



# 2030 DISTRICTS®

## Establishing 2030 Districts in BC: Exploring the Value Case

UBC Sustainability Scholars Report  
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# Executive summary

2030 Districts are aspiring high performance building zones that are led by the owners and managers of commercial buildings of all sizes located within these zones. The goal of a 2030 District is to benefit its members while helping them contribute to scalable climate change action. Members within each District achieve this goal by working closely with one another to collectively reduce the energy use, water consumption, and transportation emissions attributed to participating buildings by 50% by the year 2030, as outlined in Architecture 2030's Challenge for Planning.<sup>1</sup>

This report discusses research conducted during the summer of 2016 on the potential value of establishing a 2030 District in BC. Information was extracted from interviews with participants and leaders from other Districts and staff from the coordinating non-profit Architecture 2030, as well as from a literature review. Findings indicate that a 2030 District in BC could realize a number of key benefits. The top six benefits include the opportunity for property owners and managers to:

1. Participate in a program by and for commercial property owners/managers
2. Share with and learn from peers in District forums
3. Implement initiatives with ongoing District support and resources
4. Distinguish buildings and advertise accomplishments
5. Commit to focused goals that are compatible with other initiatives
6. Take advantage of a strategic boundary and geographical area of influence

Districts' strategic partnerships with service providers further enable property owners and managers to implement focused actions toward achieving measurable, long-term goals. The flexible nature of Districts' goals and resource support also makes them compatible with other building performance initiatives.

An overview of the structure and operations of existing Districts reveals that property, services, and community stakeholders and champions all play roles in the establishment and running of a District. Also, a BC District could contain multiple boundaries, structured either similar to existing multiple-area Districts or even in a new way specific to local geography and stakeholder support.

Notional District boundary maps for eight areas in BC's Lower Mainland and Southern Vancouver Island were created based on several criteria. Feedback received on the maps, potential stakeholders, and overall research findings indicate that next steps should include efforts to:

- Create materials to support outreach
- Research local interest and capacity
- Establish a core group of champion stakeholders in the region
- Address additional questions (ex. the participation of high density residential property)
- Develop a business plan including opportunities/gaps and cost/benefit analysis

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<sup>1</sup> The 2030 Challenge for Planning.

This report is meant to act as a guide for individuals and organizations interested in learning about 2030 Districts and potentially working to establish one or more in BC. The establishment and success of a 2030 District in BC will ultimately depend on whether further research and strategic outreach catches the interest, support, and leadership of champion property, services, and community stakeholders in the region.



# Introduction

This report discusses research conducted during the summer of 2016 on the potential value of establishing a 2030 District in British Columbia (BC). 2030 Districts are aspiring high performance building zones that are led by the owners and managers of commercial buildings of all sizes located within these zones. The goal of a 2030 District is to benefit its members while helping them contribute to scalable climate change action. Members within each District achieve this goal by working closely with one another to collectively reduce the energy use, water consumption, and transportation emissions attributed to participating buildings.<sup>2</sup>

In BC, there has been growing interest amongst local government and other varied building sustainability leaders in establishing one or more 2030 Districts. A preliminary meeting of interested parties was held on the topic in November 2015. The research findings described in this report advance several of the next steps that were formed at this meeting, including:

- Review the experience of participants in other Districts
- Expand insight into potential key stakeholders
- Create preliminary local District boundaries and summarize input
- Facilitate another forum to review new findings and outreach strategies

More specifically, the following four questions were formulated to help guide the report's research and outreach:

1. What would be the value of a BC 2030 District?
2. Who would lead a 2030 District, who would participate, and where?
3. How could a local District be structured, and what would be measured?
4. What are other insights into how to establish a successful District?

As described in the following methods section, information was extracted from interviews with participants and leaders from other Districts, and with staff from the coordinating non-profit Architecture 2030. A literature review was also conducted. Notional boundary maps were drawn for eight high potential areas in the Lower Mainland and Southern Vancouver Island, and feedback was gathered on the maps and research findings through email outreach and a July 2016 update meeting of interested parties.

This report is intended as a guide for individuals and organizations interested in learning about Districts and potentially contributing to the establishment of one in BC. It presents a comprehensive discussion of research and feedback findings in sections dedicated to exploring Districts' key value factors, their organization and operations, and where one or more could local Districts be located. It also shares revised next steps to help inform future discussions and outreach focused on determining if and how a District could be established in BC.

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<sup>2</sup> The 2030 Challenge for Planning.

# 2030 Districts backgrounder

The Seattle-based nonprofit organization Architecture 2030 created and leads the overall District initiative and its 2030 District Network. The first District was established in 2011 in Seattle. Today, thirteen North American cities have an established District, representing 271 million square feet of participating building space. Another five Districts are in the process being established.<sup>3</sup>

<i>Established Districts</i>			<i>Emerging Districts</i>
Albuquerque	Ithaca	San Francisco	Ann Arbor
Cleveland	Los Angeles	Seattle	Detroit
Dallas	Pittsburgh	Stamford	Portland
Denver	San Antonio	Toronto	New York City
Grand Rapids			Austin

Districts sign on to Architecture 2030’s Challenge for Planning performance targets for both existing buildings and new construction. The goal for existing buildings is a 50% reduction in energy use, water consumption, and associated transportation emissions by the year 2030; for new buildings and major renovations it is a 50% reduction in water consumption and transportation emissions along with carbon neutral energy performance—using no greenhouse gas-emitting energy to operate (Figure 1).<sup>4</sup> Building type-specific values from the 2003 Commercial Buildings Energy Consumption Survey (CBECS) are used for energy performance baselines, while water and transportation emissions baselines are determined individually by Districts, often in partnership with local utilities.

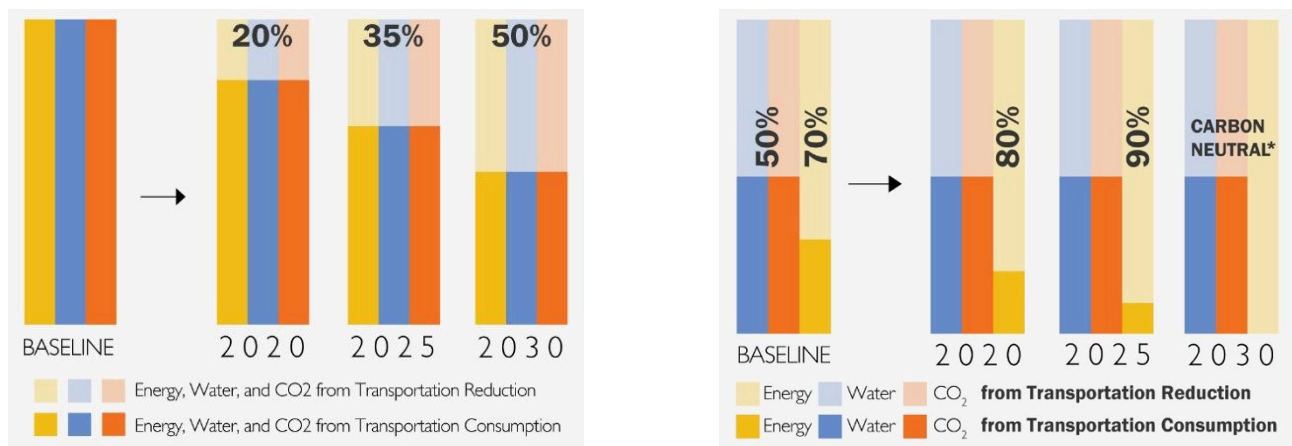


Figure 1: The 2030 Challenge for Planning for existing buildings (left), and new construction (source: Architecture 2030).

<sup>3</sup> 2030 Districts website.

<sup>4</sup> The 2030 Challenge for Planning.

Some Districts are already reporting significant performance achievements. In Seattle, buildings participating in the Seattle 2030 District have to date achieved 22% energy, 4% water, and 6% transportation emission reductions below baseline values.<sup>5</sup> Buildings participating in the Pittsburgh 2030 District, meanwhile, have already surpassed a 10% reduction in all three categories.<sup>6</sup> The World Green Building Council recently announced a groundbreaking new partnership project with Architecture 2030 that aims to ensure that all buildings are “net zero” by 2050.<sup>7</sup> This announcement points to the increasing relevance of 2030 Districts and their goals within the field of sustainability.

