces.

6.1.2 Data analysis

Data normalization and standardization are crucial steps in the data analysis process.

Percentage Transformation is transforming the original data into percentage form facilitates comparison across different metrics or values. For example, converting bus stops counts for each segment into the number of bus stops per block.

In the example provided, **Feature combination** is a common practice in data analysis, as it allows us to create new features from the original raw data that can more accurately describe the phenomenon being studied. These new features can enhance the performance of analytical models and lead to better insights. For example, calculating the Height-to-Width Ratio by combining height and width measurements is a form of feature combination.

Retail Focus

In evaluating the "retail focus" dimension of high streets, a total of 11 data indicators are involved. Among them, “Number of Blocks” is the primary objective data point that is directly collected, while 10 are secondary data points derived through analysis of the collected information.

Table 5 Definition of features of Retail Focus

No	Feature	Definition
1	**Number of Blocks**	the total count of blocks that make up a given segment.
2	**Automotive Goods & Services Storefronts Ratio**	the ratio of the specific business categories defined in 5.1.
3	**Comparison Goods Storefronts Ratio**	the ratio of the specific business categories defined in 5.1.
4	**Convenience Goods Storefronts Ratio**	the ratio of the specific business categories defined in 5.1.
5	**Service Commercial Storefronts Ratio**	the ratio of the specific business categories defined in 5.1.
6	**Food & Beverage Storefronts Ratio**	the ratio of the specific business categories defined in 5.1.
7	**Entertainment and Leisure Storefronts Ratio**	the ratio of the specific business categories defined in 5.1.
8	**Non-retail Storefronts Ratio**	the ratio of the specific business categories defined in 5.1.
9	**Unknown & vacant & vacant under construction Storefronts Ratio**	the ratio of the specific business categories defined in 5.1.
10	**Number of Business Categories**	the total count of distinct business types present along the high street.
11	**The standard deviation**	is a statistical measure that shows how much the different business categories vary across the various high street segments.

Regional Connectivity

The dimension evaluation involved a total of 6 data indicators. Of these, 2 are primary objective data points that are directly collected, while 4 are secondary data points derived through analysis of the collected information.

Table 6 Definition of features of Regional Connectivity

No	Feature	Definition
1	**Major Road Network (yes/no)**	whether the high street is located along a major vehicular thoroughfare.
2	**Public bike share stations (yes/no)**	the presence of public bike sharing stations along the street.

3	**Coverage of existing bike lane 200m buffer (yes/no)**	Specifies if bike lanes exist within 200 meters of the high street.
4	**Number of bus stops per block**	Counts the quantity of bus stops situated along each block of the high street.
5	**Number of rapid bus stops per block**	Counts the number of dedicated rapid transit bus stops per block of the high street.
6	**Number of Skytrain stations located within 400 meters**	Tallies the count of elevated rapid transit (Skytrain) stations within 400 meters of the high street.

Public Realm

This dimension is particularly complex, involving a total of 16 data indicators. Of these, 10 are primary objective data points that are directly collected, while 6 are secondary data points derived through analysis of the collected information.

Table 7 Definition of features of Public Realm

No	Feature	Definition
1	**Number of Blocks**	the total count of individual street segments that make up a given high street.
2	**Healthy Vacancy**	The 2020 Retail-Commercial District Small Business Study recommended storefront vacancy as an indicator of retail health. Specifically, the study identified 5-7% as the target range of healthy vacancies. Over 10% is described as unhealthy.
3	**BIA**	Indicates whether the high street is located within a designated Business Improvement Area.
4	**Median sidewalk width (in feet)**	Measures the typical width of the sidewalks along the high street.
5	**Road width (max) to Sidewalk width (max) ratio**	Compares the maximum road width to the maximum sidewalk width.
6	**Patio**	Denotes the presence or absence of outdoor dining patios along the high street.
7	**Gardens & GRIs (yes/no)**	Signifies if there are gardens or green infrastructure installations on the high street.
8	**Public Space Features (exclude parklet & community garden)**	Notes the availability of public amenities (excluding parklets and community gardens).
9	**Park (yes/no)**	Specifies if there is a public park located along the high street.
10	**Urban forest canopy coverage (%)**	Measures the percentage of the high street covered by tree canopy.
11	**Number of Priority Missing Curb Ramp Locations**	Counts the areas where curb ramps are lacking for accessibility.

12	**Street Height-to-width ratio**	Compares the building heights to the street widths. The research from Urban Design Compendium concludes that the optimal height-to-width ratio range is between 1:3 and 1:1.5. This ratio represents the most suitable proportions at the street scale.
13	**Number of benches per block**	Tallies the quantity of public seating along each block.
14	**Number of public washrooms (within 250 meters) per block**	Counts the availability of public restrooms within 250 meters per block.
15	**Number of drinking fountains per block**	Enumerates the number of public drinking water sources per block.
16	**Automotive Goods & Services Ratio**	indicates the pedestrian accessibility within the "Public Realm" dimension, as a higher ratio of gas stations, tire/lube services, and vehicle rentals suggests a less walkable environment along the high street.

6.2 The rationale behind categorizing data indicators

The classification of data indicators into primary and secondary, as well as their grouping into "Retail Focus," "Regional Connectivity," and "Public Realm" dimensions, serves key purposes. It provides clarity and organization by distinguishing directly collected data from derived metrics and offering a logical framework for analyzing high street aspects.

This approach also aids in identifying key drivers. Primary indicators like "Number of Blocks" likely directly shape high street character, while secondary data provides deeper insights into its composition and dynamics.

Furthermore, the multi-dimensional structure enables a comprehensive assessment, capturing the complex, interrelated factors that influence high street performance and vibrancy within the urban context.

The categorization and grouping of data indicators create a structured, transparent framework for thorough high street analysis and evaluation, facilitating the identification of key drivers of their success.

7. Evaluation

7.1 Multidimensional evaluation toolkit

The Multidimensional Evaluation Toolkit comprehensively assesses high street segments, recognizing their complex, multi-functional nature. It is based on three primary criteria—economic performance, social and cultural impact, and physical and environmental quality—each with multiple factors. Designed for adaptability, it allows for the addition or removal of research subjects, adjustment of data categories, and modification of weights, ensuring relevance and flexibility for future research and strategic planning.

7.1.1 Evaluation methods

First, we process and analyze the collected objective data, which includes both categorical and numerical variables. The categorical data consists solely of nominal data, such as the names of Business Improvement Areas (BIA). The numerical data includes both discrete and continuous variables. For instance, the number of bus stops per block is a discrete variable, while the ratio of a specific business category is continuous.

Next, we establish the scoring rules. Since many data points involve the value 0, to distinguish between the presence and absence of a particular element, we assign a score of 0 to values of 0. For nominal data, any non-zero value is assigned a score of 5. For the majority of discrete and continuous data, we divide the data into value intervals based on the distribution and assign scores from 1 to 5.

It is important to note that for height-to-width ratio and vacancy ratio, we refer to relevant literature to determine a specific interval as the "best" evaluation range, assigning it a score of 5. Data points that are greater than or less than this specific interval are still scored according to the principle of dividing the data into value intervals, assigning scores from 1 to 4.

After assigning the scores as described above, the scores for each factor are aggregated to obtain the total scores for each criterion. For each segment:

- **Aggregate scores**: Sum the scores of all factors under each criterion to get the total score for that criterion.
- **Standardization**: Convert the total score for each criterion into a standardized score out of 100. This is done by dividing the total score by the maximum possible score for that criterion (which is the number of factors multiplied by 5) and then multiplying by 100.

$$Standardized\ Score\ = \left(\frac{Total\ Score}{Maximum\ Possible\ Score}\right) \times 100$$

Where:

- Maximum Possible Score for Regional Connectivity = 55
- Maximum Possible Score for Public Realm = 68
- Maximum Possible Score for Retail Focus = 49

After normalization, the total score for each segment is obtained by summing the normalized scores of all three criteria. To understand the variation in performance across the criteria, the standard deviation of the three criteria scores for each segment is calculated.

7.1.2 Segment classification

Due to the large number of segments, classification is necessary to draw more manageable and meaningful conclusions. The segments are ranked based on their total scores in descending order and divided into three equal groups:

Rank 1	**Total score is high**
Rank 2	**Total score is medium**
Rank 3	**Total score is low**

Similarly, the standard deviations are ranked in ascending order:

Rank 1	**STDEA is low**
Rank 2	**STDEA is medium**
Rank 3	**STDEA is high**

7.2. Evaluation results

Table 8 Evaluation results of 69 segments

Segment	**if DT**	**Criteria**				**Standard Deviation**	**Rank**	
		score of retail focus (max 100)	**score of public realm (max 100)**	**score of regional connectivity (max 100)**	**Total score**		**Total score Categorize**	**STDEA categorize**
2nd Av 400W-200E	no	56	33	40	190.57	24.44	2	2
Arbutus St 2500-3100	no	33	40	37	180.76	14.52	2	1
Broadway 700E-300W	no	42	59	90	167.50	19.42	1	3
Burrard 1900-2500	yes	40	29	37	165.00	21.79	2	1
Burrard St 400-1300	yes	44	41	53	161.14	14.24	2	1
Cambie St 2200-2500	no	40	43	53	158.33	12.51	2	1
Cambie St 2800-3400	no	44	58	53	156.14	8.19	1	1
Cambie St 5500-5800	no	31	31	60	156.06	18.67	2	3
Cambie St 8000-8400	no	42	41	50	154.47	7.11	2	1

Commercial Dr 3300-3500	no	31	45	17	153.26	5.69	3	2
Commercial Dr 800-2800	no	53	68	20	151.82	9.11	2	3
Cordova St 400 W-0 E	yes	38	60	40	148.64	18.23	2	2
Davie St 100-600	yes	36	60	47	147.27	1.57	2	2
Davie St 1000-1300	yes	44	54	40	145.23	7.28	2	1
Denman St 600-1200	yes	44	54	37	143.03	11.85	2	2
Dunbar St 3200-3400	no	20	49	23	141.74	18.61	3	3
Dunbar St 4200-4500	no	38	49	20	140.57	10.34	2	2
Dunbar St 5500-5700	no	38	45	50	140.23	24.31	2	1
Dunsmuir St 600-900	yes	38	35	60	139.70	20.35	2	2
E Hastings St 1900-2800	yes	42	60	50	138.22	6.40	1	2
E Hastings St 3400-3600	no	33	40	53	138.18	12.11	2	2
Fraser St 3100-3500	no	45	38	3	137.42	14.50	3	3
Fraser St 3800-4300	no	45	40	3	137.39	7.12	3	3
Fraser St 5600-6600	no	44	51	7	135.83	7.09	3	3
Granville St 2100-3100	no	33	55	40	134.70	9.42	2	2
Granville St 400-1200	yes	40	65	53	134.05	8.59	1	2
Granville St 7900-8600	no	36	48	20	133.64	5.06	3	2
Hastings St 600W-200E	no	40	78	50	133.18	5.93	1	3
Homer St 900-1300	yes	45	48	23	133.18	13.61	2	2
Hornby St 400-1300	yes	45	40	47	133.07	4.90	2	1
Howe St 200-1200	yes	44	48	70	132.12	3.55	1	2
Joyce St 4900-5200	no	42	43	30	129.85	10.18	2	1
Keefer St 0-200	yes	29	63	37	128.86	12.20	2	3
Kingsway 0-700	no	53	53	40	128.26	17.52	2	1
Kingsway 2300-2800	no	36	45	23	127.73	11.36	3	2

Kingsway 2900-3600	no	44	48	30	126.86	13.48	2	2
Kingsway 700-2200	no	45	33	23	126.63	7.17	3	2
Main St 100-700	no	29	55	53	126.55	4.95	2	2
Main St 1800-2200	no	27	46	53	126.06	10.45	2	2
Main St 2300-3100	no	44	50	40	124.05	4.06	2	1
Main St 3200-4000	no	38	55	37	122.35	5.11	2	2
Main St 4100-4800	no	44	44	37	122.16	16.70	2	1
Main St 6400-6600	no	33	48	7	121.63	5.20	3	3
Main St 900-1700	no	35	44	43	121.14	9.19	2	1
Oak St 3000-3200	no	33	35	17	116.29	13.40	3	2
Oak St 3700-4100	no	40	35	20	114.32	7.03	3	2
Pender St 0W-1100W	yes	47	50	50	113.75	16.97	2	1
Pender St 200E-0W	yes	31	68	43	111.48	19.75	2	3
Powell St 200-400	yes	33	59	20	109.39	3.64	2	3
Renfrew St 1600-1800	no	33	28	20	106.93	14.54	3	1
Robson St 100-600	yes	49	58	47	106.14	13.33	1	1
Robson St 900-1700	yes	42	59	40	105.42	5.78	2	2
Thurlow St 600-800	yes	35	49	43	104.70	10.91	2	1
Victoria Dr 4800-5800	no	40	53	7	103.86	13.83	3	3
Victoria Dr 6300-6600	no	35	36	7	101.55	23.85	3	3
Victoria Dr 6900-7100	no	22	38	3	101.29	11.11	3	3
W 10th Av 4300-4500	no	33	70	53	100.49	11.68	1	3
W 16th Av 600-700	no	44	46	37	99.17	23.69	2	1
W 41st Ave 2000-2400	no	36	70	33	95.00	10.41	2	3

W 4th Av 2600-2900	no	44	43	20	92.58	14.17	2	2
W 4th Av 3500-3700	no	31	46	23	92.08	15.73	3	2
W 4th Ave 1600-2300	no	40	54	20	88.79	22.91	2	3
W Broadway 1000-1700	no	38	38	47	86.89	20.68	2	1
W Broadway 1800-2200	no	44	35	70	86.70	11.04	1	3
W Broadway 2500-3400	no	44	53	60	86.29	22.38	1	2
W Broadway 400-900	no	40	45	80	84.39	9.99	1	3
W Georgia St 600-1100	yes	49	55	77	80.23	6.40	1	2
Water St 0-300	yes	36	55	43	77.46	16.61	2	2
West/East Blvd 5200-6400	no	25	41	20	62.65	17.10	3	2

