



# 2023-2026 CAPITAL PLAN

*Approved by City Council on June 29, 2022*



The City of Vancouver humbly acknowledges that the lands to which the 2023-2026 Capital Plan applies are the unceded territories of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish) and səliwətał (Tsleil-Waututh) Nations.

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EXECUTIVE SUMMARY

The City owns over \$34 billion of infrastructure and amenities (replacement value excluding land), encompassing underground water and sewer infrastructure; roadways, walkways and bikeways; affordable housing; community facilities, parks and open spaces; public safety facilities and service yards. Having a network of well-maintained infrastructure and amenities is essential to our quality of life and helps drive the economy, increase prosperity and create jobs. To achieve this, we need to make strategic, long-term infrastructure investments to enhance the sustainability and resilience of our city.

Similar to other major Canadian cities, we have assumed a leading role within the region in economic development, innovation, livability, equity, resilience and climate emergency response. We have also become increasingly active in addressing needs that fall within the traditional mandate of senior levels of government. In this regard, significant investments have been made in affordable housing, social services, mental health and addictions, childcare, and other services; as well as the increasingly complex public safety and emergency response that serve both the city and the Metro Vancouver region.

As the steward of an expansive capital asset portfolio, we strive to ensure that critical infrastructure such as bridges, roads, water and sewer pipes are resilient, and community amenities are well maintained to make Vancouver a more affordable, sustainable, and livable city for all its residents and workers.

As land and resources are limited, there will always be inherent tensions and tough choices in prioritizing near term capital investments to achieve long-term goals. Emerging needs (e.g. climate mitigation and adaptation, shoreline flood protection), evolving municipal mandate (e.g. housing, childcare), and the growing need for critical infrastructure renewal require strategic inter-government partnerships and predictable long-term funding arrangements. To fully realize our goals, we need to transform our way of delivering services and evolve our supportive infrastructure and amenity networks to be more sustainable and resilient.

The 2023-2026 Capital Plan contemplates \$3.5 billion of capital investment, comprised of:

- \$0.7 billion of Council-approved in-kind infrastructure and amenities to be delivered through development, expected to begin construction over the next four years; and
- \$2.8 billion of capital programs/projects to be delivered by the City and/or its community partners, expected to be brought forward for Council approval as part of the annual budget process over the next four years.

Development of the Capital Plan is guided by the following key strategic objectives:

- Maintain the City’s critical infrastructure and amenities in an appropriate state of repair;
- Optimize the City’s network of infrastructure and amenities to address equity, support growth and economic development; and
- Advance Council, Board and community priorities in a financially sustainable and resilient manner.

The proposed capital investment will focus on the following priorities:

- Renew critical aging water and sewer infrastructure and enhance water quality;
- Renew and upgrade aging community, public safety and civic facilities to strengthen community resilience and business continuity;
- Preserve & create affordable housing & childcare to support our workforce & grow our economy; and
- Advance climate mitigation and adaptation work in accordance with the Climate Emergency Action Plan and the Climate Change Adaptation Strategy.

The following table summarizes the proposed capital investment in the 2023-2026 Capital Plan. The Capital Plan will be updated as additional development contributions and partner funding is secured over the term of the plan.

\$ million	City assets		Non-City assets	Overall	Cash				
	Existing	New			City	Dev't.	Partner	Subtotal	In-kind
Housing	17	498	102	617	84	186	12	282	335
Childcare	11	102	23	136	11	57	11	79	58
Parks & public open spaces	94	118	-	211	72	129	-	201	10
Arts, culture & heritage	31	96	23	151	94	24	1	119	32
Community facilities	183	198	11	391	191	60	6	257	134
Public safety	71	34	-	105	99	6	-	105	-
Civic facilities & equipment	41	16	-	57	57	-	-	57	-
Streets	304	167	-	471	196	90	82	368	103
Water, sewers & drainage	783	91	-	874	537	303	-	840	35
Waste collection, diversion & disposal	135	6	-	141	128	-	13	141	-
Renewable energy	5	39	30	73	68	5	-	73	-
Technology	110	-	-	110	110	-	-	110	-
Emerging priorities, contingency & project	126	29	-	155	152	3	-	155	-
Overall	1,909	1,393	189	3,492	1,800	862	124	2,786	706

**Infrastructure Deficit** – Building on the 2019-2022 Capital Plan, increasing the City’s capacity to address its growing portfolio of aging infrastructure and amenities in a financially sustainable and resilient manner continues to be the core theme of the City’s mid to long-term capital planning framework. Based on an estimated replacement value of \$34 billion, we need to invest ~\$800 million annually to maintain our assets in a state of good repair. Compared to the ~\$300 million of asset renewal funding per annum in the 2019-2022 Capital Plan, we need an intentional, multi-decade funding strategy to address the growing infrastructure deficit. The infrastructure challenge is not unique to Vancouver. Major cities across Canada have developed long-term asset management strategies with dedicated funding for infrastructure renewal.

Of the \$3.5 billion of strategic investments contemplated in the Capital Plan, over 55% is dedicated for asset maintenance and renewal. This is equivalent to ~\$480 million of annual capital maintenance, upgrade & renewal funding, supported by an inflation-adjusted increase in City funding of ~8% per annum from the current Capital Plan. The increase in capacity is largely funded by a 1% property tax increase and ~5% overall utility fee increase per annum that have been incorporated in the City’s financial plan for the next decade. This is in line with other major cities across Canada.

**Climate Mitigation & Adaptation** – The effect of climate change is undeniable. Heat waves, severe storms and floods witnessed in recent years demonstrate the threats posed by climate change and the critical need to focus on preparedness, which help inform our mid- to long-term infrastructure strategy. The Capital Plan contemplates ~\$460 million of capital investment to advance the Climate Emergency Action Plan and the Climate Change Adaptation Strategy, and ~\$260 million more to deliver additional climate mitigation and adaptation benefits, representing ~35% increase from the 2019-2022 Capital Plan.

**Senior Government Partnership** – With our limited funding sources, we cannot do it all and we cannot do it alone. In recent years, the Federal and Provincial Governments have made significant investments in Vancouver in the areas of affordable housing and childcare, as well as the Millennium Line Broadway Extension that is underway to deliver the economic potential of the second largest employment centre in British Columbia and to enable efficient movement of people and access to jobs.

To make Vancouver a more affordable, sustainable, and livable city for all its residents and workers, we are committed to work closely with senior levels of government to deliver climate actions, affordable housing, childcare, schools, transit, and supports for mental health and those struggling with addiction. The City, in consultation with Metro Vancouver, Union of BC Municipalities, and Federation of Canadian Municipalities, is actively engaging senior levels of government to pursue such opportunities to achieve Council’s public policy objectives while ensuring economic, environmental and social sustainability over the long term.

CONTEXT AND OPPORTUNITY

Vancouver is at the economic and cultural centre of a dynamic, prosperous and rapidly growing region. With a population of almost 2.5 million people, Metro Vancouver is the third largest metropolitan area in Canada, behind Toronto and Montreal. Vancouver has 25% of the region’s total population, 34% of the jobs and 30% of the total housing units.

Our Strengths

- **Economically Strong** – Vancouver is the economic heart of British Columbia with globally recognized strengths in many sectors including tech, film/television, climate solutions, life sciences, tourism, and arts & culture. The city includes the Province’s two largest business districts, Canada’s largest port, and a strong retail sector with well-loved shopping streets. All of these components contribute to a diverse and resilient economy.
- **Culturally Vibrant** – With 8,800 professional artists living in the city, Vancouver is home to the highest concentration of artists per capita among Canada’s major cities.
- **Socially Diverse** – 52% of Vancouverites are racialized (i.e., visible minority in Canadian Census) and 46% speak a non-English mother tongue language. Diverse people and communities from across the globe have instilled in Vancouver a flourishing array of cultures, qualities, landmarks and heritage that make the city recognizable and unique.
- **Convenient Transit** – 82% of residents live close to a transit route that comes at least every 15 minutes and 49% of residents live close to a RapidBus stop or SkyTrain station. This convenience means high ridership where Vancouver makes up about 40% of all regional transit trips.
- **Green Access** – Vancouver is home to 482 hectares of natural areas and has one of the most accessible park systems in North America. 99% of residents live within a 10 minute walk of a park or green space.
- **Locational Advantages** – Vancouver is a coastal seaport city with a mild climate located close to many significant regional assets including the North Shore Mountains, large regional parks like Pacific Spirit Park, an international airport, and has Canada’s largest and most diversified port.

Our Challenges

- **Affordability** – Like many North American cities, housing is our biggest challenge. 44% of renter households pay more than 30% of their income on rent and home ownership is not within reach for most residents who do not already own property.
- **Climate Emergency** – Our climate is changing and by 2050 we expect to experience longer, hotter, drier summers, sea level rise, and heavier rainstorms with increased flooding potential. These environmental changes will have significant impacts on all Vancouverites, city infrastructure, the economy, and require increased municipal response.
- **People are Struggling** – Over 2,000 people experience homelessness in the city and mental health, addiction and the opioid crisis have been made worse through the COVID-19 pandemic. One in seven Metro Vancouver residents report feeling lonely and one in four report feeling isolated.

- **Economic Pressures** – 50% of the city’s jobs are located on only 10% of the land, putting employment lands under tremendous pressure. Vancouver continues to be the preferred location for employers in the region and competition for space is putting upward pressure on commercial rents in high demand areas. 40% of the city’s jobs are held by workers who commute in from the suburbs, partly because it is difficult for them to find affordable housing options close to where they work. This significantly increases traffic congestion, worsens air quality, strains the road network and reduces productivity for local businesses.
- **Neighbourhood Completeness** – Today, only 15% of the housing in Vancouver consumes more than half of the land and 31% of residential areas do not have enough people living in them to support local businesses. Over half of Vancouver residents live in neighbourhoods without walkable access to daily needs such as food and services.
- **Fiscal Responsibility** – Vancouver, like other Canadian cities, offers a broad range of services but has limited revenue sources. The growing need for asset renewal and new infrastructure and amenities to support growth puts further pressure on the City’s budget.
- **High Risk for Earthquakes** – Hundreds of small earthquakes occur in the region every year, and while most are not felt, a major earthquake is inevitable in our future. Of the city’s 90,000 buildings, over half were built prior to 1974 and have no seismic resisting structural systems. This means the city’s buildings, residents and workers are highly vulnerable to the impacts of an earthquake event.
- **Unceded Land** – Vancouver is on unceded land of the Musqueam, Squamish and Tsleil-Watauth Peoples. There is much work to do to support the healing of past harms that have occurred, and ensure Reconciliation and decolonization are at the centre of city-building work.



CITY BUILDING

The draft Vancouver Plan was released in April 2022, with the final plan to be presented for Council consideration in July 2022.

Vancouver aspires to be a city that lives in greater balance with our ecological systems while providing more complete, inclusive and resilient neighbourhoods where people of all ages, incomes, abilities and backgrounds thrive.

**Three Foundational Principles** are at the centre of the Vancouver Plan and build on approved Council direction. These are:

- **Reconciliation** – Continuing to form relationships of mutual respect and understanding with xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and səliłwətał (Tsleil-Waututh) Nations and urban Indigenous communities, integrating Indigenous perspectives in planning and decision-making processes.
- **Equity** – Advancing an equitable approach to planning, where the benefits of growth and change are distributed across neighbourhoods, with particular attention to equity-denied groups, so that everyone has the chance to thrive.
- **Resilience** – Proactively planning for an uncertain future so we can withstand, adapt, recover, and thrive in the face of shocks like earthquakes and climate change impacts, and reduce stresses like affordability and inequities.

Three **Big Ideas** represent the main aspirations and characterize new ways of growing that reflect community priorities. These are:

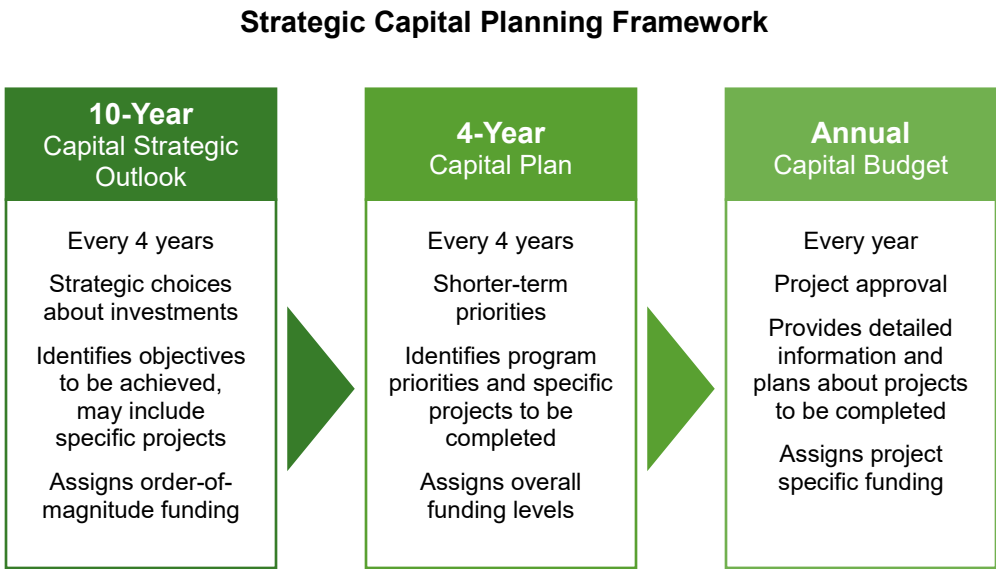
- **Equitable Housing and Complete Neighbourhoods** – Allowing more housing options and opportunities for everyone to choose a livable neighbourhood that meets their needs.
- **An Economy that Works for All** – Protecting and expanding areas for business and employment, and adding more job space to neighbourhoods. Ensuring a mix of housing, jobs, shops and services close to rapid transit.
- **Climate Protection and Restored Ecosystems** – Creating streets for people to move around by walking, rolling, biking and transit. Supporting building methods that reduce energy consumption. Protecting and expanding space for nature.

The **Land Use Strategy** sets clear city-wide guidelines that shape neighbourhood level planning to ensure the goals of the plan are achieved:

- Direct new housing to areas rich in amenities, and add opportunities for new amenities and services in areas that are currently underserved.
- Reinforce Vancouver’s role as the cultural and economic centre of the region, while directing growth to prioritize the health, happiness and well-being of residents.
- Encourage more sustainable and inclusive urban living by promoting affordable housing and jobs near transit, and where walking and biking can become the preferred ways of getting around.
- Strengthen existing and support new neighbourhood centres by allowing more homes around clusters of local shops, with flexible work spaces, childcare, public spaces and arts and culture venues.
- Create an integrated network of public spaces, ecological corridors, greenways and active modes of travel (walking, rolling and biking).
- Make space for ecology to function at the site, neighbourhood and city-wide scale.

STRATEGIC CAPITAL PLANNING FRAMEWORK

The City has a long-standing practice of preparing long-, mid- and short-term plans to guide strategic capital investments, encompassing a 10-year Capital Strategic Outlook, a 4-year Capital Plan, and an annual Capital Budget. Moving along in the timeline of the framework, the capital investments denote more specificities in terms of funding and project details.



The City has a broad range of long-term plans (e.g. community plans and public benefit strategies) and service strategies (e.g. affordable housing, transportation, climate change, healthy communities) that span 10-25 years. These plans and strategies serve to guide the City’s 10-year Capital Strategic Outlook, which presents the long-term needs for strategic capital investments in critical infrastructure and amenities. They provide the foundation for the City’s long-term service and financial planning.

The City also has a 4-year Capital Plan that establishes the financial and debt capacity, as well as the overall funding strategy for the capital investment priorities over the term of the plan. The timeframe of the Capital Plan matches the electoral cycle, and the borrowing authority for all non-utility work are established through the electorate’s approval of a borrowing plebiscite as part of the election. The Capital Plan informs the City’s short-term service and financial planning, striking a strategic balance with the City’s need to maintain critical assets in an appropriate state of repair, enhance its network of infrastructure and amenities to support growth and economic development, and advance Council, Board and community priorities within the City’s financial capacity.

Implementation of the 4-year Capital Plan is done through the Annual Budget process subject to Council approval. The annual budget sets out Council-authorized funding and spending for the year, as well as detailed project information and outcomes; and provides the authority to proceed with specific capital projects. The requirement to borrow funds to finance capital investment is also established by Council at the time of the approval of the annual budget.

STRATEGIC CAPITAL PLANNING GUIDING PRINCIPLES

The following principles guide strategic capital planning across service categories:

Vision

- Inspire a vibrant, inclusive and safe city with a resilient local economy.
- Advance public policy goals and strategic priorities of City Council and Boards (Park, Library & Police).
- Align with the City’s corporate strategic plan and long-term financial plan.
- Integrate environmental, operational and financial sustainability principles.
- Be adaptive to emerging priorities and changing demographics.

Innovation

- Partner strategically with senior levels of government, charitable & non-profit organizations, and private sector.
- Optimize service delivery through business transformation, co-location and functional integration.
- Maximize value for investments through creative design and planning, and strategic procurement and resourcing.
- Be opportunistic and nimble.

Strategic Planning

- Rationalize network of public amenities and services across agencies (City, Vancouver School Board, charitable and non-profit organizations, etc.) to enhance collaboration and synergies.
- Consider repurposing, right-sizing, relocation, co-location and decommission of existing assets as part of renewal strategy.
- Build flexible, adaptable and expandable spaces to accommodate changing demographics and future growth.
- Phase in large-scale, high impact capital programs/projects to mitigate financial impact.
- Synchronize multi-project timing to maximize efficiencies and economy of scale.

Financial Sustainability

- Live within our means.
- Consider long-term financial implications in all investment decisions.
- Maintain assets in appropriate state of repair.

FINANCIAL CAPACITY

Vancouver, like other Canadian cities, offers a broad range of services but has limited revenue sources. The City adheres to prudent fiscal stewardship with careful financial planning that balances short-term operating needs with long-term infrastructure and amenity requirements. The City’s financial planning process is guided by a set of financial sustainability guiding principles and financial health targets.

I. Financial Sustainability Guiding Principles

Fiscal Prudence

- Live within our means.
- Consider long-term implications in all decisions.
- Maintain a stable and predictable revenue stream.
- Keep debt at a manageable level.
- Build in flexibility and contingencies for emerging priorities and opportunities.

Affordability and Cost-effectiveness

- Deliver services that are relevant and result in desired public outcomes.
- Ensure value for money through productivity and innovation.
- Keep property tax and user fees affordable and competitive.

Asset Management

- Maintain assets in a state of good repair.
- Optimize operating and capital investments to meet public and economic needs while achieving value for the investment.

II. Funding Strategy for Capital Investments

Consistent with longstanding Council policies and practices, the City funds capital investments from a range of sources (who pays) a balanced mix of payment methods (when to pay). The following section summarizes the key funding sources and payment methods.

Funding Sources (Who Pays)

**City Contributions** – Property taxes and utility fees typically fund most capital maintenance and renewal work.

**Development Contributions** – Consistent with the City’s *Financing Growth Policy* (2003), new and expanded infrastructure and amenities to support growth are funded in part through development contributions such as Development Cost Levies (DCLs), Community Amenity Contributions (CACs), density bonus zoning contributions (DBZs), development servicing conditions, and utility connection charges.

- Pursuant to the *Vancouver Charter* and applicable *DCL By-laws*, DCLs may be applied towards parks, engineering public works and utilities infrastructure, housing and childcare. For capital planning purposes, the proposed DCL allocation for the 2023-2026 Capital Plan is estimated to not exceed 100% of the DCL available at the beginning of the Capital Plan and what may reasonably be expected to collect in future years.
- CACs are voluntary public benefit contributions offered by property owners when Council grants development rights through rezoning. CACs may be applied to a wide range of amenities including

those that are not DCL eligible such as new or expanded recreation, cultural and social facilities, libraries, and firehalls. Allocation of CACs is generally guided by community plans and public benefit strategies, and applicable Council and Board strategies. CACs typically come in two forms: in-kind onsite amenities and cash contributions.

**Partner Contributions** – The City actively pursues innovative partnership and funding opportunities to optimize the value for every tax dollar in advancing Council, Board and community priorities. The City receives funding from the Provincial and Federal governments, from TransLink for road work, and from non-profit agencies, foundations and philanthropists, particularly in the area of affordable housing and childcare.

Payment Methods (When to Pay)

**Pay in advance (Capital Reserves)** – The City sets aside operating revenues and other funding in capital reserves to fund future capital investment. Capital reserves can also be used as a source of internal financing in situations where the capital investment can be justified on the basis of a business case, providing a source for repayment to replenish the reserves over time without impacting property tax.

**Pay-as-you-go** – The City uses property tax, utility and user fees, and other sources to fund capital investment to ensure residents and businesses contribute on an ongoing basis. Balancing the use of current revenues and debt financing enables the City to manage its long-term debt profile, limit future debt repayment obligations, and preserve the City’s borrowing capacity for significant, large-scale capital projects that are too costly to be funded on a pay-as-you-go basis.

**Pay over time (Debt Financing)** – Like most major Canadian cities and senior levels of government, the City uses debt to finance capital investments. This allows payment to be made over a longer time frame and enables residents and businesses that benefit from the capital investments to participate in paying for them over time. When used strategically, and within best practices for responsible borrowing, debt financing allows the City to continue to renew its infrastructure and amenities on a regular basis while maintaining its fiscal health.

- s242 of the *Vancouver Charter* gives Council the authority to borrow funds for the construction, installation, maintenance, replacement, repair and regulation of waterworks, sewerage & drainage, and energy utility systems without the assent of the electorate.
- s245 of the *Vancouver Charter* requires that the borrowing authority for all other purposes be established through the electorate’s approval of a borrowing plebiscite.

The requirement to borrow funds to finance capital investment is established by Council at the time of the approval of the annual capital budget. Borrowed funds are generally paid back over 10 years to ensure that a systematic borrowing program can be administered, that outstanding debt does not accumulate to unacceptable levels, and that annual debt servicing charges (principal and interest) are maintained at a level that does not put undue pressure on the operating budget.

- s247A of the *Vancouver Charter* requires that full provision of annual debt servicing charges (principal and interest) be made in the annual operating budget to ensure that debenture holders are paid the interest component at the prescribed rate and time and that sufficient funding is available to retire the obligation at maturity.

The City takes a very careful approach to its use of debt, funding repayment over 10 years while ensuring a balanced operating budget. The City’s consistently strong credit ratings and favourable borrowing rates reflect this careful approach.

III. Long-term Financial Plan

When developing its long-term financial plan, the City has maintained a commitment to strong financial discipline and continued management of debt to ensure that capital investment will not unduly burden the operating budget through debt servicing, operating costs and asset life-cycle costs. Identifying the financial and debt capacity upfront ensures that the Capital Plan is developed in a fiscally prudent manner which considers the City’s long-term financial health, credit ratings, and future impacts on our tax and fee payers. Both Moody’s and Standard & Poor’s credit rating agencies have acknowledged the City’s efforts by awarding it with the highest credit rating (Aaa/AAA).

The funding strategy for the Capital Plan is developed based on historical experience, economic outlook, benchmark ratios with like organizations and rating agencies, and best practices in municipal debt management. Considering the City’s debt capacity as well as property tax and fee impact, the funding strategy strikes a balance in using capital reserves (30%), pay-as-you-go (29%), debt financing (21%), and in-kind amenities delivered through community amenity contributions triggered through rezoning applications in the areas of housing, childcare, recreation, culture and social policy (20%).

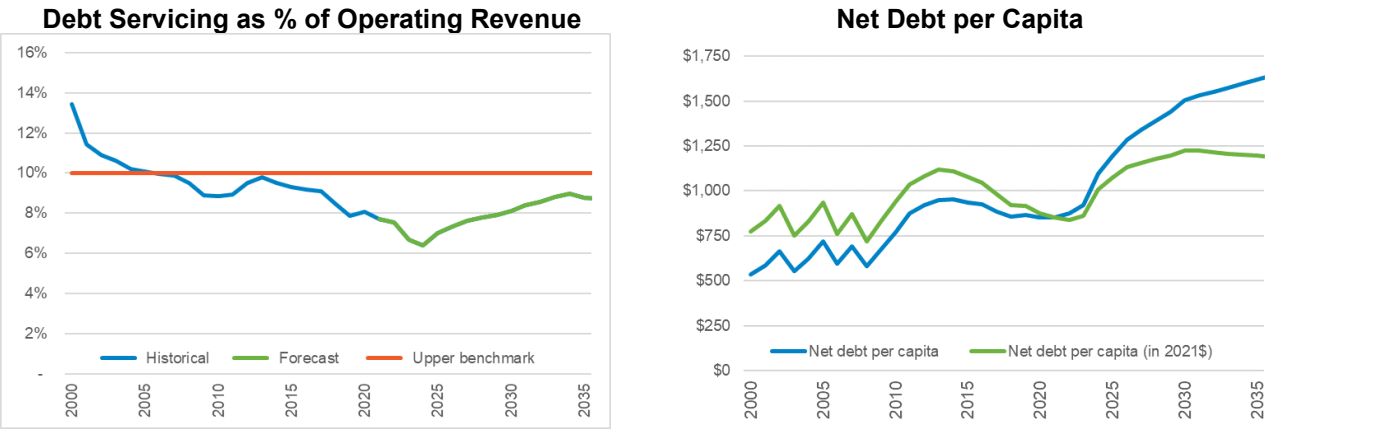
In developing the Capital Plan, a key constraining factor is the impact on the operating budget and property tax arising from debt servicing and pay-as-you-go funding to support the Capital Plan, as well as ongoing operating and asset lifecycle costs. Given the rapidly evolving economic landscape with persistently high inflation and rising interest rates, there is a real risk in overextending the City’s fiscal capacity and putting further undue pressure on future budgets.

**Keep Debt at a Manageable Level** – The City determines its long-term borrowing capacity by limiting the ratio of annual debt servicing to operating revenue at a maximum of 10%. This is to ensure that the City does not accumulate debt at unacceptable levels, and that annual debt servicing does not put undue pressure on the annual budget.

As part of our proactive debt management strategy over the last decade, the Water utility has transitioned its infrastructure lifecycle replacement programs from debt financing to pay-as-you-go. The Sewer utility is undergoing a similar strategy and is expected to be mostly funded on a pay-as-you-go basis over the next few years. In addition to saving interest costs over the long term, we have freed up debt capacity to help address our growing infrastructure deficit. The proposed \$735 million of debenture borrowing represents approximately 21% of the Capital Plan.

It is expected that the City’s Capital Plan will continue to grow over the next decade to renew our aging infrastructure and amenities. Looking ahead, the City will continue to explore opportunities, where appropriate, to optimize capital investment through balancing pay-as-you-go and debt financing to improve the City’s long-term debt profile and maintain its credit ratings

**Financial Health Indicators** – For long-term financial planning purposes, the City tracks a number of metrics to provide an indication of its financial health and long-term borrowing capacity, which informs the funding strategy for the Capital Plan. Following are two key financial health metrics and trends:



The projected growth in net debt per capita reflects a thoughtful, gradual increase in capital investment to renew and upgrade the City’s infrastructure and amenities. The trajectory could change should future Councils choose to transition more capital programs/projects from debt financing to pay-as-you-go sooner. Lowering debt financing would achieve long-term interest savings but result in higher property tax and utility fees during transition years. The City will continue to monitor and adjust its financial strategy to strike a balance between debt financing and pay-as-you-go.

**Maintain Strong Credit Ratings and Access to Low Borrowing Costs** – The City’s strong credit ratings (Aaa/AAA) are among the best for Canadian cities and are supported by a diverse economy and a strong and stable tax base. Continued management of debt within target levels is critical to maintaining the City’s credit ratings. A strong credit rating reflects the City’s prudent financial management and its capacity to adjust to changes in the economic environment. It is estimated that long-term borrowing costs would increase by 3 to 5 basis points for each level of downgrade, or approximately \$0.5 million in additional interest over the term of each \$100-million debenture issue.

**Keep Property Tax and Fees Competitive** – The growing need for asset renewal, the demand for new infrastructure and amenities to support growth, and the rapid escalation in land, construction and other costs will put further pressure on the City’s budget. Understanding the long-term impacts on tax and fee payers arising from the City’s capital investment decisions, including debt servicing, ongoing operating and asset lifecycle costs, is a key consideration in developing the City’s 2023-2026 Capital Plan. We are undertaking work to rationalize the scope and level of service as well as service delivery models to manage future renewal and growth costs. Given the rapidly evolving economic landscape with persistently high inflation and rising interest rates, our immediate focus will be on streamlining and expediting project delivery to mitigate cost escalation risks and drive value and efficiencies.

**Maintain Assets in an Appropriate State of Repair** – Maintaining critical infrastructure and amenities in an appropriate state of repair is critical to the City’s long-term financial health and resilience, and helps ensure asset management obligations are not deferred and infrastructure deficits do not accumulate to unacceptable levels – one of the key factors that credit rating agencies consider as part of rating reviews.

The City has developed service-centric facilities asset management, which ensures that the City’s core service needs inform long- and short-term decisions for new and existing facilities, including redevelopment, retrofits, and level of investment in capital maintenance.

**Optimize Capital Investments** – Before adding new facilities, the City will consider optimizing partnerships with other levels of government, non-profits and private partners as well as repurposing and right-sizing existing facilities, and will continue to pursue co-location and functional integration of services

to enhance customer service and operational efficiency. All new facilities will be designed with flexible, adaptable and expandable spaces to accommodate changing demographics and future growth.

IV. Municipal Finance Reform

Local governments and our representative organizations, the Federation of Canadian Municipalities (FCM) and Union of BC Municipalities (UBCM), have noted for over a decade that the current municipal funding model and the overreliance on property taxes are neither sustainable nor resilient.

The COVID-19 pandemic has highlighted the fragility of the current model and elevated the need for a thorough review and reform of how infrastructure, public amenities and services should be funded in the future. As noted in an FCM report calling on the federal government for financial assistance, “This crisis exposes the cracks in an outdated model that is fundamentally misaligned with the modern reality of the role of local governments.”

Recognizing the evolving and expanded mandate of major urban cities across Canada, we need appropriate funding sources that are sustainable, predictable and reliable. Consideration should also be given to addressing the evolving economic activities (e.g., e-commerce, sharing economy) that rely less and less on bricks-and-mortar businesses, on which property taxes are based.

In August 2021, UBCM released the report [Ensuring Local Government Financial Resiliency: Today’s Recovery and Tomorrow’s New Economy](#). The report provides 20 recommendations under two broad categories:

- Moving Forward: Building on Strong Fiscal Futures and Preparing for the New Economy
- Addressing Cost Drivers: Attainable Housing, Community Safety and Climate Change

The report also recognizes that none of these challenges can be addressed by any level of government individually, and solutions must be anchored in shared provincial/local government goals, objectives and priorities.