Three types of stakeholders are involved in Districts. Commercial property owners and managers represent the buildings they help run within a District boundary, which can range from institutional buildings (ex educational facilities and hospitals), to government property, to commercial office towers—and everything in between. Services stakeholders include supporters who provide services relevant to District goals within its boundary, such as architecture and engineering firms and professional associations. Community stakeholders include local governments, agencies, and nonprofit organizations that support District goals.<sup>8</sup>

The benefits listed for property owners and managers for participating in a District are wide-ranging, and relate to peer access, community-building, leadership, and the opportunity to achieve accomplishments and gain a competitive business edge. Members gain access to resources such as software tutorials, project case studies, and project financing guidelines, as well as opportunities to discuss ideas with other building owners and operators and go on tours of implemented projects.<sup>9</sup>

The following points clarify often unknown or misunderstood information about 2030 Districts:

1. Building performance is reported anonymously to peer participants and as aggregated data to the public, and there are no repercussions for not meeting reductions targets. This helps to create a low-risk, non-punitive environment in which building managers and owners can undertake performance initiatives. This can also help encourage the operators of inefficient properties to take initial steps towards performance improvement.
2. Districts are operated autonomously by local staff and stakeholder leaders, who access the resources and support of Architecture 2030 and its District Network. Districts operate at a scale that makes them small enough to take risks and be responsive, but large enough to create impact—both locally and collectively.
3. All current and past efficiency efforts undertaken by participating managers and owners count towards District goals. Property members count all efforts to improve performance in their data reporting, regardless of when they joined their District.

The District Network continues to grow and demonstrate that many 2030 Districts are effectively contributing to wide-scale building performance improvements. The following sections explore how research on the strengths and value of Districts was approached, and what was discovered.

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<sup>5</sup> Seattle 2030 District 2015 Annual Report: “Our City, Our District, Our Impact.”

<sup>6</sup> Pittsburgh 2030 District Progress Report 2015.

<sup>7</sup> Manongdo, Ping. “World Green Building Council.”

<sup>8</sup> 2030 Districts website.

<sup>9</sup> 2030 Districts Member Resources Toolkit website.

# Methods

Information and insight was gathered from interviews with Architecture 2030 staff, and District leaders and participants in Seattle, Pittsburgh, Denver, and Toronto (Figure 2). Architecture 2030 and District literature and reports were also reviewed.

<i>District</i>	<i>Reason contacted</i>
Denver	The only volunteer-run District; high performer
Pittsburgh	Unique member benefits; high performer
Seattle	First established District; high performer
Toronto	First Canadian District; distinctive District strategy

Ten people were interviewed, including two staff from Architecture 2030, two District Executive Directors (EDs), and one District Board Chair. Seven of those interviewed are property managers representing a university, a hotel, and property management and commercial real estate companies.

Feedback on notional boundary maps, potential stakeholders, and next steps was generated via email outreach to approximately thirty local government and sustainability leaders, as well as a July 2016 meeting of a dozen of those interested.

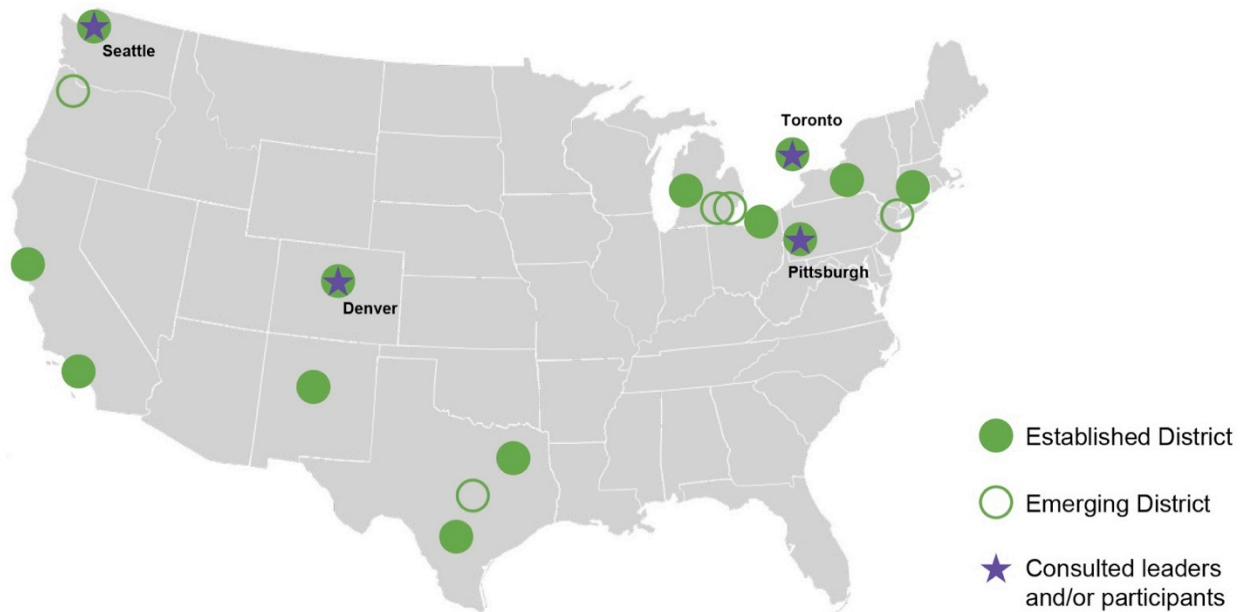


Figure 2: Map of 2030 Districts across North America (graphic: author).

# The key value proposition of Districts

This section explores my first research question on the value of a potential 2030 District in BC. Many building performance programs already exist in BC, yet six main benefits highlight the key value of 2030 Districts. They are best described qualitatively and anecdotally, and consist of the opportunity for property members to:

1. Participate in a program by and for commercial property owners/managers
2. Share with and learn from peers in District forums
3. Implement initiatives with ongoing District support and resources
4. Distinguish buildings and advertise accomplishments
5. Commit to focused goals that are compatible with other initiatives
6. Take advantage of a strategic boundary and geographical area of influence

These points complement and support one another, and should be considered collectively.

## *1. Participate in a program by and for commercial property owners/managers*

This first point identifies one of the most distinguishing District features. Districts purposefully recognize and engage a group of people who have the potential to create large impact on building performance, individually and collectively. Districts are run by and for commercial property owners and managers to empower them to plan and achieve significant performance improvements and savings, which often help them distinguish themselves within their own companies.

Districts recruit and welcome commercial property of all types and sizes. This allows for a diversity of property members to gather, cross-pollinate, and learn together in District forums. Member properties range from educational to office to large entertainment buildings, and range in size from several thousand to several hundreds of thousands of square feet of building space.

District participation may be particularly advantageous to small- and mid-sized property members who lack the resources, access to information, and declared sustainability goals of larger companies. Districts' low-risk and low-barrier environments encourage the implementation of sustainability efforts project by project, even if those efforts represent relatively small steps or even first steps for inefficient buildings. The facilities manager of a smaller university shared that after his institution joined the local District and adopted its goals, he then had access to valuable material he could repeatedly reference in both planning ambitious projects and justifying them.

The fact that Districts are by and for commercial property owners and managers also creates accessible leadership opportunities. Participating property members collectively steer the benefits created for members, District-specific goals, and their District's strategic service and stakeholder partnerships. They can also affect change in their city in unexpected ways, as one facilities manager did when he brought conflicting city-authored parking garage lighting guidelines to District leaders, who then used their government contacts to quickly rectify the issue. This facilities manager was weary of raising the discrepancy directly with the city, but felt comfortable alerting his District

contacts. His implementation of the proper guidelines in turn ended up saving his company over \$200,000 on their electricity bills. From guiding tours of projects in their buildings, to helping guide the value of their District through regular participation in meetings, managers and owners can engage in a type of leadership that is directly advocating for their own interests and those of their peers.

The fact that Districts are run by and for varied commercial property owners and managers creates inclusive, low-risk, and leadership-supporting environments. The exchanges that happen in District-facilitated forums depend on these environments.

## ***2. Share with and learn from peers in District forums***

Managers and owners repeatedly mentioned in interviews that the top District participation benefit is the opportunity to share with and learn from their property sector peers in District-facilitated forums. 2030 Districts are defined by their clear reductions targets, but their standout value lies in the action-oriented relationships and connections they facilitate that enable collective problem solving and strategy sharing.