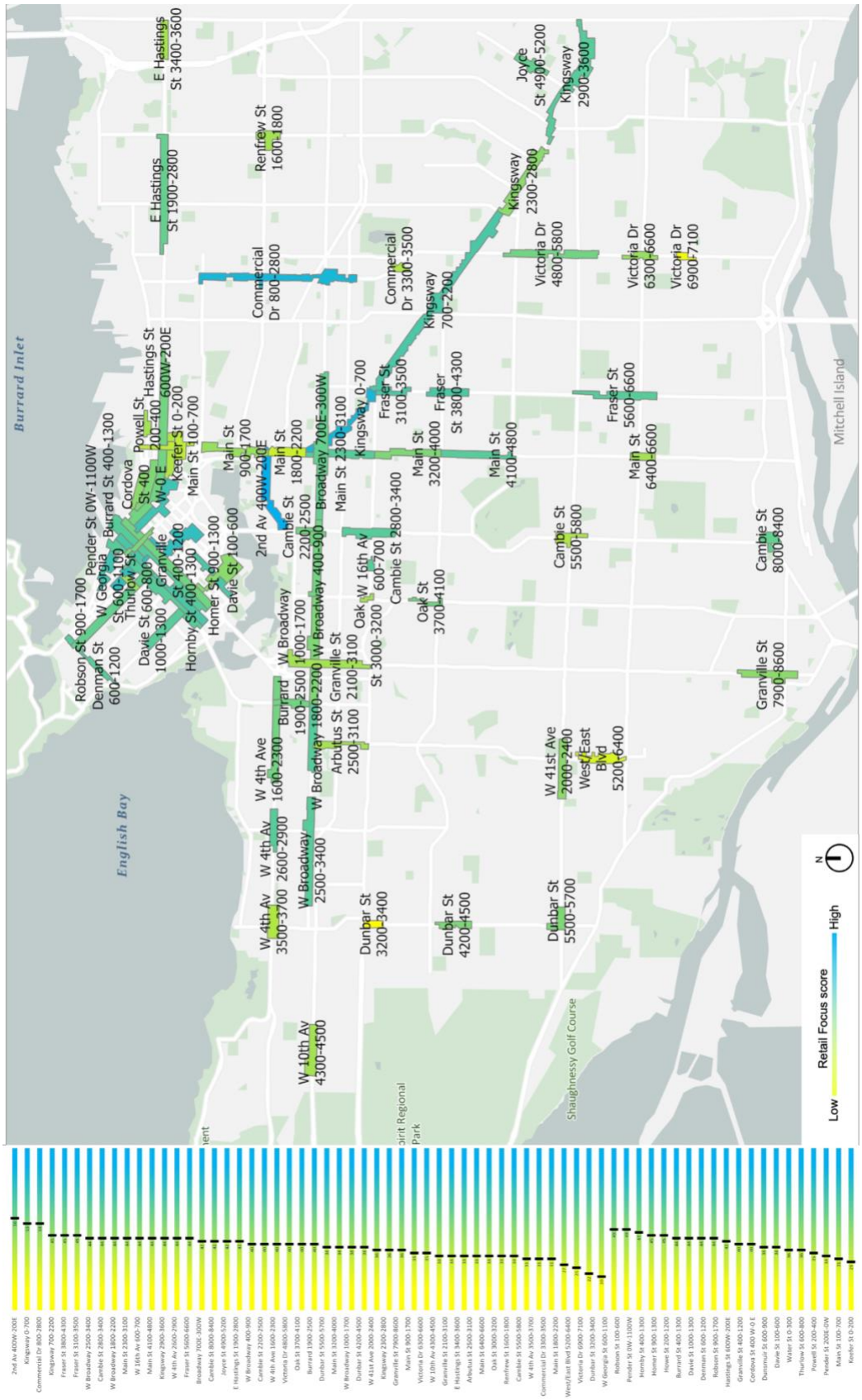

Figure 13 Retail Focus evaluation results for downtown and other areas

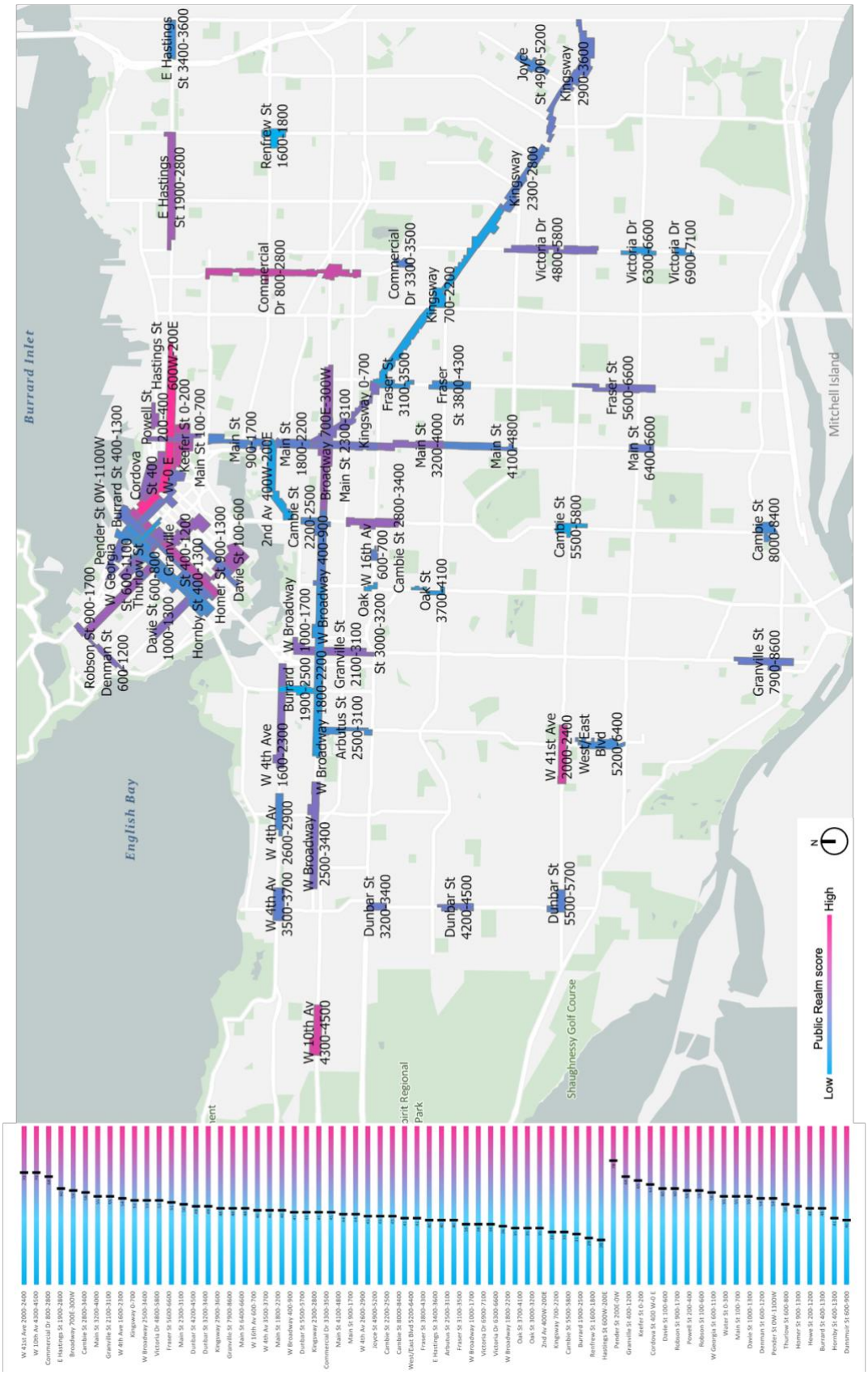

Figure 14 Public Realm evaluation results for downtown and other areas

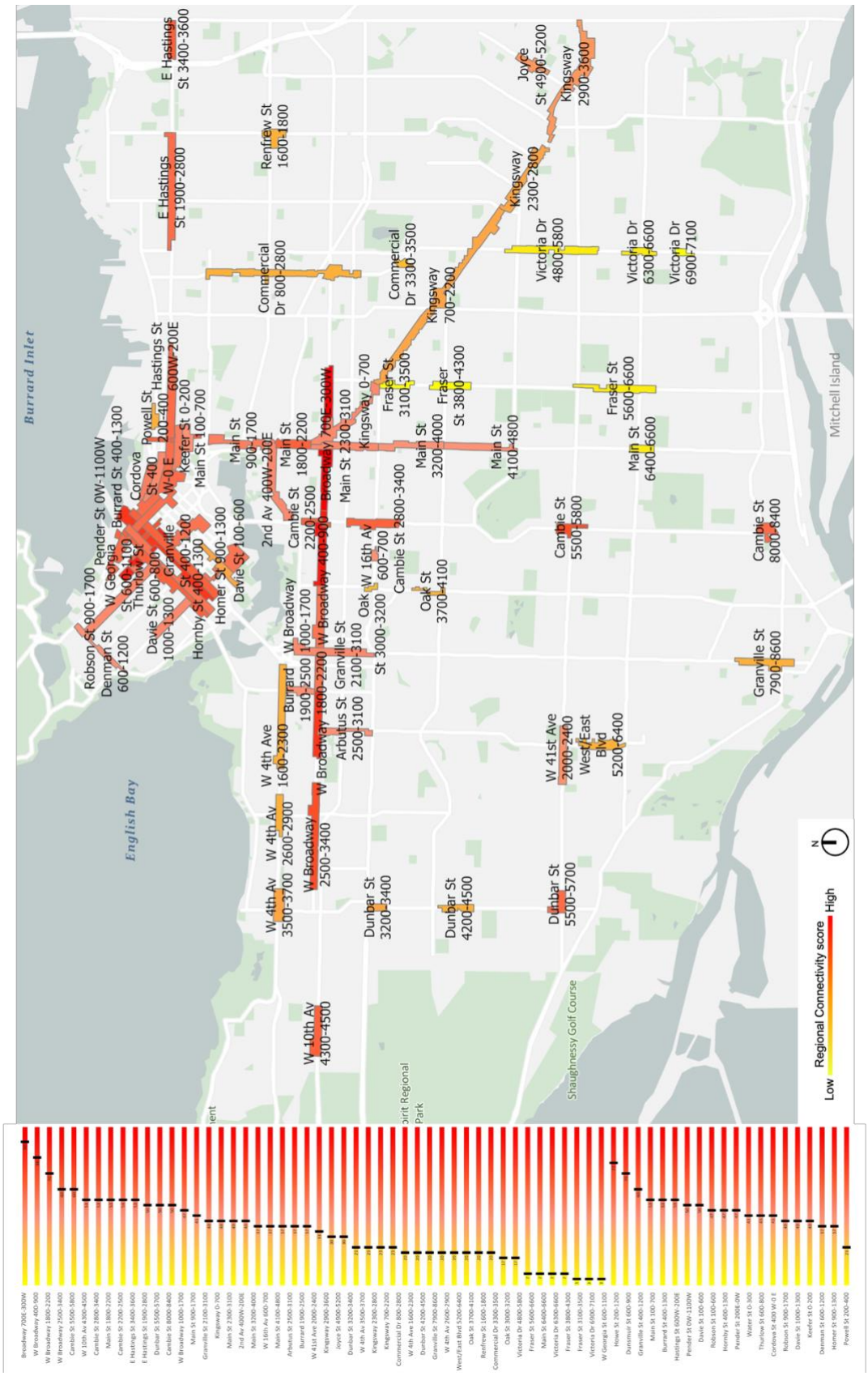

Figure 15 Regional Activity evaluation results for downtown and other Areas

8. Conclusions

8.1 Answering the main questions

Question 1 - Where are the high streets in Vancouver?

Based on the data collection and inventory work, the answer to the question has been well-documented through the use of a map and a list.

Question 2 - What are the strengths and challenges of these high street environments?

To answer this question, further analysis of the evaluation results is required to conclude.

8.2 Key findings

8.2.1 Comprehensive performance

Table 9 Segments of the Total Score Categorization that are classified as "Rank 1"

Name	score of retail focus (max 100)	score of public realm (max 100)	score of regional connectivity (max 100)	Total score	Standard Deviation	Total score Categorization	STDEA Categorization
Broadway 700E-300W	42	59	90	190.57	24.44	1	3
W Georgia St 600-1100	49	55	77	180.76	14.52	1	2
Hastings St 600W-200E	40	78	50	167.50	19.42	1	3
W Broadway 400-900	40	45	80	165.00	21.79	1	3
Howe St 200-1200	44	48	70	161.14	14.24	1	2
Granville St 400-1200	40	65	53	158.33	12.51	1	2
W Broadway 2500-3400	44	53	60	156.14	8.19	1	2
W 10th Av 4300-4500	33	70	53	156.06	18.67	1	3
Cambie St 2800-3400	44	58	53	154.47	7.11	1	1
Robson St 100-600	49	58	47	153.26	5.69	1	1
E Hastings St 1900-2800	42	60	50	151.82	9.11	1	2
W Broadway 1800-2200	44	35	70	148.64	18.23	1	3

Based on the data in the table, the following key findings can be drawn regarding the comprehensive performance of the highest-ranked segments:

Segments with the highest total scores performed exceptionally well:

The top-ranked segments demonstrated strong performance across all evaluation criteria, particularly excelling in regional connectivity. For example, Broadway 700E-300W and W Broadway 400-900 scored 90 and 80, respectively, in regional connectivity, indicating excellent transportation and connectivity.

Quality of public space significantly impacts overall scores:

Segments with high public realm scores, such as Hastings St 600W-200E and W 10th Av 4300-4500, also performed well overall. This suggests that the planning and quality of public spaces play a crucial role in the overall attractiveness and functionality of a segment.

There is considerable variation in retail focus scores:

While all these segments rank high in total scores, their retail focus scores vary significantly. For instance, W Georgia St 600-1100 scored 49 in retail focus, whereas W 10th Av 4300-4500 scored only 33. This indicates that even with differences in retail focus, other factors like public space and regional connectivity can substantially enhance a segment's overall score.

Segments with lower standard deviations exhibit more balanced performance:

Among the top-ranked segments, those with lower standard deviations, such as Robson St 100-600 and Cambie St 2800-3400, show more balanced performance across all evaluation criteria. These segments do not have significant weaknesses in retail focus, public realm, or regional connectivity.

High-scoring segments possess diverse strengths:

High-scoring segments do not rely on a single strength. For example, Granville St 400-1200 has a high score in the public realm, while Broadway 700E-300W excels in regional connectivity. This indicates that segments with high total scores typically perform well in multiple areas rather than depending on a single factor.

These findings highlight the excellent performance of high-scoring segments across multiple criteria, particularly in regional connectivity and public space quality, while also emphasizing the diversity in retail focus.

8.2.2 Balanced development

Table 10 Segments of the STDEA Categorization that are classified as "Rank 1"

Name	score of retail focus (max 100)	score of public realm (max 100)	score of regional connectivity (max 100)	Total score	Standard Deviation	Total score Categorization	STDEA Categorization
Cambie St 2800-3400	44	58	53	154.47	7.11	1	1
Robson St 100-600	49	58	47	153.26	5.69	1	1
Pender St 0W-1100W	47	50	50	147.27	1.57	2	1
Kingsway 0-700	53	53	40	145.23	7.28	2	1
Burrard St 400-1300	44	41	53	138.22	6.40	2	1
Davie St 1000-1300	44	54	40	137.39	7.12	2	1
Cambie St 2200-2500	40	43	53	135.83	7.09	2	1
Main St 2300-3100	44	50	40	133.64	5.06	2	1
Dunbar St 5500-5700	38	45	50	133.18	5.93	2	1
Cambie St 8000-8400	42	41	50	133.07	4.90	2	1

Hornby St 400-1300	45	40	47	132.12	3.55	2	1
Thurlow St 600-800	35	49	43	126.63	7.17	2	1
W 16th Av 600-700	44	46	37	126.55	4.95	2	1
Main St 4100-4800	44	44	37	124.05	4.06	2	1
W Broadway 1000-1700	38	38	47	122.35	5.11	2	1
Main St 900-1700	35	44	43	121.63	5.20	2	1
Joyce St 4900-5200	42	43	30	114.32	7.03	2	1
Arbutus St 2500-3100	33	40	37	109.39	3.64	2	1
Burrard 1900-2500	40	29	37	105.42	5.78	2	1
Renfrew St 1600-1800	33	28	20	80.23	6.40	3	1

Based on the data in the table, the following key findings can be drawn regarding the balanced development of the highest-ranked segments:

Overall balanced scores but relatively moderate

While these segments exhibit minimal differences in scores across retail focus, public realm, and regional connectivity, indicating balanced performance, their total score ranks are predominantly 2. This suggests that these segments have no significant weaknesses but also lack standout strengths. For example, Pender St 0W-1100W has a standard deviation of 1.57 and a total score rank of 2.

Lack of significant advantages

Despite their balanced performance in various aspects, segments with a standard deviation rank of 1 do not show significant advantages in any particular area, which prevents them from achieving the highest total score ranks. For instance, Cambie St 2800-3400, despite its balanced scores and a standard deviation rank of 1, only achieves a total score rank of 2.

Excellent but not outstanding overall performance

The total score ranks of these segments indicate that their overall performance is excellent but not top tier. Although the differences in scores across various evaluation criteria are small, most of these segments rank 2 in total scores, showing that their overall performance is not outstanding. For example, Robson St 100-600 achieves a total score rank of 1, but this is an exception rather than the rule.

High scores in regional connectivity

Segments with a standard deviation rank of 1 generally have high scores in regional connectivity. For instance, Cambie St 2800-3400 and Robson St 100-600 score 53 and 47, respectively, in this category, indicating good transportation and connectivity, which contributes to their overall scores.

Good quality of public realm

Segments with a standard deviation rank of 1 also perform well in the public realm category. For example, Robson St 100-600 and Pender St 0W-1100W score 58 and 50, respectively, in the public realm, showing an advantage in planning and quality of public spaces.