Having a resilient funding framework that aligns appropriate revenue sources with programs and services is sorely needed to create a more equitable society, strengthen our economy, and address Council, Board and community priorities in a cohesive fashion. We are committed to work with FCM, UBCM and Metro Vancouver to advocate to the Federal and Provincial governments for additional funding tools that are appropriate and necessary to fund the broad spectrum of critical infrastructure, public amenities and services to support economic growth and the health and well-being of those who live or work in Vancouver.

In addition to the external advocacy work, we are also committed to transform our way of delivering services. This work will involve a number of work streams, including: i) optimizing our land, infrastructure and amenities; ii) rationalizing our service levels and cost base; iii) transforming our business delivery models to drive better outcomes; iv) optimizing our revenue sources; and v) aligning our policies and regulations with Council and Board priorities.

CAPITAL PLANNING SERVICE CATEGORIES

Since 2011, the City has adopted a **service-based capital planning framework** to enhance transparency and enable a more holistic city-wide approach to long-term capital investment decision-making. Service plans inform the output metrics for the 10-year Capital Strategic Outlook and 4-year Capital Plan for each service categories. The following table summarizes the service categories and sub-categories used for the 2023-2026 Capital Plan.

Capital Planning Service Categories:

Housing

- Land acquisition
- Low-income housing
- Non-market rental housing
- Purpose-built market rental housing

Childcare

- Full-day care (0-4 years old)
- Part-day care (0-4 years old)
- School age (5-12 years old)

Parks & public open spaces

- Park land
- Seawall & waterfront
- Urban forest & natural areas
- Park amenities
- Park buildings, infrastructure & vehicles
- Decolonization, arts & culture

Arts, culture & heritage

- Cultural facilities
- Entertainment & exhibition facilities
- Public art
- Heritage

Community facilities

- Libraries
- Archives
- Recreation facilities
- Social facilities
- Non-profit office space
- Cemetery

Public safety

- Police
- Fire & rescue
- Animal control

Civic facilities & equipment

- Administrative facilities
- Service yards
- Vehicles & equipment

Streets

- Building a resilient network
- Improving mobility
- Supporting public life

One water

- Potable water
- Rainwater & sanitary water

Waste collection, diversion & disposal

- Collection & cleaning
- Diversion
- Disposal

Renewable energy

- Neighborhood energy
- Community electrification

Technology

- Hardware
- Applications



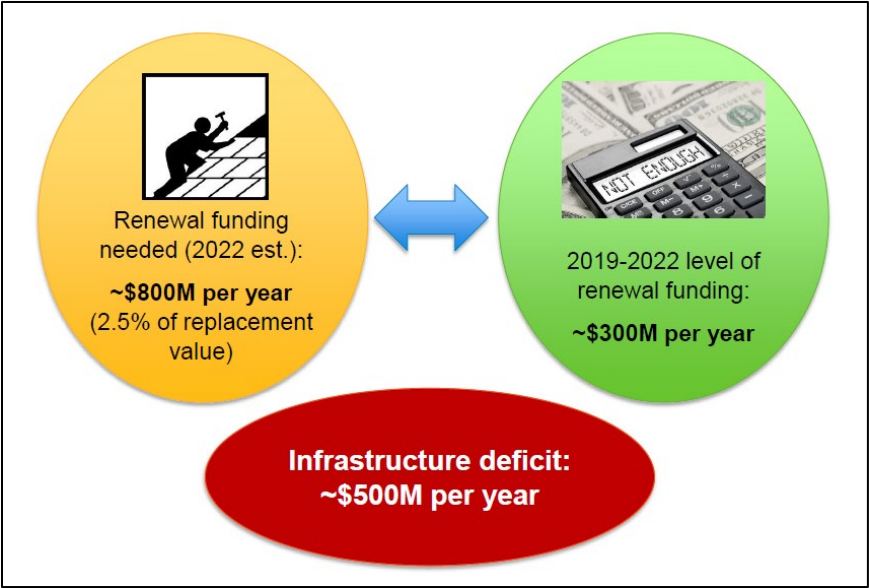
RENEWING EXISTING ASSETS AND THE INFRASTRUCTURE DEFICIT

The City owns over \$34 billion of infrastructure and amenities (replacement value excluding land) encompassing:

- ~8.5 million square feet of facilities providing a broad range of recreation, community, social and cultural programs and services, affordable housing, public safety, and civic administration
- ~1,343 hectares of parks and public open spaces
- ~4,350 km of sidewalks, streets and lanes
- ~3,600 km of underground potable water, rainwater and sanitary water mains

The lifespan of capital assets varies considerably across asset categories from underground water pipes (80-100 years), to buildings, sidewalks, trees (40-60 years), road pavement, traffic signals (20-40 years), playgrounds/playfields (10-20 years) and vehicles, information technology and other equipment (less than 10 years).

Building on the 2019-2022 Capital Plan, increasing the City’s capacity to address its growing portfolio of aging infrastructure and amenities in a financially sustainable and resilient manner continues to be the core theme of the City’s mid to long-term capital planning framework. Based on an estimated replacement value of \$34 billion, the City needs to invest ~\$800 million annually to maintain our assets in a state of good repair. Compared to the ~\$300 million of asset renewal funding per annum in the 2019-2022 Capital Plan, we need an intentional, multi-decade funding strategy to address the growing infrastructure deficit.



The infrastructure challenge is not unique to Vancouver. Major cities across Canada have developed long-term asset management strategies with dedicated funding for infrastructure renewal. For example, Toronto, Mississauga, Winnipeg and Saskatoon have implemented an infrastructure levy, or some form of dedicated revenue, to address the growing deficit.

Of the \$3.5 billion of strategic investments contemplated in the Capital Plan, over 55% is dedicated for asset maintenance and renewal. This is equivalent to ~\$480 million of annual capital maintenance, upgrade & renewal funding, supported by an inflation-adjusted increase in City funding of ~8% per annum from the current Capital Plan. The increase in capacity is largely funded by a 1% property tax increase and ~5% overall utility fee increase per annum that have been incorporated in the City’s financial plan for the next decade. This is in line with other major cities across Canada.

NEW ASSETS TO SERVE POPULATION AND EMPLOYMENT GROWTH

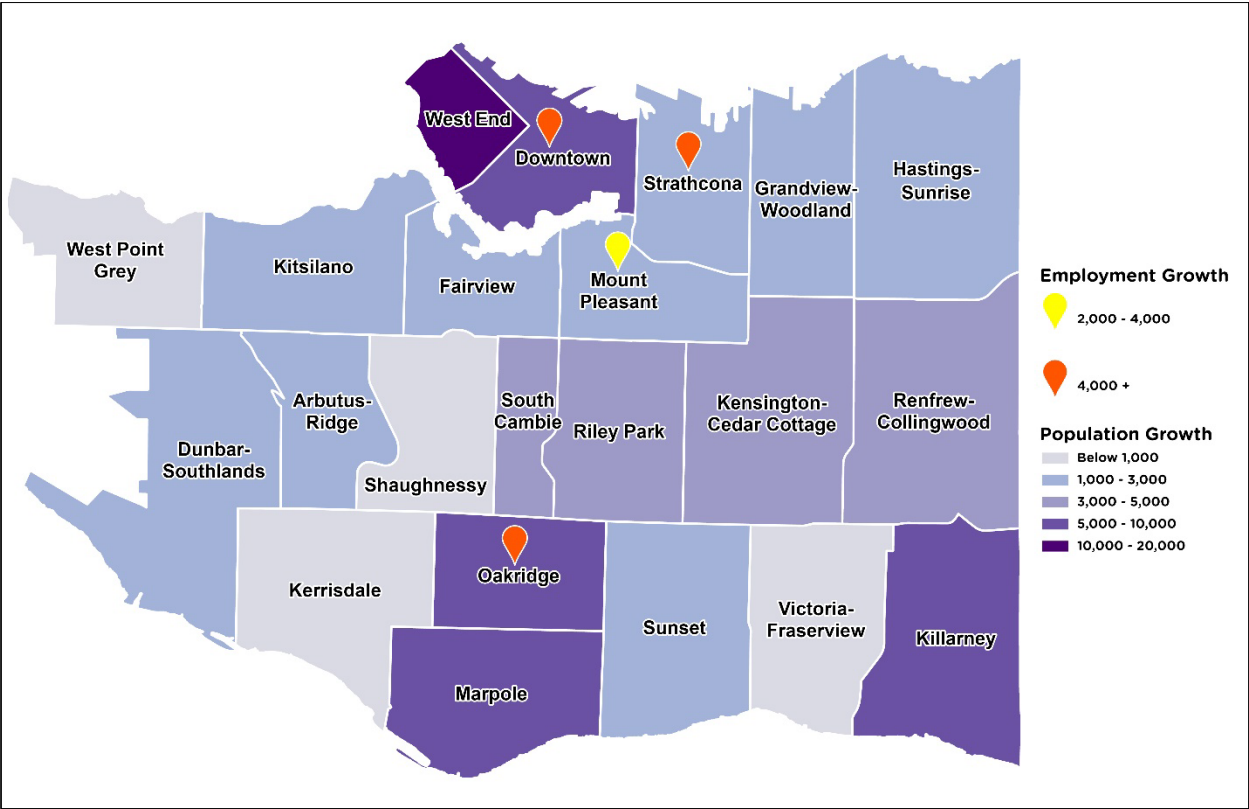
The City and partner agencies need to provide a range of services to new residents and workers.

Vancouver’s population is approximately 660,000 (2021 Census). Vancouver typically grows by an average of 5,000 to 7,000 residents per year.

Growth areas change over time, based on zoning changes and development opportunities. Significant growth occurred in False Creek South and Champlain Heights in the 1970s and 1980s, and in False Creek North, Downtown South, Coal Harbour, Collingwood Village and West Fraser Lands in the 1990s and 2000s.

Growth in recent years and over the next decade is anticipated to be concentrated in the West End, Northeast False Creek, Southeast False Creek, the Cambie Corridor, Marpole and East Fraser Lands. Growth is also anticipated to occur in the Downtown Eastside, Mount Pleasant, Grandview-Woodland, Norquay Village, Joyce-Collingwood and the Broadway Corridor. Growth in these areas is guided by community/area plans which include a ‘public benefits strategy’ to inform infrastructure and amenity priorities.

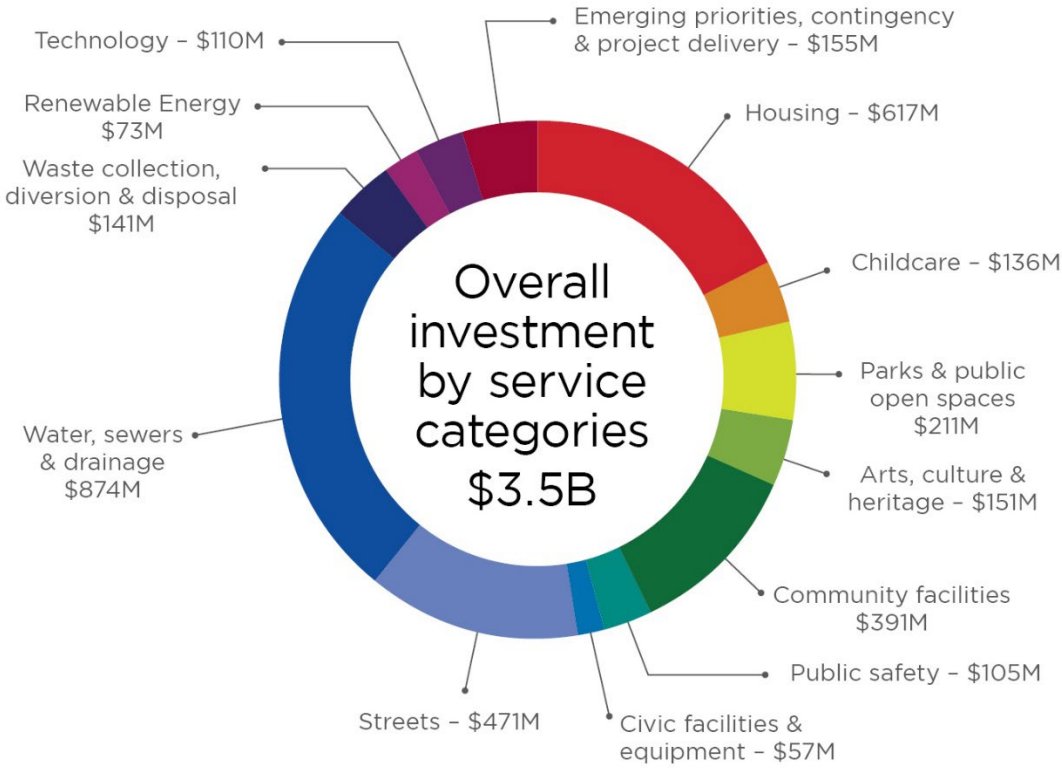
The following map shows the anticipated geographic distribution of population growth (70,000 to 75,000 new residents) and employment growth (50,000 new jobs) for the next decade (2023-2032):



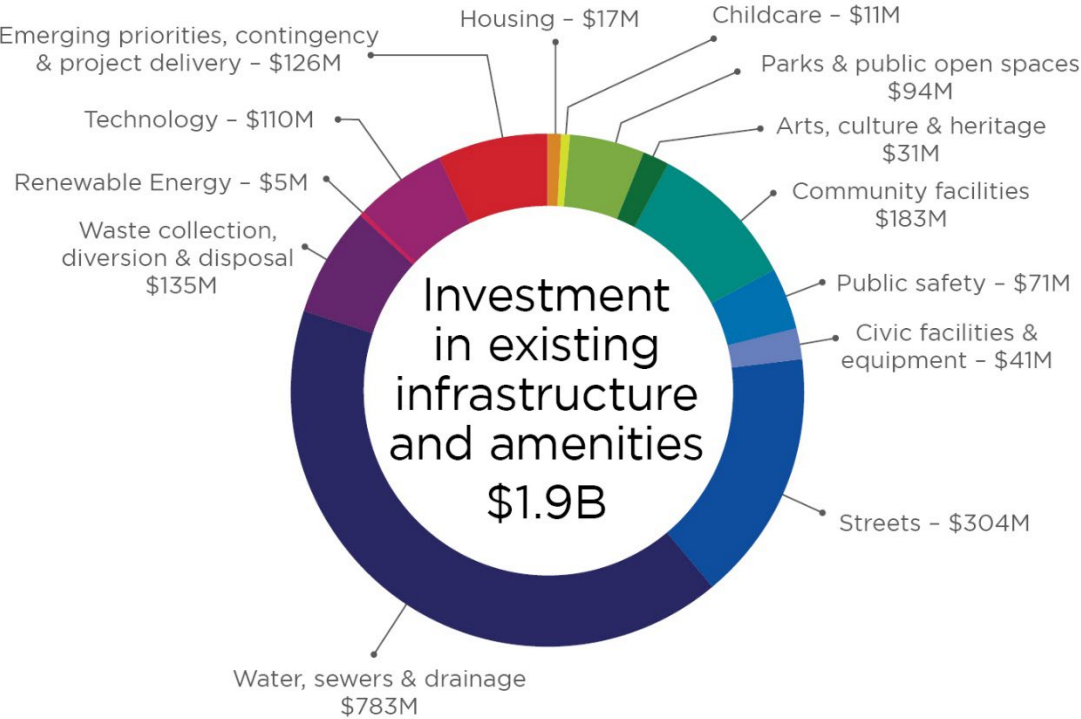
SUMMARY OF CAPITAL INVESTMENTS

A) OVERALL CAPITAL PLAN: \$3.5 BILLION

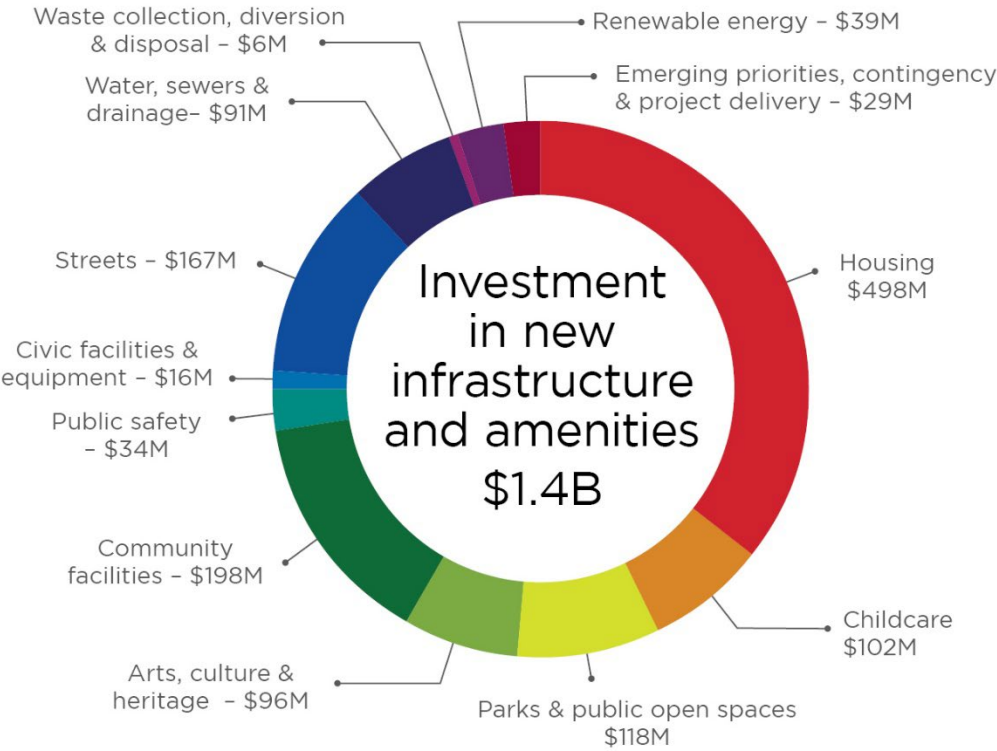
\$ million	City assets		Non-City assets	Overall	Cash				In-kind
	Existing	New			City	Dev't	Partner	Subtotal	
Housing	17	498	102	617	84	186	12	282	335
Childcare	11	102	23	136	11	57	11	79	58
Parks & public open spaces	94	118	-	211	72	129	-	201	10
Arts, culture & heritage	31	96	23	151	94	24	1	119	32
Community facilities	183	198	11	391	191	60	6	257	134
Public safety	71	34	-	105	99	6	-	105	-
Civic facilities & equipment	41	16	-	57	57	-	-	57	-
Streets	304	167	-	471	196	90	82	368	103
Water, sewers & drainage	783	91	-	874	537	303	-	840	35
Waste collection, diversion & disposal	135	6	-	141	128	-	13	141	-
Renewable energy	5	39	30	73	68	5	-	73	-
Technology	110	-	-	110	110	-	-	110	-
Emerging priorities, contingency & project delivery	126	29	-	155	152	3	-	155	-
Overall	1,909	1,393	189	3,492	1,800	862	124	2,786	706
Debt	644	91	-	735	735	-	-	735	-
Pay-as-you-go	836	132	49	1,017	774	131	113	1,017	-
Reserves	341	603	90	1,034	292	732	11	1,034	-
In-kind	89	567	50	706	-	-	-	-	706
	a	b	c	d=a+b+c d=h+i	e	f	g	h=e+f+g	i



B) EXISTING INFRASTRUCTURE AND AMENITIES: \$1.9 BILLION



C) NEW INFRASTRUCTURE AND AMENITIES: \$1.4 BILLION



HOUSING

I. Overview

An equitable housing system incorporates values of inclusion and diversity. It ensures adequate, secure and affordable housing and mitigates displacement while recognizing the need for growth, meets the needs of, and creates a sense of belonging for newcomers and existing residents.

Over the last decade, Metro Vancouver has experienced a decoupling of incomes and housing costs, with low- and moderate-income people most impacted. Vancouver has persistent homelessness, and many are living in unsafe or inadequate conditions.

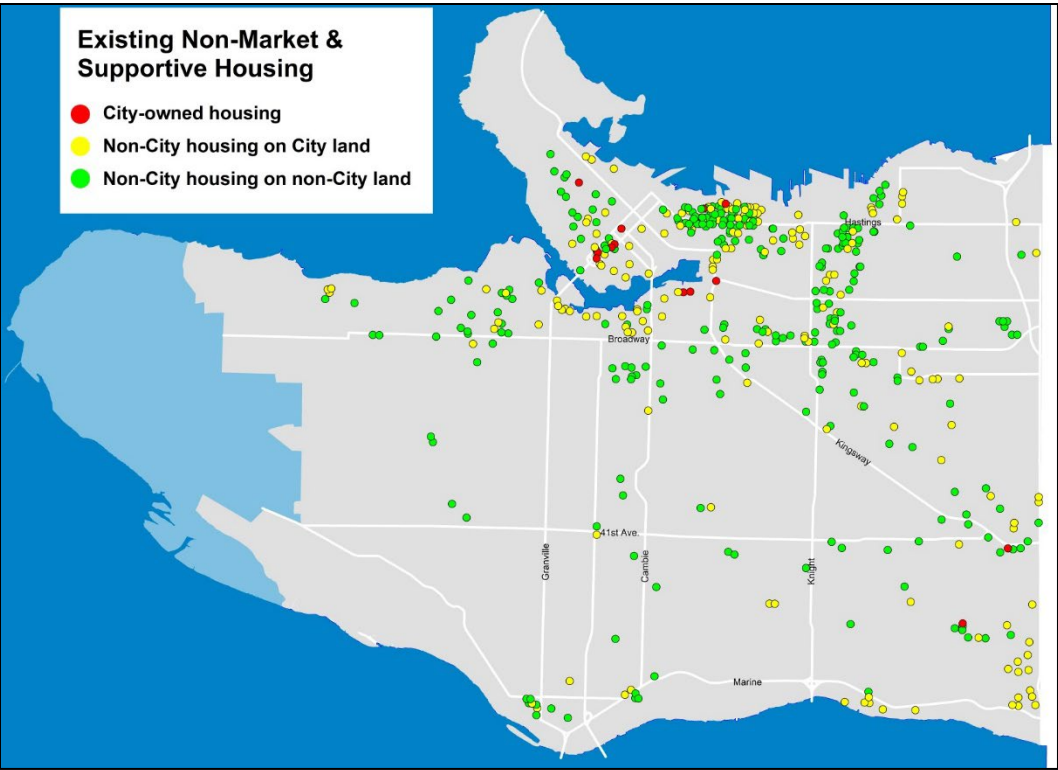
With a growing population, limited increases in income, and not enough affordable housing created in recent decades, the City needs to plan for and accommodate a wide spectrum of housing needs for low-income residents, seniors, young people, growing families, and newcomers. This cannot be achieved without clear commitment and partnerships from all levels of government, community and the private sector.

II. Inventory of Assets

There are approximately 305,000 housing units in the city of Vancouver (2021 census). The following summarizes the different types of affordable housing owned by the City or located on City land:

	City Assets	Replacement Value	% in Good / Fair Condition	Partner Assets
Shelters (year-round)	<ul style="list-style-type: none"><li>11 shelters (~490 rooms) on City-owned land leased to partners</li></ul>	-	-	<ul style="list-style-type: none"><li>~865 year round beds funded by the Province (through BC Housing)</li></ul>
SROs <sup>1</sup>	<ul style="list-style-type: none"><li>~765 SRO rooms owned by the City</li></ul>	-	-	<ul style="list-style-type: none"><li>~3,700 SRO rooms owned by private sector</li><li>~2,300 SRO rooms owned by the Provincial government (BC Housing)</li><li>~600 SRO rooms owned by non-profit societies</li><li>~170 SRO rooms owned by Chinese Benevolent Associations</li></ul>
Supportive housing & Non-market rental	<ul style="list-style-type: none"><li>234 parcels of City-owned land leased to partners</li><li>~965 units in City buildings</li></ul>	~\$500 M	~80%	<ul style="list-style-type: none"><li>~15,000 units on City-owned land</li><li>~15,500 units on non-City land</li></ul>
Purpose-built rental	<ul style="list-style-type: none"><li>~100 units (#1 Kingsway)</li></ul>	~\$50 M	100%	<ul style="list-style-type: none"><li>~72,300 units</li></ul>

<sup>1</sup> The inventory of SROs includes both open and closed rooms.



The following table summarizes major work completed in the last 4 years (2019-2022) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Supportive housing & Non-market rental	<ul style="list-style-type: none"><li>Completed redevelopment of Roddan Lodge including 213 homes</li><li>Completed expropriation of Regent &amp; Balmoral</li><li>Acquisition and opening of 24 homes at Ross House</li><li>Initiated discussions with senior government for a tri-party SRO strategy</li></ul>	<ul style="list-style-type: none"><li>866 units completed, 860 units under construction and 737 under contract/development on City land with non-profit delivery partners</li><li>Deployed 361 homes for social housing in air-space parcels secured from private developers</li><li>Acquisition of three supportive housing assets through CMHC Rapid Housing Initiative</li><li>300+ temporary modular supportive homes on city and private land</li><li>Co-location of 31 homes with the new Fire Hall #5</li><li>Initiated construction of 60+ homes co-located at 480 Broughton</li><li>Enhanced affordability of 768 homes for non-profit project through CHIP grants</li></ul>
Purpose-built rental	<ul style="list-style-type: none"><li>nil</li></ul>	<ul style="list-style-type: none"><li>Private secured rental stock increased by over 3,000 units between 2017 and 2021.</li></ul>



III. Long-term Vision

The City takes an equity-based approach to advance policies that prioritize housing for those who need it most and create more inclusive and affordable neighbourhoods across the city. This includes more secure affordable housing options near transit, green spaces, schools and childcare, and off busy streets; more housing with support services, and that help foster cultural connections and community; more family appropriate and Missing Middle options; and more secure housing options affordable to low and moderate-income households in all neighbourhoods.

Key directions:

- Plan for and accommodate existing and future housing need
- Ensure opportunities for inclusion of low and moderate-income households and diversify the housing stock across all residential areas
- Address homelessness by ensuring every person has access to safe, secure and affordable housing with a range of diverse supports
- Significantly increase the supply of social and supportive housing and support the growth of the community housing sector
- Work with Indigenous partners to support Indigenous housing models and wellness
- Become a city for renters that provides more secure rental housing options, and mitigates displacement
- Continue to address speculation and take steps to promote equitable treatment of renters and homeowners

IV. Strategy for the Next 10 Years

Provision of affordable housing is primarily the responsibility of senior governments. In recent years, both Federal and Provincial governments have increased investment in creating new housing and preserving existing housing through the National Housing Strategy and the “30-Point Plan for Housing Affordability in British Columbia”. A number of new tax measures have also been implemented to dampen speculative demand and generate new revenues to fund affordable housing. The City welcomes these new initiatives, since in the absence of senior government support, the City alone will not be able to sustain and grow the affordable housing portfolio over the long term.

The City continues to strengthen strategic partnerships provincially and nationally to support delivery of existing and future housing needs, including capital and operating funding and low-cost financing for the creation and preservation of affordable housing. Having a sustainable partnership and funding arrangement with senior governments would substantially enable new affordable housing supply as well as the much needed building repairs for all co-op and non-market housing on City land.

*Housing Vancouver* (2017) is a 10-year Council-approved comprehensive housing strategy that includes key policies and actions, along with 10-year housing targets. It provides direction to focus new housing delivery on the “right supply” of homes through transforming low-density neighbourhoods, shifting to rental; and maintaining income diversity. The amount and type of housing delivered in each neighbourhood should reflect both local and city-wide needs with emphasis on retaining income diversity into the future; that is, shifting to housing affordable to moderate and low incomes which are most challenging to deliver in an expensive city. The Strategy will be updated every five years to meet the provincially-mandated Housing Needs Assessment Requirements. The first Housing Needs Report was received by Council in April 2022, and will be updated in 2023 along with revised housing targets when new data from the 2021 Census is available.

In 2018, Council approved the formation of the Vancouver Affordable Housing Endowment Fund to consolidate all non-market housing assets from the Property Endowment Fund and the Capital Fund into a distinct portfolio, with a clear mandate of preserving and growing the City’s affordable housing in a sustainable way. This portfolio approach would further optimize the City’s non-market housing assets and investments by acquiring and readying sites for development and senior government funding, achieve greater economies of scale in housings developments and operations, proactively engage non-profit and co-op lessee’s in renewal and redevelopment planning, administer capital grants to enhance affordability of non-profit projects through our Community Housing Incentive Program, and form strategic partnerships with senior governments and housing partners, and direct investments from social purpose funds and the private sector.

V. 2023-2026 Capital Plan: highlights

Major renewal projects/programs include:

- \$24 million (50% from City and 50% from Partners) has been earmarked for the **acquisition of initial priority sites for the tripartite SRO strategy**. In addition, \$2 million has been earmarked to assist with **upgrading SROs hotels**.
- \$10 million has been earmarked to **replace City-owned buildings** beyond their useful life and leverage senior government funding to create new affordable housing through redevelopment

Major new/upgrade projects/programs include:

- Approximately 725 units (at an estimated value of \$300 million) are anticipated to be delivered by development, secured through **in-kind CACs and inclusionary zoning**.
- \$110 million has been earmarked for **housing land acquisition** to enable senior governments and non-profit housing partners to design, build, finance, operate and maintain social and supportive housing projects on City land. This is in addition to land already owned or secured by the City dedicated for affordable housing.
- \$35 million has been earmarked for **predevelopment funding** to progress projects through regulatory approvals and ready sites for senior government funding and hand over to non-profit deliver partners to design, build, finance, operate and maintain social and supportive housing projects on City land. These projects include existing City sites and new land acquired during the 2023-2026 Capital Plan for affordable housing. Most of these funds are recoverable if and when a project proceeds to construction.
- \$65 million has been earmarked for **capital grants** to enable housing projects to be delivered through community partners.
- \$12 million has been earmarked for the **replacement of existing temporary shelters**

Potential affordable housing projects to be delivered on City land in partnership with senior governments include, but not limited to, five permanent modular supportive housing sites, CMHC Rapid Housing Initiative funded sites, and other sites that are in various stages of design and development.

Consistent with Council policies, affordable housing projects are expected to be self-sustaining over the long term, where rents are set at levels that will cover mortgage payments (to repay some or all of the construction costs), operating costs and capital replacement; and do not require operating subsidies, property tax exemptions and/or financial guarantees from the City. To fully achieve the *Housing Vancouver* supply targets and the necessary level of affordability by income, the City will need partnership funding, e.g. Provincial rent supplements, BC Housing, CMHC and/or non-profit and partner equity contributions.

The City’s Secured Rental Policy and Below-Market Rental Policy are expected to continue to significantly increase the supply of affordable market rental units.