The Seattle District hosts regular meetings that are exclusively for property owners and managers, offering a safe space in which to discuss challenges. The Pittsburgh District also hosts regular meetings for participating building managers and owners, but services stakeholders are also allowed to participate (and can solicit business only through the sharing of contact information). These owner and manager-focused meetings are often held at participating properties, where the host manager or owner gives a tour of efficiency projects.

A story from the regular meetings held by the Pittsburgh District for managers and owners highlights the value of bringing a cross-section of property members together. A small grocery store manager shared how he managed to reduce the energy load of his refrigeration units, and afterwards the managers of both a university with over four hundred refrigeration units and a historic building with a single unit said they could use his tactics to attempt efficiency improvements for their respective property. And while the convening of diverse property members can be beneficial, the Pittsburgh District also organizes meetings for the managers and owners of buildings of similar type and age to help them address common issues.

The advantages of District forums are multi-fold for owners and managers. The university facilities manager mentioned in the previous point perfectly summarized this standout value when he referred to 2030 Districts as “brain trusts.” Yet the collective problem-solving Districts facilitate would be less effective without the crucial support of other District tools and resources.

## ***3. Implement initiatives with ongoing District support and resources***

Managers and owners can access ongoing support and tools from both local and Network-wide sources as their challenges and projects evolve.

The Pittsburgh District provides a few standout examples of member support. Every participating property member in the District gets to individually meet with the District’s ED once a year in exchange for them sharing their performance data. They are told how their performance and improvement compares to that of other unidentified buildings in the District, and what possible steps, tools, or programs they can take advantage of next. They are also encouraged to develop a “revolving fund” within their ownership organizations, where the savings from initiatives the District has personally helped them implement—which are often no- or low-cost projects or ones with short payback periods—are reinvested into other performance efforts. Pittsburgh’s ED was also instrumental in connecting a prospective boutique hotel to a similar hotel participating in another District to discuss their participation experience.

Owners and managers can access ongoing savings and tutorials on tools, including Portfolio Manager and Greenprint data software. One small-sized property owner mentioned that tips learned through a tutorial helped the company use Portfolio Manager more effectively. In this regard, districts can be viewed as providing a type of workforce education for property managers.

Members can also access product discounts through the District Network’s growing Marketplace. The program was launched in early 2016 and currently offers member discounts on HVAC control, advanced metering, and LED lighting products, as well as on electrochromatic windows and electric vehicle charging stations.<sup>10</sup> Architecture 2030 administers the program its vendor vetting process. The manager of one large participating property company saved half a million dollars on purchases made through the program. It is unclear how international regulations would affect the availability of these discounts to Canadian District members. Regardless, purchasing power could be leveraged by potential BC-based 2030 Districts to negotiate savings.

#### ***4. Distinguish buildings and advertise accomplishments***

The ongoing support and resources District members gain access to help them achieve performance improvements, which in turn make their buildings and companies more competitive. Participation in a District helps managers and owners differentiate their buildings and advertise accomplishments in increasingly competitive “green” property markets. A district’s goals are focused on environmental protection, but also help managers and owners save money and distinguish their companies through the accomplishment of significant building performance improvements.

One mid-sized property member revealed that after adopting Greenprint through District incentives, his company was able to share and compare building performance data with larger property companies, and felt more competitive and well-resourced.

Another property manager and District founder mentioned acknowledgement amongst her peers that growing the recognizability of 2030 Districts could potentially create client-led demand for District participation, the same way that LEED certification evolved to be frequently demanded by clients.

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<sup>10</sup> Architecture 2030, “2030 Districts Network Launches Marketplace.”



## ***5. Commit to focused goals that are compatible with other initiatives***

Districts' resources and focused, measurable goals help members achieve performance improvements. They can also support property members' participation in other building performance programs.

One District leader mentioned observing the phenomenon that simply implementing benchmarking often results in 5% energy use reductions due to resultant behavioural changes. And a facilities manager shared that he achieved 30% reductions in the gas consumption of several buildings after implementing benchmarking simply by shutting systems off at night and being able to see the difference that made. Benchmarking and regular District events and communications help keep efficiency goals "top of mind" for busy building managers.

Other programs that managers and owners are participating in (or plan to participate in) may not have the same goals as 2030 Districts, but the resources, tools, and support they access through District participation help bolster their ability to achieve the related efficiency goals of other programs. The extent and importance of the compatibility of 2030 Districts with other initiatives may be best illustrated by the fact that a property manager helped establish a successful District by reaching out to her local BOMA network. Many of the BOMA owners and managers perceived compatible value in the 2030 District and became the first forty large property members to join.

2030 Districts help bring together the participants of varied building performance programs. Another way they help bring building owners and managers together is by providing them with a shared boundary-specific identity.

## ***6. Take advantage of a strategic boundary and geographical area of influence***

Lastly, Districts' boundaries help delineate goals and rally participants to collectively strive for impact. They create a galvanizing identity, and shared District achievements can foster a sense of pride and ownership related to District participation. District leaders and participants expressed both fatigue around competition and a desire for more collaborative building performance programs. They also expressed understanding that from a more macroscopic perspective, it is better to engage in shared efforts, as cities as a whole are competing against other nearby cities in local property markets.

Finally, a District's geographical boundary can also focus advocacy-oriented action and efforts. Districts' boundaries predispose them to potentially be able to leverage their efforts to affect relevant local policy change to help them achieve their shared building sustainability goals.

The key value points of Districts build on one another to illustrate their larger overall value picture. Now that the report has demonstrated the value proposition of 2030 Districts, it will look into how they are structured and operate.

# Insights into District organization and operations

The insight shared so far in this report has focused on why those interested in building performance and sustainability should know about 2030 Districts. The following sections deconstruct the report's original research questions. The answers to these questions in turn help fill in gaps not yet covered regarding how Districts function and manage to offer their benefits and services. The following points may be especially of interest to anyone considering leading or supporting the establishment of a local District.

## *Who participates in Districts, and who leads their establishment?*

Districts are private sector-led, but they ultimately depend on their range of private-public partnerships during and after establishment. Each type of District stakeholder plays a different role, with commercial property managers and owners supported as the primary focus of Districts (Figure 3).

A Successful 2030 District is a PRIVATE-PUBLIC PARTNERSHIP, comprised of:

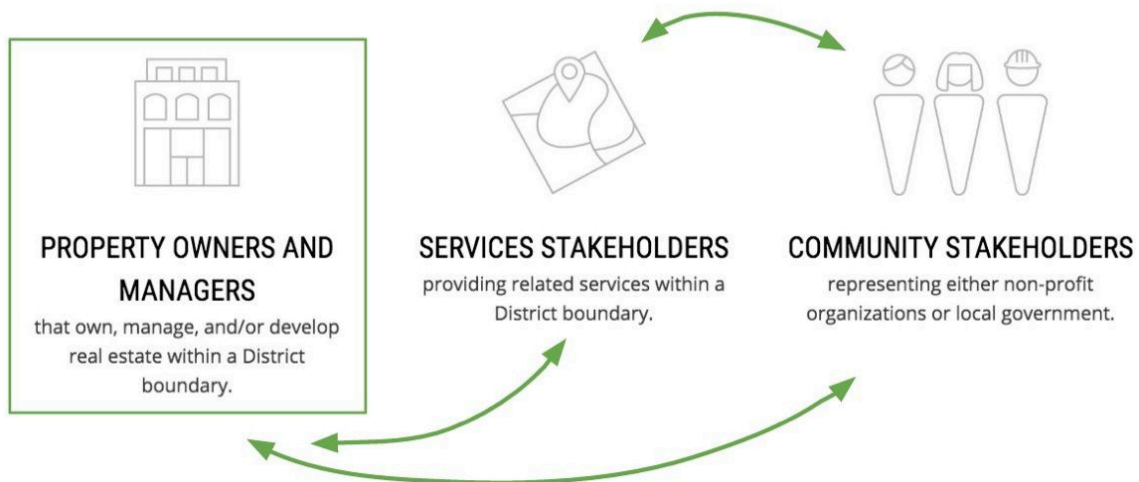


Figure 3: District stakeholders and relationships (source: author-modified diagram from Architecture 2030).

**Services stakeholders** provide expertise and advice to managers and owners on building performance strategies or challenges through various types of meetings and forums. The forums differ from District to District, but often include a variety of knowledge sharing events, lunch-and-learns, and cocktail parties.

Services stakeholders gain access to often large and influential client bases, the District's brand recognition, the opportunity to test out products and services, and exposure to organizations and local government contacts. They often offer discounts to property members. Examples include 15% off legal fees for a stakeholder law firm, and free basic energy audits from an engineering firm.