In summary, segments with a standard deviation rank of 1 show balanced scores across retail focus, public realm, and regional connectivity, but their overall performance is relatively moderate. These segments do not have significant weaknesses, but they also lack standout strengths, leading to total score ranks that are mostly 2 rather than 1. This indicates that their comprehensive performance is excellent but not top-tier, characterized by balanced development.

8.2.3 Characteristics of high streets in the downtown

Table 11 Segments in Downtown area

Segment	score of retail focus (max 100)	score of public realm (max 100)	score of regional connectivity (max 100)	Total score	Standard Deviation	Total score Categorization	STDEA Categorization
W Georgia St 600-1100	49	55	77	180.76	14.52	1	2
Howe St 200-1200	44	48	70	161.14	14.24	1	2
Granville St 400-1200	40	65	53	158.33	12.51	1	2
Robson St 100-600	49	58	47	153.26	5.69	1	1
E Hastings St 1900-2800	42	60	50	151.82	9.11	1	2
Pender St 0W-1100W	47	50	50	147.27	1.57	2	1
Davie St 100-600	36	60	47	143.03	11.85	2	2
Pender St 200E-0W	31	68	43	141.74	18.61	2	3
Robson St 900-1700	42	59	40	140.57	10.34	2	2
Burrard St 400-1300	44	41	53	138.22	6.40	2	1
Cordova St 400 W-0 E	38	60	40	138.18	12.11	2	2
Davie St 1000-1300	44	54	40	137.39	7.12	2	1
Water St 0-300	36	55	43	134.70	9.42	2	2
Denman St 600-1200	44	54	37	134.05	8.59	2	2
Dunsmuir St 600-900	38	35	60	133.18	13.61	2	2
Hornby St 400-1300	45	40	47	132.12	3.55	2	1
Keefer St 0-200	29	63	37	128.26	17.52	2	3
Thurlow St 600-800	35	49	43	126.63	7.17	2	1
Homer St 900-1300	45	48	23	116.29	13.40	2	2
Powell St 200-400	33	59	20	111.48	19.75	2	3
Burrard 1900-2500	40	29	37	105.42	5.78	2	1

In the previous analysis, the focus was on the overall performance of the streets. Now, the analysis will consider whether the streets are located in Downtown and evaluate their scores and rankings accordingly.

1) **High total score rankings**

All streets located in Downtown ranked either 1 or 2 in total score, with none ranking 3. This indicates that the streets in Downtown generally perform well, with high overall scores.

2) **Low standard deviation rankings**

Most Downtown streets have standard deviation rankings of 1 or 2, with only three streets ranking 3. This suggests that the majority of Downtown streets have balanced scores across various metrics, while a few exhibits significant score differences.

The streets with a standard deviation rank of 3 show considerable differences across various metrics, reflecting imbalanced development. Their retail focus scores are generally low, whereas their public space scores are relatively high. This indicates that these streets have weaker commercial development but better public facilities. To achieve balanced development, these streets need to improve their retail focus and regional connectivity scores. Efforts such as increasing commercial facilities and improving transportation conditions are necessary.

These analyses indicate that although downtown streets generally perform well, some streets exhibit imbalances in certain aspects, requiring further attention and improvement.

8.2.4 Disparities between downtown and non-downtown segments

Analyzing the differences in various factors between segments located in Downtown and those outside of Downtown reveals that Downtown high streets generally outperform non-Downtown high streets. Non-downtown high streets show significant gaps in commercial density, public facilities, and transportation convenience. This phenomenon can be attributed to several key factors:

1) **Economic and commercial center**

- **High commercial density**: Downtown boasts higher commercial density and more retail shops, attracting a large number of consumers and tourists, thereby driving economic activity.
- **Corporate headquarters and office buildings**: Many companies choose to establish their headquarters and offices downtown, increasing employment opportunities and attracting high-income populations.

2) **Infrastructure and public facilities**

- **Convenient transportation**: Downtown has a more comprehensive and dense transportation network, including subways, buses, and major roads, facilitating mobility and logistics.
- **Well-developed public facilities**: Public facilities in downtown, such as parks, libraries, museums, etc., are more concentrated and of higher quality.

3) **Policy support and investment**

- **Government investment**: The government invests more resources as it presents a higher population density and more building developments.

- **Policy incentives**: Downtown enjoys more policy incentives and support, such as tax reductions and subsidies, to encourage businesses and merchants to settle.

4) **Population density and diversity**

- **High population density**: Downtown has a high population density and heavy foot traffic, which supports the development of commerce and services.
- **Diverse population**: Downtown attracts people from various backgrounds and cultures, promoting diversified commercial development.

5) **Social and cultural resources**

- **Cultural hub**: Downtown is an important cultural center of the city, concentrating a large number of cultural resources and activities.
- **Rich social activities**: Abundant social and community activities enhance the area's vibrancy and resident engagement.

6) Historical and Brand Effects

- **Historical depth**: Downtown areas often have a rich historical background and cultural heritage, forming a unique city brand.
- **Brand effect**: The long-standing central position enhances the brand effect, attracting more investment and foot traffic.

These factors collectively contribute to the superior performance of downtown streets across various metrics. In contrast, non-downtown streets require further support and investment to bridge the gaps in commercial density, public facilities, and transportation convenience, aiming for more balanced development.

8.2.5 Socio-economic influence

The City of Vancouver has recently developed policies to support some ethnocultural community areas such as Punjabi Market and Chinatown. According to the Punjabi Market Retail Business Study and observations during site visits of the researcher, the increasing storefront vacancy rates, declining cultural character concentration, homogenous business types, and overall decrease in street vitality are likely symptomatic of several factors:

According to the study, the main problems include:

- Increasing vacancy rates and declining number of shops
- Weakening cultural character and homogenization of business types
- The overall decline in street vitality
- According to the study, the key reasons for these issues are:
- Significant rise in real estate values, making it unaffordable for small independent merchants to pay the high rents
- Local population and income levels are unable to support the existing commercial structure.

- Competition from richer and more diverse business offerings in neighboring areas
- Challenges facing the entire retail industry, such as the impact of e-commerce

In essence, the Punjabi Market is grappling with challenges related to affordability, changing consumer preferences, and broader industry disruption - all of which are contributing to the erosion of its unique character and vibrancy.

The City of Vancouver focuses on another ethnocultural retail area, Chinatown, has recently developed the Uplifting Chinatown Action Plan, pointing to a range of actions to address safety concerns that touch on retail feasibility and public realm stewardship. The actions mentioned in the Uplifting Chinatown Action Plan include:

- Cleaning and sanitation: Enhancing the management of cleanliness and sanitation in public areas to improve the environment's appeal.
- Safewalk program: Introducing a "Safewalk" initiative to provide support for individuals needing accompaniment, thereby increasing the community's sense of safety.
- Graffiti Removal Strategies: Implementing measures for graffiti removal to improve the visual quality of public spaces.
- Community supports: Collaborating with community organizations to provide necessary support and resources, strengthening community cohesion.
- Public space activation: Activating public spaces through events and beautification efforts to attract more foot traffic.
- Retail health monitoring: Focusing on the health of retailers, addressing vacancy issues, and promoting commercial vitality.
- Collaboration with stakeholders: Coordinating with the Vancouver Police Department, the Chinatown Business Improvement Association, and other community organizations to ensure a comprehensive approach to safety and public realm management.

This holistic approach seeks to balance safety with the need for a thriving commercial environment, ultimately contributing to the long-term sustainability of the community.

8.3 Identification of outliers

8.3.1 Renfrew St 1600-1800

Overall, the 1600-1800 block of Renfrew Street appears to be an outlier compared to the surrounding commercial areas. This segment exhibits a significantly lower score despite being in the best-performing group based on the standard deviation analysis.

Table 12 Renfrew St 1600-1800 evaluation result

Name	score of retail focus (max 100)	score of public realm (max 100)	score of regional connectivity (max 100)	Total score	Standard Deviation	Total score Categorization	STDEA Categorization
Renfrew St 1600-1800	33	28	20	80.23	6.40	3	1

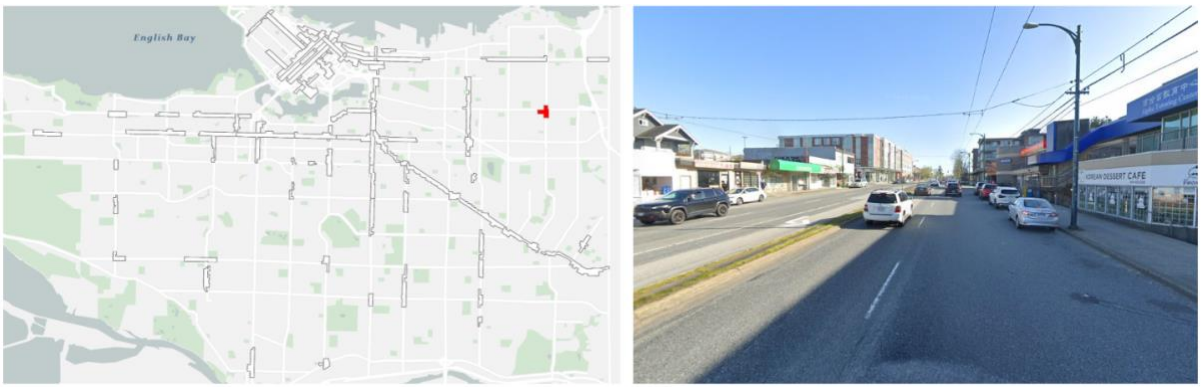

Figure 16 Location and street view of Renfrew St 1600-1800

Building on this, the potential reasons for the anomaly in the 1600-1800 block of Renfrew Street are:

- **Limited catchment area:** The small geographic coverage of this segment likely constrains the potential customer base and business activity compared to larger commercial corridors.
- **Accessibility challenges:** The remote location, far from the nearest SkyTrain station, and lack of major thoroughfare status reduce the ease of access and visibility for both customers and businesses.
- **Peripheral urban location:** Being situated near the edge of Vancouver's boundaries may result in lower prioritization of municipal investment and resources for this area, limiting its development potential.
- **Competition from neighboring commercial hub:** The presence of the vibrant Brentwood commercial complex in adjacent Burnaby exerts a strong pull, drawing away foot traffic, investment, and business activity from this segment of Renfrew Street.
- **Potential systemic barriers:** There may be some deeper, systemic barriers or market dynamics at play that are disproportionately impacting this specific commercial corridor and preventing it from achieving parity with its counterparts.

8.3.2 Broadway 700E-300W

In contrast, the 700E-300W block of Broadway has an excellent overall performance, it exhibits a highly unbalanced development profile across the three dimensions. Notably, the segment's regional connectivity metric scores as high as 90, but its retail focus metric is only 42, less than half of the connectivity score.

Table 13 Broadway 700E-300W evaluation result

Name	score of retail focus (max 100)	score of public realm (max 100)	score of regional connectivity (max 100)	Total score	Standard Deviation	Total score Categorization	STDEA Categorization
Broadway 700E-300W	42	59	90	190.57	24.44	1	3

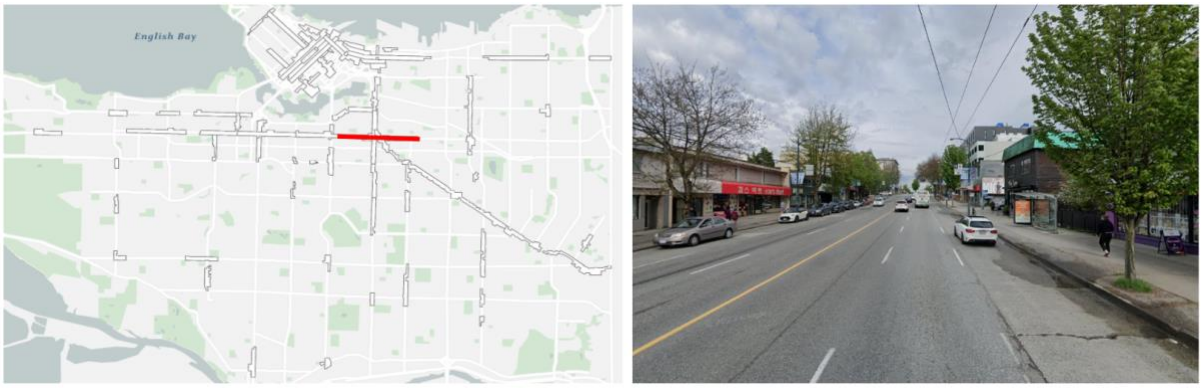

Figure 17 Location and street view of Broadway 700E-300W

Figure 18 The important role of the Broadway 700E-300W

- **Infrastructure-driven:** Significant investments in connectivity infrastructure for this Broadway area may not have been matched by parallel developments in the retail landscape.
- **Transitional phase:** This Broadway segment could be potentially impacted by the SkyTrain station construction, where its strong transportation infrastructure has not yet been matched by a commensurate retail presence. In this case, the ongoing construction of a new Broadway metro line may be causing temporary disruptions, with plans to eventually replace the existing rapid bus and standard bus routes.
- **Zoning limitations:** Restrictive zoning policies in this Broadway block could incentivize connectivity improvements over retail growth, creating the observed performance imbalance.
- **Demographic misalignment:** The Broadway segment's commercial makeup may not align well with the specific needs and spending patterns of its local customer base.

9. Way forward

9.1 Sustainable application of methodology

Developing the methodology to be adaptable and scalable for continuous application in similar assessments of high streets and other urban spaces. This will ensure that the framework remains relevant and useful for ongoing and future projects.

9.2 Toolkit for future work

9.2.1 Enhancing qualitative input

Future evaluations should incorporate comprehensive interviews and surveys with residents, business owners, and stakeholders to gain deeper insights into the socio-economic dynamics of high streets.

9.2.2 Refining evaluation criteria

The evaluation framework should be revised to ensure a more balanced consideration of regional connectivity, public realm, and retail focus. This may involve developing new metrics or adjusting the weight of existing ones.

The existing evaluation framework may not adequately balance all dimensions (regional connectivity, public realm, retail focus), potentially leading to biased results.

9.2.3 Regular data updates for future analysis

Establishing a process for regular data updates to the toolkit, allowing for continuous monitoring and trend analysis over time. With continuous data updates, the toolkit can offer more convincing insights and a clearer understanding of trends, aiding in more effective long-term planning and policy formulation.

9.3 Integrating advanced analytical tools

Utilizing advanced data analytics and modeling tools can help in better capturing and analyzing the multi-dimensional aspects of high streets. This can include incorporating interdisciplinary analytical approaches from fields such as economics, sociology, and typology:

9.3.1 Economic Analysis:

- Applying economic modeling techniques to understand the market dynamics, consumer behavior, and business viability on high streets.
- Assessing the economic impact of interventions, policies, and changes in the high street environment.
- Identifying key drivers of economic performance and opportunities for growth.

9.3.2 Sociological Perspectives:

- Incorporating qualitative and ethnographic methods to explore the social interactions, community dynamics, and lived experiences on high streets.

- Analyzing the role of high streets in shaping social cohesion, cultural identity, and community well-being.
- Understanding the impact of demographic changes, gentrification, and social exclusion on high street vitality.
- Add correlation analysis of demographics and the high streets.

9.3.3 Typological Approaches:

- Developing classification systems and typologies to categorize high streets based on their physical characteristics, functional uses, and urban design patterns.
- Applying spatial analysis and modeling techniques to identify unique high street archetypes and understand their distinct challenges and opportunities.
- Leveraging typological insights to inform context-specific strategies and interventions for high street revitalization.

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The names in the acknowledgement section are listed in alphabetical order by last name.