2023-2026 CAPITAL PLAN

VI. 2023-2026 Capital Plan for Housing: \$282 million cash + \$335 million in-kind

				Estimated outcomes (units)			City assets (\$M)		Non-city assets (\$M)	Overall (\$M)	Cash (\$M)			In-kind (\$M)	
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner		Subtotal
\$ million, except for unit outcomes															
Housing															
Land acquisition															
Land acquisition program															
New land for social housing projects; (\$60.0M)				-	400 units	-									
New land for supportive housing; (\$50.0M)				-	400 units	-	-	122	-	122	-	122	-	122	-
Demolition & other land preparation costs; (\$12.0M)				-	-	-									
Land (in-kind)															
New land for social housing from development (in-kind); (\$ -)				-	700 units	-	-	-	-	-	-	-	-	-	
Subtotal Land acquisition							-	122	-	122	-	122	-	122	-
Low-income housing															
Shelters															
Shelter program; (\$12.0M)				-	-	-	-	12	-	12	-	12	-	12	-
SROs															
SRO upgrade program; (\$2.0M)				-	-	50 units	-	24	2	26	12	2	12	26	-
SRO replacement strategy; (\$24.0M)				-	-	-									
Supportive housing															
Relocation of City-owned modular housing from 220 Terminal; (\$3.0M)				-	-	-	3	-	-	3	3	-	-	3	-
Other projects															
Replacement & preservation affordability of City operated units; (\$10.0M)				130 units	-	-	10	-	-	10	5	5	-	10	-
Subtotal Low-income housing							13	36	2	51	20	19	12	51	-
Non-market housing															
Projects (in-kind)															
New units delivered by development (in-kind); (\$300.0M)				-	725 units	-	-	300	-	300	-	-	-	-	300
Programs															
Predevelopment funding program for housing projects on City-land; (\$35.0M)				-	-	-	-	35	65	100	60	40	-	100	-
Grants to support new or redeveloped Partner units; (\$65.0M)				-	-	600 units									
Subtotal Non-market housing							-	335	65	400	60	40	-	100	300
Purpose built rental housing															
Projects															
New secured below market rental units (in-kind, non-city); (\$3.5M)				-	-	-	-	-	35	35	-	-	-	-	35
New secured market rental units (in-kind, non-city); (\$31.5M)				-	-	-									
Subtotal Purpose built rental housing							-	-	35	35	-	-	-	-	35
Programs															
Housing facility programs															
Planning & studies - Housing; (\$4.5M)				-	-	-	4	5	-	9	4	5	-	9	-
Capital maintenance & renovations - Housing; (\$4.3M)				-	-	-									
Subtotal Programs							4	5	-	9	4	5	-	9	-
Total Housing							\$ 17	\$ 498	\$ 102	\$ 617	\$ 84	\$ 186	\$ 12	\$ 282	\$ 335

CHILDCARE

I. Overview

Available, accessible, quality childcare supports the well-being of children and families in Vancouver, promotes gender equity and is key to a thriving economy. Childcare includes infant, toddler and preschooler programs for children 5 years and under, and school-age care for children ages 5 to 12 years.

Securing quality, affordable and inclusive childcare has been a challenge for families for decades due to the lack of an adequately funded childcare system in BC. Parents currently pay about 80% of the costs of childcare, which is the second greatest family expense after housing. Over time, rising costs of housing and food prices has exacerbated the lack of capacity of working families to pay for childcare. With more housing opportunities for families with children contemplated in the *Housing Vancouver Strategy* and population growth, the number of children is anticipated to grow, exacerbating the underlying need for childcare.

Childcare was recently declared an essential service by the Province of BC and is primarily a senior government responsibility. The Province in partnership with federal government is in the process of developing a strategy to deliver on new commitments for a universal childcare system which promises to change the childcare landscape in the coming decades. The need for this change is urgent - as of today, less than half of families seeking licensed childcare in Vancouver can secure adequate and affordable full time spaces. This challenge is especially great for families with very young children, where only one space is available for every 5 children under the age of 3 years.

While there remains a significant service gap for childcare, the City’s impact to date has been substantial. The City has contributed to the development of 35% of all existing licensed childcare spaces for children aged 0-12 years (1 in every 3 spaces in Vancouver), including 60% of all spaces for children under 3 years (3 out of every 5 spaces) through developer contributions, cost levies and other tools, including childcare capital grants to non profits. In total, this effort has created over 5,000 licensed spaces in Vancouver, secured for long-term childcare use, that would otherwise not be available to families today.

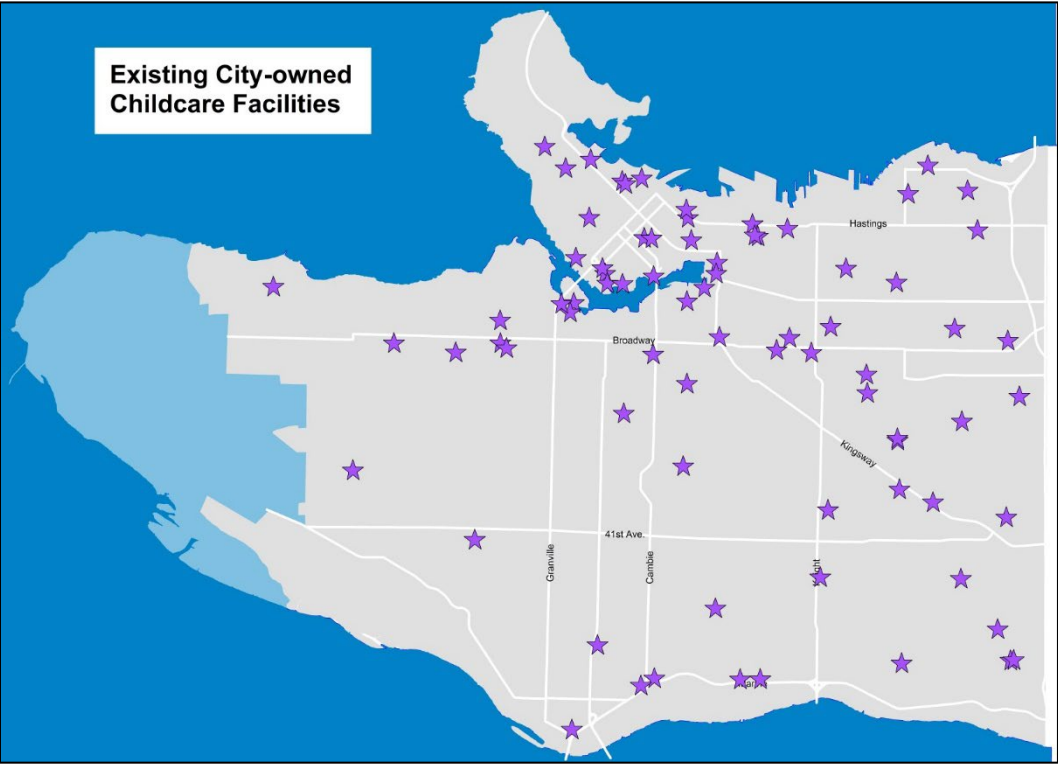
In the next few years, the City and its key partners will be instrumental in charting the future of childcare in Vancouver. With increased senior government investments committed to building a cohesive childcare system over the next five years (2021-2026), the next half decade may bring Vancouver’s children, families and communities closer than ever to meeting universal childcare needs.

II. Inventory of Assets

There are approximately 14,000 licensed childcare spaces in Vancouver for children ages 0-12 years (including preschool). As noted, the City has facilitated approximately 5,000 of these spaces.

Most preschool spaces (part-time, part-day care for children aged between 3 and 5 years old) in City-owned buildings are located in civic community centres and date from the 1950s and 1960s. These spaces are gradually being renewed as the community centres are renewed. About a dozen childcares (mostly portables) were built between 1970 and the early 1990s and most of these facilities have been renewed.

	City Assets	Replacement Value	% in Good / Fair Condition	Partner Assets
Full day for Infants, toddlers & preschoolers (0-4 years)	<ul style="list-style-type: none"><li>54 facilities with ~1,965 spaces</li></ul>	~\$425 M	~95%	<ul style="list-style-type: none"><li>~5,600 spaces provided by VSB, non-profit agencies, and private sector</li></ul>
Part-day preschool (part-day for 3-4 years old)	<ul style="list-style-type: none"><li>31 facilities with ~775 spaces</li></ul>	~\$165 M	~50%	
School age (5-12 years old)	<ul style="list-style-type: none"><li>22 facilities with ~940 spaces</li></ul>	n/a <sup>2</sup>	-	<ul style="list-style-type: none"><li>~4,700 spaces provided by VSB, non-profit agencies, and private sector</li></ul>



<sup>2</sup> School age care is part-time and the spaces are typically shared with other community uses.

The following table summarizes major work completed in the last 10 years (2013-2022) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Infant, toddler & preschool (0-4 years old)	<ul style="list-style-type: none"><li>75 spaces in buildings on City land</li></ul>	<ul style="list-style-type: none"><li>~1,300 new spaces</li><li>an additional ~450 new spaces are either under construction or approved for construction</li></ul>
School age (5-12 years old)	<ul style="list-style-type: none"><li>105 spaces in City-owned buildings</li></ul>	<ul style="list-style-type: none"><li>800 licensed spaces facilitated through City investment</li></ul>

III. Long-term Vision

While childcare is primarily a senior government responsibility, the City will continue to play a leadership role in aligning and supporting the implementation of a senior government-led universal childcare system over the next decades. Key City roles will include: leveraging partnerships with non-profit organizations, the development community, public institutions and other levels of government; supporting non-profit organizations to provide culturally safe and equitable childcare programs across the city; planning for and unlocking opportunities to develop new childcare where most needed / with considerations for equitability and need; and helping to secure and maintain existing childcare infrastructure.

With increased participation, partnerships and investments from senior government, the City can continue to make significant strides towards increasing the availability of quality childcare spaces in Vancouver. As the responsibility for childcare has shifted to a new provincial Ministry of Education and Childcare, it is anticipated that the City will be able to shift focus towards securing, funding and delivering full-day childcare for children 5 years and under. There will also be increased efforts to explore joint capital planning between key public partners (VSB) and other civic bodies.

IV. Strategy for the Next 10 Years

Over the next 10 years, the City will focus on working in partnership with senior governments to help implement the Province’s *Our Plan: Child Care BC*, the *Canada-British Columbia Canada-Wide Early Learning and Child Care Agreement – 2021 to 2026*, and the City’s *Making Strides: Vancouver’s Childcare Strategy* (2022) and forthcoming Action Plan (2023), towards the goal of building a universal system of childcare.

With \$30B in federal investments committed nationally over the next 5 years, the BC childcare plan aims to create 30,000 new spaces across the province for children under 5 years by 2026. The City’s *Making Strides: Vancouver’s Childcare Strategy*, approved by Council in June 2022, proposes working closely with the Province, civic partners and the non-profit sector to secure childcare spaces through joint capital investments, financing growth strategies, policy development, and the development of regulatory tools and

incentives. *Making Strides* also aims to ensure that the goals of cultural safety, inclusion, and equity in childcare, are being met. Key strategic actions include:

- Focusing on non-profit and public childcare delivery, with priority for full-day care for children under 3 years (infants and toddlers);
- Leveraging existing and new tools (including a capital grant program aimed at securing not-for-profit childcare in non-City owned buildings) to maximize opportunities to create new childcare spaces;
- Facilitating the conversion of part-day preschool spaces to full-day childcare for children 3 to 5 years of age, to help address oversupply of preschool spaces and undersupply of full-day care;
- Supporting civic partners to continue to create new school-age care programs on school grounds;
- Supporting the development of culturally safe and Indigenous-led childcare spaces, including school-age care programs off school sites, childcare integrated with housing projects, etc.; and
- Integrating First Nations and Urban Indigenous perspectives meaningfully in childcare policy and planning.

To enable more equitable and accessible distribution of childcare across the City, future childcare goals and targets will be more closely aligned with housing and employment strategies. Collaboration with Vancouver School Board, Vancouver Board of Parks and Recreation, and Vancouver Coastal Health will continue to play a key role in identifying and enabling co-location opportunities.

V. 2023-2026 Capital Plan: highlights

Major renewal projects include:

- Renewal of 95 childcare spaces as part of the renewal of Ray-Cam Cooperative Centre (40 spaces for children 0-4 years + 55 spaces for school age care)

Major new/upgrade projects include:

- Full-day spaces:
  - Creation of ~250 new spaces in City facilities (including expansion of childcare at RayCam Centre and potentially a new childcare as part of the renewal of the Vancouver Aquatic Centre)
  - Creation of ~250 new spaces created through in-kind development
  - Creation of ~60 new spaces by converting existing part-day preschool spaces
  - Grants to non-profit partners to create ~100 new spaces
- Part-day spaces:
  - Creation of ~20 new spaces created through in-kind development
- School-age spaces:
  - Grants to non-profit partners to create ~60 new spaces, with a focus on Indigenous-led childcare programs

2023-2026 CAPITAL PLAN

VI. 2023-2026 Capital Plan for Childcare: \$79 million cash + \$58 million in-kind

				Estimated outcomes (units)			City assets (\$M)		Non-city assets (\$M)	Overall (\$M)	Cash (\$M)			In-kind (\$M)	
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner		Subtotal
\$ million, except for unit outcomes															
Childcare															
Full day care (0-4 years old)															
Projects															
Childcare - RayCam - renewal & expansion of full day (0-4) spaces; (\$31.1M)				40 spaces	108 spaces	-									
Childcare - West End Centre renewal - new full day (0-4) spaces, design; (\$1.0M)				-	74 spaces	-	8	56	-	64	8	45	10	64	-
Childcare - Vancouver Aquatic Centre - new full day (0-4) spaces (potential); (\$15.9M)				-	74 spaces	-									
Childcare - Future projects - new full day (0-4) spaces (tbd); (\$15.9M)				-	74 spaces	-									
Projects (in-kind)															
Childcare - St. Paul's Hospital (Phase 1) (in-kind, non-city) - new full day (0-4) spaces; (\$10.3M)				-	-	49 spaces									
Childcare - 1444 Alberni St. (in-kind) - new full day (0-4) spaces; (\$11.8M)				-	56 spaces	-									
Childcare - 1940 Main St. (in-kind) - new full day (0-4) spaces; (\$7.8M)				-	37 spaces	-	-	43	10	53	-	-	-	-	53
Childcare - 1157 Burrard St. (in-kind) - new full day (0-4) spaces; (\$7.8M)				-	37 spaces	-									
Childcare - 427-477 West 49th Ave. (in-kind) - new full day (0-4) spaces; (\$7.8M)				-	37 spaces	-									
Childcare - 5812-5844 Cambie St. (in-kind) - new full day (0-4) spaces; (\$7.8M)				-	37 spaces	-									
Other															
Conversion of part-day spaces to full day (0-4) care; (\$600K)				-	64 spaces	-	1	-	5	6	-	6	-	6	-
Grants to support new full day (0-4) Partner spaces; (\$5.4M)				-	-	100 spaces									
Subtotal Full day care (0-4 years old)							9	99	16	123	8	51	10	70	53
Part day care (0-4 years old)															
Projects															
New part day (0-4) spaces delivered by the City; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Projects (in-kind)															
Childcare - St. Paul's Hospital, Phase 1 (in-kind, non-city) - new part day (0-4) spaces; (\$4.2M)				-	-	20 spaces	-	-	4	4	-	-	-	-	4
Other															
Grants to support part day (0-4) childcare spaces; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Part day care (0-4 years old)							-	-	4	4	-	-	-	-	4
School age (5-12 years old)															
Projects															
Childcare - RayCam - renewal school age (5-12) childcare spaces; (\$300K)				55 spaces	5 spaces	-	0	0	-	0	0	0	-	0	-
New school age (5-12) spaces delivered by the City; (\$ -)				-	-	-									
Projects (in-kind)															
New school age (5-12) spaces delivered by development; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Other															
Grants to support new school age (5-12) Partner spaces; (\$3.0M)				-	-	60 spaces	-	-	3	3	-	2	1	3	-
Subtotal School age (5-12 years old)							0	0	3	3	0	2	1	3	-
Programs															
Childcare facility programs															
Capital maintenance - Childcare; (\$600K)				-	-	-									
Renovations - Childcare; (\$900K)				-	-	-	2	4	0	5	2	4	-	5	-
Planning & studies - Childcare; (\$3.5M)				-	-	-									
Small capital grants for non-City owned childcares; (\$400K)				-	-	-									
Subtotal Programs							2	4	0	5	2	4	-	5	-
Total Childcare							\$ 11	\$ 102	\$ 23	\$ 136	\$ 11	\$ 57	\$ 11	\$ 79	\$ 58



PARKS & PUBLIC OPEN SPACES

I. Overview

The livability of a city is strongly tied to the quality of its parks and public open spaces, which provide spaces for people to gather, play, socialize and appreciate nature. They play a crucial role in supporting public health and social connections, maintaining urban ecological systems, providing natural carbon sequestration, and fostering a sense of community.

As Vancouver continues to grow over the coming decades, its parks and public open spaces will become increasingly important. New and existing residents living in more compact communities will need well maintained parks, with amenities and features that meet their leisure and recreational needs, and provide a strong connection to nature.

II. Inventory of Assets

Vancouver’s network of parks and public open spaces includes over 300 sites distributed across the city, accounting for 1,343 hectares (13.4 km<sup>2</sup>) or about 10% of all land within municipal boundaries. These public open spaces vary in size (from small urban plazas and mini-parks to major parks like Stanley Park) and function (e.g. natural areas, sports and recreation, leisure activities and public gatherings). The vast majority of parks and public open spaces are managed by Vancouver Board of Parks and Recreation. Other government agencies that provide public open space in and adjacent to Vancouver include the Vancouver School Board, Metro Vancouver (Regional Parks), Federal Government agencies including Canada Mortgage and Housing Corporation (Granville Island) and the Vancouver Fraser Port Authority (Canada Place), as well as hospitals and post-secondary schools.

	City Assets	Replacement Value	% in Good / Fair Condition	Partner Assets
Park land	<ul style="list-style-type: none"><li>1,343 hectares</li></ul>	-	-	<ul style="list-style-type: none"><li>Portion of Pacific Spirit Regional Park within municipal boundaries</li><li>Public open spaces at schools (primary, secondary, colleges &amp; universities)</li><li>Public open spaces at institutions such as hospitals, Granville Island, Canada Place and Convention Centre</li></ul>
Seawall & waterfront	<ul style="list-style-type: none"><li>33 km of seawall &amp; shoreline</li><li>20 hectares of beaches</li><li>23 marine structures</li></ul>	~\$0.8 B	~80%	<ul style="list-style-type: none"><li>Waterfront on Granville Island and Canada Place</li></ul>
Urban forest & natural areas	<ul style="list-style-type: none"><li>397 hectares of forests &amp; woodlands</li><li>63 lakes, ponds &amp; streams</li><li>22,000 ornamental trees in parks</li><li>130,000 street trees</li></ul>	~\$0.6 B	~90%	<ul style="list-style-type: none"><li>Portion of Pacific Spirit Regional Park within municipal boundaries</li></ul>

	City Assets	Replacement Value	% in Good / Fair Condition	Partner Assets
Park amenities	<ul style="list-style-type: none"><li>217 km of pathways, walkways &amp; trails</li><li>4,600 park benches</li><li>160 playgrounds</li><li>278 sport fields</li><li>225 sport courts</li><li>39 dog off-leash areas</li><li>6 golf courses</li></ul>	~\$0.5 B	~75%	<ul style="list-style-type: none"><li>Playgrounds, sport fields and sport courts at primary and secondary schools</li></ul>
Park buildings, infrastructure & vehicles	<ul style="list-style-type: none"><li>390 park buildings</li><li>85 picnic shelters &amp; gazebos</li><li>23 km of roadway</li><li>360 vehicles &amp; equipment</li></ul>	~\$1.0 B	~50%	<ul style="list-style-type: none"><li>n.a.</li></ul>



The following table summarizes major work completed in the last 10 years (2013-2022) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Park land	n/a	<ul style="list-style-type: none"><li>5 hectares of new park</li></ul>
Seawall & waterfront	<ul style="list-style-type: none"><li>maintenance &amp; repairs to 4 km of seawall</li><li>0.4 km shoreline protection</li></ul>	<ul style="list-style-type: none"><li>0.6 km of new seawall</li></ul>
Urban forest & natural areas	<ul style="list-style-type: none"><li>10,000 street trees replaced</li><li>2.6 ha of enhanced ponds &amp; water bodies</li></ul>	<ul style="list-style-type: none"><li>8,000 new street trees</li><li>7.5 ha of new forested area</li><li>2.5 ha of new ponds and water bodies</li></ul>
Park amenities	<ul style="list-style-type: none"><li>37 playgrounds</li><li>14 sport fields and diamonds</li><li>2 synthetic turf field</li><li>110 sport courts (pickleball, tennis, basketball)</li></ul>	<ul style="list-style-type: none"><li>5 new playgrounds</li><li>3 new synthetic turf sport fields</li></ul>
Park buildings, infrastructure & vehicles	<ul style="list-style-type: none"><li>8 washrooms</li><li>200 vehicles</li></ul>	<ul style="list-style-type: none"><li>14 new washrooms</li><li>10 vehicles</li></ul>

III. Long-term Vision

The City and Board of Parks and Recreation envision connecting people to green space, active living and community, and ensuring that all residents have access to high quality parks and recreation experiences. This includes providing, preserving and advocating for parks and recreation to benefit all people, communities and the environment. This commitment is supported through policies and strategies such as:

- The *VanPlay - Parks and Recreation Services Master Plan* (2020), guides the long-term renewal and expansion of the parks and recreation system, as well as development of new park provision metrics and policies.
- The *Park Board’s Strategic Framework* (2012) sets a vision of connecting people to green space, active living and community, with a strong focus on inclusion and accessibility for all backgrounds, genders, incomes, and abilities.
- The *Biodiversity Strategy* (2016), in conjunction with the *Urban Forest Strategy*, *Environmental Education and Stewardship Action Plan*, and *Bird Strategy*, provides a foundation for:
  - restoring and protecting natural areas and species
  - improving access to nature across the city
  - supporting biodiversity on public and private lands in Vancouver
- VanSplash: Vancouver Aquatic Strategy* (2019) guides the future of Vancouver’s pools and beaches, exploring innovative options to support community and personal well-being

- On Water: Vancouver’s Non-motorized Watercraft Strategy* (2019) guides planning and implementation for existing facilities and future non-motorized watercraft facilities.
- People, Parks and Dogs Strategy* (2017) guides the planning and design of safe, engaging, and appealing parks for people with and without dogs
- Track and Field Strategy* (2019) guides the development of track and field facilities across Vancouver.
- Local Food Systems Action Plan* (2021) directs action toward a sustainable, just, and decolonized local food system by making space for Indigenous food sovereignty, and increasing equitable access to food assets and services.
- Sport Field Strategy* (in progress 2022) will create a clear and sustainable path to deliver optimal recreational and competitive outdoor sport field and diamond facilities and services. Outlining the best way to prioritize equity and deliver high quality, safe and inclusive facilities. The strategy will also ensure the maintenance, administration, allocation and pricing of these facilities are sustainable and provide, preserve and advocate for parks and recreation to benefit all people, communities and the environment.
- The Skateboard Amenities Strategy* (in progress 2022) will define a vision for skateboarding (and other small wheeled sports) in Vancouver and provide a long term policy and implementation plan for improving and adding to our city’s existing network of skateboard facilities. The plan includes a detailed gap analysis and needs assessment which will validate the recommendations to increase the types of skate amenities within our parks and the public realm and prioritize locations based on inclusion, access and equity.

IV. Strategy for the Next 10 Years

Key Priorities

- Deliver services equitably to create a fair and effective parks and recreation system.
- Welcome everyone by creating parks and recreation experiences that improve quality of life.
- Weave the city together and ensure parks, nature, recreation and culture are integrated into everyday life.

Key Outcomes

- Parks and green spaces that keep pace with population growth (e.g. Northeast False Creek, East Fraser Lands, Oakridge)
- A connected network of new and existing parks, green spaces and recreation areas.
- Resilient and durable park spaces and amenities that are developed, renewed and maintained to withstand intensive use from a growing population (~20 parks)

Trends Impacting Parks & Public Open Spaces over the next 10 years

- An increasing desire to pursue a co-management framework for parks with Musqueam, Squamish and Tsleil-Waututh Nations.
- Climate change impacts at a rate, intensity and with compounding factors (e.g. higher sea level, increased storm intensity, ocean debris) negatively impacting ecosystems, infrastructure, maintenance requirements and service delivery in unpredictable ways.

- 70,000 to 75,000 new residents resulting in higher demand and more intensive use of parks and recreation amenities and services.
- Residential densification, reducing private yard space and tree canopy cover city-wide.
- Growth areas of the city receive new park and recreation amenities exacerbating historical inequalities city-wide.
- Aging population requiring parks and recreation amenities that are responsive to changing needs and abilities.
- Increasing demand for wellness amenities that support growing mental and physical health needs.
- Increased desire for access to nature and to experience nature in the city.

**Actions to Address Priorities and Trends**

- Integrating Musqueam, Squamish, Tsleil-Waututh Nations and Urban Indigenous Peoples history and living culture in parks and open spaces.
- Building resilience to a changing climate by integrating living shorelines, daylit streams, and green infrastructure to restore natural hydrology and enhance ecological networks; using materials and designs that can withstand intense storm events; and building shade structures and access to water to support residents during heat events.
- Increasing the ability of parks to respond to growing user demand by building and upgrading parks and fields with more durable surfaces and higher quantity and/or capacity amenities.
- Acquiring and developing new parks, and adding amenities to existing parks to improve services in areas of high-need (e.g. service gap), and to serve the active and passive park needs of all ages (e.g. paths and trails, skateparks, seating, drinking fountains, playgrounds, off-leash dog areas, and multi-use hard surfaces).
- Where possible, directing new investments towards Equity Initiative Zones, as outlined in VanPlay.
- Considering and designing for the diverse needs, ages and mobilities of park users in new and renewed park amenities.
- Pursuing partnerships, development and land acquisitions to connect park, green spaces and recreation areas together.
- Growing the urban forest through tree planting on public lands, streets, private property, and developments sites.

**V. 2023-2026 Capital Plan: highlights**

In the next four years, the Park Board is considering undertaking a number of major park renewal projects. Additionally a number of major projects will expand park access and amenities, including new parks in Southeast False Creek and East Fraser Lands, and adding two new washroom facilities. Highlights of the Capital Plan for the next four years are described below.

**Parkland Acquisition**

Parkland acquisition is focussed on expanding natural areas and neighbourhood parks in Equity Initiative Zones over the next four years.

**Park Amenities**

The Park Amenity category includes new and renewed parks, as well as new and upgraded individual amenities such as playgrounds, skateboard and bicycle parks, pathways and dog off-leash areas. This category also includes new, renewed and upgraded sport facilities including play fields and diamonds, tennis and basketball courts, and improving track and field facilities.

In the next four years, major projects include the design and development of a new park in the eastern portion of South East False Creek, the development of multiple parks in East Fraser Lands, and a significant expansion to a park in the Burrard Slopes neighborhood. Project delivery is focussed on growth areas, including the West End, along the Cambie Corridor, and Downtown, as well as in Equity Initiative Zones.

**Seawall and Waterfront**

This category includes work to maintain and repair existing shorelines and seawalls on the ocean and riverfronts. Additionally, projects include coastal adaptation planning to create more resilient shorelines and marine ecosystems in the face of rising sea levels and increasing frequency and severity of storm events related to climate change.

**Urban Forest and Natural Areas**

Urban forests and natural areas bring nature to urban residents. These assets are the most effective natural carbon sequestration assets in the city (see: Climate Emergency Action Plan), and offer significant unrealized potential for combating climate change. The urban forest canopy (street trees, in parks, and on private property) and its cooling benefits are not equitably distributed in the city. Projects to address this include the expensive conversion of street asphalt to tree planting sites. Natural areas in parks include sections of forest, wetland (in conjunction with green infrastructure), pollinator meadow, and creek restoration projects (many currently awaiting funding).

**Park Buildings, Infrastructure and Vehicles**

This category includes park washrooms, and general maintenance and upkeep of existing park buildings. The Capital Plan includes renewing and building two new washrooms. Continued investment in park infrastructure will support the growing activity in parks city-wide. This includes pathways, bridges, pavement and parking lots, electrical and water infrastructure to further water conservation goals, and other general park infrastructure investments.

This category also includes new and renewed park vehicles and small equipment for park maintenance and landscaping, and responds to the city-wide effort to move toward electric vehicles and equipment and away from gas power. The proposal contained in the Capital Plan would lead to the conversion of 47 fleet assets to electric, increasing the number of electric vehicles from 43 to 90 (from 12% to 25% of fleet).

**Decolonization, Arts and Culture**

Decolonization, arts and culture capital projects guide the shifting policies and frameworks for the cultural landscape in parks. This includes the co-management framework and Decolonization Strategy, as well as parks and recreation infrastructure projects that are driven by MST and enhance cultural visibility on the land.