Building owners and managers work collaboratively with existing program and service providers to address the building performance challenges and opportunities that exist in their area. Each District involves services stakeholders in different ways, and some impose a vetting process to ensure that the service providers they are inviting into District forums are of high quality.

**Community stakeholders** also access the opportunity to build relationships with both property members and services stakeholders, and often fulfill their most important roles as District champions. Some Districts' services and community stakeholders are involved with event sponsorship opportunities, as District meetings are seen as a resource on which to capitalize. Pending changes to Architecture 2030's strategy will see local governments become required community stakeholders for new Districts. The intention of this requirement is to facilitate a District's uptake, success, and potential influence on local policy and building performance efforts.

**Champions** are crucial to the establishment of a District. Across all three stakeholder groups, champion companies, organizations, and agencies play leadership roles in supporting and promoting District goals and operations, and in recruiting other champions and participants. Champions involved in the establishment of existing Districts have come from each stakeholder group. After understanding the value of establishing a District within their local context, these champions are then critical in bringing others on board.

The research also identified two kinds of important balance regarding Districts' diverse stakeholders and champions. They include the balance between:

1. The need for property leaders vs the need for service and community leaders
2. Standout champions vs collective leadership (across all stakeholder types)

While Districts are focused on engaging property managers and owners to improve the performance of their buildings, services and community stakeholders play crucial roles in engaging broader communities, enabling establishment, and supporting 2030 District goals, benefits, and operations. In addition, a District cannot be led by a single organization but a few standout stakeholders are needed to jump-start establishment efforts and participation trends.

### *What is required to start a District?*

To start a District, at least three property managers and owners must be actively involved in an exploratory committee for the District to be recognized as "emerging" by Architecture 2030; five must be actively participating in meetings and efforts before a District can sign the required Charter and transition from "emerging" to "established."

A District must have at least two **community stakeholder sponsors**, with one acting as its fiscal sponsor. General sponsors contribute resources such as professional networks, office space, and staff time. Oftentimes an official fiscal sponsor will also provide these other kinds of support. An ideal community sponsor is therefore:

- Well-connected and well-known
- Neutral (able to support a District without jeopardizing existing relationships)
- Interested in supporting a District in multiple ways, beyond fiscal sponsorship

The type of sponsorship Districts receive from community stakeholders varies from District to District, but frequently a sponsor organization will act as a “nest” or “host” organization to a District. While the Seattle and Cleveland Districts were established as their own organizations, all others have been supported by a sponsor organization. The Pittsburgh District, for example, is nested within the Green Building Alliance, which acted as a community champion and fiscal sponsor.

Due to their official roles in the establishment process, Districts depend largely on property and community stakeholders to harness interest inertia and get a District up and running. Champion services stakeholders are not required for District sponsorship or establishment, but they have often been the first to introduce the idea of a District in their city and recruit other leaders. According to the people interviewed, it is key to quickly move a District from “emerging” to “established” even if all organizational details have not yet been worked out.

### *Who runs a District once it has been established?*

Most Districts are run by an ED. Since this paid position is often the only one that exists upon a District’s establishment, it is important to fill this role carefully. The best person for this job, which often starts out as a part-time position, may not be someone who helped to establish the District, and may be best found through a separate recruitment process. Impactful District EDs often possess impressive relationship-building and sales abilities. The Denver District is currently entirely volunteer-run and operating without an ED, making it an exception in the District Network. Dedicated communications and data personnel are beneficial to growing Districts, since engaging the stakeholder community and sharing pertinent information on a regular basis are paramount to District success.

Every District must have a board of directors, and its composition must consist of at least 40% property stakeholders, 20% services stakeholders, and 20% community stakeholders. This distribution helps to reinforce the collective nature of 2030 Districts.

### *How could a BC District be geographically structured?*

The Pittsburgh and Cleveland Districts are each made up of two distinct geographical boundaries, and are referred to as Multiple Boundary Districts to avoid creating a hierarchical relationship between boundaries. They each contain a downtown area and a satellite-type boundary in

neighbourhoods characterized by high concentrations of educational or healthcare facilities (often referred to as “Eds and Meds” precincts). The Pittsburgh District has one ED and one board, but separate advisory committees for each boundary.

Multiple Boundary Districts can beneficially share programs and offer the same services, while measuring their aggregated performance data separately. In Texas, emerging Districts shared a fiscal sponsor but maintained separate boards and EDs. Due to the geographical proximity of high potential areas in BC, shared fiscal sponsorship, multiple boundaries, and the geographical assignment of EDs, boards, and advisory committees should all be discussed in relation to structural options for one or more potential Districts. Furthermore, it is important to note that a BC District could approach its organizational structure in a way not yet seen in the District Network.

### *How are Districts funded?*

Each District receives funding from a variety of different sources, including foundations, grants, government agencies, sponsor organizations, and other kinds of sponsorship events or programs. Property members do not pay membership fees, as Districts strive to reduce barriers to participation. As mentioned above, sponsor organizations will often provide resources and amenities such as staff power, office space, and internet access. It is recommended that a District have diverse funding sources and partners, to reduce financial risk and simultaneously bolster the collective nature of District efforts. Some Districts, once they have become well established and well respected, have had funders approach them with funding offers, relieved to find a quality project that meets their funding guidelines.

### *How are baselines established, and how is data reported?*

All Districts are using building type-specific 2003 Commercial Buildings Energy Consumption Survey (CBECS) data for their baselines. This data is housed with the Energy Information Administration (EIA). The Toronto District will use baseline values they determined through correcting relevant CBECS data from the Northeastern United States for weather differences. In the meantime, it is waiting to collect data on its participating buildings until the mandated provincial building performance reporting for Ontario is implemented in the next several years.

Each District determines its own water consumption and transportation emissions baseline values based on what information is available and accessible. Many Districts have determined these values in partnership with local utility providers. Districts are therefore accomplishing data collection for these two metrics more slowly than for their energy metric.

Districts report performance progress in relation to established baselines with aggregated data for all participating buildings within a boundary. Sometimes, as Seattle has done for example, Districts also report how the aggregated reductions achieved by their participating buildings affect the performance of a District as a whole, including all buildings within its boundary (and not just those that are District members).

Architecture 2030 and individual Districts promote Energy Star’s Portfolio Manager and the Urban Land Institute’s (ULI’s) Greenprint program as their chosen performance-tracking software. Portfolio Manager is a powerful tool used to collect data, and Greenprint is used to create effective reports with that data.

Every District can determine if they take on other goals in addition to the Challenge for Planning’s 50% reduction goals for energy use, water consumption, and associated transportation emissions. Figure 4 demonstrates how the Pittsburgh District is in the process of integrating an additional goal and metric for indoor air quality alongside its standard 2030 District targets.

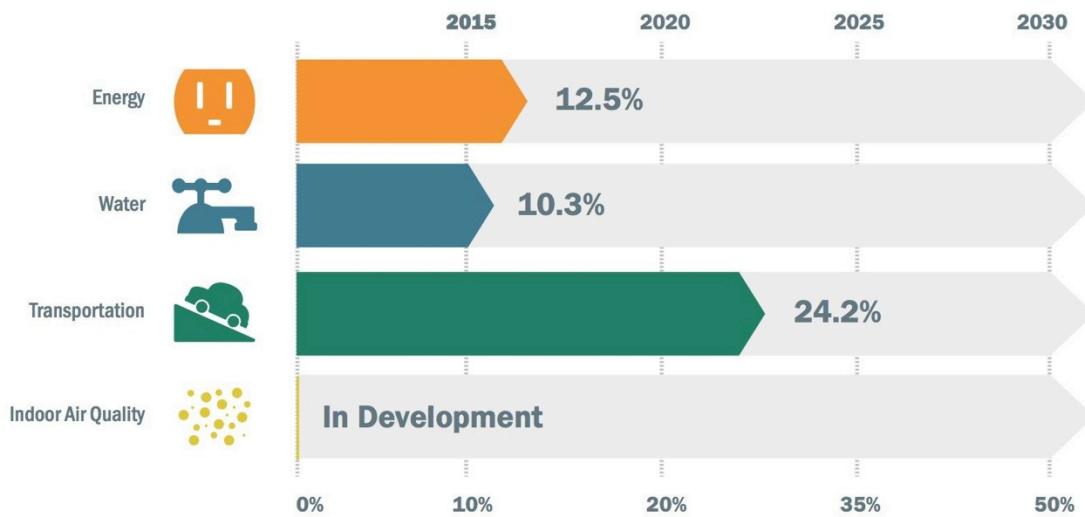


Figure 4: The Pittsburgh 2030 District’s additional indoor air quality performance metric, shown with the District’s 2015 performance achievements. Note that the District met or surpassed the 2015 target of 10% reductions in each category (source: Pittsburgh 2030 District Progress Report 2015).