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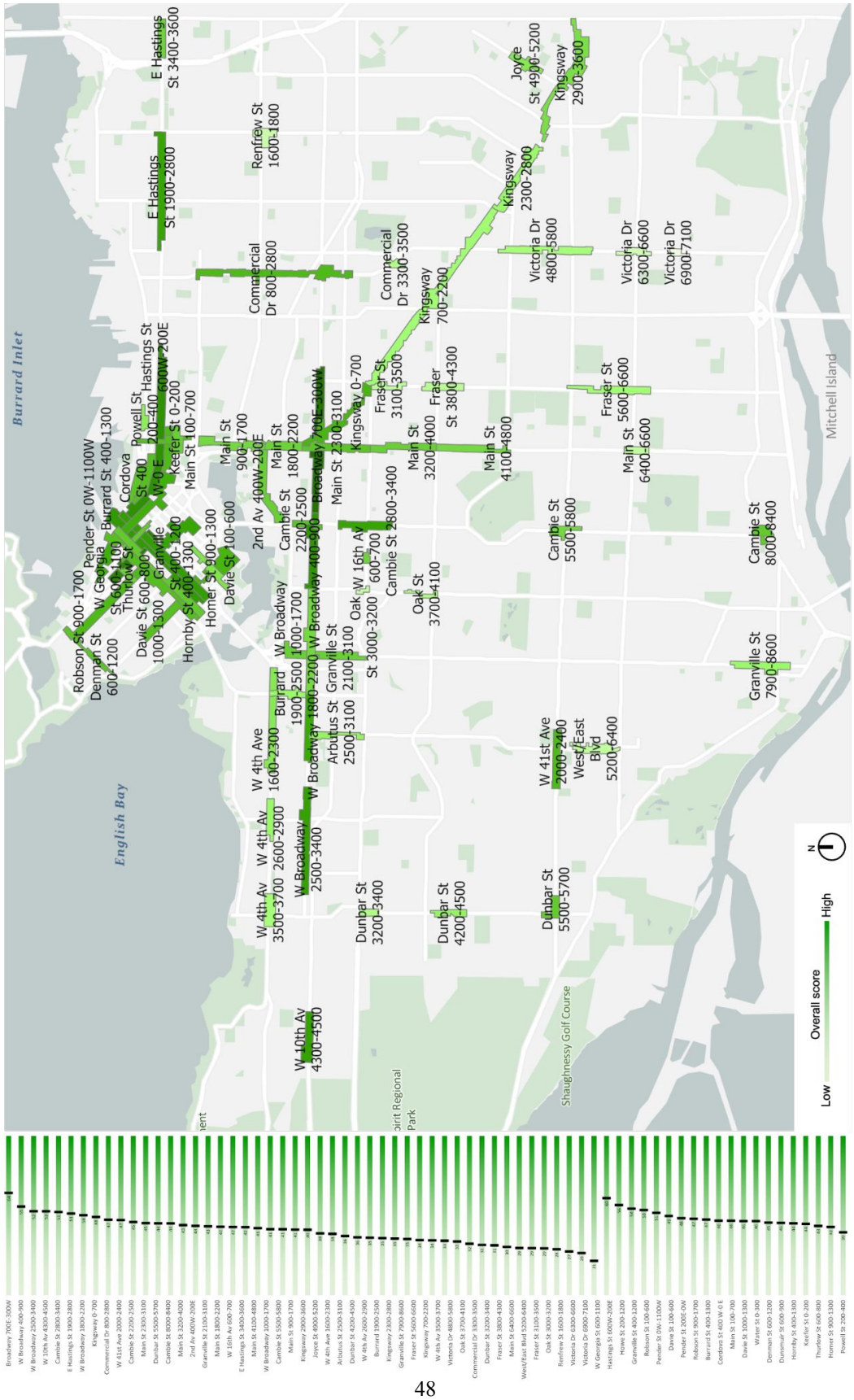
Appendices

Appendix I: Overall evaluation result (sum of the scores)

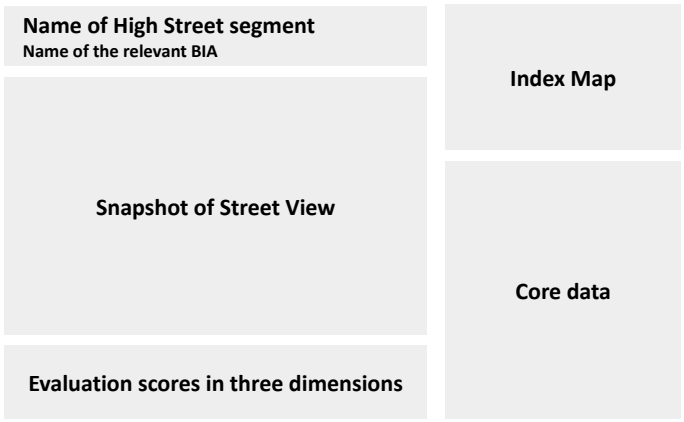


Appendix Ⅱ: Collection of details of 69 high street segments

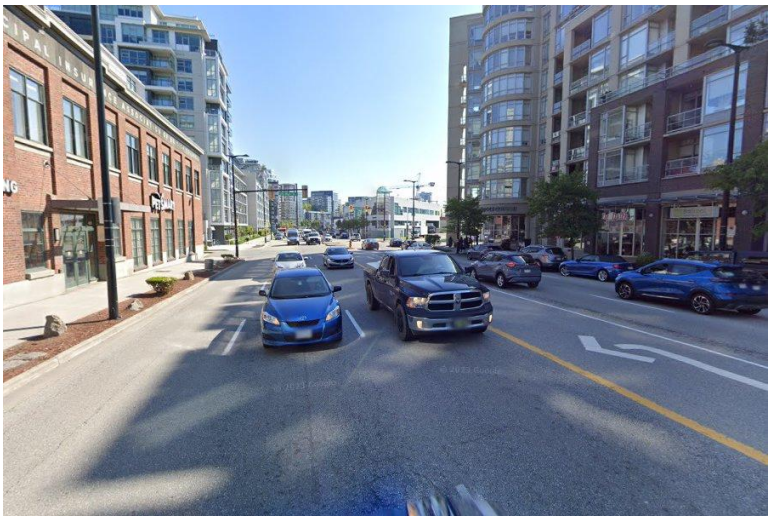
How to read: This booklet is designed to lay the groundwork for future work, recognizing that there is still much room for improvement. Enhancements could include labeling key elements supporting public life in the street views and conducting spider chart analyses of the multidimensional scores.

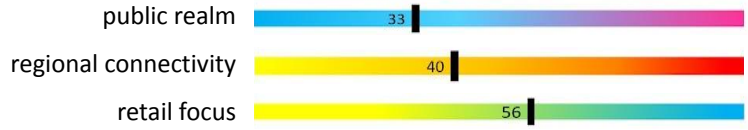
To use it, start by referencing the **Index Map** to locate each high street segment. The **Name of the Relevant BIA** indicates the overlapping Business Improvement Area within the defined high street research scope.

The **Core Data** presents essential statistics and metrics. The **Snapshot of Street View** offers a current visual representation of the street's appearance. Finally, review the **Evaluation Scores in Three Dimensions** - Retail Focus, Regional Connectivity, and Public Realm - to understand the segment's strengths and areas for improvement. This structured approach will help you effectively navigate and interpret the detailed evaluations and data provided.



2nd Ave 400W - 200E

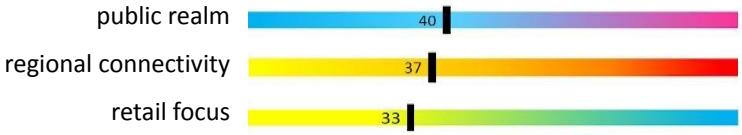




Number of blocks:	8
Median sidewalk width (m):	0.55
Patios (yes/no):	yes
Number of storefronts per block:	35
Number of business categories:	7
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	4.64%

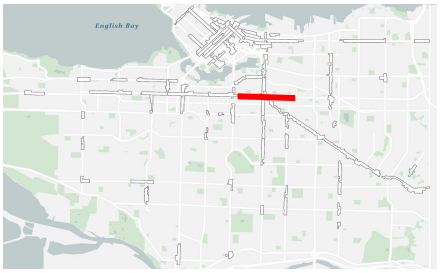
Arbutus St 2500 - 3100

Number of blocks:	7
Median sidewalk width (m):	0.55
Patios (yes/no):	yes
Number of storefronts per block:	22
Number of business categories:	5
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	11.11%

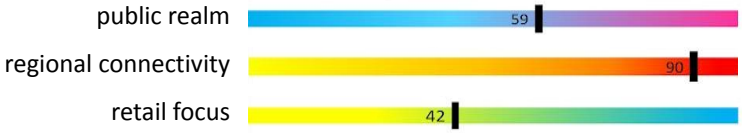


Broadway 700E - 300W

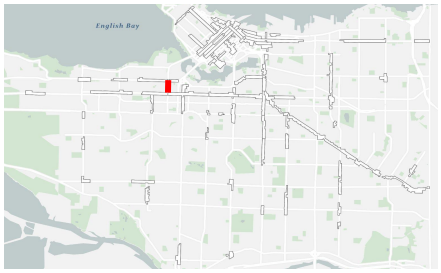
Mount Pleasant BIA



Number of blocks:	5
Median sidewalk width (m):	0.61
Patios (yes/no):	yes
Number of storefronts per block:	210
Number of business categories:	7
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	5
Vacancy rate (%):	17.13%



Burrard St 1900 - 2500



public realm 29

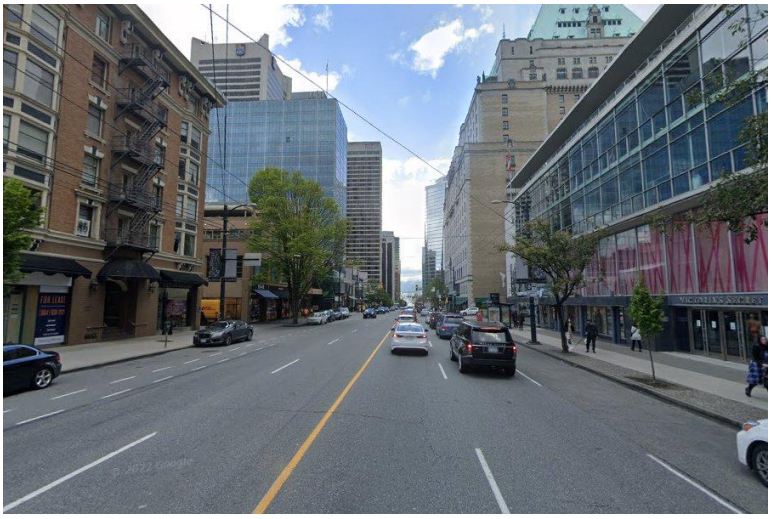
regional connectivity 37

retail focus 40

Number of blocks:	6
Median sidewalk width (m):	0.85
Patios (yes/no):	yes
Number of storefronts per block:	22
Number of business categories:	5
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	6.11%

Burrard St 400 - 1300

Downtown Vancouver BIA



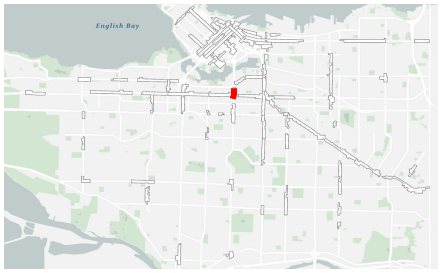
public realm 41

regional connectivity 53

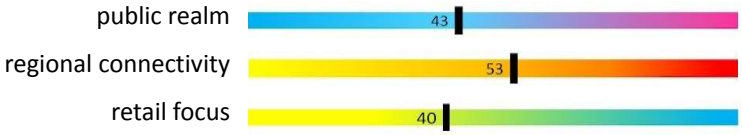
retail focus 44

Number of blocks:	10
Median sidewalk width (m):	1.52
Patios (yes/no):	yes
Number of storefronts per block:	51
Number of business categories:	7
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	9.07%

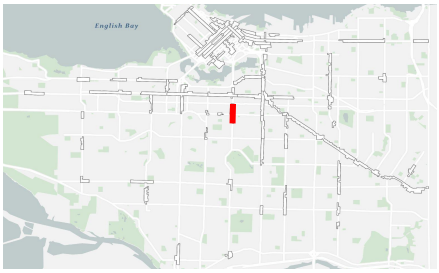
Cambie St 2200 - 2500
Cambie Village BIA



Number of blocks:	4
Median sidewalk width (m):	0.98
Patios (yes/no):	no
Number of storefronts per block:	37
Number of business categories:	6
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	7.53%

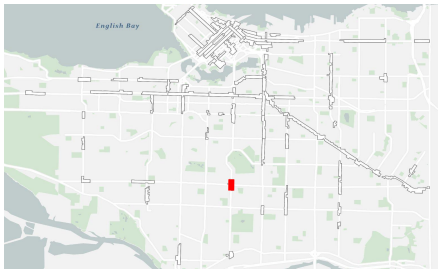


Cambie St 2800 - 3400
Cambie Village BIA



Number of blocks:	7
Median sidewalk width (m):	0.55
Patios (yes/no):	yes
Number of storefronts per block:	66
Number of business categories:	7
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	8.23%

Cambie St 5500 - 5800



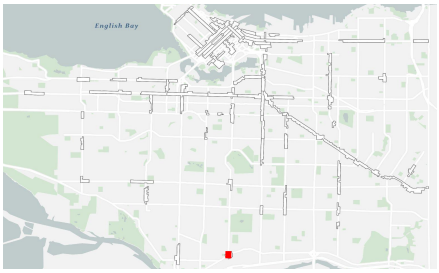
public realm 31

regional connectivity 60

retail focus 31

Number of blocks:	4
Median sidewalk width (m):	0.37
Patios (yes/no):	yes
Number of storefronts per block:	7
Number of business categories:	4
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	18.52%

Cambie St 8000 - 8400



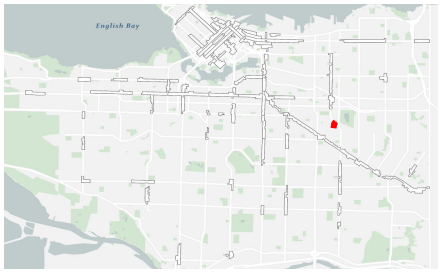
public realm 41

regional connectivity 50

retail focus 42

Number of blocks:	3
Median sidewalk width (m):	0.50
Patios (yes/no):	yes
Number of storefronts per block:	52
Number of business categories:	5
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	2.55%

Commercial Dr 3300 - 3500



public realm 45

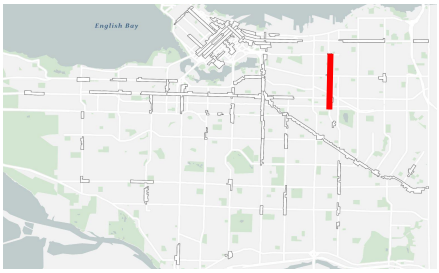
regional connectivity 17

retail focus 31

Number of blocks:	3
Median sidewalk width (m):	1.22
Patios (yes/no):	yes
Number of storefronts per block:	49
Number of business categories:	5
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	0
Vacancy rate (%):	18.24%

Commercial Dr 800 - 2800

Commercial Drive BIA



public realm 68

regional connectivity 20

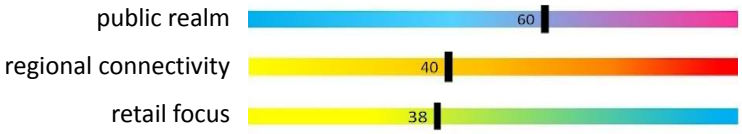
retail focus 53

Number of blocks:	21
Median sidewalk width (m):	0.91
Patios (yes/no):	yes
Number of storefronts per block:	68
Number of business categories:	7
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	7.44%