2023-2026 CAPITAL PLAN

VI. 2023-2026 Capital Plan for Parks & Public Open Spaces: \$201 million cash + \$10 million in-kind

				Estimated outcomes (units)			City assets (\$M)		Non-city assets (\$M)	Overall (\$M)	Cash (\$M)			In-kind (\$M)
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner	
\$ million, except for unit outcomes														
Parks & public open spaces														
Park land														
Land acquired by City														
New land for parks; (\$22.5M)				-	0.35 ha	-	-	23	-	23	-	23	-	-
Land transferred to City by development (in-kind)														
New park land in East Fraser Lands (in-kind); (\$ -)				-	3.3 ha	-								
New park land at Pearson-Dogwood site (in-kind); (\$ -)				-	1.4 ha	-								
New park land at Oakridge Centre site (in-kind); (\$ -)				-	0.9 ha	-	-	-	-	-	-	-	-	-
New park land at Little Mountain site (in-kind); (\$ -)				-	0.2 ha	-								
New park land at Alberni & Nicola Streets (in-kind); (\$ -)				-	0.1 ha	-								
Subtotal Park land							-	23	-	23	-	23	-	-
Seawall & waterfront														
Seawall & shoreline														
Maintenance / repairs of seawall or shoreline; (\$4.5M)				-	-	-								
Upgrades to existing seawall or shoreline; (\$ -)				-	-	-								
New section of seawall or shoreline in East Fraser Lands (in-kind); (\$ -)				-	-	-	8	5	-	13	9	4	-	13
New section of seawall or shoreline in Northeast False Creek (in-kind); (\$ -)				-	-	-								
Seawall / shoreline planning; (\$7.0M)				-	-	-								
Deconstruction Creekside Expo deck (initial phases); (\$1.0M)				-	-	-								
Waterfront walkway-bikeway														
Upgrades to waterfront-walkway bikeway; (\$2.0M)				1-2 km	-	-								
New waterfront walkway-bikeway in East Fraser Lands (in-kind); (\$ -)				-	-	-	2	-	-	2	1	2	-	2
New waterfront walkway-bikeway in Northeast False Creek (in-kind); (\$ -)				-	-	-								
Marine structures														
Maintenance / repairs of marine structures; (\$ -)				-	-	-								
Renewal of marine structures; (\$1.0M)				1 structure	-	-	1	-	-	1	1	-	-	1
New marine structures; (\$ -)				-	-	-								
Subtotal Seawall & waterfront							11	5	-	16	11	5	-	16
Urban forest & natural areas														
Urban forest														
Street trees - replacement; (\$5.0M)				~9,000 trees	-	-								
Street trees - new; (\$ -)				-	-	-								
Park trees - replacement; (\$ -)				-	-	-	5	3	-	8	5	3	-	8
Park trees - new; (\$2.5M)				~2,500 trees	-	-								
Forest management/enhancement program; (\$ -)				-	-	-								
Tree planting program on private land; (\$ -)				-	-	-								
Natural areas														
Convert park land to healthy habitat; (\$5.5M)				-	-	-	6	-	-	6	2	4	-	6
Urban agriculture														
Local food assets; (\$360K)				-	-	-	-	0	-	0	-	0	-	0
Subtotal Urban forest & natural areas							11	3	-	13	7	7	-	13



2023-2026 CAPITAL PLAN

VI. 2023-2026 Capital Plan for Parks & Public Open Spaces (continued)

				Estimated outcomes (units)			City assets (\$M)		Non-city assets (\$M)	Overall (\$M)	Cash (\$M)				In-kind (\$M)
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner	Subtotal	
\$ million, except for unit outcomes															
Parks & public open spaces															
Park amenities															
New parks															
Expansion of W.C. Shelly Park (phase 1); (\$3.7M)				-	0.15 ha	-									
Expansion of Burrard Slopes Park (phase 1); (\$12.0M)				-	0.5 ha	-									
New 'East Park' in Southeast False Creek (phase 1); (\$16.8M)				-	-	-									
New park at Alberni & Nicola; (\$3.0M)				-	0.085 ha	-									
New parks in East Fraser Land; (\$5.4M)				-	-	-	-	57	-	57	-	47	-	47	10
New parks at Pearson-Dogwood site; (\$3.9M)				-	-	-									
New 'wedge park' at Little Mountain site; (\$250K)				-	0.21 ha	-									
New park at Oakridge Centre (phase 1, in-kind); (\$10.0M)				-	3.6 ha	-									
Expansion of Delamont Park (phase 1); (\$1.9M)				-	-	-									
Existing parks															
Park renewal program; (\$6.3M)				1 - 2 parks	-	-									
Yaletown Park redevelopment; (\$4.0M)				0.14 ha	-	-	20	-	-	20	5	15	-	20	-
West End waterfront parks (phase 1 implementation); (\$10.0M)				-	-	-									
Playgrounds & spray parks															
Renewal & upgrades of playgrounds & spray parks; (\$6.0M)				8 - 10 projects	-	-									
New playgrounds & spray parks; (\$1.3M)				-	1 spray park	-	6	1	-	7	4	4	-	7	-
Sport courts & skate parks															
Renewal & upgrades of sport courts & skate parks; (\$2.4M)				2 - 4 projects	-	-									
New sport courts & skate parks; (\$1.3M)				-	1 - 2 projects	-	2	1	-	4	1	2	-	4	-
Ball diamonds & playfields															
Renewal & upgrades of ball diamonds & playfields; (\$3.6M)				6 - 12 projects	-	-									
New ball diamonds & playfields; (\$3.3M)				-	1 - 2 projects	-	4	3	-	7	3	4	-	7	-
Other sports amenities															
New track & field facility; (\$10.7M)				-	1 facility	-	-	11	-	11	-	11	-	11	-
Dog off-leash areas															
Renewal of dog off-leash areas; (\$500K)				1 project	-	-									
New dog off-leash areas; (\$ -)				-	-	-	1	-	-	1	1	1	-	1	-
Upgrades dog off-leash area at Emery Barnes Park; (\$900K)				1 project	-	-									
Other amenities															
Renewal of other amenities; (\$750K)				-	-	-									
New other amenities; (\$667K)				-	-	-	1	1	-	1	1	1	-	1	-
Park planning															
Planning & studies - Parks; (\$1.5M)				-	-	-	-	2	-	2	1	1	-	2	-
Subtotal Park amenities							34	76	-	110	16	84	-	100	10

2023-2026 CAPITAL PLAN

VI. 2023-2026 Capital Plan for Parks & Public Open Spaces (continued)

				Estimated outcomes (units)			City assets (\$M)		Non-city assets (\$M)	Overall (\$M)	Cash (\$M)			In-kind (\$M)	
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner		Subtotal
\$ million, except for unit outcomes															
Parks & public open spaces															
Park buildings, infrastructure & vehicles															
Park buildings															
Renovations - Park buildings; (\$5.0M)				5 - 7 projects	-	-	10	3	-	13	8	6	-	13	-
Capital maintenance - Park buildings; (\$5.0M)				-	-	-									
New park buildings; (\$3.3M)				-	2 - 3 projects	-									
Park pathways															
Maintenance & renewal of park pedestrian infrastructure; (\$2.5M)				-	-	-									
Universal access improvements to park pedestrian infrastructure; (\$1.0M)				-	-	-	4	-	-	4	3	1	-	4	-
New pedestrian infrastructure; (\$ -)				-	-	-									
Park roads & parking lots															
Maintenance & renewal of park vehicular infrastructure; (\$2.5M)				-	-	-	3	-	-	3	3	-	-	3	-
Park infrastructure															
Maintenance, upgrading & renewal of park electrical & water infrastructure; (\$3.3M)				-	-	-									
Stanley Park cliff maintenance (Prospect Pt.- 3rd Beach); (\$500K)				2.0 km	-	-	6	4	-	10	6	4	-	10	-
New park electrical & water infrastructure; (\$4.0M)				-	-	-									
Potable water reduction/reuse program; (\$2.0M)				2 projects	-	-									
Park vehicles & equipment															
Renewal of vehicles & equipment - Parks; (\$13.2M)				75 vehicles	-	-									
Electrification of vehicles & equipment - Parks; (\$3.4M)				48 vehicles	-	-	17	3	-	20	20	-	-	20	-
New vehicles & equipment - Parks; (\$3.1M)				-	60 vehicles	-									
Subtotal Park buildings, infrastructure & vehicles							38	10	-	49	38	11	-	49	-
Decolonization, arts & culture															
Decolonization & policy development															
Co-management framework; (\$200K)				-	-	-									
Cultural visibility on the land; (\$300K)				-	-	-	-	1	-	1	1	-	-	1	-
Decolonization strategy; (\$500K)				-	-	-									
Subtotal Decolonization, arts & culture							-	1	-	1	1	-	-	1	-
Total Parks & public open spaces							\$ 94	\$ 118	-	\$ 211	\$ 72	\$ 129	-	\$ 201	\$ 10

ARTS, CULTURE & HERITAGE

I. Overview

Art and culture give cities life, imbuing them with the qualities, landmarks, and stories that make cities recognizable and distinct. Vancouver is located on the unceded and traditional homelands of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish) and səlilwətał (Tsleil-Waututh) People. A place rooted in history and vibrant Indigenous cultural resurgence, Vancouver is also city renowned for its artists, cultural traditions, industries and diversity.

The City supports access to arts and culture through a variety of means, including through operations of the Vancouver Civic Theatres, commissioning new public art through the Public Art Program, supporting cultural heritage in Chinatown, providing capital grants to support both City and non-City cultural spaces, supporting non-profit cultural tenants and artists in City owned spaces, and developing new cultural spaces through development. Programs and services are also provided through partnerships with Vancouver Park Board, Vancouver Public Library, other levels of government, private development, and non-profit organizations to provide a range of facilities, services and programs.

II. Inventory of Assets

Arts & culture includes cultural facilities, entertainment/exhibition facilities, public art and heritage.

Cultural facilities

Vancouver’s vibrant cultural ecology relies on a network of accessible, affordable and secure artist creation, exhibition, performance and ancillary spaces. As part of this network, the City provides capital grants, technical advice, integrates arts and culture into City planning and owns or leases 56 cultural spaces. This also includes the operations and maintenance of the Vancouver Civic Theatres landmark performance venues, the Orpheum, Annex, Vancouver Playhouse, Queen Elizabeth Theatre, and ᓄᓂᓴᓴ exən Xwtl’a7shn Plaza, as well as seven studios that are part of the City’s Artist Studios Award Program.

More than forty City-owned spaces (over 800,000 square feet) are provided at below-market or nominal rent to non-profit arts and cultural tenants. Reflecting a range of arts and cultural uses, examples include the BMO Theatre Centre, Dr. Sun Yat-Sen Gardens, and the recently launched affordable artist housing and associated production space at Main and 2<sup>nd</sup> facility. The City’s portfolio also claims a number of heritage buildings, including the Orpheum, the Firehall Arts Centre, Historic Joy Kogawa House, the Police Museum, and the Queen Elizabeth Theatre.

Entertainment/exhibition facilities

This category includes Nat Bailey Stadium at Hillcrest Park and the following buildings managed by the Pacific National Exhibition (PNE) at Hastings Park: the Pacific Coliseum, the Forum, Rollerland, and the Livestock Building. These buildings were all built between 1930 and 1970. Also included is Playland amusement park at Hastings Park.

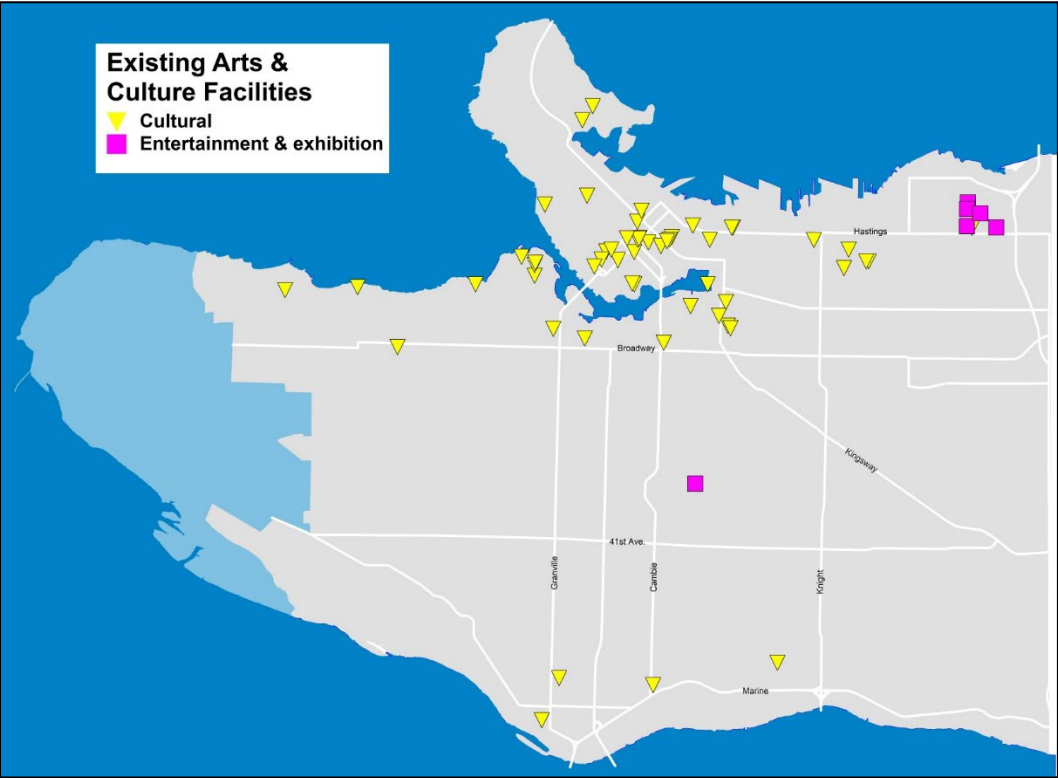
Public art

The City of Vancouver Public Art Program commissions artworks and supports critical artistic explorations that reflect on the complexities of place, publics, and culture. The program prioritizes artist-centred approaches and respectful relations in pursuit of the vision of a city where the work of artists is integrated into daily life. Artworks are commissioned by the program for public sites and through private development rezoning requirements. Vancouver’s public art collection includes over 300 artworks created since the program began in 1991.

Heritage

Heritage supports the conservation and protection of Vancouver Heritage Register listed sites (2,255) and those sites and areas of particular importance to Vancouver’s communities (existing and new historic areas), cultural heritage emphasizing support to Indigenous Cultural Heritage and heritage of racialized and historically marginalized communities.

	City Assets	Replacement Value	% in Good/ Fair Condition	Partner Assets
Cultural facilities	• 56 facilities (1,325,000 sq.ft.)	~\$1.2B	~35%	• Non-profit cultural facilities
Entertainment & Exhibition	• Nat Bailey Stadium • 10 facilities at the PNE (500,000 sq.ft.) • Playland amusement park	~\$350M	0%	• B.C. Place Stadium • Rogers Arena • Convention Centre
Public Art	• ~240 art installations (permanent) • ~200 art installations (temporary)	~\$50 M	~75%	• ~100 art installations on private land
Heritage	• ~100 buildings	-	-	• ~2,155 buildings



The following table summarizes major work completed in the last 10 years (2013-2022) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Cultural facilities	<ul style="list-style-type: none"><li>• nil</li></ul>	<ul style="list-style-type: none"><li>• 10 new facilities (~110,000 sq.ft. added)</li><li>• New cultural facility at Oakridge Centre (~12,000 sf) currently under construction</li></ul>
Entertainment & Exhibition	<ul style="list-style-type: none"><li>• Basic renovations and maintenance of facilities</li></ul>	<ul style="list-style-type: none"><li>• Seating expansion at Nat Bailey Stadium</li></ul>
Public Art	<ul style="list-style-type: none"><li>• 6 art installations restored</li><li>• 13 art installations repaired</li></ul>	<ul style="list-style-type: none"><li>• ~50 art installations added</li></ul>
Heritage	<ul style="list-style-type: none"><li>• ~500 heritage reviews/ site improvements</li></ul>	<ul style="list-style-type: none"><li>• ~100 new sites added to the Heritage Register</li></ul>

III. Long-term Vision

Arts and culture play an important role in contributing to a city’s identity, liveability, economic prosperity, social cohesion and sense of environmental responsibility. Over the next 30 years, as guided by the future Vancouver Plan, the City will elevate arts, culture and heritage in ways that reflect Vancouver’s diversity, position on unceded territory, and right relationship with Musqueam, Squamish, and Tsleil-Waututh Nations. This includes directions to:

- Embed arts and culture at the centre of city building;
- Expand and support spaces to produce, present and experience arts and culture; and
- Integrate Indigenous and equity-denied communities’ perspectives and approaches into arts, culture and heritage policy and projects.

Cultural facilities

The most critical challenge facing arts and culture, in Vancouver and globally, is affordability of space. Cities have a particular responsibility through provision of affordable space, support of local infrastructure projects, land use and zoning, planning and development, and regulatory policies and processes. Through the upcoming *Vancouver Plan*, the 2019 Council approved *Culture|Shift* and integrated plans, *Making Space for Arts and Culture*, and *Vancouver Music Strategy*, the City has outlined targets, directions and actions to secure, enhance, and develop vibrant, affordable and accessible arts and cultural spaces in collaboration with the community and private sector, other agencies and levels of government.

Entertainment & exhibition facilities

The Hastings Park / Pacific National Exhibition Master Plan (2011) identified the following key statements in its vision. Hastings Park is: a) a place of renewal and transformation; b) a place of celebration; c) a place of connections; and d) a destination for local residents and visitors.

Public art

The public art program will continue to centre artists in city building, letting artists lead in creating work for the public realm and allowing their visions and voice to point to broader directions in public life. Public Art in the City of Vancouver will advance goals of Reconciliation and Decolonization by supporting and making visible Vancouver’s acknowledgement that it is built on the unceded territories of the Musqueam, Squamish, and Tsleil-Waututh First Nations, and advancing the visibility and voice of the Nations and their artists on their lands. Working alongside larger initiatives, public art will also support cultural redress and

equity through commemorative projects and culturally relevant commissions. Permanent artworks will be maintained physically and their continued relevance will be supported through programming and outreach. Funding for new work will track with City and private sector capital expenditures, and be available for projects that advance civic goals, across the city.

Heritage

The Heritage Planning and Conservation continues to evolve with its values-based approach to both tangible and intangible heritage. It now includes, and even more so in the future, the histories of Indigenous Peoples and Indigenous Cultural Heritage as well as histories and cultures of racialized Vancouver communities. The citywide growth targets and development patterns will continue to impose threat to heritage resources necessitating increase in further policy and program development, in particular to support engagement process with the MST Nations. Continue and improve existing heritage incentive programs, and introduce new incentives to support intangible cultural heritage.

IV. Strategy for the Next 10 Years

Arts & Culture

As outlined by *Culture|Shift*, the strategy for the next 10 years is to:

- Champion creators & elevate arts & culture
- Recognize & support Indigenous cultural knowledge & presence through decolonizing practices.
- Advance diverse & inclusive leadership & practices by offering equitable & accessible support.
- Prevent displacement & support affordable, accessible, secure spaces.
- Strengthen sector resilience through facilitating partnerships & leveraging investment

Cultural facilities

To prevent displacement and support affordable, accessible, secure spaces, *Making Space for Arts and Culture* sets a 10-year target to secure 800,000 square feet of new, repurposed or expanded, affordable space. This target includes: 400 units of affordable artist housing; 650,000 square feet of new or repurposed space; renewal and enhancement of 150,000 square feet of existing space; and a goal to see “no net loss” of Vancouver’s cultural spaces including artist studios and music spaces. Goals include:

- Prioritize self-determined Musqueam, Squamish, and Tsleil-Waututh, and Urban Indigenous Spaces
- Prioritize Cultural Heritage, Equity, and Accessibility
- Remove Regulatory Barriers and Expand Tools to Prevent Displacement and Secure Spaces
- Expand Community Partnerships & Increase Community Ownership and Support a Cultural Land Trust
- Prioritise renewal/enhancement of City-owned cultural facilities to thrive for the economic, cultural and social benefit of residents and visitors.

Entertainment & exhibition facilities

The strategy for the next 10 years is to advance on one or two larger scale renewal/enhancement projects at Hastings Park, while maintaining site infrastructure in a state of good repair. Maintenance of buildings will be done in a prioritized manner focusing on building life safety and critical systems.

Public art

The strategy for the next 10 years is to:

- Improve the condition of works in the collection as it ages, and to address maintenance backlog and build capacity for major renewals;
- Increase City capacity to commission artists for key new and renewed public spaces;



- Expand the collection, with focus on underserved communities, with new commissioning opportunities co-developed with the Host Nations and cultural communities; and
- Build on the new Commemoration Framework to create new opportunities for commemorative artworks.

**Heritage**

The strategy for the next 10 years is to:

- Modernize Vancouver Heritage Register to reflect expanded meaning of heritage and add missing sites
- Establish new historic areas or heritage conservation areas
- Protect as many heritage sites as possible, including City-owned sites
- Provide incentives for conservation of heritage sites
- Create new programs and incentives for cultural heritage
- Ensure that consideration of existing living culture, including Indigenous, and heritage assets of each and every community, are prioritized and respectfully safeguarded through community planning and accommodation of growth objectives for the area.

**V. 2023-2026 Capital Plan: highlights**

**Major renewal projects include:**

- *Historic Joy Kogawa House*: major renovations of the childhood home of Canadian author Joy Kogawa. Renewal will make the facility accessible, address code upgrades required to bring the zoning in compliance with its use through an HRA, and restore heritage aspects of the original house to reflect its historical and cultural significance.
- *Fire Hall Arts Theatre*: \$0.7M in City funding to advance with detailed design for renovating this cultural facility. The first phase, which is estimated to cost ~\$7M, involves renovating the ground floor and new additions to bring the space up to code (washrooms, dressing rooms, lobby and elevator for performers) as well as a new accessible shared entrance and elevator with the adjacent Police Museum. The detailed design will be used as a basis for a funding application to the Canada Cultural Spaces Fund. The City’s share for construction will be considered as part of the Capital Plan Mid-term Update in 2024 from Emerging Priorities – Senior Government Partnership Funding.

**Major new/upgrade projects include:**

- *Outdoor Amphitheatre at Hastings Park/PNE*: construction of a 9,000 seat open air venue of 65,000 sq.ft. including weather protection and front and back-of-house support buildings of approximately 25,000 sq.ft.
- *Chinatown Memorial Square*: increase the size of this public open space by ~0.1 hectare via curb adjustments and the closure of the lane north of the plaza.
- *New cultural hub at Burrard & Davie*: Construction of 16,000 sq. ft. facility. This is an in-kind CAC project and is expected to start during the 2023-2026 Capital Plan period.
- *New artist studios at Cambie & 44<sup>th</sup> Ave.*: Construction of 9 studios (10,000 sq. ft.). This is an in-kind CAC project and is expected to start during the 2023-2026 Capital Plan period.
- *New music centre in Northeast False Creek*: Construction of 20,000 sq. ft. facility. This is an in-kind CAC project and is expected to start during the 2023-2026 Capital Plan period.
- *Public Art programs for Oakridge Centre, River District and Northeast False Creek*.

2023-2026 CAPITAL PLAN

VI. 2023-2026 Capital Plan for Arts, Culture & Heritage: \$119 million cash + \$32 million in-kind

				Estimated outcomes (units)			City assets (\$M)		Non-city assets (\$M)	Overall (\$M)	Cash (\$M)			In-kind (\$M)	
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner		Subtotal
\$ million, except for unit outcomes															
Arts, culture & heritage															
Cultural facilities															
Projects															
Historic Joy Kogawa House renewal; (\$1.4M)				-	-	-	2	-	-	2	1	-	1	2	-
FireHall Theatre renewal & expansion, detailed design; (\$700K)				3,000 sq.ft.	4,200 sq.ft.	-									
Projects (in-kind)															
New artist studios at 5910-5998 Cambie (in-kind); (\$6.1M)				-	10,100 sq.ft.	-									
New cultural hub at Burrard & Davie (in-kind); (\$15.6M)				-	15,800 sq.ft.	-	-	22	-	22	-	-	-	-	22
New music presentation Centre at the Plaza of Nations (in-kind, non-City); (\$ -)				-	-	20,000 sq.ft.									
Grants															
Cultural capital grant program; (\$5.0M)				-	-	-	-	-	6	6	6	-	-	6	-
Chinatown cultural partnership grants; (\$1.0M)				-	-	-									
Programs															
Capital maintenance - Cultural facilities; (\$16.0M)				-	-	-									
Renovations - Cultural facilities; (\$1.0M)				-	-	-	19	0	-	19	19	-	-	19	-
Civic theatre upgrades; (\$2.0M)				-	-	-									
Planning & studies - Cultural facilities; (\$400K)				-	-	-									
Subtotal Cultural facilities							21	22	6	49	27	-	1	28	22
Entertainment & exhibition															
Projects															
PNE Amphitheatre renewal & expansion; (\$59.0M)				-	-	-	-	59	-	59	59	-	-	59	-
PNE infrastructure renewal & upgrades; (\$ -)				-	-	-									
Programs															
Capital maintenance - Entertainment & exhibition; (\$5.2M)				-	-	-	6	-	-	6	6	-	-	6	-
Renovations - Entertainment & exhibition; (\$300K)				-	-	-									
Subtotal Entertainment & exhibition							6	59	-	65	65	-	-	65	-
Public art															
Programs															
New public art delivered by the City; (\$5.0M)				-	-	-									
New public art delivered by development (in-kind); (\$10.0M)				-	-	-	2	15	-	17	1	6	-	7	10
Maintenance of Public Art; (\$2.0M)				-	-	-									
Subtotal Public art							2	15	-	17	1	6	-	7	10
Heritage															
Grants															
Heritage Incentive Program; (\$15.0M)				-	-	-									
Heritage Facade Program; (\$1.2M)				-	-	-	-	-	17	17	2	15	-	17	-
Grant to Heritage Foundation; (\$1.2M)				-	-	-									
Projects															
Chinatown Memorial Square redesign; (\$2.5M)				-	-	-	3	-	-	3	-	3	-	3	-
Subtotal Heritage							3	-	17	20	2	18	-	20	-
Total Arts, culture & heritage							\$ 31	\$ 96	\$ 23	\$ 151	\$ 94	\$ 24	\$ 1	\$ 119	\$ 32

COMMUNITY FACILITIES

I. Overview

Community facilities offer a range of literary, leisure, recreation and social programs for people of all ages, incomes, backgrounds and abilities in all Vancouver neighbourhoods. While many of the community facilities are operated by the City, there are also many facilities that are operated by non-profit partners. Collectively, the programs offered at these facilities promote the well-being of individuals, families and the broader community.

II. Inventory of Assets

Community facilities include libraries, the City Archives, recreation facilities, social facilities, non-profit office space, and Mountain View Cemetery.

Libraries

Vancouver’s network of libraries includes a central library and 20 branch libraries. Most of the libraries were built between 1945 and 1980. Since 1980, two libraries have been added to the system and 11 have been renewed, including the Central Library in 1995. The Oakridge branch library (to be renewed and expanded) is currently under construction, and planning/design is underway to renew and relocate the West Point Grey branch library. The renewal process will continue over the next 20-30 years with expansion in high-growth areas. The location, size and service area of libraries are determined by the Library Board and the City as part of the renewal process.

City Archives

The City Archives was established in 1933 with a mandate to acquire both City and private-sector records of enduring value. The archives’ unique holdings, the second-largest archival collection in BC, are currently valued at approximately \$28 million. The archives’ present site in Vanier Park was opened in 1972 as the first purpose-built municipal archives building in Canada, and includes a publicly accessible reading room. The Archives also has approximately 200,000 digital photographs, maps, video and sound recordings available online.

Recreation facilities

There are 55 recreation facilities across the City, comprised of 24 community centres, one satellite centre, nine indoor swimming pools, five outdoor swimming pools, nine ice rinks and seven non-profit specialty recreation facilities (e.g. curling). The bulk of the recreation facilities were built between 1945 and 1980. The City started renewing the portfolio in the 1990s, and significant progress has been made in the last 25 years: 12 facilities have been renewed and the Marpole-Oakridge Community Centre project was funded in the 2019-2022 Capital Plan and is currently in design development phase. The renewal process will continue over the next 20-30 years.

Three new community centres have been built in high-growth areas (Roundhouse, Coal Harbour and Creekside) since the 1990s, and a new community centre is currently under construction at Oakridge Centre. Eight existing community centres have been expanded since 2000. In addition, a new outdoor pool in Marpole has been planned and designed with funding from the 2019-2022 Capital Plan but its construction has been delayed due to significant cost escalation associated with the renewal of the Marpole-Oakridge Community Centre and will be delivered in a subsequent phase.

Social facilities

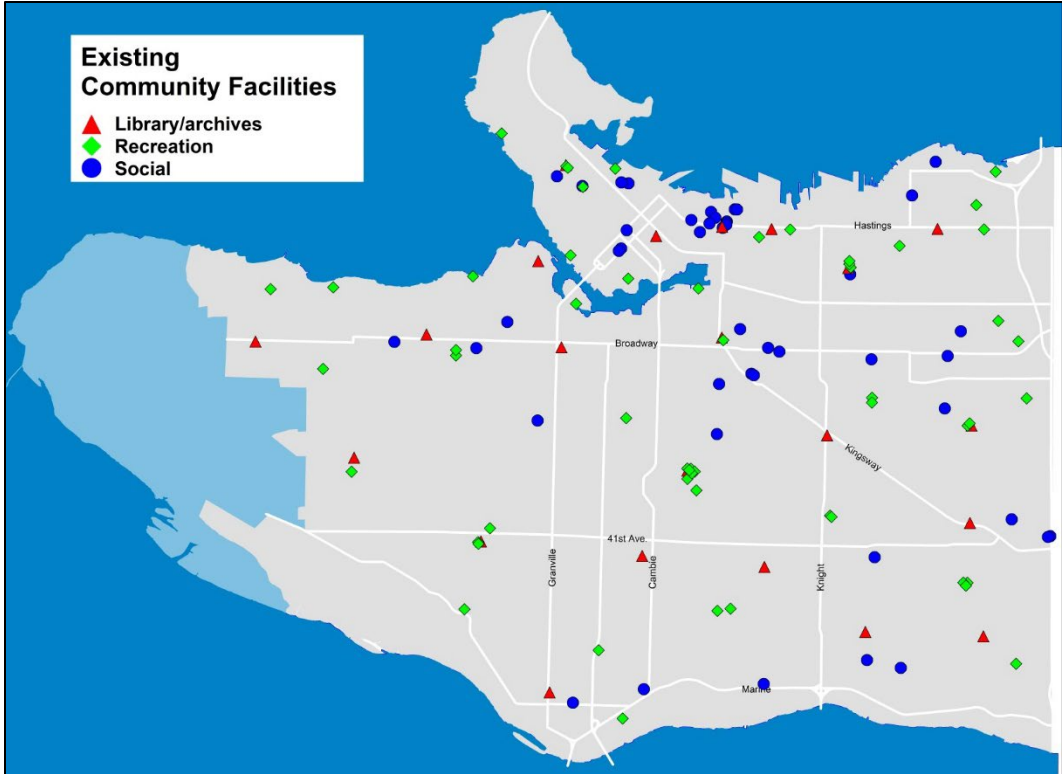
A healthy city requires a diversity of social facilities within each local neighbourhood. Social facilities house a broad range of services, from broad-ranging service hubs such as neighbourhood houses to specific purpose or population services, such as community gardens, seniors centres, or women’s drop-in centres. Equity-denied communities typically face systemic barriers to accessing mainstream services and programs and the operators of City-owned social facilities often address these inequities. Further, social facility programs and services foster community resilience in partnership with community and non-profit

partners to support safe and equitable access to services. The City has been involved in the provision of social facilities since the 1970s and currently owns 46 social facilities. Such spaces have a variety of program and service models that enhance the lives of residents through innovative and essential social programs and services to communities. The City operates three community centres for low-income residents in the Downtown Eastside and Downtown South. The remaining social facilities are leased by the City and operated by non-profit partners (e.g. Neighbourhood Houses, Women’s Centres, and Indigenous Healing & Wellness Centres). The City’s first non-profit office space was created at the Woodward’s project in 2009 and houses a mix of non-profit social and cultural agencies. More social-cultural non-profit spaces are planned to be created in the next couple of decades. Non-profit agencies also own or lease spaces not owned by the City and play an important role in making sure people have a place of belonging across Vancouver.