This section shared insight into the establishment process, structure, and operations of Districts. These details demonstrate what is required to support a District and the benefits it offers participating property owners and managers. The following section applies this information to the BC context, and advances the discussion of the establishment of one or more Districts in BC by presenting notional boundary maps and preliminary tactics for stakeholder and champion identification.

# Potential BC locations and stakeholders

This section outlines the steps taken to identify notional District boundaries to generate feedback and discussion on a selection of first-cut areas. They were also created to gather recommendations for potential local stakeholders that could be approached for District leadership or participation.

## *Notional boundary identification and feedback*

Notional boundaries in eight Lower Mainland and Southern Vancouver Island cities were drawn using zoning and development trends detected in the boundaries of existing Districts and high level information from local District leaders. The following strategies were used to determine the boundaries:

- Reference community plans, zoning maps, and official city centre boundaries
- Anchor the boundary around the largest area of dense, contiguous commercial property
- Avoid low density residential areas as they do not contain target property stakeholders
- Include building types such as colleges, hospitals, government buildings, shopping malls, and entertainment facilities, as their owners represent large potential property stakeholders



Figure 5: The eight notional boundary areas in BC (credit: author).

The resultant maps encircle areas in Burnaby, New Westminster, North Vancouver, Richmond, Surrey, Vancouver (including UBC), Victoria, and West Vancouver (Figure 5, and see Appendix A for the complete set of full-sized maps). Feedback indicated that the notional boundaries seem reasonable as preliminary discussion tools (see complete comments in Appendix B). However, three additional pieces of general advice were suggested by local stakeholders asked to provide feedback on these notional boundaries:



- The potential role and inclusion of different types of residential buildings should be clarified
- The boundaries could more closely mimic those of official neighbourhood and city centres, for recognizability and possible advantages regarding data compatibility and sharing
- Several boundaries should expand to include adjacent areas containing large properties managed by a few companies, or where sustainability initiatives are a priority

For anyone planning to develop a District in these or other notional areas not considered in this report, it is recommended that the following criteria be used to help assess an area's preparedness:

1. Commercial building density and total square footage
  - The presence of commercial and eligible building types vs residential density
2. Presence of potential stakeholders and champions
  - Property stakeholders affect the boundary of a District (as they need to be within it)
  - Services/community stakeholders can affect the general region in which a District is established due to their roles in instigating interest and sponsoring Districts
3. Level of local interest, capacity, and readiness (based on preliminary feedback)
  - Districts are established where varied stakeholders express interest, leadership potential, and an understanding of how their city could benefit from a District

### *Preliminary list of potential BC stakeholders*

In addition to providing a focus to discuss notional District boundaries in BC, the maps were also used to generate feedback on potential property, services, and community stakeholders. Lists of approximately 60 property-, 15 service-, and 25 community-centred businesses and organizations were created through this process (see Appendix C). These lists provide examples of the potential stakeholders who could be approached regarding District leadership and participation.

When assessing which stakeholders to approach first about establishing a potential 2030 District, three types of property stakeholders are especially noteworthy. First, stakeholders that are already participating in a 2030 District in another city (or multiple cities) should be contacted. Conversations with contacts in these businesses and organizations could reveal more about the potential value of a District in BC, as well as initiate discussion on joining a BC District from the outset. Second, stakeholders that are real estate investors, such as the Healthcare of Ontario Pension Plan (HOOPP), help to determine the performance goals of their large property portfolios. They would therefore be prominent stakeholders to join or champion a District. Lastly, potential stakeholders who have property in multiple notional areas should be targeted for outreach, as their participation could influence the structure of BC Districts with multiple affiliated areas.

Similar factors distinguish potential services and community stakeholders on the lists, including participation in other 2030 Districts and activity in or near to multiple notional areas. As previously discussed, community stakeholders that are well-connected, relatively neutral, and interested in supporting a District in multiple ways are especially valuable to engage. Local or regional governmental staff can help develop interest in a District, but they will need to hand off efforts to identified champions for the bulk of the establishment process.

# Discussion and next steps

This report shares information and insight on the value proposition, structure, and operations of 2030 Districts that was collected over several months of research and outreach to District leaders and participants. The feedback received on potential stakeholders and the notional maps, along with the discussion during a July 2016 meeting with interested parties from the Lower Mainland and Southern Vancouver Island, generated important points about the trajectory of this 2030 District exploratory project and its next steps. More clarity needs to be achieved on whether or not it makes sense to pursue a District in one or more areas of BC, and if so, what the plan should be moving forward—including who is committing time and resources. To keep building momentum for establishing a 2030 District in BC, the report advances the following set of recommendations:

## ***1. Create materials to support outreach***

A tailored external communications piece or package is required to initiate and guide conversations. These materials should include a summary of ideas that could be used to prompt potential property, services, and community stakeholders and assess interest. A wide distribution strategy would help catch the attention of as many potential stakeholders as possible.

## ***2. Research local interest and capacity***

Targeted outreach to potential stakeholders is needed to determine the desire and current ability of the chosen notional regions in BC to support a District. Stakeholders on the Appendix 3 lists that are participating in other Districts or have a presence in multiple notional areas here in BC should be prioritized for initial outreach and networking. This will also help assess the extent of program exhaustion felt by local property stakeholders, and identify ways to navigate a possibly overwhelmed participation landscape.

## ***3. Establish a core group of local champion stakeholders***

Outreach efforts and the assessment of local interest should focus on identifying local champion stakeholders who want to form an exploratory committee and lead a District establishment process. Champion property managers and owners and community stakeholders are needed to sponsor and establish a District, fiscally and otherwise. Efforts to identify these champions should have a limited timeframe, after which either the project will be put on pause due to a current lack of threshold support, or champions will step forward to carry through establishment efforts.

## ***4. Address additional research questions***

Research should be undertaken to assess whether a local District would target multi-unit residential buildings (MURBs) for participation. It is unclear if and how MURBs are engaged in other Districts. Due to the Lower Mainland's high density of strata buildings, for example, it is crucial to address if and how they would participate in a 2030 District. Branding, the perceived value of District participation, and the spill-over of action from leaders to small property owners will be

important points to discuss with potential MURB stakeholders. The timing of this research is important, as it affects the timing and strategy of research into local interest and capacity.

Additional research could also be carried out to gain further insight into how other Districts approached establishment, including the drawing of their boundaries and the role of local government. This research might best be conducted, however, if and when local champions are identified.

### ***5. Develop a business plan***

There is clear need to develop a more thorough opportunities/gaps analysis including comparison to existing and planned building performance initiatives, develop a cost/benefit analysis of running a District and providing its services, and explore potential funding strategies.

### ***6. Commit short-term resources to this project's next phase***

The five recommendations above will require dedicated time and resources in order to be accomplished and move this explorative project through to its next phase. A budget should be created to provide staff time from one or more existing organizations, or to fund and support the hiring of one or more short-term personnel who can carry out the identified work.

Districts are ultimately the result of collaborative efforts. While many other North American cities have found value in hosting a District, one can and should only be established in BC if its value is perceived as locally beneficial, and if interest gains traction and champions and supporters step forward relatively quickly.

# References

2030 Challenge for Planning. Accessed August 2016,  
[http://architecture2030.org/2030\\_challenges/2030\\_challenge\\_planning/](http://architecture2030.org/2030_challenges/2030_challenge_planning/).

2030 Districts Member Resources Toolkit website. Accessed August 2016,  
<http://www.2030districts.org/toolkits>.

2030 Districts website. Accessed August 2016, <http://www.2030districts.org>.

Architecture 2030. “2030 Districts Network Launches Marketplace to Give Members Special Pricing on Energy-Efficient Products.” Architecture 2030 website, March 28 2016, accessed online.

Manongdo, Ping. “World Green Building Council sets goal for all buildings to be ‘net zero’ by 2050.” *Eco-Business*, June 29, 2016, accessed online.