Cordova St 400W - 0E

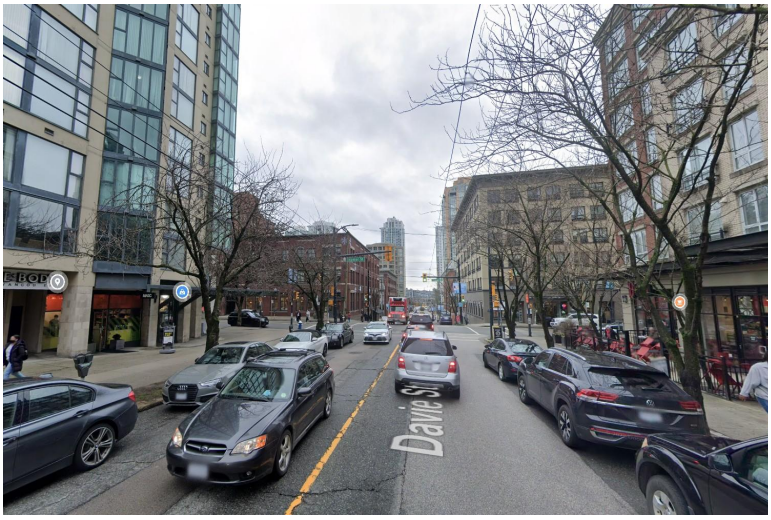
Gastown BIA

Number of blocks:	5
Median sidewalk width (m):	0.82
Patios (yes/no):	yes
Number of storefronts per block:	86
Number of business categories:	6
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	0
Vacancy rate (%):	11.57%

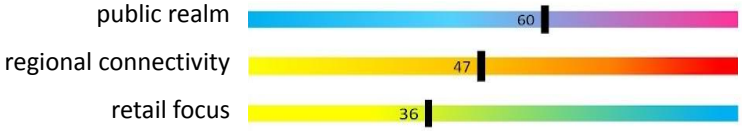


Davie St 100 - 600

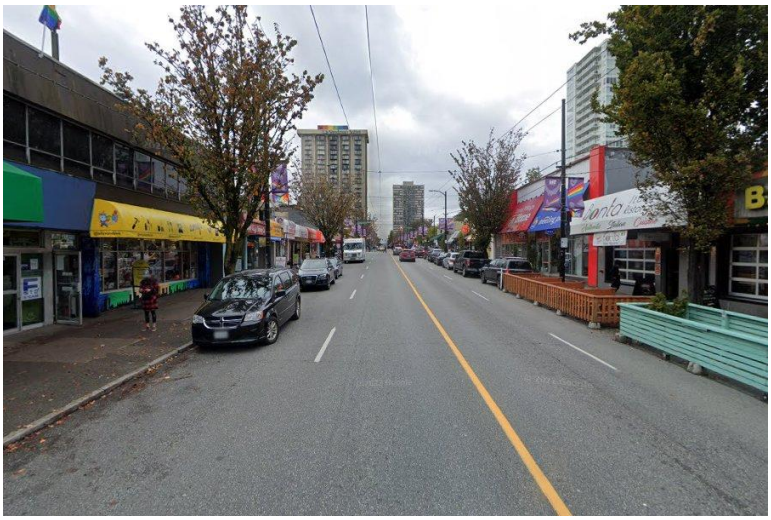
Downtown Vancouver BIA /Yaletown BIA



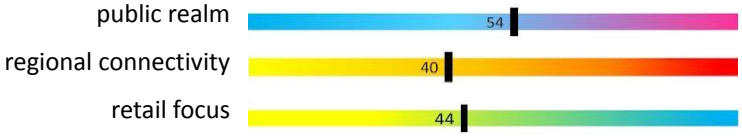
Number of blocks:	6
Median sidewalk width (m):	0.98
Patios (yes/no):	yes
Number of storefronts per block:	63
Number of business categories:	6
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	9.31%



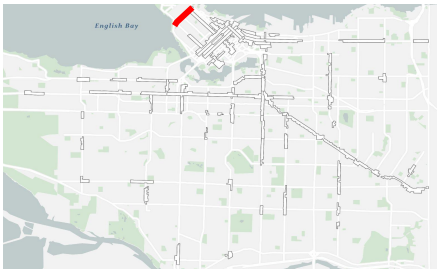
Davie St 1000 - 1300
West End BIA



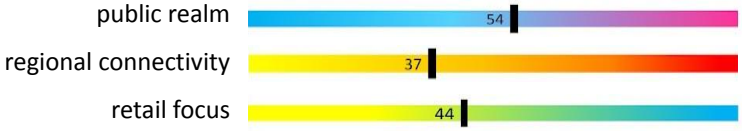
Number of blocks:	4
Median sidewalk width (m):	1.07
Patios (yes/no):	yes
Number of storefronts per block:	133
Number of business categories:	7
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	5.64%



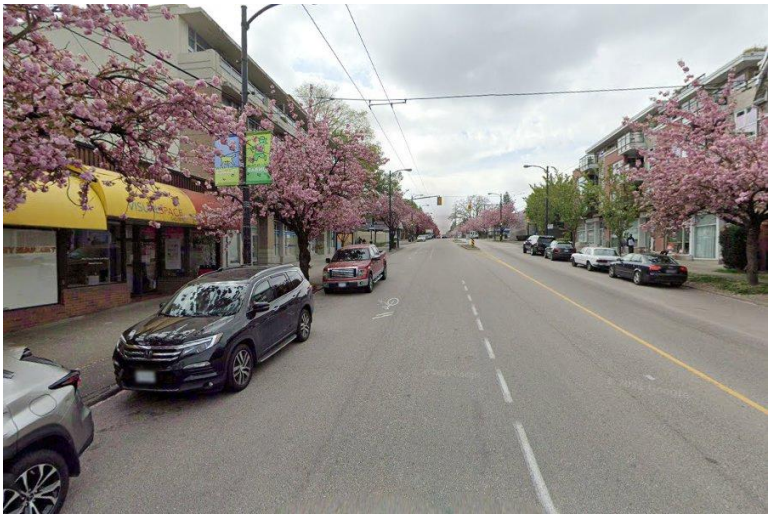
Denman St 600 - 1200
West End BIA

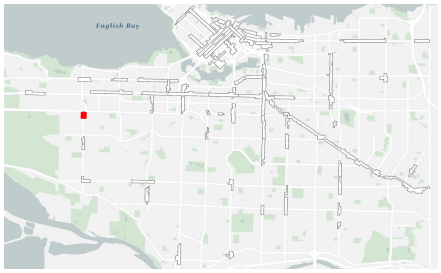


Number of blocks:	7
Median sidewalk width (m):	1.07
Patios (yes/no):	yes
Number of storefronts per block:	88
Number of business categories:	7
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	8.16%

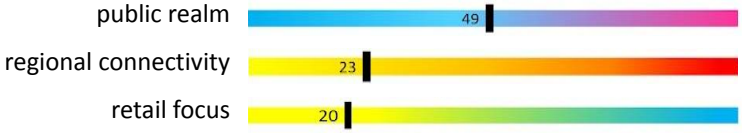


Dunbar St 3200 - 3400
Dunbar Village BIA

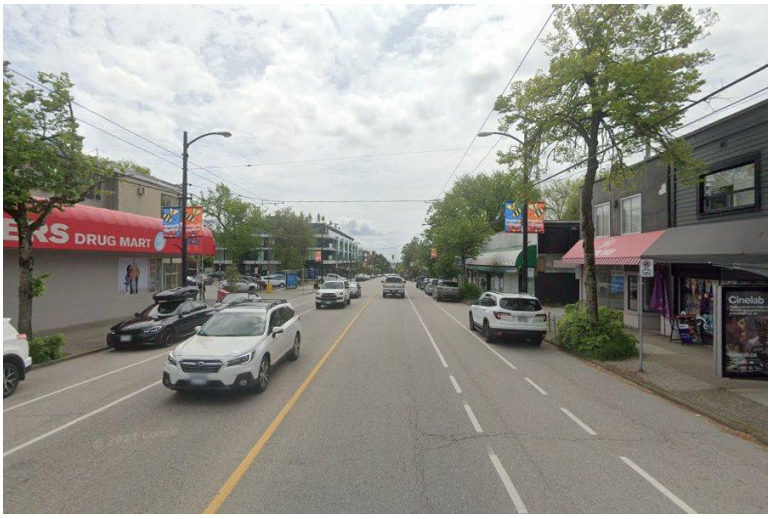




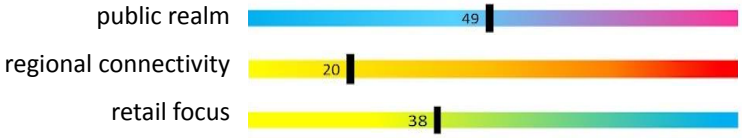
Number of blocks:	3
Median sidewalk width (m):	1.83
Patios (yes/no):	no
Number of storefronts per block:	57
Number of business categories:	5
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	26.90%



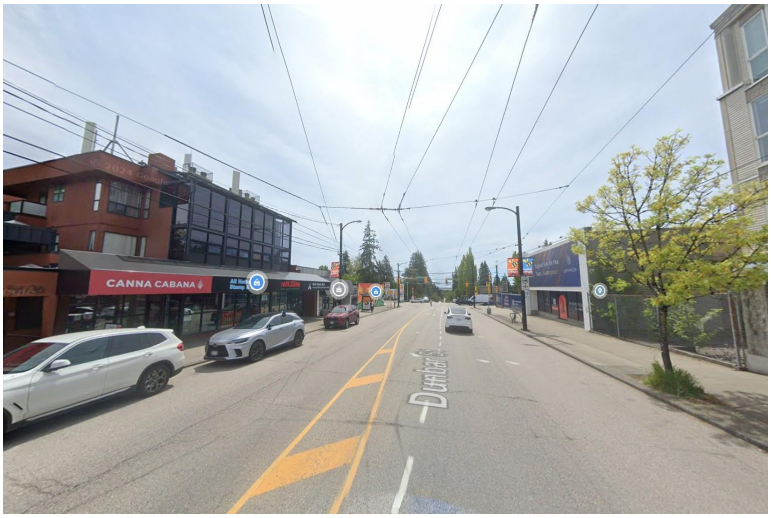
Dunbar St 4200 - 4500
Dunbar Village BIA

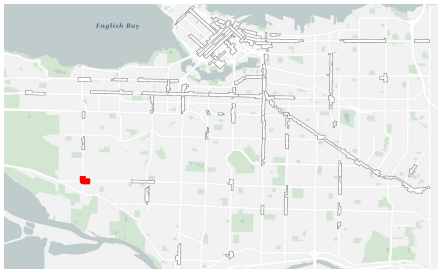


Number of blocks:	4
Median sidewalk width (m):	1.22
Patios (yes/no):	yes
Number of storefronts per block:	56
Number of business categories:	6
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	10.76%



Dunbar St 5500 - 5700
Dunbar Village BIA





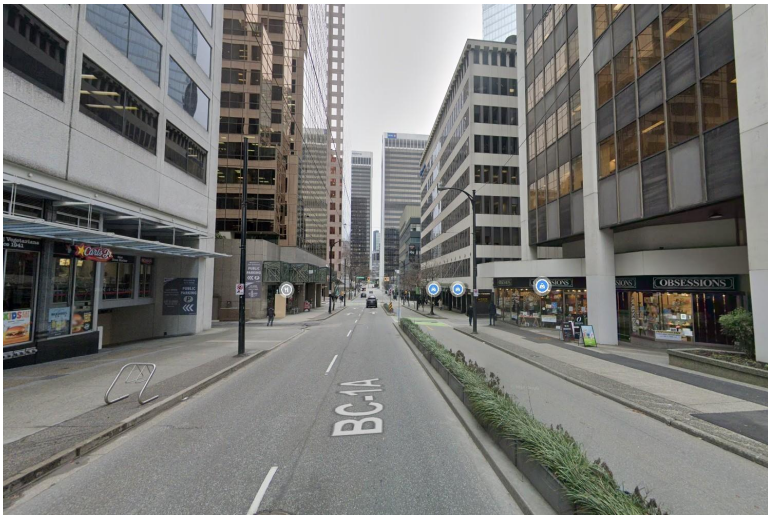
public realm 45

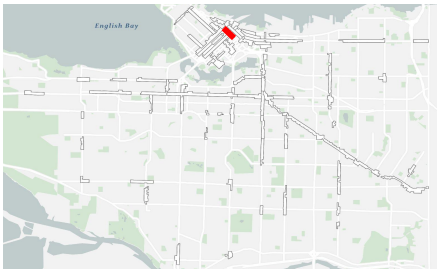
regional connectivity 50

retail focus 38

Number of blocks:	3
Median sidewalk width (m):	0.55
Patios (yes/no):	no
Number of storefronts per block:	59
Number of business categories:	7
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	3
Vacancy rate (%):	15.82%

Dunsmuir St 600 - 900
Downtown Vancouver BIA





public realm 35

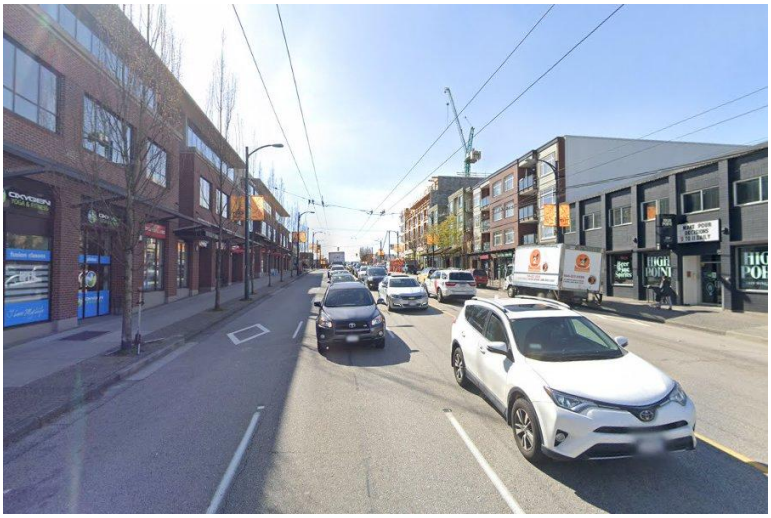
regional connectivity 60

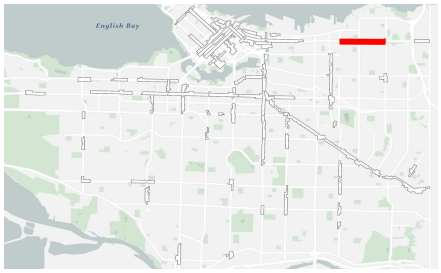
retail focus 38

Number of blocks:	4
Median sidewalk width (m):	1.07
Patios (yes/no):	yes
Number of storefronts per block:	12
Number of business categories:	4
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	8.51%

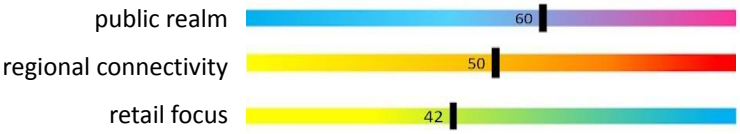
E Hastings St 1900 - 2800

Hastings - North BIA



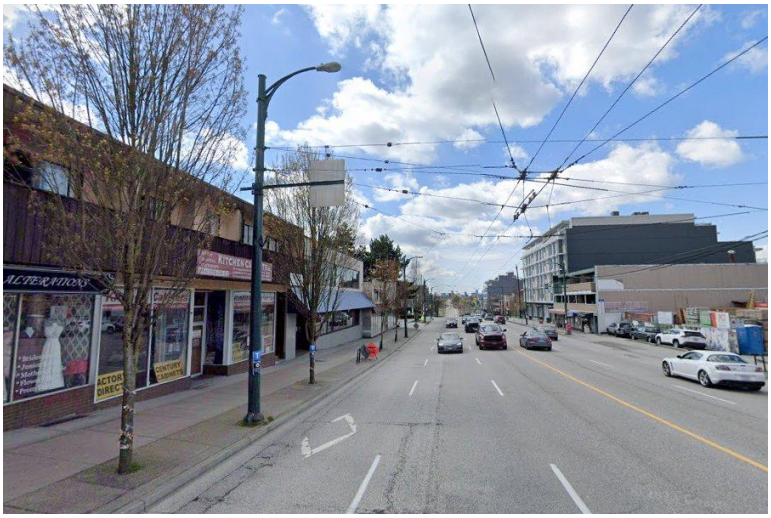


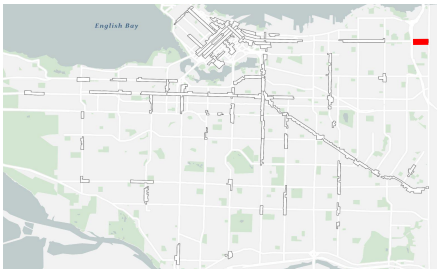
Number of blocks:	10
Median sidewalk width (m):	0.93
Patios (yes/no):	yes
Number of storefronts per block:	99
Number of business categories:	7
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	11.47%