Mountain View Cemetery

Mountain View Cemetery is Vancouver’s only cemetery and an active social, cultural space that is central to the heritage of Vancouver and engaging the community in conversations about history, life, and death. Since 1886 it has provided a sacred sanctuary where people honour the memory of their ancestors in a civic space for the living; a place where lives are commemorated and memorialized regardless of race, creed, or residence. The 100-Year Cemetery Master Plan (approved in 2000) marked the dawn of a revitalization era. The first phase was completed in 2008 and included the renewal of aging facilities, reinvestments in landscaping and infrastructure, and the reopening of the cemetery to the sale of interment space.

	City Assets	Replacement Value	% in Good/ Fair Condition	Partner Assets
Libraries	• 21 facilities (575,000 sf)	~\$990M	~85%	• n/a
City Archives	• 1 main building & 1 ancillary building (35,000 sf)	~\$40M	0%	• n/a
Recreation	• 55 facilities (1,680,000 sq.ft.)	~\$2.1B	~60%	• YMCA, YWCA
Social	• 46 facilities (600,000 sq.ft.)	~\$600M	~65%	• Non-profit social facilities and office spaces
Mountain View Cemetery	• 3 facilities (28,500 sq.ft.) • 9 km of roads	~\$30M	~80%	• n/a



The following table summarizes major work completed in the last 10 years (2013-2022) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Libraries	<ul style="list-style-type: none"><li>1 branch library (néca?mat ct Strathcona) renewed</li><li>1 branch library (Oakridge) under construction</li><li>1 branch library (West Point Grey) approved for renewal</li></ul>	<ul style="list-style-type: none"><li>Central Library expanded</li><li>1 branch library expanded as part of facility renewal project</li><li>~50,000 sq.ft. added</li></ul>
City Archives	<ul style="list-style-type: none"><li>Nil</li></ul>	<ul style="list-style-type: none"><li>1 satellite facility (~12,000 sq.ft. added)</li></ul>
Recreation	<ul style="list-style-type: none"><li>Nil</li><li>1 facility (Marpole-Oakridge Community Centre) approved for renewal</li></ul>	<ul style="list-style-type: none"><li>1 facility expanded (Killarney Seniors' Centre): ~10,000 sq.ft. added</li><li>1 new facility under construction (new Oakridge Community centre): ~30,000 sq.ft.</li></ul>
Social	<ul style="list-style-type: none"><li>2 facility renewed and renovated (~24,000 sq.ft.)</li><li>5 major kitchens renovations</li><li>~150 projects in community gardens</li></ul>	<ul style="list-style-type: none"><li>11 new facilities</li><li>1 facility expansion</li><li>~245,000 sq.ft. added</li></ul>
Mountain View cemetery	<ul style="list-style-type: none"><li>350m of road replaced</li></ul>	<ul style="list-style-type: none"><li>nil</li></ul>

III. Long-term Vision

The network of community facilities will continue to serve a broad range of residents as Vancouver grows and its demographic make-up gradually changes. Many of the older community facilities will need to be renewed, at which time the location and size of the facilities can be adjusted, if needed. New facilities will be added in high-growth or high-need communities. As land prices continue to increase, opportunities to co-locate and functionally integrate multiple facilities in one building will become more common. The design and layout of the spaces should accommodate ongoing daily needs of the community, as well as special needs during stresses (e.g. extreme weather events) and after shocks (e.g. earthquakes).

Libraries

VPL will solidify its role supporting equity, belonging and connection and reflect Indigenous ways of knowing, being and doing. VPL will become a place where everyone in a neighbourhood feels welcome to come together to learn and discuss ideas and issues.

The need for library space will grow as library usage changes. Overall, total library space will keep pace with population growth, and expansion will be focused on existing facilities in communities that experience increased population density or are underserved, including those facing isolation and poverty. While the shift from physical to digital collection use continues, patrons will come to their local public library for conversation and social interaction, learning through library programming, access to technology, individual study/work, reading and relaxation, as well as borrowing physical collections.

New assets will focus on non-traditional library facilities designed to serve specific community needs, such as free-standing library kiosks in high traffic locations or other limited service outlets. Space sharing for library services will also be in place, such as access to library resources in community centres or a library program area in a seniors' centre or housing development. Offsite service delivery will increase to meet the needs of those with mobility challenges.

City Archives

The City Archives will continue with its mandate to acquire both City and private-sector records of enduring value. Although automation and digitization are transforming the way the public accesses and uses archival records, there will be an enduring need for an archives facility. The current building in Vanier Park was opened in 1972 and is in fair to poor condition and will eventually need to be renewed.

Recreation facilities

The vision is for the City and Park Board to significantly improve the condition of recreation facilities, such that, by 2050, 70-80% of the portfolio is in good/fair condition, overall capacity is increased to address population grown, and that this delivery is done in an equitable manner. This would improve day-to-day service delivery and increase the City's overall resilience. This is a massive undertaking and will involve the renewal of at least 20 facilities over a 30-year period. The network will also grow, with the addition of at least 5 new facilities. As part of this renewal and expansion process, the City and Park Board will work with partners (e.g. Library Board, School Board, Pacific National Exhibition) on collective solutions to co-locate and functionally integrate facilities where appropriate. Finally, programming at the recreation facilities will continue to evolve to meet the changing needs of Vancouverites. Vancouver recreation facilities were built on the lands of the Musqueam, Squamish, and Tsleil-Waututh Nations and, as these facilities are renewed, the need to contextualize and identify decolonization will be part of these processes.

Social facilities

Over the next decade, the City and NPO sector can anticipate continued increased demands for service and more complex and intersecting social issues (e.g., aging population, poverty, mental health / addictions, inequalities, affordability), as well as impacts from natural disasters, health, climate and other emergencies. Many social serving NPOs need more space, others have uncertain tenure in their current spaces, and most will continue to face affordability challenges.



The implementation of the *Spaces to Thrive: Vancouver Social Infrastructure Strategy*, which includes a 10-year policy framework and financial plan, outlines the City's role as regulator, partner, investor and advocate. The City will work to achieve a social infrastructure landscape within each neighbourhoods where Vancouver residents, especially those who face systemic barriers, can access spaces to gather and participate in programs and services that meet their diverse needs in a dynamic and changing city.

**Mountain View Cemetery**

The 100-Year Cemetery Master Plan (approved in 2000) marked the dawn of a revitalization era. The first phase was completed in 2008, and it is anticipated that, over the next 30 years, two or three revitalization phases will be completed, ensuring that this civic space continues to serve this important role for at least the next century.

**IV. Strategy for the Next 10 Years**

The strategy for the next 10 years is to focus efforts to renew approximately 10 aging community facilities, the vast majority of which were built in the 1945-1980 period. Many of these projects will involve expanding the community facilities and, in some cases, relocating the facilities to new sites. The strategy will also see the expansion of the community facility network by adding about 5 new facilities in high-growth or high-need areas. Many of these projects will involve co-location of multiple community uses and/or with childcare or affordable housing.

**Libraries**

The strategy is to renew and expand 3-4 aging branch libraries over the next decade aligned with growth, including Oakridge (currently under construction), Marpole, and Joe Fortes branches, and to co-locate with other community uses. The strategy includes expanding services through non-traditional approaches, and leveraging philanthropic donations to support renewal at Central Library.

**City Archives**

The strategy for the next 10 years is to maintain the existing hub and satellite model, modestly improve physical condition of buildings, protect holdings until existing facility is renewed in the subsequent decade, and plan for that facility renewal.

**Recreation facilities**

The strategy is to renew and expand 6 to 8 aging recreation facilities over the next decade, including larger scale projects in the West End and at Britannia in Grandview-Woodland. The strategy also involves adding 3 new recreation facilities in high-growth areas such as East Fraser Lands and Northeast False Creek

**Social facilities**

The strategy is to renew and expand 3-5 social facilities owned by the City and leased to non-profits, as well as providing grants to up to 3 new social facility renewal projects owned by non-profits. Several new non-profit social-cultural co-location office and program spaces in distinct locations are planned over the next decade, with 3 facilities to be built in the subsequent decade.

**Mountain View Cemetery**

The strategy for the next 10 years is to steadily renew on-site infrastructure (e.g. roads, potable water pipes, fencing) and complete the next phase of revitalization by expanding interment capacity by approximately 5,000 spaces.

**V. 2023-2026 Capital Plan: highlights**

**Major renewal projects include:**

- *RayCam Centre*: Funding to design and build the renewal and expansion of this community centre located at Hastings and Campbell in Strathcona. The project will also involve the renewal and expansion of childcare, as well as the provision of new affordable housing above the centre. This is partnership project between the City and BC Housing, with the project to be managed by BC Housing.
- *Vancouver Aquatic Centre*: Funding to plan, design and build the renewal and expansion of this indoor swimming pool located in the West End. Given the large size of the planned facility (~100,000 square feet), the project will be built in two phases, with the first phase prioritizing the renewal of the 50m lap pool and diving pool.
- *West End Community Hub*: Funding to prepare preliminary detailed design plans for the project, which includes the renewal and expansion of the following community facilities: community centre, an ice rink, Joe Fortes library and social/cultural space, as well as childcare and a relocated fire hall. The project is co-managed with the Vancouver School Board, as it also involves the renewal and expansion of King George secondary school. (Note: funding for the planning/scoping phase was provided in the 2019-2022 Capital Plan.)
- *Britannia Centre*: Funding for the detailed design of the first phase of renewal of this community complex in Grandview-Woodland, after the rezoning process is complete. The first building will include the pool, recreation centre, a childcare centre and housing, to be located west of the existing ice rink. Unused funding from the 2015-2018 and 2019-2022 Capital Plans will be carried forward into the 2023-2026 Capital Plan.

**Major new/upgrade projects include:**

- *New community centre in East Fraser Lands*: Construction of a new 36,000 sq.ft. community centre. Based on the proposal contained in a recent rezoning application that has been referred to a Public Hearing, the project is now expected to be delivered as an in-kind project that would be expected to start during the 2023-2026 Capital Plan period.
- *New community centre and ice rink in Northeast False Creek*: Construction of a new 40,000 sq.ft. community centre and 31,000 sq.ft. ice rink. This is an in-kind CAC project and is expected to start during the 2023-2026 Capital Plan period.
- *New social facility in Cambie Corridor*: Construction of a new 5,900 sq.ft. youth centre at Cambie Street & 42<sup>nd</sup> Avenue. This is an in-kind CAC project and is expected to start during the 2023-2026 Capital Plan period.
- *New non-profit office space in Cambie Corridor*: Construction of a new 14,500 sq.ft. non-profit office space at Cambie Street & 42<sup>nd</sup> Avenue. This is an in-kind CAC project and is expected to start during the 2023-2026 Capital Plan period.

2023-2026 CAPITAL PLAN

VI. 2023-2026 Capital Plan for Community Facilities: \$267 million cash + \$122 million in-kind

				Estimated outcomes (units)			City assets (\$M)		Non-city assets (\$M)	Overall (\$M)	Cash (\$M)			In-kind (\$M)	
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner		Subtotal
\$ million, except for unit outcomes															
Community facilities															
Libraries															
Projects															
Joe Fortes Branch Library - renewal & expansion, design; (\$2.0M)				4,500 sq.ft.	10,000 sq.ft.	-									
Renovation of Central Children's Library; (\$3.5M)				-	-	-	7	3	-	10	1	3	6	10	-
Renovation of Central Library Level 2 & 3; (\$2.5M)				-	-	-									
Oakridge Library: furniture, equipment + collection; (\$2.4M)				-	-	-									
Programs															
Capital maintenance - Libraries; (\$5.8M)				-	-	-	7	-	-	7	7	-	-	7	-
Renovations - Libraries; (\$700K)				-	-	-									
Subtotal Libraries							14	3	-	17	8	3	6	17	-
Archives															
Projects															
Interim rehabilitation / renovation of Archive facilities; (\$4.0M)				-	-	-	4	-	-	4	4	-	-	4	-
Programs															
Capital maintenance - Archives; (\$500K)				-	-	-	1	-	-	1	1	-	-	1	-
Renovations - Archives; (\$ -)				-	-	-									
Subtotal Archives							5	-	-	5	5	-	-	5	-
Recreation facilities															
Projects															
RayCam Community Centre - renewal & expansion; (\$49.0M)				27,250 sq.ft.	12,750 sq.ft.	-									
West End Community Centre - renewal & expansion, design; (\$3.1M)				37,800 sq.ft.	24,200 sq.ft.	-	138	55	-	194	138	55	-	194	-
West End Ice Rink - renewal & expansion, design; (\$1.5M)				18,000 sq.ft.	18,000 sq.ft.	-									
Vancouver Aquatic Centre - renewal & expansion; (\$140.0M)				65,000 sq.ft.	tbd	-									
Projects (in-kind)															
New North East False Creek Community centre (in-kind); (\$41.7M)				-	40,000 sq.ft.	-									
New North East False Creek Ice rink (in-kind); (\$25.0M)				-	31,000 sq.ft.	-	-	114	-	114	-	-	-	-	114
New East Fraser Lands Community Centre (in-kind); (\$47.0M)				-	36,000 sq.ft.	-									
Programs															
Capital maintenance - Recreation facilities; (\$19.1M)				-	-	-	21	-	-	21	21	-	-	21	-
Renovations - Recreation facilities; (\$2.3M)				-	-	-									
Subtotal Recreation facilities							160	169	-	329	160	55	-	215	114

2023-2026 CAPITAL PLAN

VI. 2023-2026 Capital Plan for Community Facilities (continued)

				Estimated outcomes (units)			City assets (\$M)		Non-city assets (\$M)	Overall (\$M)	Cash (\$M)			In-kind (\$M)	
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner		Subtotal
\$ million, except for unit outcomes															
Community facilities															
Social facilities															
Projects															
New social/cultural space in West End Community Hub, design; (\$1.0M)				-	20,000 sq.ft.	-	-	1	5	6	5	1	-	6	-
Neighbourhood house capital project grants; (\$5.0M)				-	-	-	-	-	-	-	-	-	-	-	-
Projects (in-kind)															
Youth Centre at 5812 Cambie (in-kind); (\$8.0M)				-	-	-	-	8	-	8	-	-	-	-	8
Grants															
Social capital grant program; (\$1.1M)				-	-	-	-	-	6	6	6	-	-	6	-
Downtown Eastside capital grant programs; (\$4.5M)				-	-	-	-	-	-	-	-	-	-	-	-
Programs															
Capital maintenance - Social facilities; (\$2.9M)				-	-	-	-	-	-	-	-	-	-	-	-
Renovations - Social facilities; (\$1.4M)				-	-	-	4	4	-	8	8	-	-	8	-
Planning & studies - Social facilities; (\$4.0M)				-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Social facilities															
				4	13		11	28	19	1	-	20	8		
Non-profit office space															
Projects															
New non-profit office space at 5740 Cambie (in-kind); (\$12.4M)				-	14,500 sq.ft.	-	-	12	-	12	-	-	-	-	12
Subtotal Non-profit office space															
				-	12		-	12	-	12	-	-	-	-	12
Cemetery															
Programs															
Maintenance & upgrades of cemetery facilities; (\$1.0M)				-	-	-	1	-	-	1	1	-	-	1	-
Subtotal Cemetery															
				1	-		-	-	1	1	-	-	1	-	
Total Community facilities															
				\$ 183	\$ 198		\$ 11	\$ 391	\$ 191	\$ 60	\$ 6	\$ 257	\$ 134		

PUBLIC SAFETY

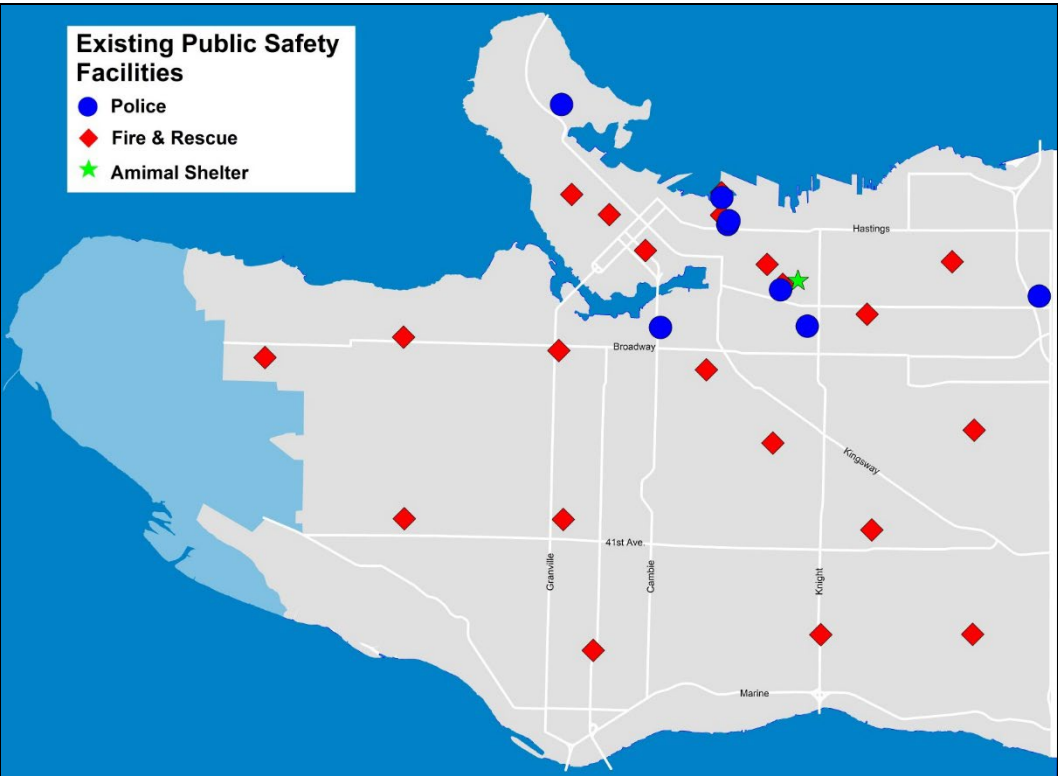
I. Overview

Public safety includes three core functions: Police, Fire and Animal Control. These functions play a significant role in developing and maintaining public safety and community resilience, and have a critical role during and after emergencies. While all three provide service on a city-wide basis, the service delivery model for Police and Animal Control is to deploy police officers and staff from one or a small number of locations, whereas the service delivery model for Fire is to deploy fire fighters from a neighbourhood-based network of fire halls.

II. Inventory of Assets

The City owns or leases 39 Public Safety facilities, with approximately 840,000 square feet of building area. The bulk of Public Safety network was built out between 1886 and 1986. Police currently operates out of two primary facilities (located at Cambie & 5<sup>th</sup> Ave. and Boundary & Graveley), with other functions (e.g. dog squad, marine squad) provided at other sites. Fire halls are gradually renewed as they age. The animal control shelter was built in the 1970s and the facility is not optimally designed for the services offered today. There are approximately 630 public safety vehicles, including police cars and fire trucks.

	City Assets	Replacement Value	% in Good / Fair / Condition	Partner assets
Police	<ul style="list-style-type: none"><li>2 primary police facilities (235,000 sq.ft.)</li><li>12 secondary police facilities (365,000 sq.ft.)</li><li>~500 vehicles &amp; equipment</li></ul>	~\$800M	100%	<ul style="list-style-type: none"><li>n/a</li></ul>
Fire	<ul style="list-style-type: none"><li>19 fire halls (185,000 sq.ft.)</li><li>5 specialty fire facilities (45,000 sq.ft.)</li><li>~130 vehicles &amp; equipment</li></ul>	~\$500M	~80%	<ul style="list-style-type: none"><li>n/a</li></ul>
Animal Control	<ul style="list-style-type: none"><li>1 animal control shelter (12,000 sq.ft.)</li></ul>	~\$10M	0%	<ul style="list-style-type: none"><li>n/a</li></ul>



The following table summarizes major work completed in the last 10 years (2013-2022) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Police	<ul style="list-style-type: none"><li>Capital maintenance &amp; improvements to keep existing facilities safe and functional</li></ul>	<ul style="list-style-type: none"><li>nil</li></ul>
Fire	<ul style="list-style-type: none"><li>Fire hall #5 at Kerr &amp; 54<sup>th</sup> Ave.</li><li>Fire hall #17 at Knight &amp; 55<sup>th</sup> Ave.</li><li>Fire hall #9 at Victoria &amp; 2<sup>nd</sup> Ave. is approved for renewal</li></ul>	<ul style="list-style-type: none"><li>nil</li></ul>
Animal Control	<ul style="list-style-type: none"><li>Capital maintenance to keep existing facility safe and functional</li></ul>	<ul style="list-style-type: none"><li>nil</li></ul>

III. Long-term Vision

The City needs to ensure that its Public Safety facilities are maintained in a state of good repair, as they provide critical and core public services on a daily basis. As part of the facility renewal program, the City needs to ensure sufficient capacity for future expansion to support growth. As well, there is a need to increase the resilience of these facilities, to ensure that most, if not all, of the portfolio will be operable after a major event (e.g. earthquake).



2023-2026 CAPITAL PLAN

IV. Strategy for the Next 10 Years

- Improve the overall physical condition of the Public Safety portfolio.
- Improve the resilience of the Public Safety portfolio, with higher priorities given to emergency preparedness, business continuity and high occupancy buildings.
- Complete planning/scoping and design for a consolidated post-disaster police headquarters facility.
- Update the longer-term renewal/expansion strategy for fire halls.
- Improve services to citizens who use/visit Public Safety facilities (e.g. at the Animal Shelter).

V. 2023-2026 Capital Plan: highlights

Major renewal projects include:

- Funding to renew and expand the Downtown South fire hall (FH#8) currently located at Smithe and Hamilton (planning/scoping, detailed design and construction phases).

- Funding to complete the preliminary detailed design of the West End fire hall (FH#6) planned to be relocated from Nelson and Nicola to the West End Community Hub site.
- Funding to renew and expand the Animal Shelter. The City is exploring a partnership arrangement with the BC SPCA, whose facility in Vancouver also needs to be renewed. The project may lead to the relocation of the City's Animal Shelter from Malkin & Raymur to the SPCA site at Keith & 6<sup>th</sup> Avenue.
- Funding for preliminary planning/scoping for a consolidated post-disaster police headquarters facility.
- Fleet electrification: the proposal contained in the Capital Plan would lead to the conversion of:
  - Police: 47 fleet assets to electric, increasing the number of electric vehicles from 23 to 70 (from 5% to 14% of fleet); and
  - Fire & rescue: 8 fleet assets to electric, increasing the number of electric vehicles from 3 to 11 (from 2% to 9% of fleet).

VI. 2023-2026 Capital Plan for Public Safety: \$105 million cash

				Estimated outcomes (units)			City assets (\$M)		Non-city assets (\$M)	Overall (\$M)	Cash (\$M)			In-kind (\$M)	
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner		Subtotal
\$ million, except for unit outcomes															
Public safety															
Fire & rescue															
Projects															
West End fire hall (FH#6) - renewal & expansion, design; (\$1.5M)				7,676 sq.ft.	10,000 sq.ft.	-	16	21	-	37	31	6	-	37	-
Downtown South fire hall (FH#8) - renewal & expansion; (\$35.6M)				7,700 sq.ft.	10,300 sq.ft.	-									
Programs															
Capital maintenance - Fire & rescue; (\$1.5M)				-	-	-									
Renovations - Fire & rescue; (\$700K)				-	-	-									
Renewal of vehicles & equipment - VFRS; (\$11.4M)				15 vehicles	-	-	14	5	-	19	19	-	-	19	-
Electrification of vehicles & equipment - VFRS; (\$200K)				10 vehicles	-	-									
New vehicles & equipment - VFRS; (\$4.7M)				-	10 vehicles	-									
Subtotal Fire & rescue							30	26	-	56	50	6	-	56	-
Police															
Projects															
VPD Headquarters - planning & scoping; (\$1.0M)				-	-	-	-	1	-	1	1	-	-	1	-
Programs															
Capital maintenance - Police; (\$5.6M)				-	-	-									
Renovations - Police; (\$1.9M)				-	-	-									
Renewal of vehicles & equipment - VPD; (\$15.5M)				170 vehicles	-	-	26	-	-	26	26	-	-	26	-
Electrification of vehicles & equipment - VPD; (\$3.4M)				45 vehicles	-	-									
New vehicles & equipment - VPD; (\$ -)				-	-	-									
Subtotal Police							26	1	-	27	27	-	-	27	-
Animal control															
Projects															
Animal Control Centre renewal & expansion; (\$22.0M)				16,000 sq.ft.	8,000 sq.ft.	-	15	7	-	22	22	-	-	22	-
Programs															
Capital maintenance - Animal control; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Renovations - Animal control; (\$ -)				-	-	-									
Subtotal Animal control							15	7	-	22	22	-	-	22	-
Total Public safety							\$ 71	\$ 34	-	\$ 105	\$ 99	\$ 6	-	\$ 105	-

CIVIC FACILITIES & EQUIPMENT

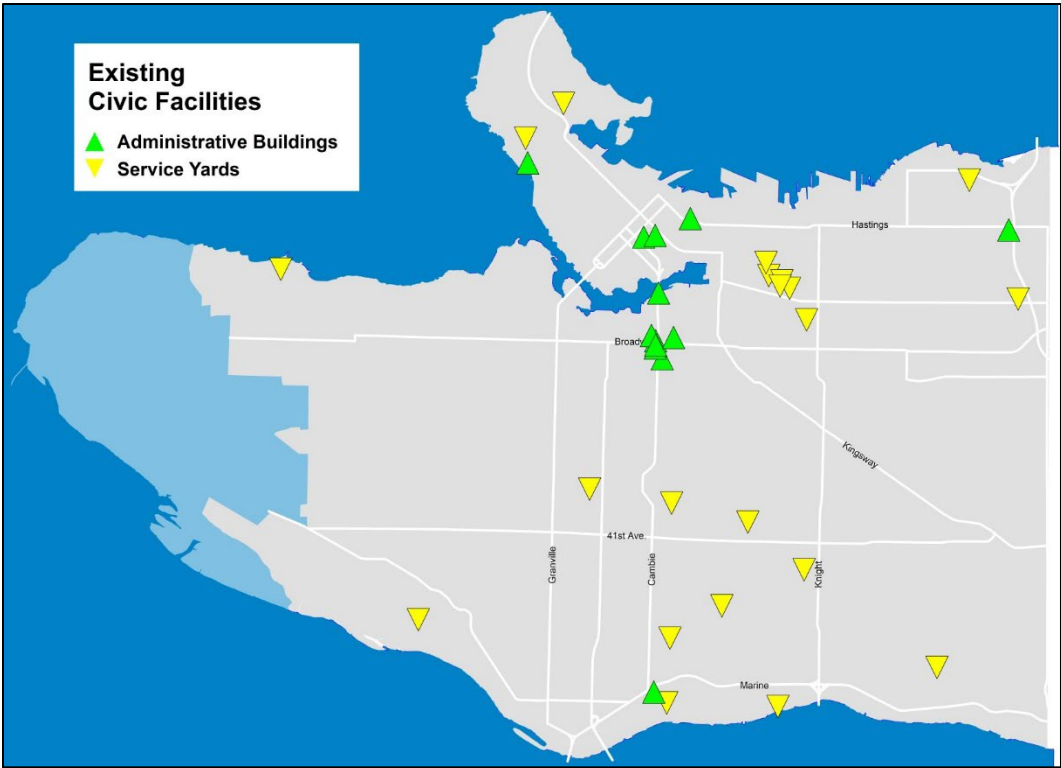
I. Overview

Civic Facilities include municipal administrative buildings (e.g. City Hall campus and Park Board administration building) and service yards (e.g. industrial-type municipal facilities where trucks and equipment are stored and serviced). Civic Facilities serve a city-wide area and are therefore concentrated in a handful of locations within Vancouver. Civic Facilities & Equipment provide continuous essential services to the public and also provide emergency and disaster response as required.

II. Inventory of Assets

The City owns or leases 13 administrative buildings and 21 service yards, with approximately 1,300,000 square feet of building area. The bulk of Civic Facilities were built gradually between 1886 and 1986, including the main City Hall building, which was constructed for the City’s 50<sup>th</sup> anniversary in 1936. Some administration facilities have been improved in the last decade by renovating existing City-owned buildings or leasing out private-owned office space. Nearly half of service yard facilities are in poor condition. While three service yards were rebuilt in the last 30 years<sup>3</sup>, four major yards have buildings in the range of 50 to 90 years old are in need of being renewed<sup>4</sup>. The first phase for renewing Sunset Yard is currently under construction.

	City Assets	Replacement Value	% in Good / Fair / Condition	Partner assets
Administrative facilities	<ul style="list-style-type: none"><li>13 administration buildings (605,000 sq.ft.)</li></ul>	~\$500M	~60%	<ul style="list-style-type: none"><li>n/a</li></ul>
Service yards	<ul style="list-style-type: none"><li>21 service yards</li><li>72 buildings (675,000 sq.ft.)</li></ul>	~\$600M	~55%	<ul style="list-style-type: none"><li>n/a</li></ul>
Vehicles & equipment <sup>5</sup>	<ul style="list-style-type: none"><li>~90 vehicles &amp; equipment</li></ul>	~\$5M	~65%	<ul style="list-style-type: none"><li>n/a</li></ul>



The following table summarizes major work completed in the last 10 years (2013-2022) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Administrative facilities	<ul style="list-style-type: none"><li>City Hall West Annex (Cambie &amp; 10th Ave.): seismic upgrade of building and new service counter for permits &amp; licenses.</li><li>Tenant improvements of leased offices at Crossroads (Broadway &amp; Cambie), 814 Richards, Marine Gateway (Cambie &amp; Marine), Echelon (W 8th Ave &amp; Ash) and 510 W. Broadway.</li></ul>	<ul style="list-style-type: none"><li>n/a</li></ul>
Service yards	<ul style="list-style-type: none"><li>Sunset Service Yard renewal (phase 1) (currently under construction; completion in 2023)</li></ul>	<ul style="list-style-type: none"><li>n/a</li></ul>

III. Long-term Vision

The City needs to ensure that its administrative buildings and service yards are maintained in a state of good repair, as they provide core public services on a daily basis. As part of the facility renewal program, the City needs to ensure sufficient capacity for future expansion to support growth. As well, there is a need to increase the resilience of these facilities, to ensure that most, if not all, of the portfolio will be operable after a major event (e.g. earthquake).

<sup>3</sup> Evans Yard, Kent Yard and National Yard  
<sup>4</sup> Manitoba Yard, Sunset Yard, Stanley Park Yard and Jericho Yard.  
<sup>5</sup> Vehicles & equipment for parks, police, fire & rescue, streets, water/sewer and sanitation/solid waste are found in their respective service category. Vehicles & equipment in the Civic Facilities include the vehicles for all other service categories.

2023-2026 CAPITAL PLAN

IV. Strategy for the Next 10 Years

- Improve the overall physical condition of the Civic Facilities portfolio.
- Improve the resilience of the Civic Facilities portfolio, with higher priorities given to emergency preparedness, business continuity and high occupancy buildings.
- Finalize longer-term strategies for individual portfolios (e.g. administrative buildings, service yards) and specific sites (e.g. City Hall campus, Manitoba Yard).