Pittsburgh 2030 District Progress Report 2015. Accessed August 2016,  
<http://www.2030districts.org/sites/default/files/atoms/files/Pittsburgh%202030%20District%20Progress%20Report%202015.pdf>.

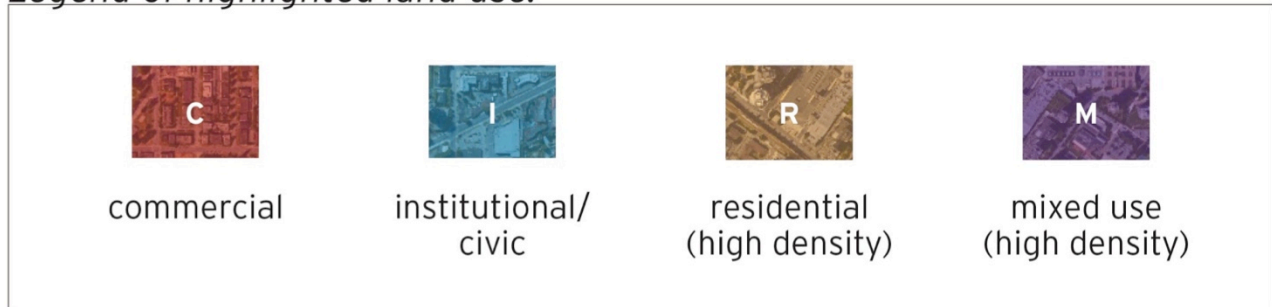
Seattle 2030 District 2015 Annual Report: “Our City, Our District, Our Impact.” Accessed August 2016,  
[http://www.2030districts.org/sites/default/files/atoms/files/Seattle\\_2030\\_District\\_Annual\\_Report\\_2016.pdf](http://www.2030districts.org/sites/default/files/atoms/files/Seattle_2030_District_Annual_Report_2016.pdf).

# Appendix A

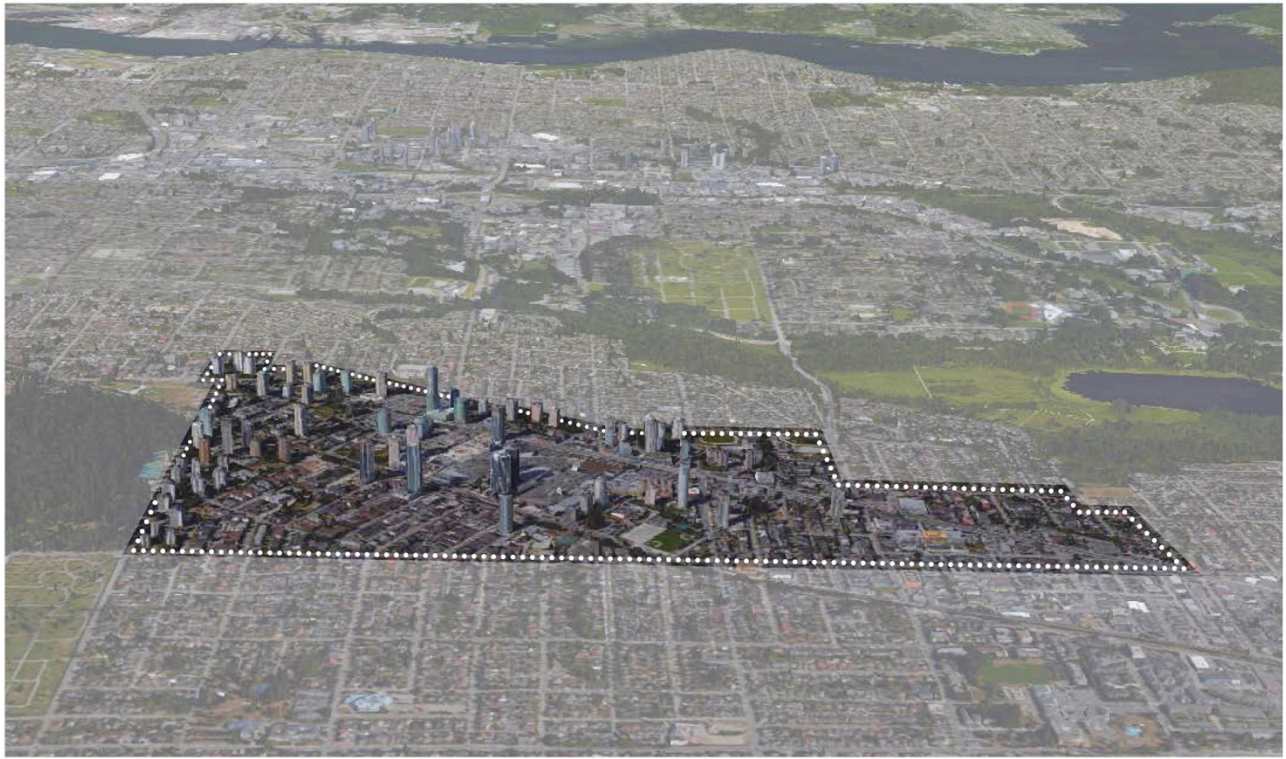
## Notional District boundary maps

The following pages contain the notional District maps for the eight high potential BC areas identified in this report.