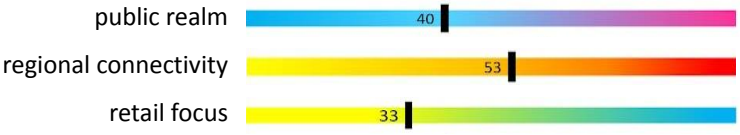
E Hastings St 3400 - 3600

Hastings - North BIA

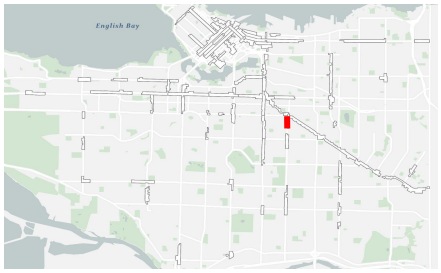




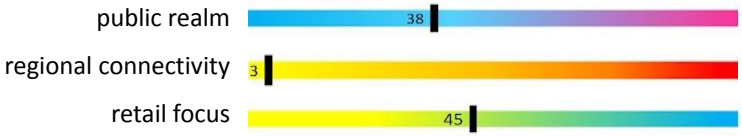
Number of blocks:	3
Median sidewalk width (m):	1.07
Patios (yes/no):	no
Number of storefronts per block:	78
Number of business categories:	7
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	4
Vacancy rate (%):	29.18%



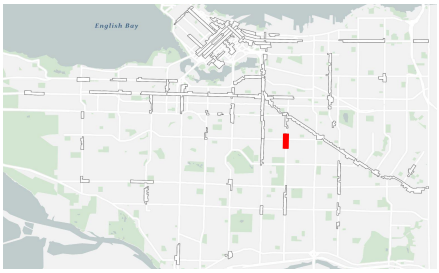
Fraser St 3100 - 3500



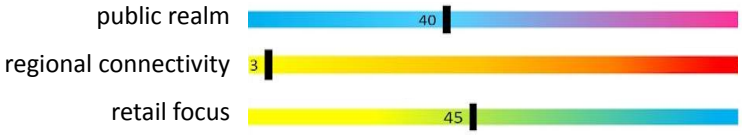
Number of blocks:	5
Median sidewalk width (m):	0.55
Patios (yes/no):	yes
Number of storefronts per block:	41
Number of business categories:	6
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	10.68%



Fraser St 3800 - 4300

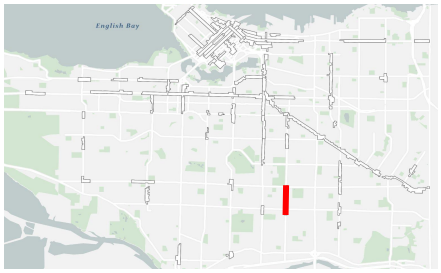


Number of blocks:	6
Median sidewalk width (m):	0.66
Patios (yes/no):	yes
Number of storefronts per block:	64
Number of business categories:	7
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	8.40%



Fraser St 5600 - 6600

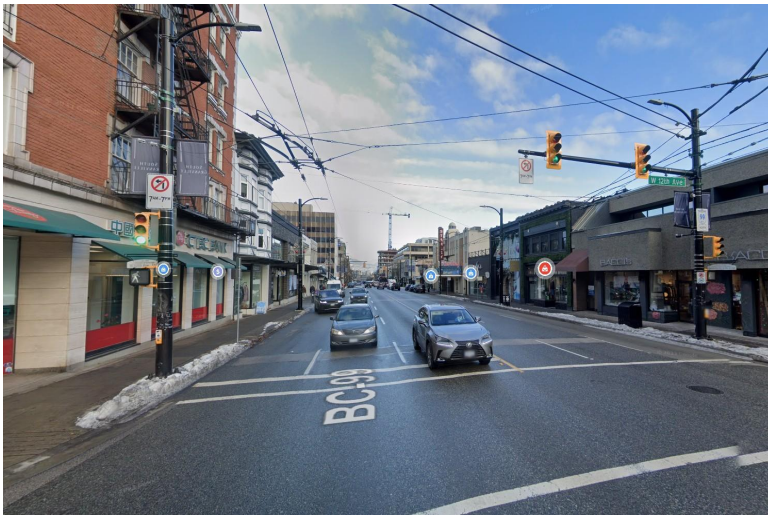
Fraser St BIA

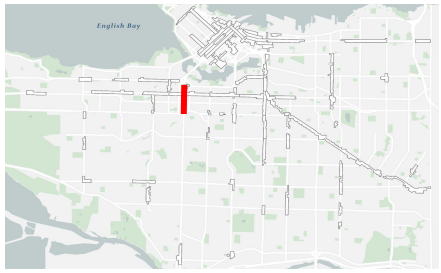


Number of blocks:	11
Median sidewalk width (m):	0.94
Patios (yes/no):	yes
Number of storefronts per block:	67
Number of business categories:	7
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	7.47%

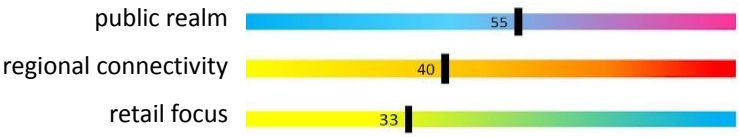
Granville St 2100 - 3100

South Granville BIA

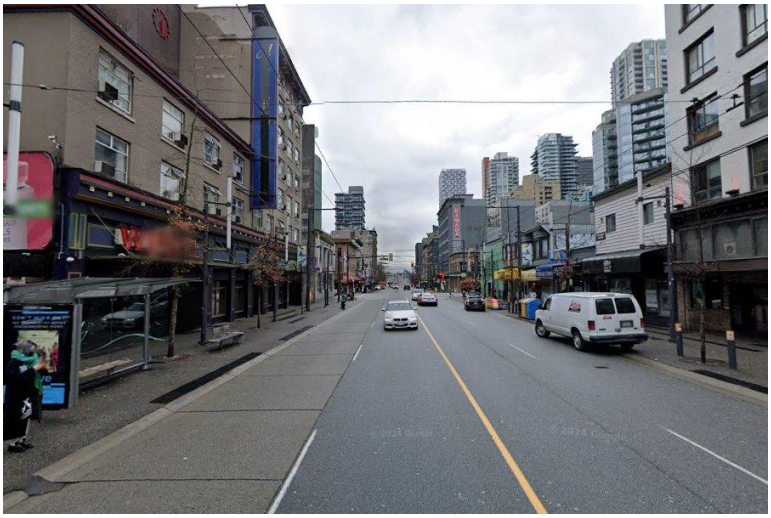


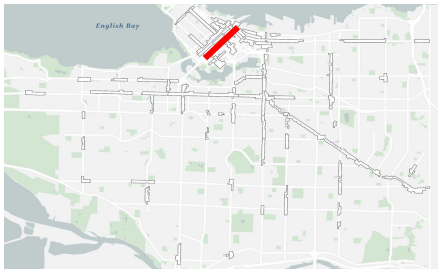


Number of blocks:	11
Median sidewalk width (m):	0.61
Patios (yes/no):	yes
Number of storefronts per block:	69
Number of business categories:	6
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	15.02%



Granville St 400 - 1200
Downtown Vancouver BIA

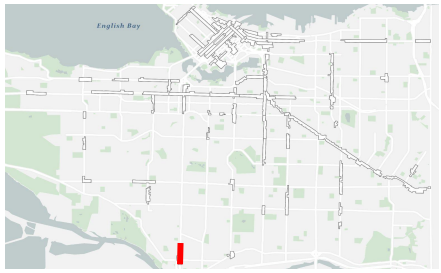




public realm	65
regional connectivity	53
retail focus	40

Number of blocks:	9
Median sidewalk width (m):	2.13
Patios (yes/no):	yes
Number of storefronts per block:	98
Number of business categories:	7
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	3
Vacancy rate (%):	17.01%

Granville St 7900 - 8600
Marpole BIA

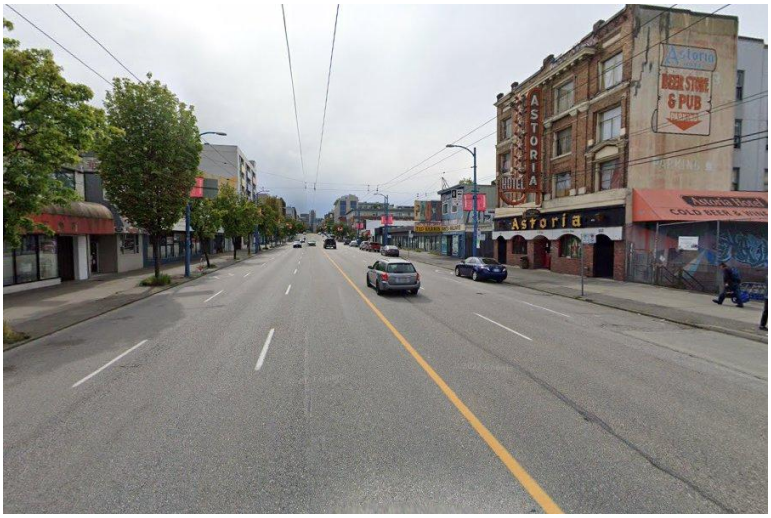


public realm	48
regional connectivity	20
retail focus	36

Number of blocks:	8
Median sidewalk width (m):	0.55
Patios (yes/no):	yes
Number of storefronts per block:	66
Number of business categories:	6
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	11.53%

Hastings St 600W - 200E

Hastings Crossing BIA/Strathcona Area BIA



public realm	78
regional connectivity	50
retail focus	40

Number of blocks:	16
Median sidewalk width (m):	1.52
Patios (yes/no):	yes
Number of storefronts per block:	79
Number of business categories:	7
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	22.62%

Homer St 900 - 1300

Yaletown BIA

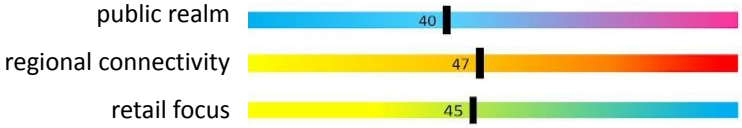
public realm	48
regional connectivity	23
retail focus	45

Number of blocks:	5
Median sidewalk width (m):	0.98
Patios (yes/no):	yes
Number of storefronts per block:	68
Number of business categories:	7
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	0
Vacancy rate (%):	5.85%

Hornby St 400 - 1300

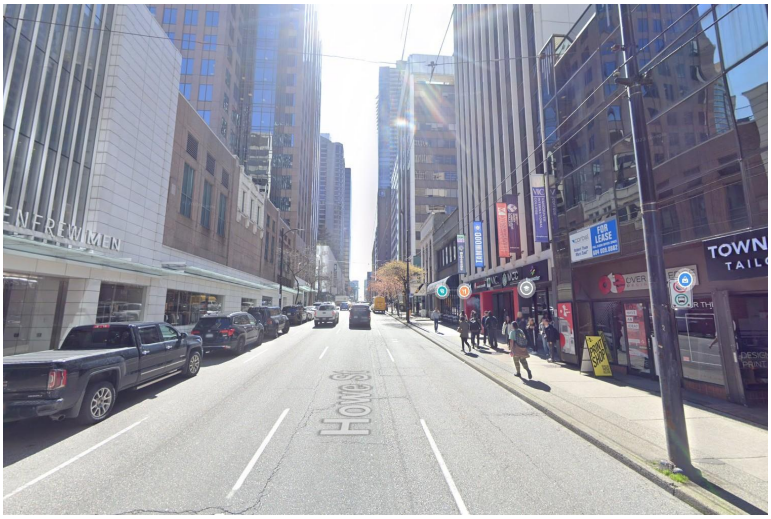
Downtown Vancouver BIA

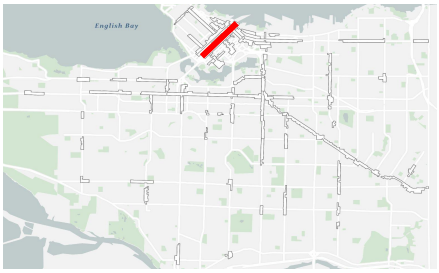
Number of blocks:	10
Median sidewalk width (m):	1.05
Patios (yes/no):	yes
Number of storefronts per block:	43
Number of business categories:	7
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	0
Vacancy rate (%):	6.70%



Howe St 200 - 1200

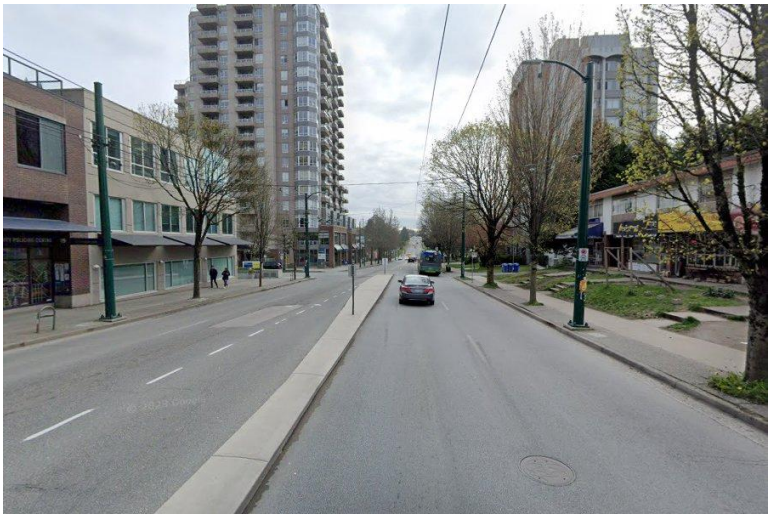
Downtown Vancouver BIA





Number of blocks:	11
Median sidewalk width (m):	1.05
Patios (yes/no):	yes
Number of storefronts per block:	45
Number of business categories:	6
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	4.87%

Joyce St 4900 - 5200



public realm 43

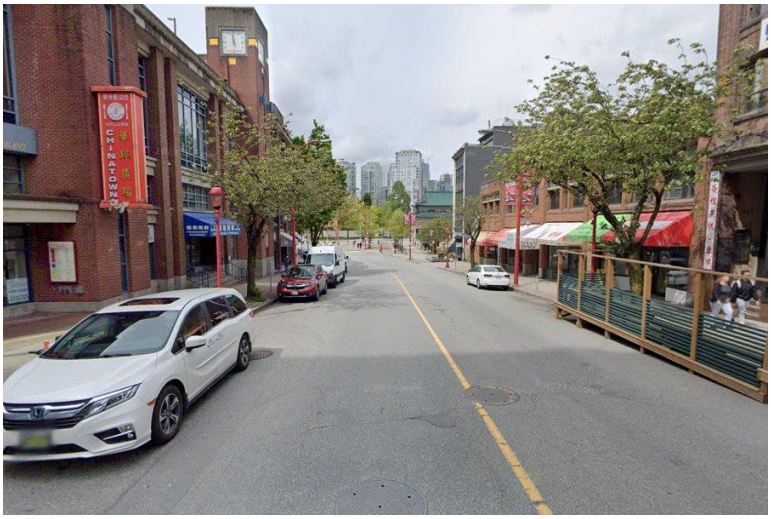
regional connectivity 30

retail focus 42

Number of blocks:	4
Median sidewalk width (m):	0.55
Patios (yes/no):	no
Number of storefronts per block:	41
Number of business categories:	5
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	3
Vacancy rate (%):	7.32%