V. 2023-2026 Capital Plan: highlights

Major renewal projects include:

- Funding to complete the detailed design for the second phase of renewal at Sunset Service Yard; this service yard is operated by the Park Board and located at Main Street and 51<sup>st</sup> Avenue in south-central Vancouver. The buildings and structures at the yard are aging and need to be renewed. Construction on the first phase started in 2022 and is expected to be completed in 2023.
- Fleet electrification: the proposal contained in the Capital Plan would lead to the conversion of:
  - Fleet included in Civic Facilities: 14 fleet assets to electric, increasing the number of electric vehicles from 11 to 25 (from 7% to 16% of fleet).
  - Fleet City-wide (includes all vehicles for parks, police, fire & rescue, streets, water/sewer and sanitation/solid waste, plus those listed in Civic Facilities): 233 fleet assets to electric, increasing the number of electric vehicles from 150 to 383 (from 8% to 20% of fleet).

VI. 2023-2026 Capital Plan for Civic Facilities & Equipment: \$57 million cash

				Estimated outcomes (units)			City assets (\$M)		Non-city assets (\$M)	Overall (\$M)	Cash (\$M)			In-kind (\$M)	
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner		Subtotal
\$ million, except for unit outcomes															
Civic facilities & equipment															
Administrative facilities															
Programs															
Capital maintenance - Administrative facilities; (\$5.1M)				-	-	-	11	-	-	11	11	-	-	11	-
Renovations - Administrative facilities; (\$5.6M)				-	-	-									
Subtotal Administrative facilities							11	-	-	11	11	-	-	11	-
Service yards															
Projects															
Sunset Yard renewal, phase two detailed design; (\$2.0M)				-	-	-	2	-	-	2	2	-	-	2	-
Programs															
Capital maintenance - Service yards; (\$4.2M)				-	-	-	6	-	-	6	6	-	-	6	-
Renovations - Service yards; (\$1.6M)				-	-	-									
Subtotal Service yards							8	-	-	8	8	-	-	8	-
Vehicles & equipment															
Programs															
Renewal of vehicles & equipment - Other; (\$1.0M)				5 vehicles	-	-									
Electrification of vehicles & equipment - Other; (\$800K)				15 vehicles	-	-	2	1	-	2	2	-	-	2	-
New vehicles & equipment - Other; (\$500K)				-	30 vehicles	-									
Subtotal Vehicles & equipment							2	1	-	2	2	-	-	2	-
All City facilities															
Programs															
Planning, studies, project management & other support - All city facilities; (\$18.0M)				-	-	-									
Energy optimization program; (\$8.0M)				-	-	-	21	16	-	36	36	-	-	36	-
Facility resilience & improvement programs; (\$10.0M)				-	-	-									
Subtotal All City facilities							21	16	-	36	36	-	-	36	-
Total Civic facilities & equipment							\$ 41	\$ 16	-	\$ 57	\$ 57	-	-	\$ 57	-

STREETS

I. Overview

Livable cities are built upon an integrated transportation network, walkable land uses, and public spaces that support all residents to access jobs, services, and amenities across all modes of travel. As the number of people living and working in Vancouver grows, we need to accommodate more trips within the same amount of space.

By providing better access to transit, and walking and cycling facilities that are comfortable and convenient for people of all ages and abilities, we increase the opportunity for people to get around without driving or owning a car. In doing so, we also strengthen the City’s resilience and support more affordable, healthy, and sustainable movement. Our economy also depends on a reliable and well-maintained transportation network to deliver goods and services, and for emergency response.

The demand for public spaces for expression, relaxation, and enjoyment will also grow as Vancouver densifies. Our streets are among the City’s greatest public space assets. Vancouver’s streets host a range of uses that extend beyond their function of moving people and goods, and also serve as places for people to rest, gather and connect. Welcoming plazas and supportive public realm infrastructure significantly contribute to the quality of life, health, sustainability and economic vitality of the City.

For the 2023-2026 Capital Plan, critical asset renewal is a focus of capital investment in the Streets area. This includes renewal across many asset categories but will particularly focus on increasing funding for rehabilitation and seismic upgrades of the City’s major bridges.

II. Inventory of Assets

The transportation network in Vancouver is provided jointly by three levels of government:

- The City owns and maintains over 4,000 km of walking, cycling and vehicle networks, and a wide range of structures including the False Creek bridges, downtown viaducts and 39 other bridges.
- TransLink owns, operates, and maintains all rapid transit and bus services, and provides funding for the Major Road Network, walking and cycling facilities, and bus-priority measures.
- The Province owns and maintains ~6 km of highways and three major bridges leading into Vancouver

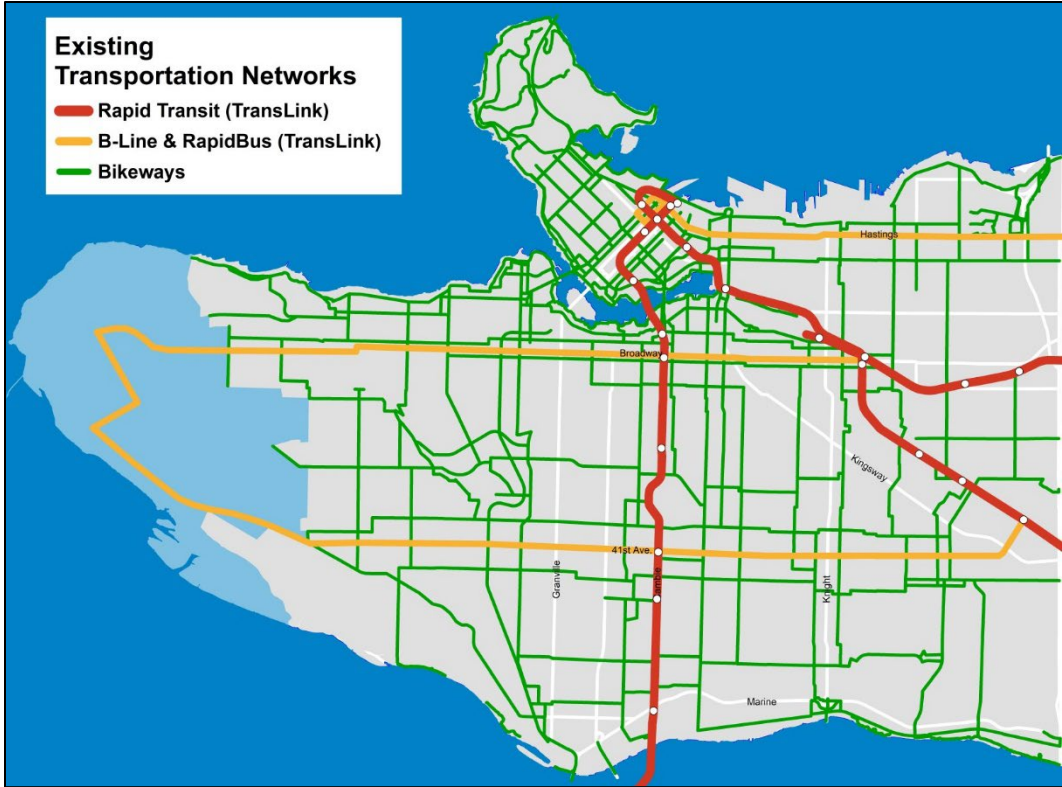
Most of Vancouver’s sidewalks and streets were built between 1886 and 1986, and the City has gradually been renewing these assets as they age. In more recent years, the City has delivered the majority of its pedestrian-bicycle signals, bikeways, and greenways to expand mobility options within the network. The City also partners with TransLink to improve bus service, such as new RapidBus routes and bus-priority measures to improve the efficiency, reliability and accessibility of bus service.

The City’s six major bridges were built between 1930 and 1985, and the average age of the remaining 39 bridges is 33 years. To maintain a state of good repair, recent investments have been made to rehabilitate some critical structural elements and improve seismic performance of three of the six major bridges and further investment is forecast in future capital plans.

Investment in plazas and parklets is relatively new for the City, and all of these assets have been constructed or installed in the last 10 years, with accelerated expansion (in largely temporary materials) during the COVID-19 pandemic.

	City Assets	Replacement Value	% in Good / Fair Condition	Partner Assets
Walking & Cycling	<ul style="list-style-type: none"><li>• 2,165 km of sidewalk</li><li>• 333 km of bikeways</li><li>• 394 pedestrian-bike signals</li><li>• 40 flashing beacons/special crosswalks</li><li>• 15 pedestrian bridges and tunnels</li></ul>	~\$1.3B	~95%	<ul style="list-style-type: none"><li>• Sidewalks &amp; paths at Granville Island, Canada Place and Convention Centre</li><li>• 2 bridges</li></ul>
Transit	<ul style="list-style-type: none"><li>• 66 km of bus lanes</li><li>• 1,800 bus stops</li></ul>	-	-	<ul style="list-style-type: none"><li>• 3 rapid transit lines with 25 km</li></ul>
Major Roads	<ul style="list-style-type: none"><li>• 360 km of MRN &amp; arterial roads</li><li>• 509 traffic signals</li><li>• 8,000 major street light poles</li><li>• 400 km of major street conduit</li></ul>	~\$2.3B	~65%	<ul style="list-style-type: none"><li>• 6 km of highways</li><li>• 4 km within Port</li></ul>
	<ul style="list-style-type: none"><li>• 6 major vehicular bridges</li><li>• 24 other vehicular bridges</li></ul>	~1.8B ~0.6B	~60% ~70%	<ul style="list-style-type: none"><li>• 4 bridges</li><li>• 7 bridges</li></ul>
Local Roads	<ul style="list-style-type: none"><li>• 1,054 km of local roads</li><li>• 774 km of lanes</li><li>• 24,000 local street light poles</li><li>• 1,200 km of local street conduit</li></ul>	~\$5.0B	~65% (excluding lanes)	<ul style="list-style-type: none"><li>• Local roads at Granville Island and within Port of Vancouver</li></ul>
Parking	<ul style="list-style-type: none"><li>• 12,000 metered parking spaces</li></ul>	~\$15M	~95%	<ul style="list-style-type: none"><li>•</li></ul>
Public gathering spaces	<ul style="list-style-type: none"><li>• 20 plazas</li><li>• 30 parklets</li></ul>	~\$20M	~90%	<ul style="list-style-type: none"><li>•</li></ul>
Street Furniture	<ul style="list-style-type: none"><li>• 2,700 units (bus shelters, benches, bike racks)</li><li>• 2 comfort stations</li></ul>	~\$5M	~50%	<ul style="list-style-type: none"><li>• Over 3,500 units managed through Street Furniture Contract</li></ul>
Horticulture	<ul style="list-style-type: none"><li>• 25 ha street horticulture</li></ul>	~\$25M	~65%	<ul style="list-style-type: none"><li>•</li></ul>
Vehicles & Equipment	<ul style="list-style-type: none"><li>• ~470 vehicles &amp; equipment</li></ul>	~\$50M	~60%	<ul style="list-style-type: none"><li>•</li></ul>





The following table summarizes major work completed in the last 10 years (2013-2022) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Building a resilient network	<ul style="list-style-type: none"><li>• Rehab projects for 3 major bridges:<ul style="list-style-type: none"><li>▪ Granville Bridge (phase 1 of 5)</li><li>▪ Cambie Bridge (phase 1 of 5)</li><li>▪ Burrard Bridge (phases 1 &amp; 2)</li></ul></li><li>• Granville &amp; Burrard Bridges bearing replacements</li><li>• Bridgeway pedestrian bridge replacement</li></ul>	<ul style="list-style-type: none"><li>• Seismic upgrades for 3 major bridges:<ul style="list-style-type: none"><li>▪ Granville Bridge</li><li>▪ Cambie Bridge (phase 1 of 5)</li><li>▪ Burrard Bridge</li></ul></li><li>• ~230 traffic signal controllers with backup power supply</li></ul>
Improving mobility	<ul style="list-style-type: none"><li>•</li></ul>	<ul style="list-style-type: none"><li>• ~35km of bus priority lanes</li><li>• ~40 slow street improvement locations</li><li>• ~680 pedestrian curb ramps</li><li>• ~140 wheelchair accessible bus stops</li><li>• ~55km new bikeways</li><li>• ~75 pedestrian-bike signals</li><li>• ~35 rectangular rapid flashing beacons</li></ul>
Supporting public life	<ul style="list-style-type: none"><li>•</li></ul>	<ul style="list-style-type: none"><li>• 16 temporary plazas (COVID response)</li><li>• 13 temporary parklets (COVID response)</li><li>• 4 permanent plaza upgrades:</li><li>• ~1,500 Mobi bikes, ~500 e-bikes and ~200 bike share stations</li></ul>

Highlights of major projects completed over the last 10 years (2013-2022) includes:

- Started Granville Bridge rehabilitation and seismic upgrades, including north abutment repairs, steel repairs & recoating (phase 1 of 5)
- Completed Cambie Bridge rehabilitation and seismic upgrades (phase 1 of 5)
- Completed Burrard Bridge seismic upgrades and rehabilitation as well as separate walking and cycling facilities, and safety improvements, including adding means prevention and protected intersections
- Commenced LED street lighting replacement (phase 1 of 2)
- Expanded the cycling network and upgraded existing bikeways and greenways to AAA (all ages and abilities). Key projects include the Comox-Helmcken Greenway, South False Creek Seaside Greenway, Union-Adanac Bikeway, 10th Avenue Corridor, Point Grey Road Seaside Greenway, SW Marine Drive, Richards, Haro, Ontario, Smithe etc.
- Purchased the Arbutus Greenway and constructed a temporary path and amenities
- Constructed the Powell Street Overpass to improve safety and support goods movement to the Port of Vancouver
- Partnered with TransLink to expand and improve transit service, including new RapidBus service (R4 – 41st Ave, R5 – Hastings) with over 35km of new bus lanes and 315 extended hours of bus lanes
- Started construction of the Broadway Subway extension of the Millennium Line SkyTrain west to Arbutus in partnership with the Province and TransLink
- Delivered Jim Deva Plaza and 800 Robson Plaza, with Bute Robson Plaza and Blood Alley Square currently underway.
- Responded rapidly to the COVID-19 pandemic:
  - Interim sidewalk and transit improvements on Robson St.
  - Peak period bus lanes
  - Beach Ave bike lane and slow street improvements
  - Temporary plazas and parklets to encourage physical distancing

III. Long-term Vision

Over the next 30 years, Vancouver’s street network must meet increasing demand for travel and public gathering to support economic activities within the City and the region, and be resilient enough to minimize impacts and recover quickly from shocks and stresses.

Our transportation network will continue to evolve with a focus on supporting sustainable modes of travel (walking, cycling, and transit) and in response to new and emerging technologies. A network of complete streets and greenways will provide residents with a wide range of transportation choices; neighbourhoods will evolve into complete communities where walking to local destinations will be easy for most people. High quality, comfortable and reliable rapid transit will connect our communities across the City and to the rest of the region. Emergency response and movement of goods and services will be reliable and support a thriving economy.

In each neighbourhood our streets will offer amenities such as seating, bike racks, charging stations, green infrastructure and washrooms, as well as a network of public gathering spaces for people to enjoy. These public spaces will include spaces to pause and rest, community plazas, pedestrian-oriented streets and larger spaces for events – all designed and managed with a focus on equity and gender-based safety. Our streets and public spaces will provide places for cultural and community expression, support economic vitality, and become better integrated with natural systems through the use of green infrastructure implementation for rainwater management, urban forest and landscaping.

Our Streets assets need to be renewed and upgraded to meet City objectives for climate adaptation, seismic resilience, equity, gender-based safety, and accessibility for all, and to comply with changes to regulation and industry requirements. The City’s roads and sidewalks, bridges, street lighting and traffic management infrastructure will be managed to ensure public safety and reliable movement of people, goods, and emergency services.

To achieve the long-term vision for Streets, the investment are informed by a number of strategies, including:

- *Climate Emergency Action Plan* (Big Move 2 – How We Move) (2020)
- *Places for People Downtown Public Space Strategy* (2020)
- *Resilient Vancouver* (2019)
- Area Plans (such as Cambie Corridor, Marpole Plan and the upcoming Broadway Plan)
- *Transportation 2040 Plan* (2012)
- *Healthy City Strategy* (2014)
- *Accessibility Strategy* (2019)
- *Equity Framework* (2021)
- *Culture|Shift* (2019)
- *Rain City Strategy* (2019)
- *Urban Forest Strategy* (2018)

**IV. Strategy for the Next 10 Years**

The backbone of a strong economy and a liveable city is a transportation system that allows people and goods to move around reliably. As such, we must both upgrade our streets to function more effectively and maintain assets so that they continue to function. As part of our long-term asset renewal strategy, strategic investments will be prioritized to maintain, repair, and upgrade critical infrastructure and amenities such as bridges, retaining walls, roads, bikeways, sidewalks, street lighting, and traffic signals to minimize lifecycle costs and ensure safe, comfortable, and effective service for all road users. More specifically, significant investment into rehabilitation and seismic upgrade of bridges is needed to help offset the historical lack of funds available to maintain these aging assets.

In order to move a growing number of people who live or work in our city, we also need to make the most efficient use of our limited road space. We do this by managing congestion and by reallocating road space to increase mobility options and expand capacity for walking, cycling, and transit which are more sustainable and space-efficient transportation modes. Guided by Transportation 2040 & the Climate Emergency Action Plan, strategic investment will be made to advance objectives to reach our mobility target of two-thirds of all trips by walking, cycling or transit by 2030, and work towards a safety target of zero traffic-related fatalities. The City will also invest in community-led transportation and public space projects that transform our streets to create welcoming places for walking, rolling, relaxing, and socializing. Particular consideration will be given to equity-denied communities.

**Building a Resilient Network**

**Structures Management**

- Manage aging components of City’s major bridges. Coordinate bridge renewal with transportation improvements where practical.

**Granville St Bridge:**

- Complete 3 out of 5 phases of structural steel repairs & recoating program.
- Complete South approach rehabilitation.

**Cambie St Bridge:**

- Complete 3 out of 5 phases of rehabilitation & seismic upgrades program.

**Burrard St Bridge and Grandview (1<sup>st</sup> Ave) Viaduct:**

- Complete concrete and building envelope repairs to the gallery towers.
- Initiate some of the structural steel repairs & recoating work.

**Georgia and Dunsmuir Viaducts:**

- Complete minor structural repairs to Georgia and Dunsmuir viaducts.
- Work with other City teams and departments to develop a comprehensive plan for replacement of the viaducts by 2032. In the event the viaducts are not replaced by 2032, additional investments to the existing viaducts would be required.

- Reduce percentage of structures in poor condition, including 45 bridges and over 500 retaining walls, through renewal of infrastructure funded from capital and external partners:
  - Implement expansion joint replacement program for bridges.
  - Implement a comprehensive inspection and maintenance program for retaining walls.
- Improve the resiliency of critical infrastructure to known hazards such as seismic events:
  - Support the advancement of the City’s earthquake preparedness strategy.
  - Complete 3 out of 5 phases of Cambie Bridge seismic upgrades.
  - Complete seismic upgrades for 2 other Major Route Network bridges.
- Develop a comprehensive long-term asset management plan for structures assets, including business cases for rehabilitating and upgrading Granville and Cambie bridges.

**Pavement & Sidewalk Management**

- Maintain the TransLink Major Road Network (MRN) in a state of good repair.
- Develop work plans and strategies to, over time, improve the overall condition of the arterial road network to match that of the MRN network.
- Prioritize limited funding for the rehabilitation of the local road network to minimize the deterioration of the asset condition.
- Improve accessibility of sidewalks by advancing curb ramp construction & sidewalk rehabilitation.

**Street Lighting Management**

- Prioritize the replacement of aging lighting assets such as underground conduit, street light poles.
- Reduce safety risks to the public through the proactive replacement of all street light poles assessed to be in poor condition.
- Develop and implement long-term strategies to manage lighting assets, including establishing financial strategies to fund necessary capital expenditures.
- Modernize the street lighting networks to take advantage of new and emerging technologies such as LED lighting that provide improved functionality while also reducing energy requirements.
- Take advantage of opportunities to “electrify” the street ROW for new and expanded uses such as public events and food services.
- Leverage the renewal of underground conduit to install increased conduit capacity to meet expected future demands and build the city of tomorrow.

**Signal Management**

- Rehabilitate and replace traffic signal equipment, including traffic signal poles, controller cabinet, backup power supply, for operational reliability.
- Upgrade traffic management system to smart and connected emerging technologies.
- Installation of signals to improve safety of all road users.

**Rail Corridor**

- Protect and improve rail corridors, and upgrade at-grade rail crossings for safety and new Transport Canada standards.

**Improving Mobility**

**Active Transportation**

- Improve the pedestrian network, prioritizing safety improvements along routes to transit, schools, parks, community, and healthcare facilities
- Advance pedestrian accessibility through new or upgraded sidewalks, curb ramps, tactile cues, non-slip surfaces, and accessible pedestrian signals.
- Expand and upgrade the network of greenways and comfortable cycling routes for people of all ages and abilities (AAA) across the city.
- Support the growth of public bike share, including shared e-bikes, to enable more people to make more bicycle trips to access transit stations, employment sites, commercial areas, and destination-rich streets.

**Complete Streets**

- Continue taking a holistic approach to street network planning and design, considering the needs of people of all ages and abilities, and all modes of travel.
- Prioritize projects that are coordinated with street rehabilitation, leverage opportunities from redevelopment, and have significant improvements to sustainable mode share and safety.

**Transit Integration & Reliability**

- Leverage regional funding and support the Province to design and construct the Broadway Subway, and work with TransLink to further plan for an extension to UBC
- Continue to support efficient bus operations and fleet changes by upgrading bus stops and improving bus routes. Continue to upgrade bus stops for accessibility, and increasing the amenities and integration with other street infrastructure.
- Implement bus-priority projects on key corridors and RapidBus routes, such as by extending bus-priority lanes, installing bus bulbs, improving intersections, and supporting TransLink’s Bus Stop Balancing program.
- Plan and implement bus-priority improvements to support TransLink’s Rapid and Frequent Transit Network and projects within the TransLink’s T2050 10 year priorities.

**Safety Improvements**

- Work towards eliminating all transportation-related fatalities and serious injuries, with a focus on vulnerable road users (pedestrians, cyclists) and at risk groups (people with mobility challenges, seniors and children).

- Prioritize safety improvements for walking and cycling, particularly around schools and collision hot spots
- Partner with VPD, VCH, BC Ambulance, ICBC for improved data sharing and targeted enforcement and education campaigns.

**Arterial Construction Management**

- Analyse and reduce construction impact of long duration closure on major roadways while improving safety and accessibility of pedestrians and cyclists.
- Review and coordinate traffic control plans for all major construction projects as per updated 2020 Traffic Management Manual for Work on Roadway requirements.
- Review rush-hour parking restrictions on arterial streets to provide greater capacity for moving vehicles, and implement measures to improve reliability

**Planning & Monitoring**

- Increase monitoring and analysis to better inform decision-making, long-term planning and operations of the street network. Track, plan and report on progress towards transportation targets.
- Replace assets as needed and implement new technologies for data collection.

**Supporting Public Life**

**Streetscape Amenities and Public Gathering**

- Partner with businesses and communities to create plazas, deliver needed public amenities, and support cultural expression and redress.
- Ongoing support to maintain welcoming and accessible public gathering spaces, in collaboration with community partners, and upgrade existing COVID-response temporary plazas and parklets
- Renew the Street Furniture Contract, which provides bus shelters, benches, and litter cans
- Continue to adapt our street horticulture assets so that they are more resilient

**Public Realm Electrification**

- On-street EV charging in designated areas, including collaboration with car-share programs
- Deployment of electrical kiosks for food trucks, the film industry and special events to reduce reliance on generators
- Electrification of public bike share stations to support the deployment of E-bikes
- Electrical access for charging and lighting in public gathering spaces

**Curbside Management**

- Effectively manage curbside use, using emerging technologies to help mitigate congestion and manage parking and support business activity.
- Replace aging and obsolete equipment, and improve security
- Improve performance-based pricing strategies and expand metered parking where needed
- Work towards asset-light infrastructure and increase mobile payment usage

V. 2023-2026 Capital Plan: highlights

Major renewal projects include:

- Granville Bridge structural steel repairs & recoating (Phase 2 of 5)
- Granville Bridge South approach rehabilitation
- Cambie Bridge rehabilitation (Phase 2 of 5)
- Gastown streets, which includes: interim repair of Maple Tree Square, reconstruction of Trounce Alley and targeted repairs to sidewalks; planning and design for Water St. major rehabilitation; and partnerships and projects with the Host Nations to increase their visibility in the public realm.
- Pavement rehabilitation of MRN and arterial streets.
- Replacement of aging streetlight poles & rehabilitation of underground electrical conduit.
- Replace aging and obsolete parking meters and equipment.
- Advance replacement of traffic signal system, including communication network and controllers to new industry standard.
- Partner with BC Hydro to complete the elimination of the existing H-frame infrastructure in downtown lanes with upgraded, underground infrastructure.
- Fleet electrification: the proposal contained in the Capital Plan would lead to the conversion of 83 fleet assets to electric, increasing the number of electric vehicles from 46 to 129 (from 10% to 28% of fleet).

Major new/upgrade projects include:

- Cambie Bridge seismic upgrades (Phase 2 of 5)
- Construct new sidewalks, curb ramps, traffic signals and other improvements identified in the 5-year walking map.
- Upgrade and construct new active transportation corridors including Bute Greenway, Portside Greenway, Kent Ave, Eastside Crosscut, and other key corridors.
- West End street improvements: transportation & public realm projects on Robson, Bute Greenway, Davie Village, and West End Waterfront, focusing on community and business priorities for the neighbourhood.
- Implement neighbourhood focused traffic management plans to reduce speeds, shortcutting and improve safety and comfort for people walking and cycling.
- Complete upgrades to all rail crossings to improve safety and meet Transport Canada requirements.
- Install public realm electrification infrastructure to support on-street EV charging, micro-mobility charging hubs, and other public realm uses.
- Upgrades to public gathering spaces across the city.

In addition to the City’s transportation investments, major investments will also be delivered through partnerships with TransLink, the Province and the Federal government including:

- Complete construction of the 6 km Millennium Line Broadway Extension to serve Central Broadway (VCC-Clark station west to Arbutus), an investment of \$2.83 billion.
- Implement transit priority and reliability improvements for RapidBus and other bus routes across the City, and plan for expansion of TransLink’s Frequent Transit Network across the city.
- Upgrade the Central Valley Greenway and BC Parkway, which are owned by TransLink



2023-2026 CAPITAL PLAN

VI. 2023-2026 Capital Plan for Streets: \$368 million cash + \$103 million in-kind

				Estimated outcomes (units)			City assets (\$M)		Non-city assets (\$M)	Overall (\$M)	Cash (\$M)			In-kind (\$M)		
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner		Subtotal	
\$ million, except for unit outcomes																
Streets																
Building a resilient network																
Bridges & structures																
Granville Bridge rehabilitation & seismic upgrades; (\$45.0M)				-	-	-										
Cambie Bridge rehabilitation & seismic upgrades; (\$30.0M)				-	-	-	80		-	-	80	50	-	30	80	-
General bridge rehabilitation program; (\$3.8M)				-	-	-										
Retaining wall & slope rehabilitation; (\$1.0M)				-	-	-										
Street lighting																
Street lighting rehabilitation; (\$27.3M)				3,000 lights	-	-										
H-frame replacement; (\$6.0M)				8 blocks	-	-										
Trolley pole replacement; (\$5.5M)				400 poles	-	-	40		15	-	56	36	1	3	40	16
New street lighting; (\$1.0M)				-	100 lights	-										
New & upgraded street lighting delivered through development (in-kind); (\$16.0M)				160 lights	1,440 lights	-										
Pavement rehabilitation																
Major road network rehabilitation; (\$22.5M)				15 cen-km	-	-										
Arterial road rehabilitation; (\$19.0M)				10 cen-km	-	-	53		-	-	53	30	-	23	53	-
Local roads rehabilitation; (\$10.0M)				22 cen-km	-	-										
Design investigation - streets & structures; (\$1.4M)				-	-	-										
Sidewalks & pathways																
Sidewalks rehabilitation; (\$5.0M)				900 panels	-	-	5		-	-	5	5	-	-	5	-
Traffic signals																
Signal rehabilitation; (\$26.0M)				50 signals	-	-										
New signals; (\$8.4M)				-	16 signals	-	28		24	-	51	18	7	10	34	17
New & upgraded signals delivered through development (in-kind); (\$17.0M)				4 signals	32 signals	-										
Vehicles & equipment																
Renewal of vehicles & equipment - Streets; (\$20.6M)				105 vehicles	-	-										
Electrification of vehicles & equipment - Streets; (\$4.6M)				85 vehicles	-	-	25		1	-	26	26	-	-	26	-
New vehicles & equipment - Streets; (\$1.0M)				-	55 vehicles	-										
Subtotal Building a resilient network							231	40	-		271	166	8	65	238	33

2023-2026 CAPITAL PLAN

VI. 2023-2026 Capital Plan for Streets (continued)

\$ million, except for unit outcomes				Estimated outcomes (units)			City assets (\$M)		Non-city assets (\$M)	Overall (\$M)	Cash (\$M)				In-kind (\$M)
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner	Subtotal	
Streets															
Improving mobility															
Transit integration & reliability															
Rapid transit office; (\$6.9M)				-	-	-	-	12	-	12	2	7	4	12	-
Bus transit improvements; (\$5.0M)				-	-	-									
Active transportation corridors & complete streets															
Active transportation & complete streets; (\$38.4M)				-	20 km	-									
New sidewalks; (\$4.9M)				-	1.9 km	-	56	69	-	125	3	42	11	55	70
Transportation planning & monitoring; (\$12.0M)				-	-	-									
Street improvements delivered through development (in-kind); (\$70.0M)				16.0 km	4.0 km	-									
Transportation safety & accessibility															
School program; (\$3.0M)				-	-	-									
At-grade rail crossings; (\$5.0M)				8 xings	-	-									
Arterial & construction management; (\$2.0M)				-	-	-	-	12	-	12	-	11	1	12	-
Transportation safety; (\$2.0M)				-	20 fl. beacons	-									
Ferry docks; (\$ -)				-	-	-									
Neighbourhood transportation															
Neighbourhood traffic management & spot improvements; (\$2.0M)				-	8 projects	-	-	6	-	6	-	5	2	6	-
Pedestrian curb ramps; (\$4.0M)				-	400 ramps	-									
Subtotal Improving mobility							56	99	-	155	5	64	17	85	70
Supporting public life															
Streetscape amenities															
Horticulture; (\$1.0M)				-	-	-									
Street furniture & bike racks; (\$500K)				-	-	-	-	10	-	10	10	-	-	10	-
Public realm electrification; (\$4.3M)				-	-	-									
Public realm EV charging infrastructure; (\$4.3M)				-	-	-									
Washrooms															
Washrooms renewal; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
New washrooms; (\$ -)				-	-	-									
Public gathering & place making															
Public gathering / plazas; (\$5.8M)				-	-	-	-	8	-	8	-	8	-	8	-
Equity & Cultural Redress public space projects; (\$2.0M)				-	-	-									
Commercial high street corridors															
Gastown / Water St. public space & transportation improvements; (\$10.0M)				-	-	-	10	10	-	20	9	11	-	20	-
West End public space & transportation improvements; (\$10.0M)				-	-	-									
Curbside vehicle management															
Metered & pay parking; (\$7.0M)				-	-	-	7	-	-	7	7	-	-	7	-
Subtotal Supporting public life							17	28	-	45	26	19	-	45	-
Total Streets							\$ 304	\$ 167	-	\$ 471	\$ 196	\$ 90	\$ 82	\$ 368	\$ 103

ONE WATER: POTABLE WATER, RAINWATER & SANITARY WATER

I. Overview

*One Water* refers to all water-related services and utilities. The City is implementing a *One Water* planning approach which values all forms of water. Along with the essential services of providing potable water, collecting and conveying sanitary water (often referred to as sewage) and rainwater (often referred to as drainage), *One Water* services also include groundwater protection and flood management.