*Legend of highlighted land use:*

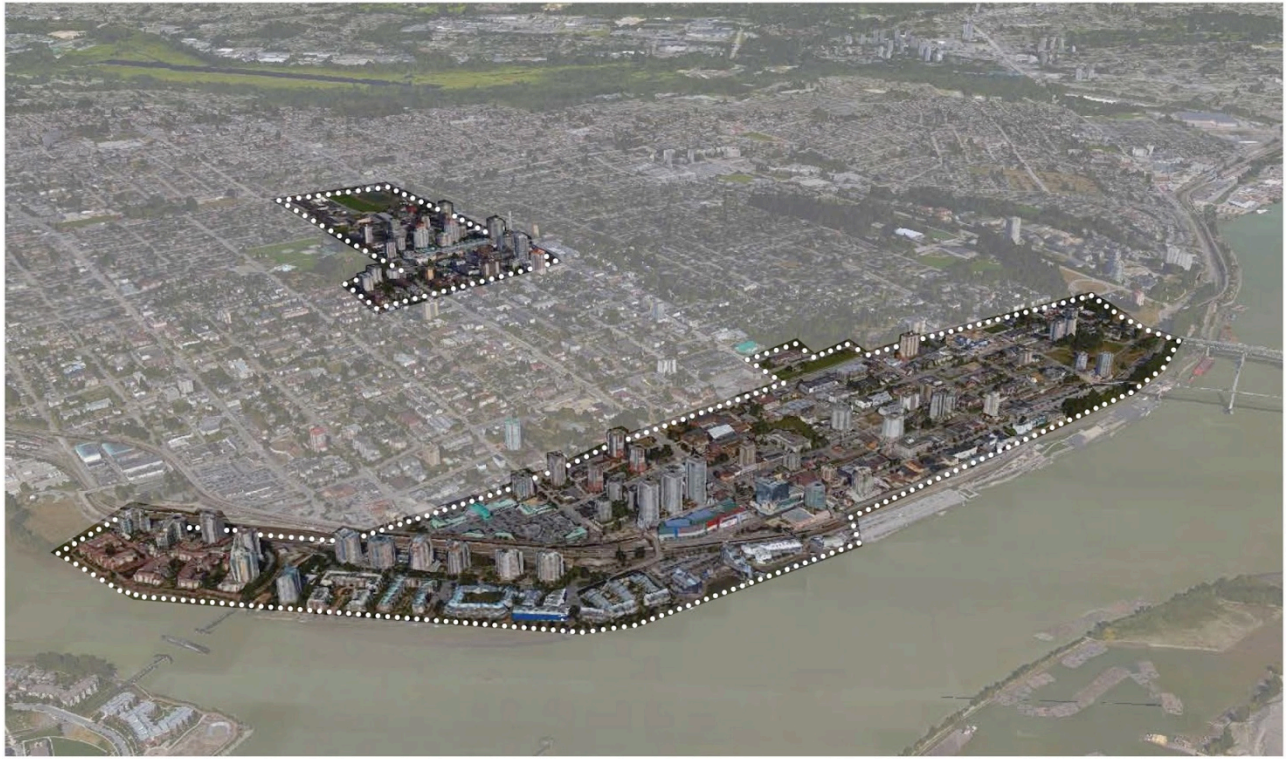






Burnaby





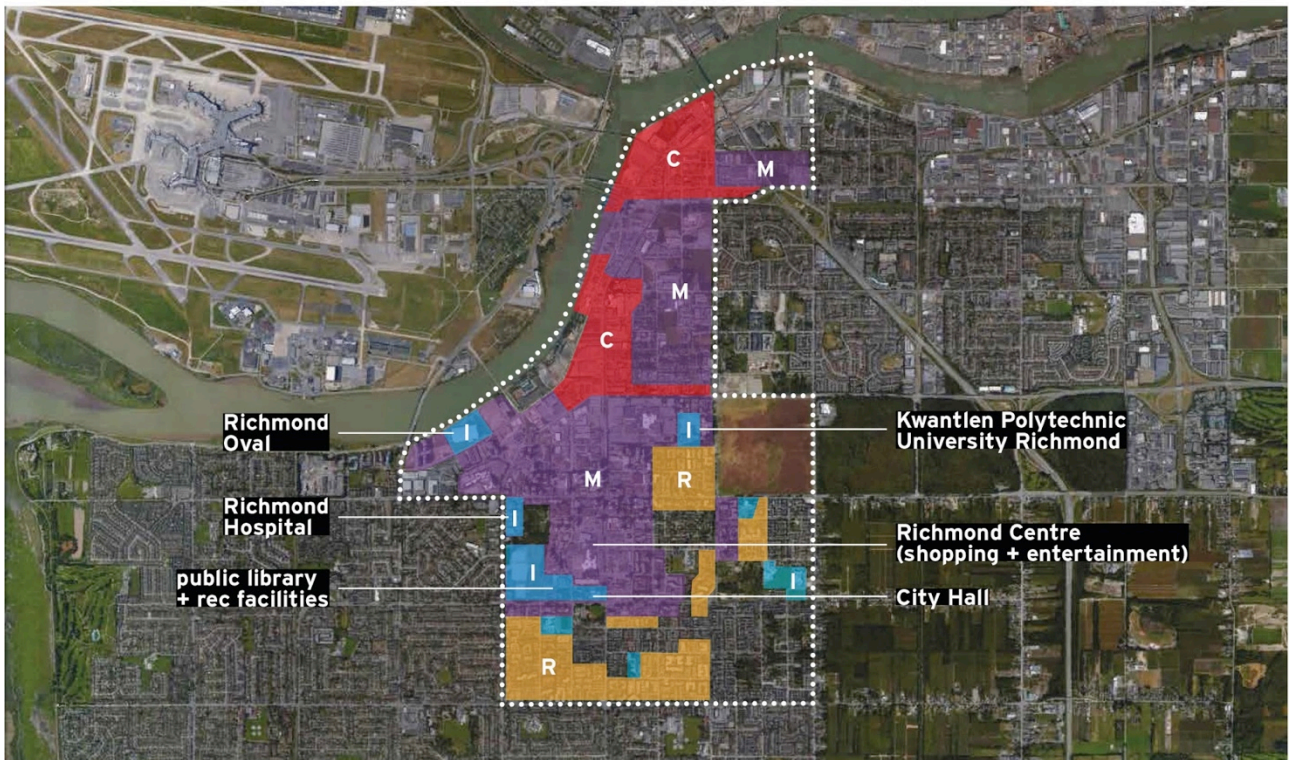
New Westminister





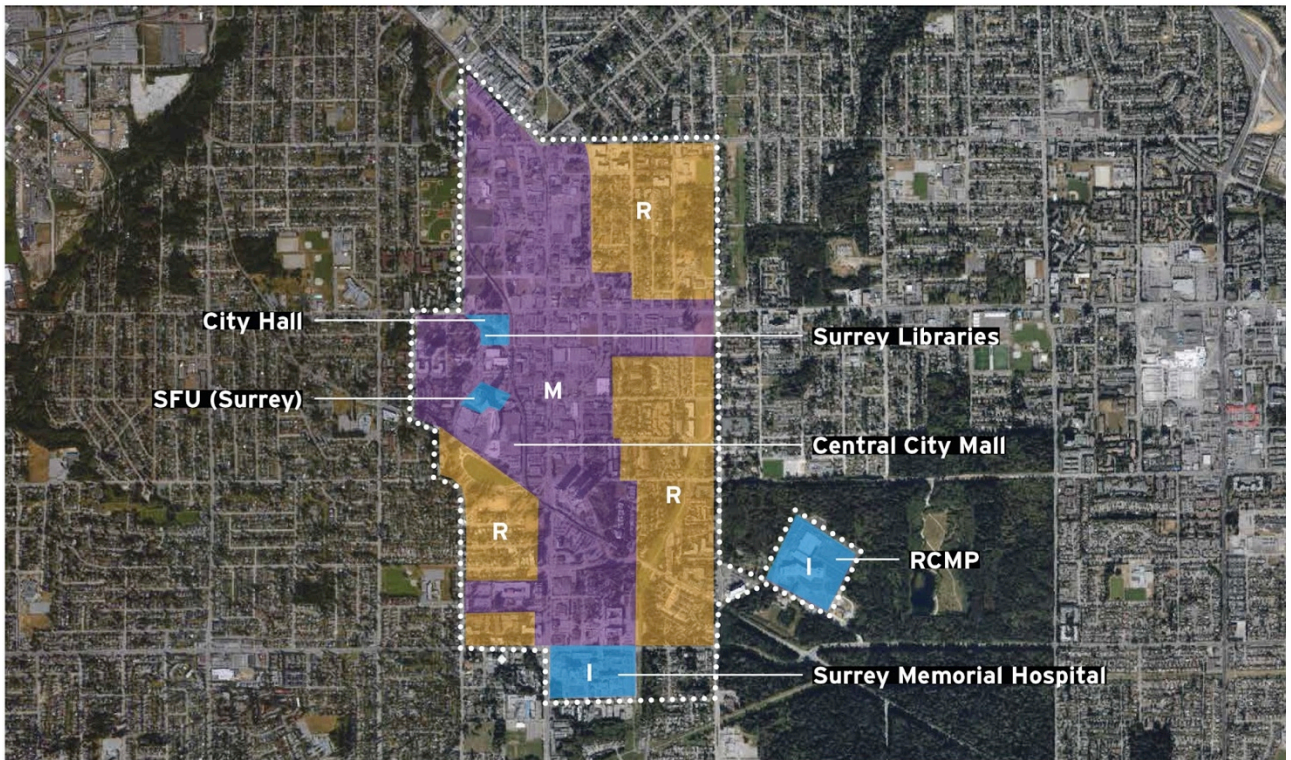
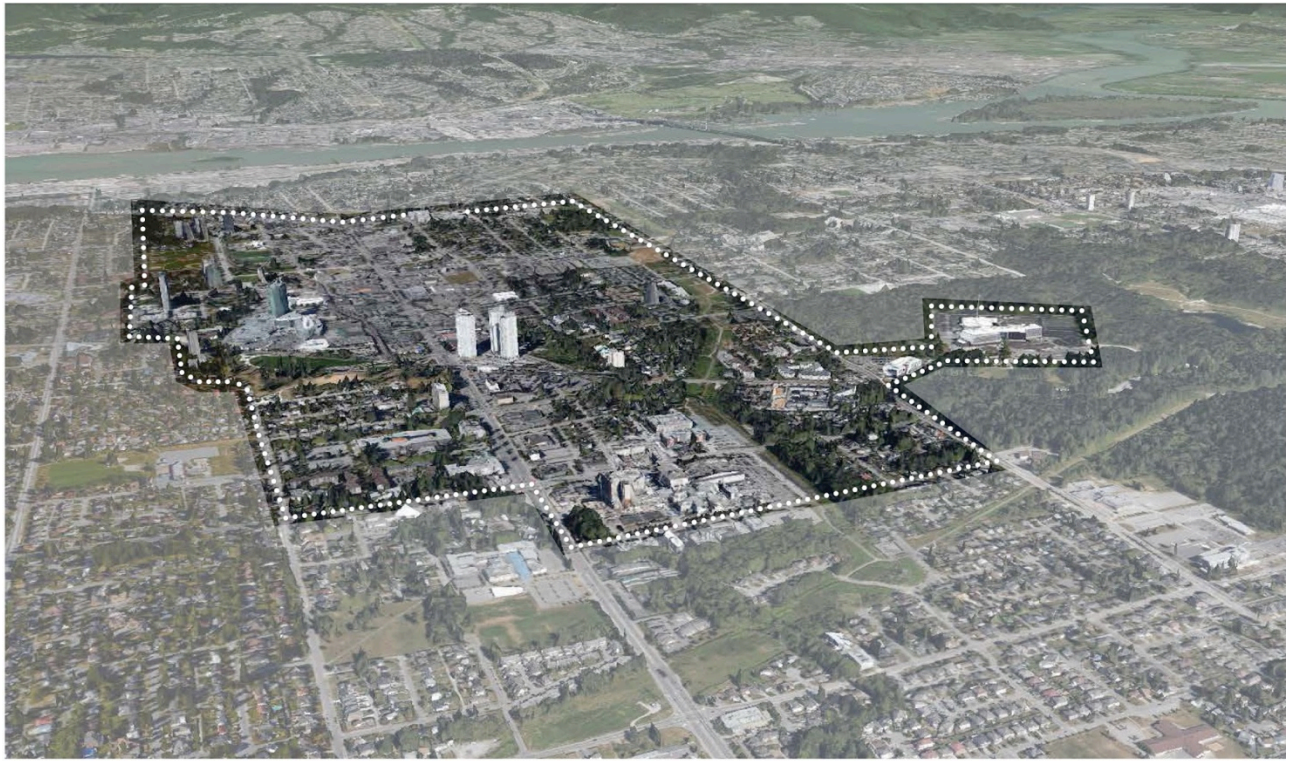
North Vancouver