Keefer St 0 - 200

Chinatown BIA



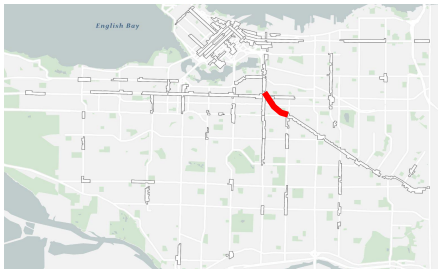
public realm 63

regional connectivity 37

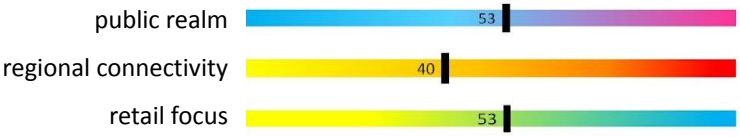
retail focus 29

Number of blocks:	3
Median sidewalk width (m):	0.93
Patios (yes/no):	yes
Number of storefronts per block:	88
Number of business categories:	5
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	19.39%

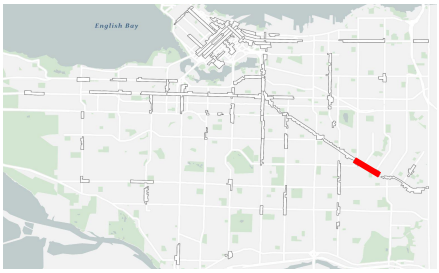
Kingsway 0 - 700
Mount Pleasant BIA



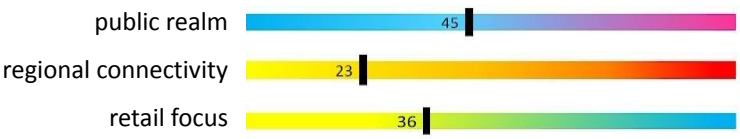
Number of blocks:	8
Median sidewalk width (m):	0.61
Patios (yes/no):	yes
Number of storefronts per block:	53
Number of business categories:	7
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	0.70%



Kingsway 2300 - 2800

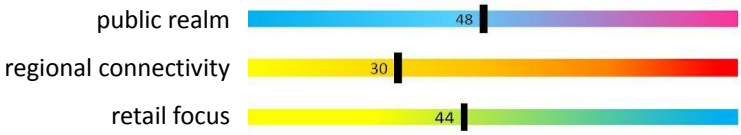


Number of blocks:	6
Median sidewalk width (m):	0.61
Patios (yes/no):	yes
Number of storefronts per block:	69
Number of business categories:	7
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	18.98%



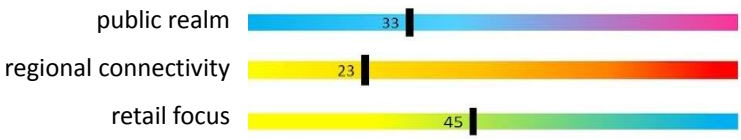
Kingsway 2900 - 3600
Collingwood BIA

Number of blocks:	8
Median sidewalk width (m):	0.93
Patios (yes/no):	yes
Number of storefronts per block:	116
Number of business categories:	7
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	10.49%



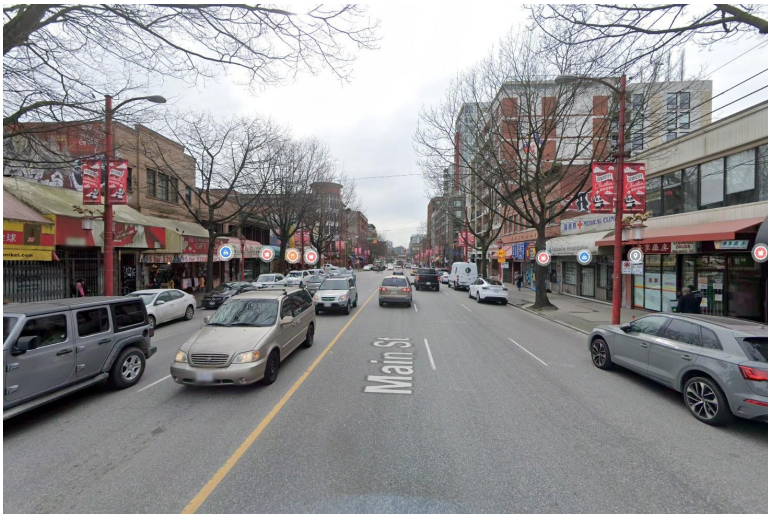
Kingsway 700 - 2200

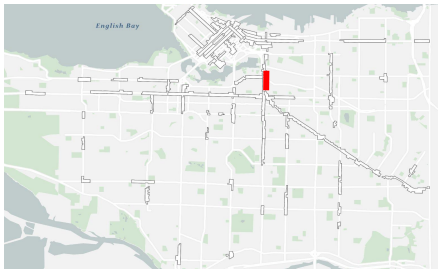
Number of blocks:	16
Median sidewalk width (m):	0.61
Patios (yes/no):	yes
Number of storefronts per block:	93
Number of business categories:	7
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	12.70%



Main St 100 - 700

Chinatown BIA//Hastings Crossing BIA



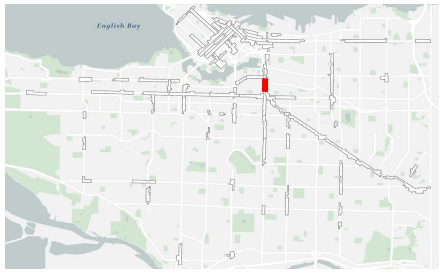


public realm	55
regional connectivity	53
retail focus	29

Number of blocks:	7
Median sidewalk width (m):	1.58
Patios (yes/no):	yes
Number of storefronts per block:	47
Number of business categories:	6
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	25.98%

Main St 1800 - 2200

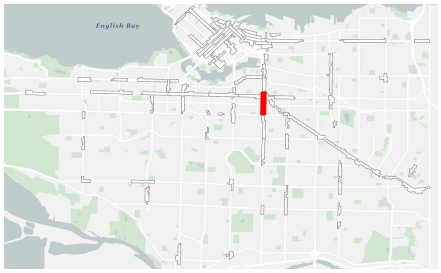
Mount Pleasant BIA



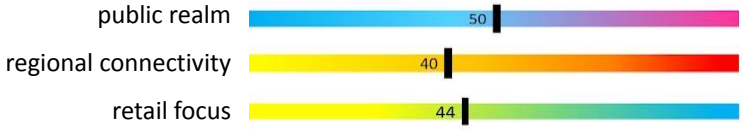
public realm	46
regional connectivity	53
retail focus	27

Number of blocks:	5
Median sidewalk width (m):	0.82
Patios (yes/no):	yes
Number of storefronts per block:	27
Number of business categories:	6
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	28.57%

Main St 2300 - 3100
Mount Pleasant BIA

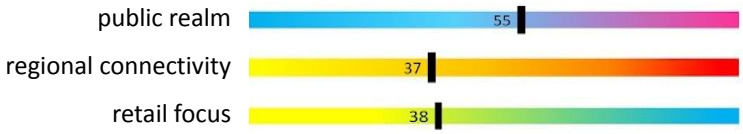


Number of blocks:	9
Median sidewalk width (m):	1.02
Patios (yes/no):	yes
Number of storefronts per block:	65
Number of business categories:	7
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	10.90%



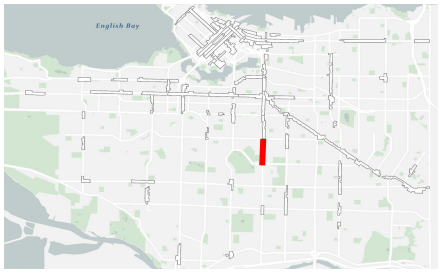
Main St 3200 - 4000
Mount Pleasant BIA

Number of blocks:	9
Median sidewalk width (m):	1.07
Patios (yes/no):	yes
Number of storefronts per block:	58
Number of business categories:	5
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	6.17%

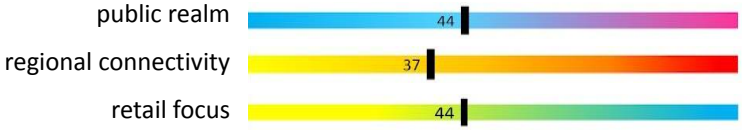


Main St 4100 - 4800

Mount Pleasant BIA

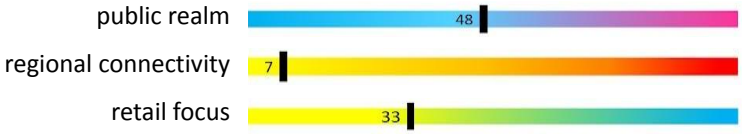


Number of blocks:	8
Median sidewalk width (m):	1.07
Patios (yes/no):	yes
Number of storefronts per block:	83
Number of business categories:	7
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	7.72%



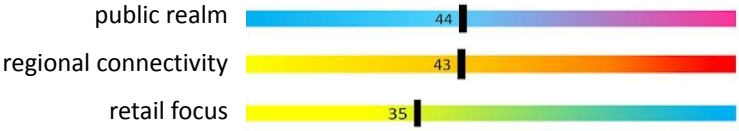
Main St 6400 - 6600

Number of blocks:	3
Median sidewalk width (m):	0.91
Patios (yes/no):	yes
Number of storefronts per block:	100
Number of business categories:	6
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	11.30%

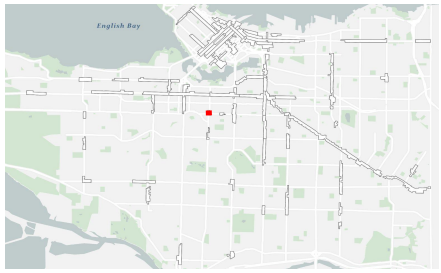


Main St 900 - 1700

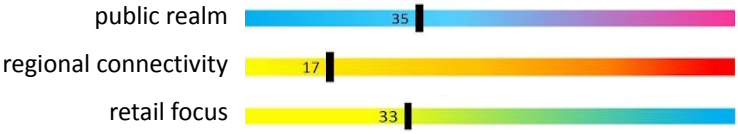
Number of blocks:	9
Median sidewalk width (m):	0.82
Patios (yes/no):	yes
Number of storefronts per block:	25
Number of business categories:	6
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	22.87%



Oak St 3000 - 3200



Number of blocks:	3
Median sidewalk width (m):	0.55
Patios (yes/no):	yes
Number of storefronts per block:	25
Number of business categories:	4
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	0
Vacancy rate (%):	0.00%



Oak St 3700 - 4100

public realm	35
regional connectivity	20
retail focus	40

Number of blocks:	5
Median sidewalk width (m):	0.55
Patios (yes/no):	yes
Number of storefronts per block:	29
Number of business categories:	5
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	3.47%

Pender St 0W - 1100W

Downtown Vancouver BIA/Hastings Crossing BIA

public realm	50
regional connectivity	50
retail focus	47

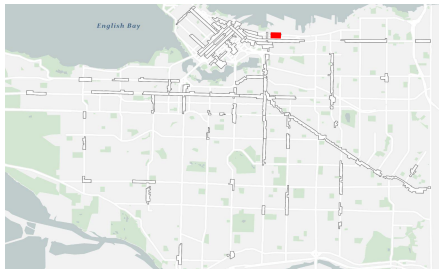
Number of blocks:	12
Median sidewalk width (m):	1.01
Patios (yes/no):	yes
Number of storefronts per block:	53
Number of business categories:	6
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	10.92%

Pender St 200E - 0W
Chinatown BIA

public realm	68
regional connectivity	43
retail focus	31

Number of blocks:	4
Median sidewalk width (m):	1.05
Patios (yes/no):	yes
Number of storefronts per block:	130
Number of business categories:	6
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	20.54%

Powell St 200 - 400
Strathcona Area BIA



public realm	59
regional connectivity	20
retail focus	33

Number of blocks:	3
Median sidewalk width (m):	0.91
Patios (yes/no):	yes
Number of storefronts per block:	48
Number of business categories:	5
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	24.48%

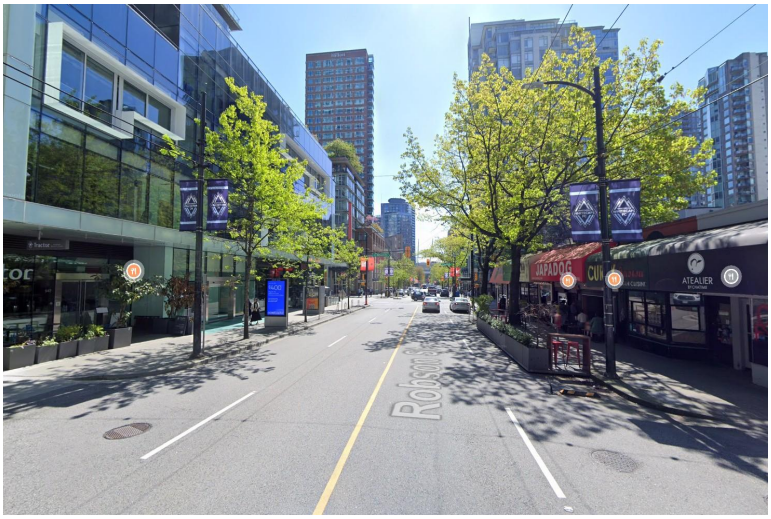
Renfrew St 1600 - 1800

public realm	28
regional connectivity	20
retail focus	33

Number of blocks:	3
Median sidewalk width (m):	0.85
Patios (yes/no):	no
Number of storefronts per block:	95
Number of business categories:	5
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	12.94%

Robson St 100 - 600

Downtown Vancouver BIA/Yaletown BIA



public realm	58
regional connectivity	47
retail focus	49

Number of blocks:	6
Median sidewalk width (m):	1.52
Patios (yes/no):	yes
Number of storefronts per block:	57
Number of business categories:	7
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	8.72%

Robson St 900 - 1700

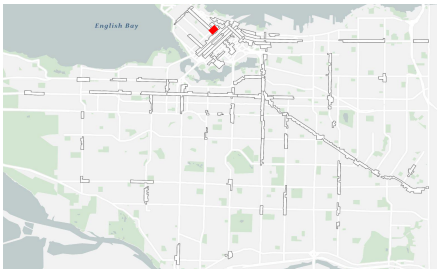
Robson St BIA/West End BIA

public realm	59
regional connectivity	40
retail focus	42

Number of blocks:	9
Median sidewalk width (m):	1.58
Patios (yes/no):	yes
Number of storefronts per block:	107
Number of business categories:	7
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	12.24%

Thurlow St 600 - 800

Downtown Vancouver BIA

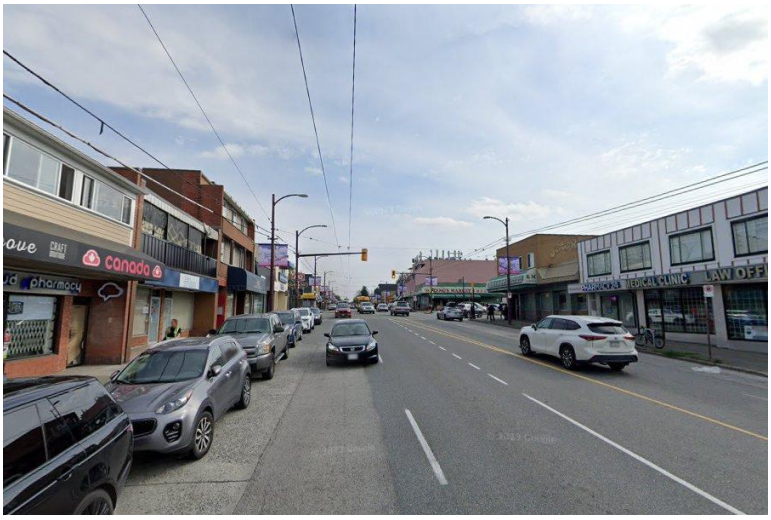


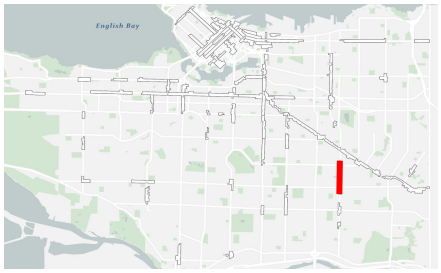
public realm	49
regional connectivity	43
retail focus	35