These services are critical to maintaining the health and well-being of our residents, supporting a growing population, enabling local economy, and improving the city’s sustainability, resilience, and climate change adaptation. *One Water* services are delivered by the City in collaboration with Metro Vancouver, which operates the regional systems.

Vancouver’s *potable water* originates from the Capilano, Seymour, and Coquitlam reservoirs. On an average day, the water system delivers 300 million litres of high-quality drinking water throughout the city.

Vancouver’s *rainwater* is collected through a combination of drainage pipes and green rainwater infrastructure (GRI). GRI systems throughout the city divert rainwater from the pipe systems using engineered nature-based assets, and capture rainwater run-off pollutants that would otherwise end up in our waterways.

The majority of the *sanitary water* is processed at the Iona Island treatment plant in Richmond before being discharged into the Strait of Georgia. However, similar to other North American cities, the City of Vancouver network also comprises sections of combined sewer pipes, where sanitary and rainwater flows are combined in a single pipe. When the flow reaches or exceeds the capacity of these combined pipes, they overflow into the nearby receiving waters such as the Burrard Inlet, English Bay, False Creek, and the Fraser River.

Over the next decade and beyond, the City and regional potable water, sewer, and drainage systems will continue to be impacted by population growth, climate change, evolving regulatory requirements, aging and deteriorating infrastructure. The need for improved water quality discharges in our receiving waters is also ever more urgent. The scale of these challenges requires integrated and data-driven planning, adaptive strategies, inter-jurisdictional collaboration, and improved policies for infrastructure investments. Strategic investments in *One Water* services will improve the city’s systems resilience, and support community well-being and a thriving environment.

II. Inventory of Assets

The potable water, rainwater and sanitary services in Vancouver are provided jointly by two levels of government:

- Metro Vancouver owns and maintains regional network components, such as the potable water reservoirs, watersheds and treatment facilities on the North Shore, the wastewater treatment plants in Richmond and Delta that serve Vancouver, and the water transmission mains, water reservoirs, and trunk sewers located within Vancouver and the region.
- The City owns and maintains local serving components, such as potable water transmission and distribution mains, collection pipes for rainwater and sanitary, and green rainwater infrastructure assets located on public land.

The City owns and operates almost \$11 billion of infrastructure assets to support critical *One Water* services. The vast majority of the potable water, rainwater and sanitary systems were built between 1886 and 1986, and Metro Vancouver and the City have been gradually renewing and upgrading these assets as they age. The bulk of Vancouver’s original rainwater and sanitary systems were built with “combined pipes”. “Separated pipes” were constructed in Still Creek starting in the 1950s and the rest of the city starting in the 1970s.

	City Assets	Replacement Value	% in Good/ Fair Condition	Partner Assets
Potable Water	<ul style="list-style-type: none"><li>• 1,475 km of water mains</li><li>• 12 km of dedicated fire protection (DFPS) water mains</li><li>• 2 DFPS pump stations</li><li>• 28 pressure reducing valve stations (PRVs)</li><li>• ~100,000 water connections</li><li>• ~24,000 water meters</li><li>• ~6,500 fire hydrants</li><li>• ~80 vehicles and equipment</li></ul>	~\$3.1 B	80%	Metro Vancouver: <ul style="list-style-type: none"><li>• 3 supply reservoirs and filtration / UV disinfection plant on the North Shore</li><li>• 103 km of water mains and 2 reservoirs within Vancouver</li></ul>
Rainwater & Sanitary Water	<ul style="list-style-type: none"><li>• ~850 km of storm mains</li><li>• ~720 km of sanitary mains</li><li>• ~560 km of combined mains</li><li>• 24 pump stations</li><li>• ~93,000 sewer connections</li><li>• ~42,000 catch basins</li><li>• ~300 green rainwater infrastructure features</li><li>• ~115 vehicles and equipment</li></ul>	~\$7.6 B	75%	Metro Vancouver: <ul style="list-style-type: none"><li>• 125 km of sewer pipes within Vancouver</li><li>• 2 wastewater treatment plants serve Vancouver: one in Richmond (which serves 97% of Vancouver) and one in Delta (which serves 3% of Vancouver)</li></ul>

The City anticipates an increase in the rate of *One Water* asset deterioration over the coming decades, and is therefore increasing asset renewal rates in order to better match the investments with the scale of the renewal need. Renewal is complemented by new and upgraded infrastructure assets that are typically triggered by population growth and development, and by other priorities such as resilience to seismic events, climate change, and environmental protection.

A large portion of the potable water system will reach end of life in the next 30 years. To address assets reaching end of life, over the last 10 years, water mains have been replaced at an average annual rate of 0.5%, with gradual increases year over year. The annual rate of renewal was 0.9% as of 2022.

Similarly, the volume of aging sewer mains is growing fast, and the City is responding by increasing the average annual renewal rate from 0.5% to over 1% in the coming decade. Concurrently, sewer renewal and growth investments enable us to continue the multi-decade sewer separation program to replace our combined sewer pipes with separated sewer pipes.

The City has implemented over 300 green rainwater infrastructure (GRI) assets since 2001, managing a total drainage area of 19 hectares. Each year, 10-15 assets in poor condition are rehabilitated to improve their drainage and water quality functionality to very good condition. As GRI contributes to numerous City goals for climate adaptation and community resilience, continued expansion of GRI assets is planned for the next 10 years.

The following table summarizes major work completed in the last 10 years (2013-2022) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Potable Water	<ul style="list-style-type: none"><li>• 80 km of water mains</li><li>• ~4,900 water connections</li><li>• ~4,100 water meters</li><li>• 2 pressure reducing valve stations</li></ul>	<ul style="list-style-type: none"><li>• 10 km of water mains</li><li>• ~10,000 water connections</li><li>• ~10,000 water meters</li><li>• 30 new drinking water fountains</li></ul>
Rainwater & Sanitary Water	<ul style="list-style-type: none"><li>• ~70 km of combined sewer mains replaced with ~140 km of separated sewer mains</li><li>• 3 sewer pump stations replaced or refurbished</li><li>• 28 green rainwater infrastructure assets rehabilitated</li></ul>	<ul style="list-style-type: none"><li>• 5 km of sewer mains</li><li>• ~10,000 sewer connections</li><li>• 183 green rainwater infrastructure assets installed</li><li>• 2 new or upgraded pump stations</li><li>• 22 Combined Sewage Overflow monitors</li><li>• 13 rain monitoring stations</li><li>• 99 temporary flow monitors</li></ul>

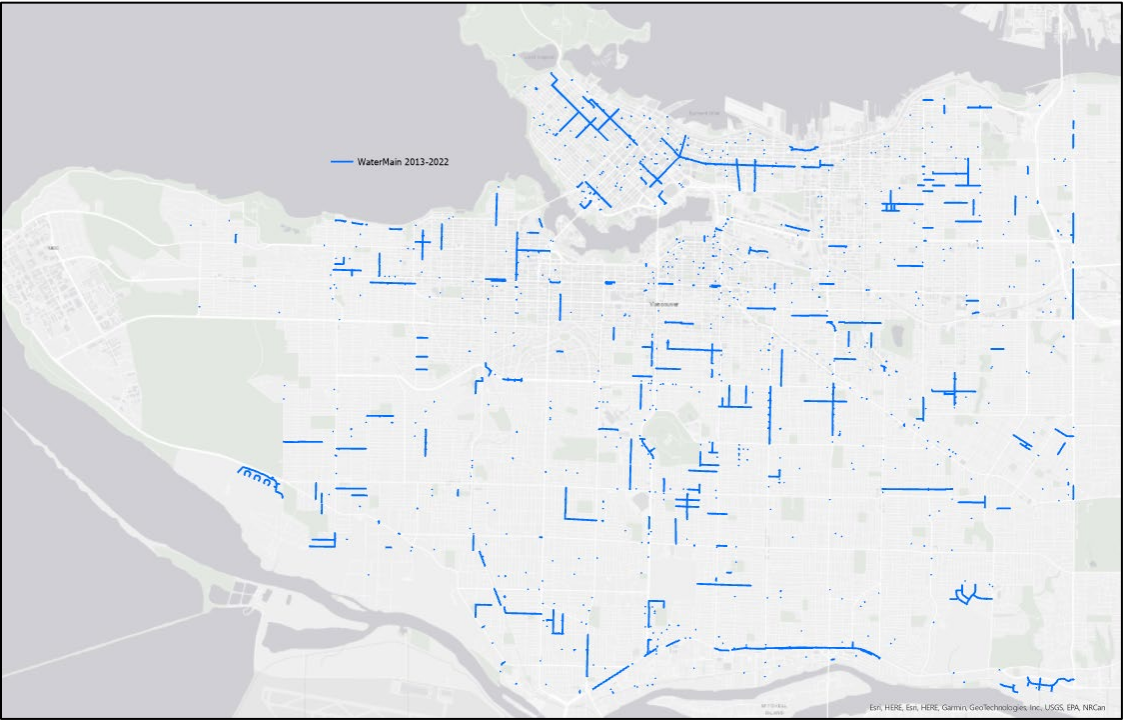
Major renewal projects completed include:

- Replacement and upgrade of 4.5 km of potable water transmission mains on Pender St., Trafalgar St., Haro St. and Bute St.
- Renewal of ~75 km of potable water distribution mains at end of life, including major projects on SW Marine, W Georgia, E 12th Av, Burrard St., Oak St, and Knight St.
- Replaced two water pressure reducing valve stations at end of life (2022)
- Renewal of ~70 km of sewer mains, including projects on major arterials such as Burrard, Marine Dr, Dunbar, Nanaimo, King Edward, St. Catherines and Renfrew.
- Renewal/refurbishment of three pump stations: Skeena/Cornett, Boundary/1<sup>st</sup> Ave, and Glen/7<sup>th</sup> Ave.

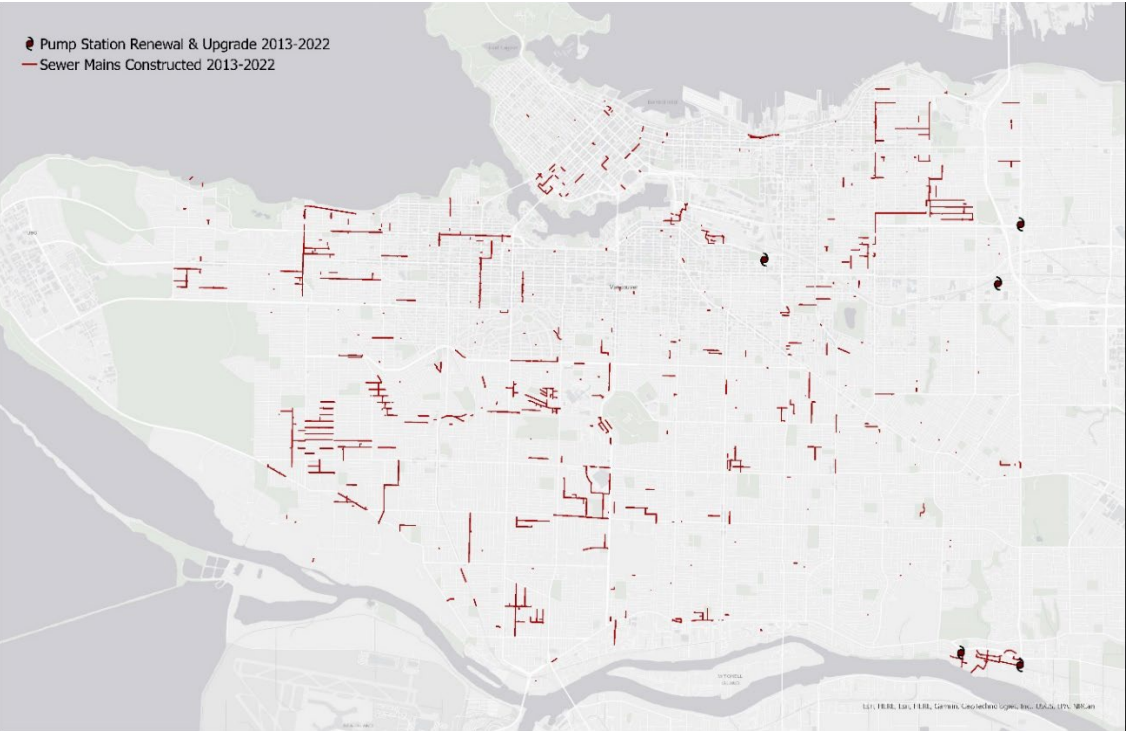
Major new/upgrade projects completed include:

- New and upgraded potable water mains, sanitary and storm sewer trunks, green infrastructure and flood protection infrastructure in key growth areas to support new developments: Oakridge, Cambie Corridor, West End, Marpole, East Fraser Lands.
- Trial of Japanese-standard seismically resilient water pipe for Jackson Ave renewal, seismically resilient upgrade of Anderson St. water and sewer infrastructure.
- New water meters for all growth and redevelopment sites, including single and dual family properties, and strategic meter installations for large residential properties.
- New/upgraded pump stations include White Pine Mill and Kent/Kinross Pump Stations.
- 183 green rainwater infrastructure assets built managing more than 10 hectares or street runoff, including major projects such as 63<sup>rd</sup> & Yukon, Richard St (Dunsmuir to Pacific), Haro St (Thurlow to Bidwell), Pine St & 8<sup>th</sup>, Woodland & 2<sup>nd</sup>, and Prince Edward in Sunset Park.
- Completion of integrated One Water studies for servicing the Cambie Corridor and Broadway Plan.
- Development of a sewer and drainage modelling practice, including modelling software infrastructure, the development of modelling standards, and the development of calibrated models to inform planning efforts in the Cambie Corridor and Broadway Plan areas (~20% of the City’s total area).

New & Renewed Water Mains (2013-2022)



New & Renewed Sewer Mains & Pump Stations (2013-2022)





III. Long-term Vision

The City’s existing utility infrastructure represents generations of investments to manage drinking water, sewer and drainage to protect public health, support safety, community resiliency, environmental stewardship and livability.

Over the next 30 years, the City and regional drinking water, sewerage and drainage systems will continue to be impacted by population growth, climate change, evolving regulatory requirements to improve receiving waters quality, and aging and deteriorating infrastructure. Additionally, major regional upgrades are anticipated including the Iona Wastewater Treatment Plant upgrade and the Coquitlam Lake Water Supply Expansion project.

The scale of these infrastructure needs and challenges requires integrated, data-driven planning and collaborative decision making that balances risk with service levels. The next 30 years will see a significant shift in how water resources are managed in the City, toward integrated water management, as laid out in the Rain City Strategy, Resilient Vancouver Strategy, Climate Change Adaptation Strategy, and in the development of the Vancouver Plan, Asset Management Plans, Water Demand Management Strategy and the Healthy Waters Plan. The objectives for One Water over the next 30 years include:

- Implementing a *One Water* approach to water resources management that values water in all its forms and considers the entire urban water cycle and its impacts to the environment and the community.
- Maintaining assets in a good state of repair and addressing aging infrastructure deterioration through renewal.
- Supporting population growth through resilient upgrades to local and regional water, sewer, and drainage systems and through improved regulation of on-site rainwater management, and innovative water conservation, harvest, and reuse solutions.
- Supporting climate change adaptation and the progressive mitigation of combined sewer overflows through sewer separation as well as targeted policies and investments in nature-based solutions that capture and clean rainwater closer to where it falls.
- Improving emergency preparedness and response planning for seismic hazards, public health emergencies and climate risks with resilient infrastructure investments.
- Expanding access to water in the public realm, in recognition of access to water as a human right.
- Reducing potable water consumption and improving equity and accountability for water use through universal water metering, advanced metering technology and improved water loss management.
- Incorporating equity and reconciliation with Indigenous communities into planning, decision-making, and implementation.

The *One Water* planning approach will provide flexibility and efficiency for meeting environmental water quality standards while addressing broader city goals. Integrated policies will optimize local solutions based on local watershed characteristics, including proximity of drinking water and sanitary systems, annual rainfall, groundwater supply, and ground conditions. Innovative and adaptive servicing solutions will broaden infrastructure assets beyond conventional piped water and sewer systems to include green rainwater infrastructure, groundwater management tools, and distributed solutions at building scale and district scale.

IV. Strategy for the Next 10 Years

Over the next 10 years, *One Water* will focus on investments and initiatives to address asset deterioration, support growth and development, improve resiliency and climate change adaptation and advance urban watershed management to protect the environment:

- **Continue to Increase System Renewal Rates toward Sustainable Asset Management Target**  
In conjunction with adopting an integrated *One Water* planning approach to utility servicing, the City must continue to increase infrastructure renewal programs to replace existing infrastructure reaching end of life. Currently 20% of assets are in poor condition and more assets are deteriorating rapidly. As such, higher renewal rates are planned over the coming decade.
- **Support Growth and Development**  
Replacement or expansion of existing water, sewer, and drainage infrastructure will be required to support ongoing population growth and development in Vancouver. Ongoing work within the Broadway and Cambie land use areas, and the ongoing Healthy Waters Plan will enable the implementation of integrated strategies combining pipe upgrades with green rainwater infrastructure to further reduce combined sewer overflows, decrease drinking water demands, maintain sewer system capacity to accommodate growth, and reduce flood risk.
- **Improve Resiliency & Climate Change Adaptation**  
The significance of resiliency and climate change adaptation has been apparent over the last several years. As the COVID-19 Pandemic has demonstrated, emergency preparedness is critical. Climate change will result in less snow pack to fill reservoirs, more drought and water demand in summer, more intense storms in the winter and sea level rise. The City will prepare for the increasing pressures of climate change by reducing potable water demand, leveraging natural watersheds and green rainwater infrastructure to return water to the natural water cycle and implementing flood management systems to protect against coastal flooding. Investments in accelerated residential water metering will help reduce our draw on regional water sources in order to help defer significant water supply reservoir expansions. As well, the City will continue to invest in seismic resiliency and preparedness.
- **Advance Urban Watershed Management and Protect the Environment**  
Investments will strive to reinstate the natural watershed functions, increase ecosystem health and connectivity, increase biodiversity, advance access to healthy green and connected spaces for the community, and maximize the opportunity to meet our reconciliation commitments and respond urgently to the needs of equity deserving groups. The completion of the Healthy Waters Plan will also guide investments to sustainably address pollution in our waterbodies. The implications of this approach are significant and will inform and align with Metro Vancouver utility planning and capital investment decisions for the systems in the coming decades.

Based on the 10 year One Water investment strategy, individual utility plans are as follows:

Potable Water

- Implement an infrastructure replacement strategy to address asset deterioration for the large wave of assets reaching end of life over the next 30 years. Incremental strategy to increase annual water main renewal rate to 1.2% over several Capital Plans, to allow for resource leveling, stability, continuity, and consistent funding levels.
- Upgrade infrastructure to support population growth and development.
- Increase the hardened grid network of seismically resilient water mains and develop and implement a strategy for the provision of post-disaster drinking water.
- Accelerate residential water metering towards universal metering over the next 15 years and implement an advanced meter reading system and customer portal to better support water conservation initiatives, provide improved customer service and reduce drinking water consumption.



- Investigate opportunities for potable water offsets through harvest and reuse, and “fit for purpose” water.
- Increase equitable access to drinking water in the public realm through drinking water fountains and bottle fillers.

**Urban Watersheds, Sewers, Drainage**

- Complete development of the Healthy Waters Plan, which will be a comprehensive long-range vision for sewage and rainwater management. This will deal with critical challenge areas including pollution from combined sewer overflows (‘CSO’) and urban runoff, meeting the needs of growth, adapting to climate change as well as renewing aging infrastructure.
- Accelerate the pace of renewal to meet the needs of aging and deteriorating infrastructure over several Capital Plans to work towards target of 1.5% annual asset renewal rate.
- Accelerate the implementation of distributed and district-scale green rainwater infrastructure assets, to meet Rain City Strategy goals, preserve pipe system capacity, support combined sewage overflow reductions, and capture pollutants from rainwater run-off.
- Deliver capital upgrades to enable population growth and development.
- Expand system monitoring and modelling programs to meet regulatory requirements, improve system understanding and support the evaluation of the capital investment needs.
- Continue with sewer separation efforts to support the regulatory target of eliminating combined sewer overflows as required by Metro Vancouver’s Liquid Waste Management Plan.
- Continue to accelerate and expand programs to address impacts of climate change, including constructing flood protection assets to protect against storm surges, king tides and sea level rise.
- Replace and renew service connections in response to the development and to trouble calls related to blockages from tree roots and asset deterioration that result in property damage claims.
- Renew end of life sanitary pump stations with facilities that better protect the environment and maintain sewer service to residents.

**V. 2023-2026 Capital Plan: highlights**

**Asset Renewal – Continue to Increase System Renewal Rates toward Sustainable Asset Management Target:**

- Renewal of 55-65 km of water distribution and transmission mains; increase annual renewal rate to 1.1% by 2026 (future target 1.2%).
- Renewal of water connection, meter and hydrant assets at end of life.
- Renewal of 35-40 km of sewer mains; increase annual renewal rate to 0.8% by 2026 (future target 1.5%).
- Renew/refurbish 4 pump stations and initiate renewal/refurbishment of 3 pump stations.
- 40-50 green rainwater infrastructure assets rehabilitated to level of service “A”.
- Fleet electrification: the proposal contained in the Capital Plan would lead to the conversion of:
  - Potable water: 6 fleet assets to electric, increasing the number of electric vehicles from 6 to 12 (from 7% to 15% of fleet; and
  - Sewers: 11 fleet assets to electric, increasing the number of electric vehicles from 1 to 12 (from 1% to 11% of fleet).

**Support Growth and Development:**

- New/upgraded sewer and water connections and meters for development.
- New and upgraded water and sewer mains, green rainwater infrastructure to serve growth areas (e.g. Cambie Corridor and Broadway Area Plan).
- Complete upgrade of Thornton Pump Station.

**Improve Resiliency & Climate Change Adaptation**

- Reduce per capita water consumption by 8% from 2019 levels by 2026
  - Double coverage of residential water meters to 30% to improve equity and accountability for water use.
  - Install an advanced water meter reading system to improve customer service, education and water loss management.
- Expand the hardened grid of seismically resilient water mains by 5km.
- Improve access to water in the public realm by adding 20 new drinking water fountains with bottle fillers.
- Develop a post-disaster provision of drinking water strategy.
- Explore the feasibility of downspout disconnection and scope a potential pilot project.
- Wet-weather hazard assessment and mitigation planning.
- Complete the Fraser River Floodplain Mitigation Plan.
- Develop the first-ever City-wide Groundwater Strategy.
- Expand metrological monitoring network, and align monitoring programs with regional and municipal partners.

**Advance Urban Watershed Management and Protect the Environment**

- Complete Integrated Water Management Plans (IWMP) for Broadway and Renfrew Rupert Land Use Plan and the Arbutus Catchment, advance the Renfrew Creek Daylighting project, and begin to implement the Cambie Corridor IWMP.
- Separate approximately 4 km of existing sewers to eliminate a combined sewer outfall, or reduce combined sewer overflows.
- New GRI assets retaining and treating runoff from 23 hectares of street area including the Blue Green System Project at Cambie.
- Build tree pit infrastructure, including soil volume, for 500 street trees in tree deficient areas in conjunction with One Water infrastructure projects.
- Continue to plan and construct major blue green system projects, including St. George Rainway Phase 1, Broadway Complete Street, and the Alberta Street and Columbia Park Project.
- Expand and continue to monitor stormwater quality within drainage systems to meet regulator requirements.
- Update the Still Creek Enhancement Study and develop a Still Creek model to inform the Renfrew Rupert Land Use Plan and Still Creek Flood Mitigation Plan with the aim to enhance and protect one of Vancouver’s remaining Salmon bearing creeks.

In addition to the City delivered investments, **major investments by Metro Vancouver** include:

- Iona Wastewater Treatment Plant upgrade to secondary treatment by 2034 (\$10B).
- Coquitlam Lake Water Supply Upgrade – expansion of reservoir draw capacity with new intake and treatment plant projected to begin by 2030 (\$4B).

2023-2026 CAPITAL PLAN

VI. 2023-2026 Capital Plan for Potable Water, Rainwater & Sanitary Water: \$840 million cash + \$35 million in-kind

				Estimated outcomes (units)			City assets (\$M)		Non-city assets (\$M)	Overall (\$M)	Cash (\$M)			In-kind (\$M)
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner	
\$ million, except for unit outcomes														
Water, sewers & drainage														
Potable water														
Infrastructure renewal / Asset management														
Distribution mains renewal program; (\$83.0M)				60 km	-	-								
Transmission main renewal program; (\$20.4M)				2.5 km	-	-								
Connection renewal program; (\$6.7M)				1,200 cnxs	-	-	123	-	-	123	123	-	-	123 -
Meter renewal program; (\$4.0M)				2,200 meters	-	-								
Water system components; (\$3.6M)				-	-	-								
Water planning & site investigations; (\$5.2M)				-	-	-								
Supporting growth & development														
Water upgrades to support growth (City-led); (\$5.0M)				3 km	-	-								
Water upgrades to support growth (development-led, in-kind); (\$7.0M)				1.7 km	0.3 km	-	12	16	-	28	-	21	-	21 7
Connection upgrades to support growth; (\$14.0M)				500 cnxs	-	-								
New meters to support growth; (\$2.0M)				-	500 meters	-								
Vehicles & equipment														
Renewal of vehicles & equipment - Water; (\$3.0M)				20 vehicles	-	-								
Electrification of vehicles & equipment - Water; (\$200K)				5 vehicles	-	-	3	1	-	4	4	-	-	4 -
New vehicles & equipment - Water; (\$500K)				-	10 vehicles	-								
Resilience & climate adaptation														
Water seismic resilience upgrade program; (\$10.5M)				5 km	-	-								
Water access programs supporting emergency preparedness; (\$1.4M)				-	-	-								
Water quality programs; (\$425K)				-	-	-	12	25	-	36	36	-	-	36 -
Water conservation programs; (\$1.1M)				-	-	-								
Accelerated water meter deployment program; (\$23.0M)				-	-	-								
Subtotal Potable water							150	41	-	191	163	21	-	184 7
Rainwater & sanitary water														
Core network														
Smaller main renewal program (up to ~750 mm); (\$113.0M)				28 km	-	-								
Larger main renewal program (~750 mm +); (\$113.0M)				12 km	-	-								
Targeted separation program (strategic CSO & flood mitigation); (\$26.0M)				4 km	-	-								
Sewer upgrades to support growth (city-led); (\$102.7M)				5 km	-	-								
Sewer upgrades to support growth (development-led, in-kind); (\$27.5M)				4.5 km	0.5 km	-	445	39	-	484	304	153	-	457 28
Pump station renewals & upgrades; (\$31.0M)				7 stations	1 station	-								
Maintenance & replacement of other components; (\$20.0M)				-	-	-								
Green infrastructure renewal & upgrades; (\$41.0M)				2 ha	23 ha	-								
Flood protection & drainage; (\$10.0M)				3 outfalls	-	-								
Connections														
Connections renewal program; (\$10.0M)				900 cnxs	-	-	109	11	-	120	10	110	-	120 -
New & upgraded connections; (\$110.0M)				-	4,800 cnxs	-								
Vehicles & equipment														
Renewal of vehicles & equipment - Sewers; (\$14.1M)				55 vehicles	-	-								
Electrification of vehicle & equipment - Sewers; (\$500K)				10 vehicles	-	-	15	1	-	15	15	-	-	15 -
New vehicles & equipment - Sewers; (\$500K)				-	20 vehicles	-								
Asset management & planning														
Asset inspections, investigations & monitoring ; (\$35.0M)				-	-	-	64	-	-	64	45	19	-	64 -
System strategy, policy & planning ; (\$29.2M)				-	-	-								
Subtotal Rainwater & sanitary water							633	50	-	683	374	282	-	656 28
Total Water, sewers & drainage							\$ 783	\$ 91	-	\$ 874	\$ 537	\$ 303	-	\$ 840 \$ 35

WASTE COLLECTION, DIVERSION & DISPOSAL

I. Overview

Solid waste management is vital to maintaining the health and well-being of our residents, supporting local economy, and improving the city’s sustainability and resilience.

The City’s Solid Waste Management group provides the following services:

- The collection of garbage and compostable organic materials from single-family and duplex homes.
- The operation of the City’s transfer station and the Vancouver Landfill, which receives waste from across the Region.
- The provision of recycling services through two Zero Waste centres, one at the transfer station and one at the landfill.
- The processing of compostable organics through contracts with the private sector.
- Collection of waste and litter from the public realm, as well as street cleaning operations.

II. Inventory of Assets

The overall waste management system in the City includes two recycling centres, a waste transfer station and a landfill. The City-owned landfill in Delta started operations in the mid-1960s. The Vancouver South Transfer Station at Manitoba Yard was built in the late-1980s. The recycling centre at the landfill was built in the 1990s and expanded in 2019. A new Zero Waste Centre, replacing the recycling centre at Manitoba Yard, opened in 2018.