Richmond





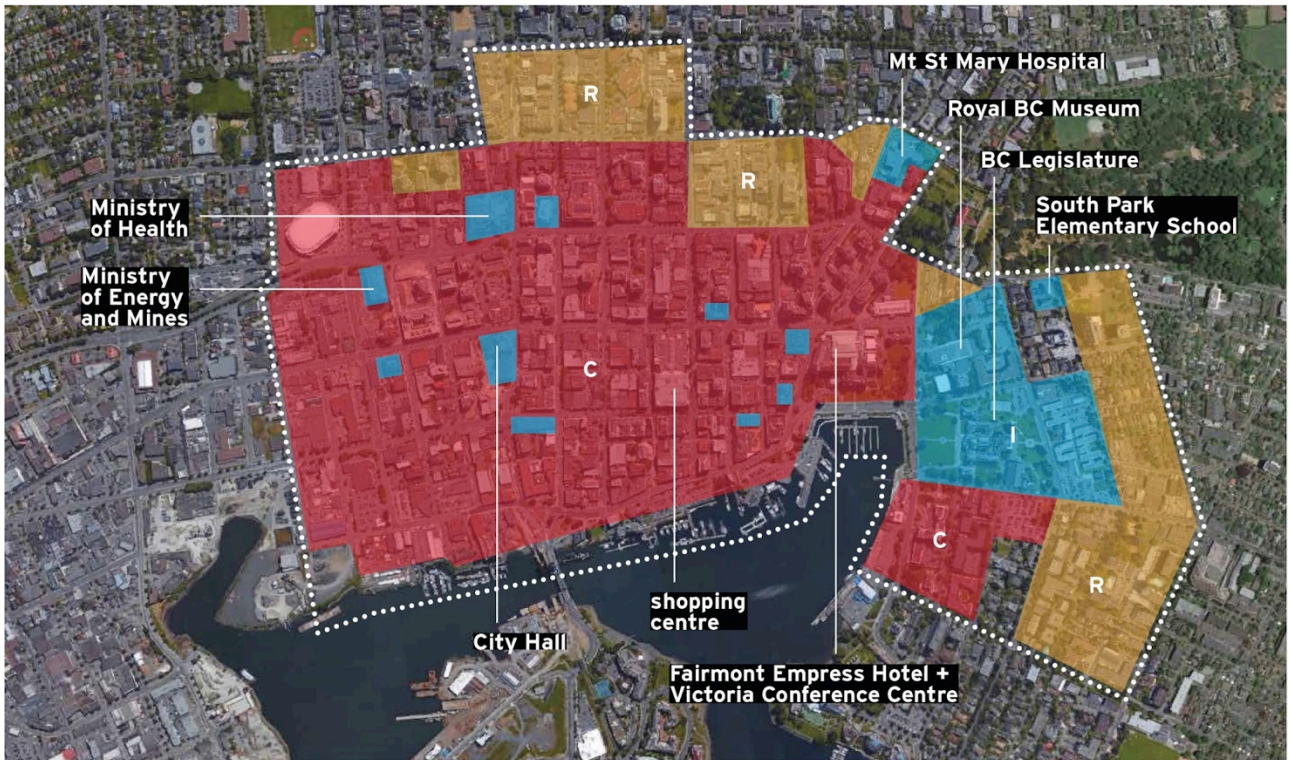
Surrey





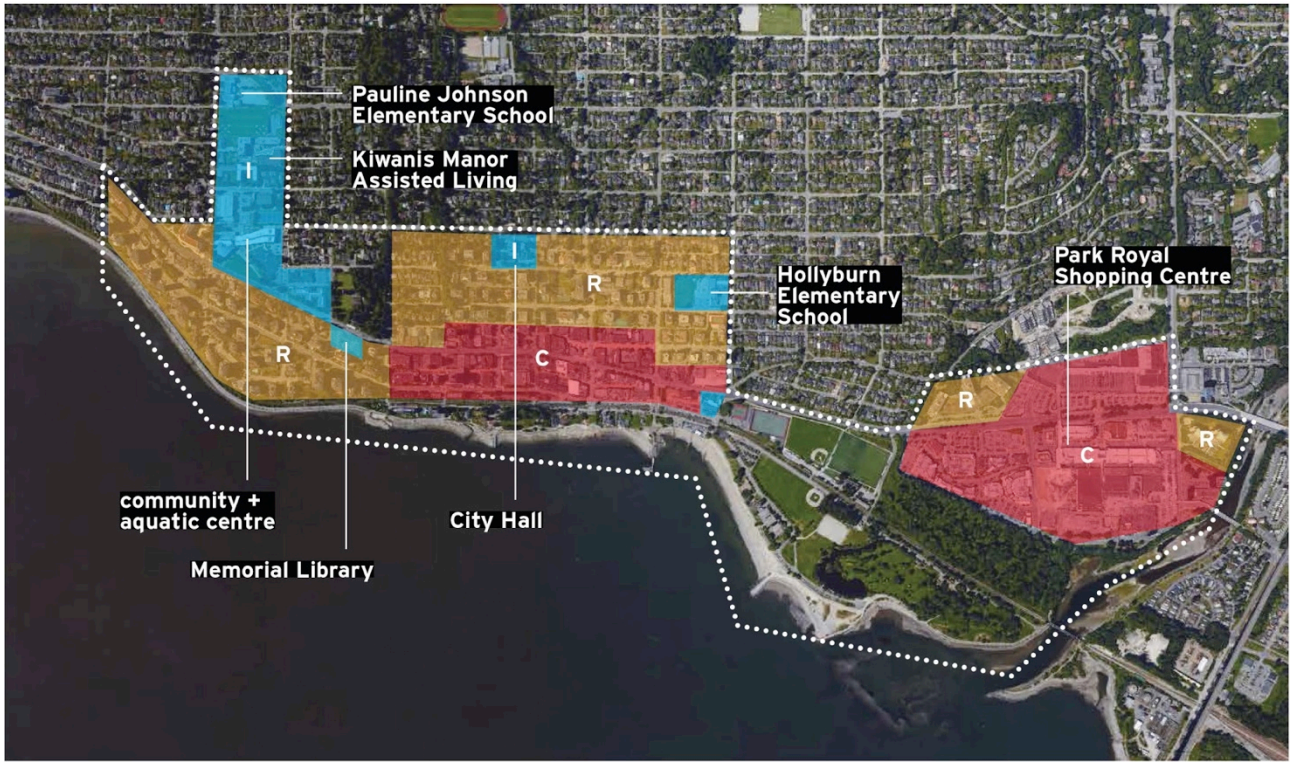
Vancouver (including UBC)





Victoria





West Vancouver

# Appendix B

## Feedback on maps

Please contact Tom Berkhout at [tom.berkhout@gov.bc.ca](mailto:tom.berkhout@gov.bc.ca) to request a copy of this Appendix.



# Appendix C

## Lists of potential BC stakeholders

Please contact Tom Berkhout at [tom.berkhout@gov.bc.ca](mailto:tom.berkhout@gov.bc.ca) to request a copy of this Appendix.