Number of blocks:	3
Median sidewalk width (m):	1.28
Patios (yes/no):	yes
Number of storefronts per block:	47
Number of business categories:	5
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	0
Vacancy rate (%):	5.63%

Victoria Dr 4800 - 5800

Victoria Drive BIA





public realm	53
regional connectivity	7
retail focus	40

Number of blocks:	11
Median sidewalk width (m):	0.98
Patios (yes/no):	yes
Number of storefronts per block:	76
Number of business categories:	6
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	7.19%

Victoria Dr 6300 - 6600

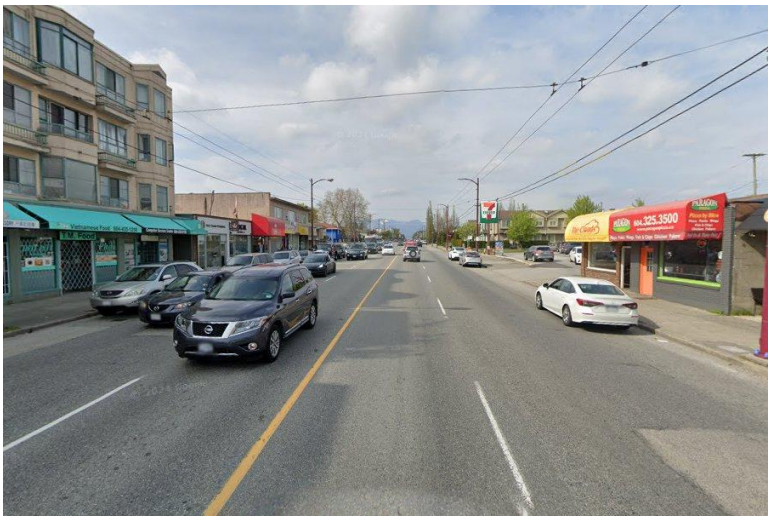
Victoria Drive BIA

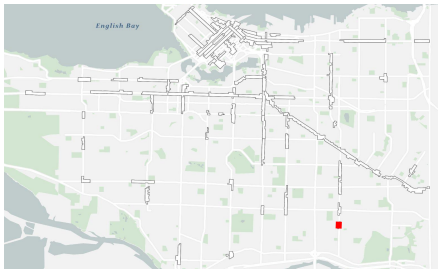
public realm	36
regional connectivity	7
retail focus	35

Number of blocks:	4
Median sidewalk width (m):	0.91
Patios (yes/no):	no
Number of storefronts per block:	71
Number of business categories:	6
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	11.70%

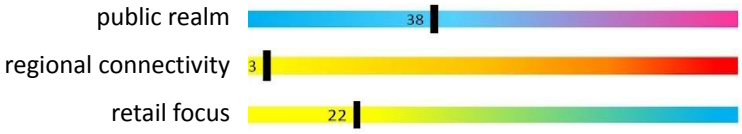
Victoria Dr 6900 - 7100

Victoria Drive BIA



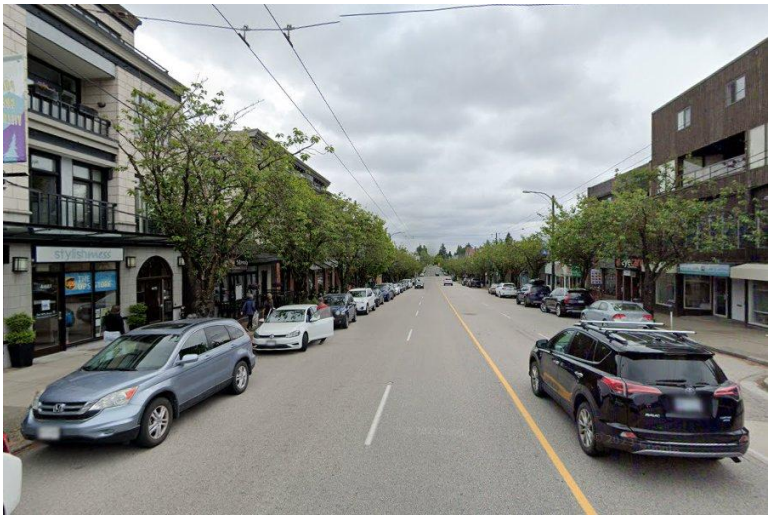


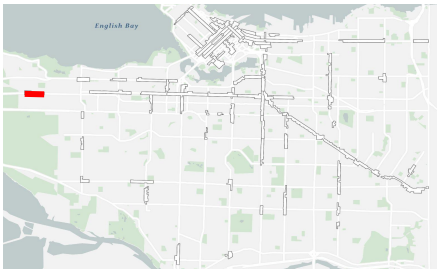
Number of blocks:	3
Median sidewalk width (m):	0.91
Patios (yes/no):	no
Number of storefronts per block:	54
Number of business categories:	5
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	21.60%



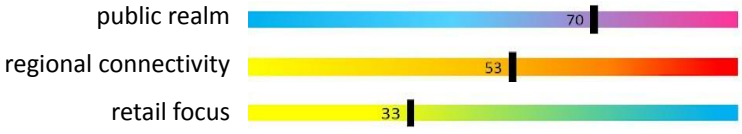
W 10th Ave 4300 - 4500

Point Grey Village BIA

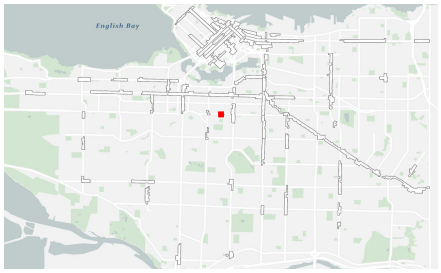




Number of blocks:	3
Median sidewalk width (m):	1.52
Patios (yes/no):	yes
Number of storefronts per block:	162
Number of business categories:	7
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	17.11%



W 16th Ave 600 - 700



Number of blocks:	2
Median sidewalk width (m):	0.50
Patios (yes/no):	yes
Number of storefronts per block:	33
Number of business categories:	4
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	6.15%

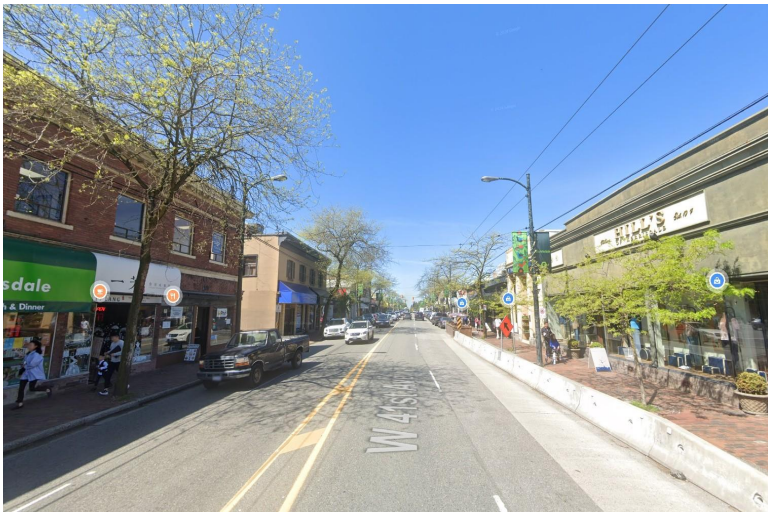
public realm 46

regional connectivity 37

retail focus 44

W 41st Ave 2000 - 2400

Kerrisdale BIA



Number of blocks:	5
Median sidewalk width (m):	1.10
Patios (yes/no):	yes
Number of storefronts per block:	130
Number of business categories:	5
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	4.01%

public realm 70

regional connectivity 33

retail focus 36

W 4th Ave 2600 - 2900

Number of blocks:	4
Median sidewalk width (m):	0.78
Patios (yes/no):	yes
Number of storefronts per block:	92
Number of business categories:	6
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	7.63%

public realm 43

regional connectivity 20

retail focus 44

W 4th Ave 3500 - 3700

Number of blocks:	3
Median sidewalk width (m):	0.55
Patios (yes/no):	yes
Number of storefronts per block:	101
Number of business categories:	5
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	9.90%

public realm 46

regional connectivity 23

retail focus 31

W 4th Ave 1600 - 2300

Kitsilano Fourth Ave. BIA

public realm	54
regional connectivity	20
retail focus	40

Number of blocks:	8
Median sidewalk width (m):	0.85
Patios (yes/no):	yes
Number of storefronts per block:	114
Number of business categories:	7
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	11.86%

W Broadway 1000 - 1700

public realm	38
regional connectivity	47
retail focus	38

Number of blocks:	8
Median sidewalk width (m):	0.55
Patios (yes/no):	yes
Number of storefronts per block:	91
Number of business categories:	7
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	15.91%

W Broadway 1800 - 2200

public realm	35
regional connectivity	70
retail focus	44

Number of blocks:	5
Median sidewalk width (m):	0.61
Patios (yes/no):	yes
Number of storefronts per block:	88
Number of business categories:	7
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	12.05%

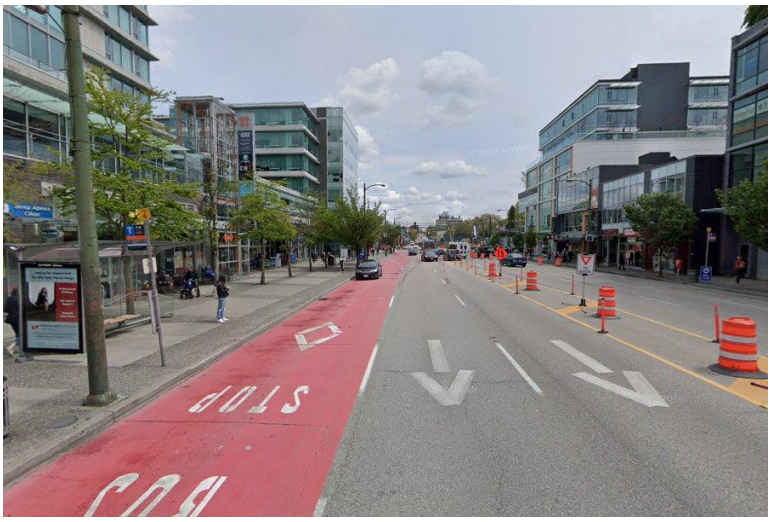
W Broadway 2500 - 3400

West Broadway BIA

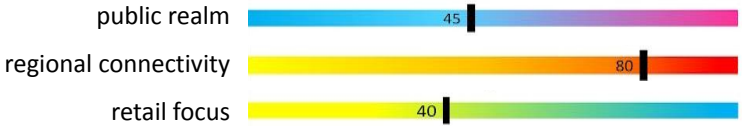
public realm	53
regional connectivity	60
retail focus	44

Number of blocks:	10
Median sidewalk width (m):	1.10
Patios (yes/no):	yes
Number of storefronts per block:	98
Number of business categories:	7
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	2
Vacancy rate (%):	8.09%

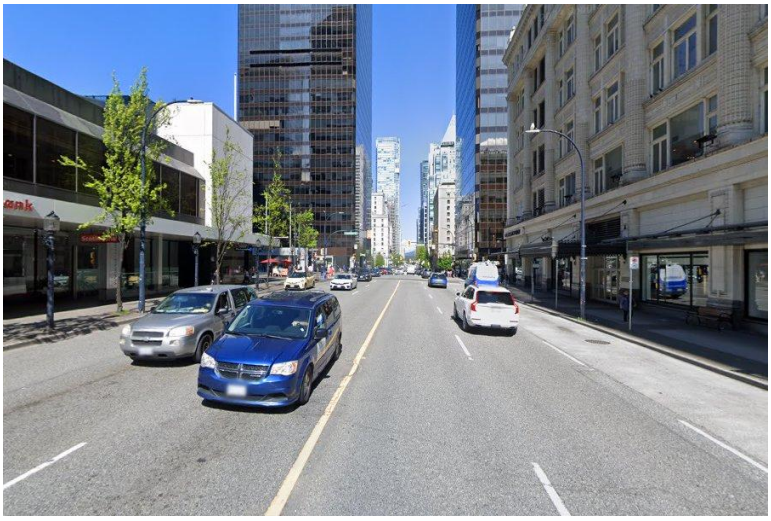
W Broadway 400 - 900
Cambie Village BIA



Number of blocks:	6
Median sidewalk width (m):	0.55
Patios (yes/no):	yes
Number of storefronts per block:	97
Number of business categories:	7
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	3
Vacancy rate (%):	15.29%

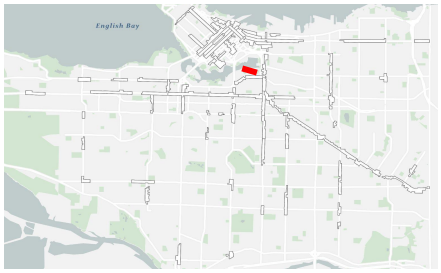


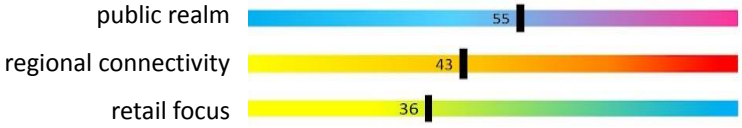
W Georgia St 600 - 1100
Downtown Vancouver BIA



Number of blocks:	6
Median sidewalk width (m):	1.37
Patios (yes/no):	yes
Number of storefronts per block:	31
Number of business categories:	6
Major Road Network (yes/no):	MRN
Number of regular and rapid bus stops per block:	3
Vacancy rate (%):	2.13%

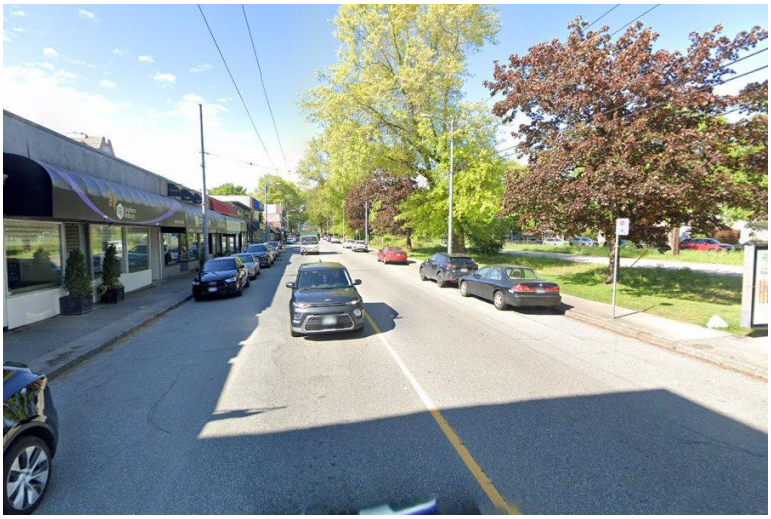
Water St 0 - 300
Gastown BIA

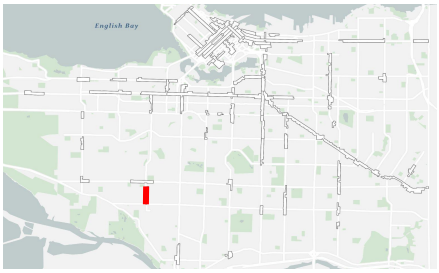




Number of blocks:	4
Median sidewalk width (m):	1.14
Patios (yes/no):	yes
Number of storefronts per block:	93
Number of business categories:	6
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	0
Vacancy rate (%):	11.56%

West/East Blvd 5200 - 6400





Number of blocks:	6
Median sidewalk width (m):	0.18
Patios (yes/no):	yes
Number of storefronts per block:	34
Number of business categories:	4
Major Road Network (yes/no):	n/a
Number of regular and rapid bus stops per block:	1
Vacancy rate (%):	15.05%

Back cover photo credit: Nelson Mouëllic

August 2024