	City Assets	Replacement Value	% in Good / Fair Condition	Partner Assets
Solid Waste	<ul style="list-style-type: none"><li>• Landfill in Delta (includes gas collection infrastructure) (~225 hectares)</li><li>• 1 transfer station</li><li>• 2 recycling centres</li><li>• ~180 vehicles and equipment</li></ul>	\$285 M	70%	<ul style="list-style-type: none"><li>• Village Farms landfill gas beneficial use facility</li></ul>

The following table summarizes major work completed in the last 10 years (2013-2022) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Solid Waste	<ul style="list-style-type: none"><li>• Recycling centre (Zero Waste Centre) at Manitoba Yard</li><li>• Transfer station floor, pit and scale repairs</li></ul>	<ul style="list-style-type: none"><li>• Food waste was added to the Green Bin Program and collection frequency changed to weekly green bin and biweekly garbage in 2013.</li><li>• City delivered recycling services to residential properties were wound down and transferred to Recycle BC in 2016</li><li>• Landfill:<ul style="list-style-type: none"><li>• completed closure of 90 ha</li><li>• leachate pump station upgrades</li><li>• front entrance improvements including the addition of a new two-storey scalehouse and two new scales and expansion of the recycling centre</li></ul></li><li>• Landfill gas collection:</li></ul>

	Renewed Assets	New/Upgraded Assets
		<ul style="list-style-type: none"><li>• Contracts with Fortis and Village Farms to develop infrastructure to convert landfill gas to renewable natural gas.</li><li>• Replacement of one flare with two new flares for gas control</li><li>• 438 monitoring points, including mainly 263 vertical wells and 129 horizontal collectors, installed</li><li>• 30 km of gas pipe installed</li><li>• Transfer station: addition of two new scales</li></ul>

III. Long-term Vision

Societal and regulatory pressures will continue to focus on reducing the amount of waste we dispose, shifting from a linear to circular economy, and recovering the value from materials in the waste stream. Our long-term investment is guided by a number of strategies:

- *Zero Waste 2040* (June 2018) is a long-term strategy that guides future waste management investments to achieve the City’s zero waste goal. It provides a framework for Vancouver to reduce and ultimately eliminate waste disposed to landfill and incinerator by 2040.
  - *Organic Wastes* – While efforts to recover food waste and organics from disposal have resulted in diversion of approximately 50,000 tonnes of material from disposal to composting, food scraps and food-soiled paper from Vancouver continue to represent ~20% of garbage disposed to landfills or incinerators. This area will require additional focus in order to further maximize diversion in the future including our ongoing efforts around reducing wasted food through the Love Food Hate Waste campaign and applying a circular economy lens to the food sector.
  - *Construction & Demolition Wastes* – To significantly reduce the volume of construction, renovation, and demolition wastes disposed in the landfill or incinerator, the City implemented a program in 2014 requiring a minimum 75% reuse and recycling of demolition waste from pre-1940 homes, and 90% from pre-1940 homes with identified character features. Future focus will be on increasing the number of homes and buildings covered under green demolition and deconstruction requirements, supporting market development in the industry, and recovering construction and demolition materials at the landfill for beneficial use.
- *Waste Diversion* – Significant efforts have been made in the last 4 years to develop alternate waste diversion programs. Zero Waste drop off initiatives and repair/re-use events have attracted thousands of residents over the last 4 years and will continue to grow into the future.
- *Single Use Item reductions* – over the past 4 years City Council has taken steps to reduce the disposal of single use items such as plastic bags, disposable cups, straws, foam food containers and plastic utensils. Efforts to further reduce single use items will continue in the future in concert with Federal, Provincial and local initiatives.
- *Street Cleaning, encampments and abandoned waste* – through additional Council-directed investment in street cleaning programs, services have increased in areas with the most demand around the city. Larger litter containers and public realm recycling containers continue to be installed in key areas and there will be ongoing efforts to address challenges in the Downtown Eastside and Downtown core.

IV. Strategy for the Next 10 Years

Key areas of focus over the next 10 years will relate to maximizing landfill gas recovery to reduce climate impacts and reducing the overall amount of material going to disposal and include:

- Partnering with FortisBC and Village Farms on their systems to convert landfill gas to renewable natural gas to achieve nearly 100% beneficial use.
- Increase overall diversion of organics by promoting greater participation in food scraps recycling programs covering all sectors.
- Increase diversion at the landfill with a soil blending and aggregate processing facility and other initiatives developed jointly with Kent Yard.
- Support building deconstruction through permitting to ensure reuse and recycling.
- Support expansions to the City’s green demolition and deconstruction program through by-law updates to ensure more reuse and recycling.
- Convene, collaborate, educate and support Vancouver as a community to focus on waste prevention, reduction and material reuse, and shift from a linear to circular economy.
- Develop new systems and programs geared towards maximizing material recovery for beneficial use.

**V. 2023-2026 Capital Plan: highlights**

**Major projects include:**

- Replacement of Solid Waste equipment including, collection vehicles and Landfill machines.
- Fleet electrification: the proposal contained in the Capital Plan would lead to the conversion of:
  - Collection and Street Cleaning: 14 fleet assets to electric, increasing the number of electric vehicles from 16 to 30 (from 13% to 24% of fleet); and
  - Transfer and Disposal: 3 fleet assets to electric, increasing the number of electric vehicles from 1 to 4 (from 2% to 7% of fleet).
- Closure construction and installation of gas collection infrastructure in completed areas of the Landfill (Phase 5 South).
- Installation of gas collection infrastructure in active areas of the Landfill.
- Infrastructure improvements at the Landfill including pump station, flare station and site electrical.
- Transfer Station improvements including new roof and air handling system.
- Installation of larger volume litter and recycling containers in high demand areas of the city.

2023-2026 CAPITAL PLAN

VI. 2023-2026 Capital Plan for Waste Collection, Diversion & Disposal: \$141 million cash

				Estimated outcomes (units)			City assets (\$M)		Non-city assets (\$M)	Overall (\$M)	Cash (\$M)			In-kind (\$M)
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner	
\$ million, except for unit outcomes														
Waste collection, diversion & disposal														
Diversion														
Zero waste initiatives														
Maintenance & upgrades at Zero Waste facilities; (\$ -)				-	-	-	-	-	-	-	-	-	-	-
Subtotal Diversion							-	-	-	-	-	-	-	-
Collection & cleaning														
Public realm infrastructure														
Maintenance & renewal of litter & recycling cans/bins; (\$2.0M)				1,200 bins	-	-	2	2	-	4	4	-	-	4
New litter & recycling cans/bins; (\$2.4M)				-	350 bins	-								
Collection & public realm cleaning programs														
Renewal of vehicles & equipment - Sanitation; (\$24.3M)				45 vehicles	-	-								
Electrification of vehicles & equipment - Sanitation; (\$1.1M)				15 vehicles	-	-	25	4	-	29	29	-	-	29
New vehicles & equipment - Sanitation; (\$1.6M)				-	15 vehicles	-								
Technological enhancements; (\$2.0M)				-	-	-								
Subtotal Collection & cleaning							27	6	-	33	33	-	-	33
Disposal														
Transfer station														
Maintenance & renewal of transfer station; (\$7.0M)				-	-	-	7	-	-	7	7	-	-	7
Landfill non-closure														
Gas collection infrastructure; (\$20.0M)				50 points	-	-	33	-	-	33	33	-	-	33
Maintenance / renovations / upgrades; (\$13.0M)				-	-	-								
Landfill closure														
Phase 5 - design; (\$3.5M)				27 ha	-	-								
Phase 5 North - closure implementation; (\$18.5M)				13 ha	-	-								
Phase 5 South - closure implementation; (\$20.5M)				14 ha	-	-	57	-	-	57	44	-	13	57
Closure maintenance; (\$4.0M)				30 wells	-	-								
Landfill stormwater management; (\$10.0M)				-	-	-								
Vehicles & equipment														
Renewal of vehicles & equipment - Disposal; (\$10.5M)				10 vehicles	-	-								
Electrification of vehicles & equipment - Disposal; (\$200K)				5 vehicles	-	-	11	0	-	11	11	-	-	11
New vehicles & equipment - Disposal; (\$200K)				-	5 vehicles	-								
Subtotal Disposal							107	0	-	107	95	-	13	107
Total Waste collection, diversion & disposal							\$ 135	\$ 6	-	\$ 141	\$ 128	-	\$ 13	\$ 141



RENEWABLE ENERGY

I. Overview

The City has set a bold target to cut carbon pollution in half by 2030, and to be carbon neutral before 2050. This section covers renewable energy associated with buildings and off-street electric vehicle charging. Over half of Vancouver’s carbon pollution comes from burning natural gas to heat space and water in our buildings. As such, reducing emissions from buildings is critical to achieving our climate target. This requires actions to improve energy efficiency and reduce energy consumption, along with actions to increase the supply and use of renewable energy, in order to transition away from burning fossil fuels.

Shifting from burning fossil fuels in buildings to relying on low-carbon energy for space heat and hot water is key. Renewable energy technologies (e.g. electric heat pumps, geo-exchange systems, waste heat recovery, bio-fuels, solar energy) provide a means to supplement or replace conventional energy sources and thereby reducing carbon pollution. Renewable energy technologies can be implemented for individual homes and buildings, for clusters of buildings, or at the larger district or neighborhood scale.

On the transportation side, which accounts for roughly 37% of carbon pollution in the city, the transition to renewable energy means shifting to more walking, cycling and transit use, and replacing combustion-engine vehicles with electric vehicles. The City is helping advance electric vehicles (EV) through the provision of and support for charging infrastructure. Within this Renewable Energy section, off-street EV charging support is outlined (refer to the Streets section for public EV charging infrastructure).

II. Inventory of Assets

The City owns and operates the False Creek Neighbourhood Energy Utility (“NEU”), which has been operating since 2010 and utilizes waste heat recovered from sewage and renewable natural gas to achieve the 70% renewable energy performance target. The NEU operates on a commercial utility model and recovers its capital and operating costs through rates. There are also two fossil-fuel based neighbourhood energy systems owned by Provincial governmental agencies, and two systems owned by private utility operators.

	City Assets	Replacement Value	% in Good / Fair Condition	Partner Assets
Neighbourhood Energy	<ul style="list-style-type: none"><li>2 energy centres</li><li>12 km of pipes</li><li>44 energy transfer stations</li></ul>	~\$80M	100%	<ul style="list-style-type: none"><li>2 systems owned by other governments</li><li>2 systems owned by private utility providers</li></ul>

The last 10 years (2013-2022) have represented a time of rapid growth for the NEU in which the focus has been on expanding the distribution network to connect new developments within the NEU service area and on expanding the sewage heat recovery capacity within the False Creek Energy Centre to meet growing energy demand. This growth has also triggered the need for the first satellite peaking boiler plant to enhance system resiliency. The following table summarizes major work completed in the last 10 years (2013-2022) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Neighbourhood Energy	<ul style="list-style-type: none"><li>Boiler #1 (4MW) replaced</li></ul>	<ul style="list-style-type: none"><li>1 Mount Pleasant Peaking Plant energy centre (5 MW)</li><li>6km of distribution pipes</li><li>26 energy transfer stations</li></ul>

III. Long-term Vision

The City has set a goal of reducing carbon pollution by 50% by 2030 and achieving net zero emissions before 2050. This goal is in line with international recommendations to limit global warming to 1.5C. In order to achieve this goal, buildings in Vancouver will need to transition from burning fossils fuels for space heat and hot water and move towards renewable energy sources.

To continue its leadership role, the City-owned NEU will increase the renewable energy content provided to customers in the NEU Service Area. The system will meet the growing demand by incrementally adding energy generation capacity through a combination of local waste heat sources, renewable natural gas, clean electricity and other innovative technologies, and may build, own and operate additional future generation capacity, or broaden the service delivery model by engaging in the private sector. The NEU will continue to be at the forefront of climate change mitigation, energy knowledge and innovation, while delivering an affordable and reliable critical service.

City Council has approved a number of policies and strategies that support the long-term vision to reduce energy consumption, increase the use of renewable energy, and reduce greenhouse gas emissions:

- The *Climate Emergency Action Plan* (2020) Big Move 4 seeks to cut carbon pollution from buildings in half by 2030 (from a 2007 baseline) while establishing a pathway to zero emissions before 2050. This plan outlines a bold approach to regulate carbon emissions from both new and existing buildings. In addition, this plan includes adoption of a target to convert the NEU to 100% renewable energy by 2030, subject to evaluation and competitiveness with other low carbon energy options for buildings. The plan also includes direction for the City to support and accelerate the transition to electric vehicles from combustion engines.
- The *Zero Emissions Building Plan* (2016) outlines two pathways to achieve low-carbon new construction: through high performance buildings and low-carbon energy systems.
- Other policies include the *Green Buildings Policy for Rezoning*, the *Rezoning Policy for Large Developments* (2010), zoning relaxations for the *Passive House* standard, and green demolition practices.
- The *Vancouver Building By-law* is regularly updated to require more efficient and sustainable construction. As sustainability regulations and policies develop city-wide, more stringent requirements will apply as we transition buildings to no longer be dependent on fossil fuels.
- The *Strategic Approach to Neighbourhood Energy* (2012) targets the conversion of existing fossil fuel based steam heat systems to renewable energy and the deployment of new renewable energy systems for high-density neighborhoods.
- The *Electric Vehicle Ecosystem Strategy* (2017) articulates the City’s role in ensuring Vancouver is prepared for the rapid transition to electric mobility through the provision of home, workplace and public charging infrastructure.

IV. Strategy for the Next 10 Years

In accordance with the *Climate Emergency Action Plan*, key requirements include reducing demand for energy and increasing the supply and use of renewable energy. To meet these requirements, investments will be needed in three broad areas:

Low Carbon District Energy Systems

Low carbon energy systems help accelerate the City’s efforts to transition all buildings to zero-emissions. Recognizing that compact mixed-use communities provide an ideal context for neighborhood energy systems, the City will take the following actions:

- Continue to expand the City-owned NEU in accordance with the Council-approved investment decision framework

- Increase the NEU's renewable energy supply to support *Zero Emissions Building Plan & Climate Emergency Action Plan* goals.
- Continue policy support for the conversion of existing fossil-fuel based district energy systems that are owned by other parties to renewable fuel sources.

**Zero Emissions Buildings**

The City of Vancouver has become a North American leader in advancing zero emissions new buildings, such as those that meet the Passive House standard. Over the past decade, Vancouver has updated its new building requirements such that the carbon pollution from new buildings has been cut dramatically. Further emission reductions for new buildings are expected in the coming years, largely as a result of reducing the carbon pollution allowed the Vancouver Building Bylaw to near zero by 2025. Vancouver has also demonstrated leadership by building its new facilities to near-zero emissions standards.

Big Move 4 in the Climate Emergency Action Plan puts forward a bold roadmap to reduce carbon pollution from existing buildings, through retrofits and expansion of low-carbon energy systems (described below). The retrofit actions include:

- Develop regulations that limit carbon emissions from existing buildings, focussing initially on large commercial and multi-family buildings as well as detached homes.
- Provide deep emission retrofit support for building owners such as incentives, energy retrofit planning assistance and streamlining of permits
- Invest in contractor, supplier, engineering and operational capacity to successfully undertake low carbon retrofits through training, peer-to-peer learning, etc.
- Educate the public and industry on the opportunities and benefits of moving to renewable energy through installations at public facilities, case studies, dialogues, etc
- Partner with BC Hydro, FortisBC, district heating utilities and the province to increase the supply and facilitate access to renewable energy through City policy, infrastructure planning and collaborative reduction of barriers

**Zero Emissions Vehicles**

Within this Renewable Energy section of the capital plan, funding is specifically for off-street EV charging support. The City is also supporting the transition to EV's by providing convenient, accessible public EV charging, which described in the Street section of this report. Together, these actions are meant to enable the City to achieve its target under Big Move 3 of the Climate Emergency Action Plan that 50% of all kilometres travelled in Vancouver will be by electric vehicles by 2030. To advance off-street charging, the City will take the following actions:

- Providing funding and technical support, in partnership with BC Hydro, for rental building owners seeking to provide electric vehicle charging within a building.
- Continuing to ensure that new residential and commercial construction is ready for the transition to electric vehicles by having parking stalls be pre-wired for electric vehicle charging (much of this work has already been advanced).
- Using parking policies to provide preferential access to zero emissions vehicles relative to private internal combustion engine vehicles.
- Working with the provincial government to implement policy that increases the supply of zero emissions vehicles and renewable fuels so that residents and businesses have the ability to choose those options.

**V. 2023-2026 Capital Plan: highlights**

**Low Carbon District Energy Systems:**

- The NEU has been in operation for 12 years, and certain assets (older energy transfer stations and initial boilers) will require maintenance or renewal.
- Expand the NEU distribution network by up to 1.7km.
- Connect up to 20 buildings to the NEU system.
- Commission 6.6MW of low carbon energy capacity via the sewage heat recovery expansion at the False Creek Energy Centre (see map below).
- Install 6MW of peaking capacity at a satellite energy centre location (see map below).



**Zero Emissions Buildings:**

- \$24 million of investment supporting zero emission building objectives, including:
  - Develop and implement City regulations to limit carbon pollution from existing buildings, focussing initially on large commercial and multi-family buildings as well as detached homes.
  - Expand supports such as incentives, deep emissions retrofit planning assistance and tools, with programs for detached homes, multi-family buildings (including non-market, rental, coop, and condominiums) and commercial buildings, with an emphasis on ensuring the benefits of these retrofits are shared by the building occupants.
  - Undertake public and industry education programming to grow awareness and capacity regarding heat pumps, deep emission retrofits and energy efficient operations through case studies, dialogues, how-to guides, installations at public facilities, etc.
  - Partner with housing and building associations, utilities, and non-profit organizations to undertake demonstration projects that advance best practice in low carbon construction and near zero emission retrofits with a focus on simultaneously increasing resilience to climate changes such as increasing heat waves and forest fire smoke.

**Zero Emissions Vehicles:**

- Provide funding and technical support, in partnership with BC Hydro, for EV chargers in 150-200 multi-family rental parking stalls per year (based on current pricing).

2023-2026 CAPITAL PLAN

VI. 2023-2026 Capital Plan for Renewable Energy: \$73 million cash

				Estimated outcomes (units)			City assets (\$M)		Non-city assets (\$M)	Overall (\$M)	Cash (\$M)			In-kind (\$M)	
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner		Subtotal
\$ million, except for unit outcomes															
Renewable energy															
Neighbourhood Energy Utility															
Generation															
New low carbon base load capacity for exisitng network (land); (\$3.5M)				-	5,000 sq.ft.	-									
New low carbon base load capacity for existing network (planning & design); (\$2.5M)				-	tbd	-	-	12	-	12	12	-	-	12	-
New peaking capacity for existing network; (\$4.0M)				-	6 MW	-									
New capacity for NEFC expansion; (\$1.8M)				-	tbd	-									
Distribution															
Expansion of existing distribution network; (\$11.7M)				-	1.7 km	-									
New service connections, including energy transfer stations; (\$7.0M)				-	20 cnxs	-	-	23	-	23	18	5	-	23	-
New distribution network for NEFC expansion; (\$2.0M)				-	0.3 km	-									
New service connections & ETSS for NEFC expansion; (\$2.2M)				-	6 cnxs	-									
Programs															
Maintenance & renewal of NEU assets; (\$4.6M)				-	-	-	5	4	-	8	8	-	-	8	-
System planning & overhead; (\$3.8M)				-	-	-									
Subtotal Neighbourhood Energy Utility							5	39	-	43	38	5	-	43	-
Community electrification															
Zero emission vehicles															
Off-street EV charging infrastructure for non-City buildings; (\$6.0M)				-	-	700 stalls <sup>2</sup>	-	-	6	6	6	-	-	6	-
Green buildings															
Energy retrofits for non-City buildings; (\$24.0M)				-	-	265,000 tCO	-	-	24	24	24	-	-	24	-
Subtotal Community electrification							-	-	30	30	30	-	-	30	-
Total Renewable energy							\$ 5	\$ 39	\$ 30	\$ 73	\$ 68	\$ 5	-	\$ 73	-



TECHNOLOGY

I. Overview

As cities continue to face increasing demands, technology has become a critical enabling component in the planning, design, implementation and delivery of City services. Technology can provide support to growth by digitizing services on scalable technology platforms that provide stability, security, resilience and cost optimization. Delivering products and services on these platforms enables the City to better serve the public, businesses and partners. In addition technology advancements in the area of enterprise data allows for enhanced decision making support.

II. Inventory of Assets

Information technology assets have relatively short lifespans and require frequent replacement when compared to most other City assets. In addition, the world of information technology changes rapidly and is invariably accompanied by a change in the way work is done or a service is offered.

	City Assets	Replacement Value	% in Good / Fair Condition	Partner Assets
Technology	<ul style="list-style-type: none"><li>~9,900 computers &amp; laptops</li><li>~850 infrastructure components</li><li>400+ software applications</li><li>300+ km's of fibre optic cable</li></ul>	~\$0.2B	~70%	<ul style="list-style-type: none"><li>#VanWiFi free public WiFi network at 590 locations throughout the city is comprised of assets deployed by our partners, Telus &amp; Shaw</li></ul>

The following table summarizes major work completed in the last 10 years (2013-2022) with regards to asset renewal and addition/upgrades.

	Renewed Assets	New/Upgraded Assets
Technology	<ul style="list-style-type: none"><li>~11,000 computers and electronic devices replaced based on lifecycle</li><li>Software applications renewed (includes SAP, online licences and permits, and online taxes and utility accounts software applications)</li><li>Hybrid data center program to locate copies of data outside seismic zone and reduce reliance on City Hall data centre</li></ul>	<ul style="list-style-type: none"><li>Major infrastructure upgrades including firewall and network equipment upgrades. VOIP phone system upgrades</li><li>Modern technology platforms - includes asset management (Hansen), IT service management (Service Now), GIS (ESRI), Open Data portal (Open Data Soft) and call centre management (Lagan) and Microsoft 365 platform</li><li>Updates to permits and licensing systems (Amanda and POSSE) and Tempest tax utilities billing system to support new licence and tax types e.g. Empty Homes Tax, Short Term Rentals business licence etc.</li><li>Software as a Service (SaaS) applications, including volunteer management (Better Impact), donations tracking (Raiser's Edge), recreation management (ActiveNet) social media management (Hootsuite), mobile apps (VanCollect, VanConnect, VanGolf) and public engagement software (TalkVancouver and Shape Your City)</li></ul>

III. Long-term Vision

As technology continues to be a critical enabler for City departments, the shared services model will continue to develop and evolve to ensure the smooth running and maintenance of critical infrastructure and applications coupled with flexible business models to enable the timely delivery of new technologies.

Technology Services will proactively partner with the City's business units to deliver strategic initiatives that support business objectives, identifying solutions to transform service delivery, increase operational efficiency, improve the availability of data for decision making and enhance the user experience for members of the public when interacting with the City over digital channels.

IV. Strategy for the Next 10 Years

The City's digital strategy (2013) laid the foundation to increase the technology maturity of the city. The 2019-2022 Capital Plan focussed on ensuring the resilience of core infrastructure and the introduction of an enterprise culture. Future Capital Plans will ensure that the technology core of the city is maintained, and that transformation in the back office and multichannel service delivery models continues. It is also a key goal to enhance the capabilities of our business units to leverage our digital platforms to transform how they use data to make decisions and deliver business services to staff and public alike. As data and connectivity improvements are delivered in the near term, the City will be enabled to adapt to the multiple emerging technologies on the horizon for the next decade such as the Internet of Things, Smart Mobility, Augmented and Virtual Reality, Machine Learning and Artificial Intelligence.

V. 2023-2026 Capital Plan: highlights

Major renewal projects include:

- M365 and power platform rollout
- Business enablement on modern digital platforms (Service Now, ESRI, M365)
- Upgrades to key support systems such as Lagan, SAP, Amanda, Tempest, Hansen, VanDocs, Posse
- Content Management System renewal
- End of Life infrastructure replacement for City of Vancouver, Vancouver Public Library and Vancouver Police Department

Major new/upgrade projects include:

- Hybrid data center program
- Cybersecurity tooling and network investment
- Enterprise Data and Analytics
- Operating Technologies and Critical Infrastructure Improvements

VI. 2023-2026 Capital Plan for Technology: \$110 million cash

						Estimated outcomes (units)			City assets (\$M)		Non-city	Overall	Cash (\$M)				In-kind
\$ million, except for unit outcomes						Existing	New	Non-City	Existing	New	assets (\$M)	(\$M)	City	Dev't.	Partner	Subtotal	(\$M)
Technology																	
Technology																	
Technology programs																	
Maintenance & upgrades of IT systems & infrastructure; (\$80.0M)						-	-	-	110	-	-	110	110	-	-	110	-
Technology transformation; (\$30.0M)						-	-	-									
Subtotal Technology									110	-	-	110	110	-	-	110	-
Total Technology									\$ 110	-	-	\$ 110	\$ 110	-	-	\$ 110	-

EMERGING PRIORITIES, CONTINGENCY & PROJECT DELIVERY

While the City prepares multi-year work programs for various service categories (e.g. affordable housing, community facilities, transportation), it is impossible to foresee all eventualities that will happen over the term of the Capital Plan.

For instance, there may be new funding programs at the Federal, Provincial or regional levels that may create opportunities to advance one or more City-led projects. Certain projects may be at varying stage of planning where further work is required to develop business case and funding strategy, as well as to secure strategic partnership and funding commitments from senior levels of government and multiple community partners and stakeholders. As part of the City’s prudent financial management strategy, \$70 million has been set aside to address tax-funded emerging priorities over the term of the Capital Plan. Priority will be given to projects related to renewal of critical infrastructure and amenities that receive partner funding from regional and/or senior levels of government and community partners.

\$20 million has been set aside for emerging priorities for climate adaptation to support the next phase of coastal adaptation work, environmental planning, and collaborations with Host Nations, to leverage senior government and partner funding opportunities. Possible works include seawall reconstruction, coastal adaptation planning, improving forest canopy (particularly in underserved neighbourhoods), ecological restoration and/or other adaptation projects.

The 2023-2026 Capital Plan was developed based on 2022 scope and cost estimates. Given the rapidly evolving economic landscape with persistently high inflation and rising interest rates, projects that receive approval to proceed in later stages of the Capital Plan could experience additional cost escalation or unforeseen scope changes. \$25 million has been set aside for contingencies to support tax-funded capital projects over the course of the Capital Plan. In addition, the City’s immediate focus will be on streamlining and expediting project delivery and rationalizing service levels to mitigate cost escalation risks and drive value and efficiencies.

Funding is also provided for project delivery support and overhead for the implementation of the \$3.5 billion Capital Plan, including planning, supply chain management, legal service, and cost associated with debenture issuance.

2023-2026 Capital Plan for Emerging priorities, contingency & project delivery: \$155 million cash

\$ million	Overall	Cash				In-kind
		City	Dev't	Partner	Subtotal	
Senior government partnerships and/or other emerging priorities	70	70	-	-	70	-
Emerging climate adaptation priorities	20	20	-	-	20	-
Contingency	25	25	-	-	25	-
Delivery	39	36	3	-	39	-
Overall	155	152	3	-	155	-



2023-2026 CAPITAL PLAN  
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Overall

\$ million	City assets		Non-City assets	Overall	Cash				In-kind
	Existing	New			City	Dev't.	Partner	Subtotal	
Housing	17	498	102	617	84	186	12	282	335
Childcare	11	102	23	136	11	57	11	79	58
Parks & public open spaces	94	118	-	211	72	129	-	201	10
Arts, culture & heritage	31	96	23	151	94	24	1	119	32
Community facilities	183	198	11	391	191	60	6	257	134
Public safety	71	34	-	105	99	6	-	105	-
Civic facilities & equipment	41	16	-	57	57	-	-	57	-
Streets	304	167	-	471	196	90	82	368	103
Water, sewers & drainage	783	91	-	874	537	303	-	840	35
Waste collection, diversion & disposal	135	6	-	141	128	-	13	141	-
Renewable energy	5	39	30	73	68	5	-	73	-
Technology	110	-	-	110	110	-	-	110	-
Emerging priorities, contingency & project c	126	29	-	155	152	3	-	155	-
Overall	1,909	1,393	189	3,492	1,800	862	124	2,786	706
Debt	644	91	-	735	735	-	-	735	-
Pay-as-you-go	836	132	49	1,017	774	131	113	1,017	-
Reserves	341	603	90	1,034	292	732	11	1,034	-
In-kind	89	567	50	706	-	-	-	-	706
	a	b	c	d=a+b+c d=h+i	e	f	g	h=e+f+g	i

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Housing												
\$ million, except for unit outcomes	Estimated outcomes (units)			City assets (\$M)		Non-City assets (\$M)	Overall (\$M)	Cash (\$M)			In-kind (\$M)	
	Existing	New	Non-City	Existing	New			City	Dev't.	Partner		Subtotal
Housing												
Land acquisition												
Land acquisition program												
New land for social housing projects; (\$60.0M)												
	-	400 units	-	-	60	-	60	-	60	-	60	-
New land for supportive housing; (\$50.0M)												
	-	400 units	-	-	50	-	50	-	50	-	50	-
Demolition & other land preparation costs; (\$12.0M)												
	-	-	-	-	12	-	12	-	12	-	12	-
Land (in-kind)												
New land for social housing from development (in-kind); (\$ -)												
	-	700 units	-	-	-	-	-	-	-	-	-	-
Subtotal Land acquisition												
				-	122	-	122	-	122	-	122	-
Low-income housing												
Shelters												
Shelter program; (\$12.0M)												
	-	-	-	-	12	-	12	-	12	-	12	-
SROs												
SRO upgrade program; (\$2.0M)												
	-	-	50 units	-	-	2	2	-	2	-	2	-
SRO replacement strategy; (\$24.0M)												
	-	-	-	-	24	-	24	12	-	12	24	-
Supportive housing												
Relocation of City-owned modular housing from 220 Terminal; (\$3.0M)												
	-	-	-	3	-	-	3	3	-	-	3	-
Other projects												
Replacement & preservation affordability of City operated units; (\$10.0M)												
	130 units	-	-	10	-	-	10	5	5	-	10	-
Subtotal Low-income housing												
				13	36	2	51	20	19	12	51	-
Non-market housing												
Projects (in-kind)												
New units delivered by development (in-kind); (\$300.0M)												
	-	725 units	-	-	300	-	300	-	-	-	-	300
Programs												
Predevelopment funding program for housing projects on City-land; (\$35.0M)												
	-	-	-	-	35	-	35	-	35	-	35	-
Grants to support new or redeveloped Partner units; (\$65.0M)												
	-	-	600 units	-	-	65	65	60	5	-	65	-
Subtotal Non-market housing												
				-	335	65	400	60	40	-	100	300
Purpose built rental housing												
Projects												
New secured below market rental units (in-kind, non-city); (\$3.5M)												
	-	-	-	-	-	4	4	-	-	-	-	4
New secured market rental units (in-kind, non-city); (\$31.5M)												
	-	-	-	-	-	32	32	-	-	-	-	32
Subtotal Purpose built rental housing												
				-	-	35	35	-	-	-	-	35
Programs												
Housing facility programs												
Planning & studies - Housing; (\$4.5M)												
	-	-	-	-	5	-	5	-	5	-	5	-
Capital maintenance & renovations - Housing; (\$4.3M)												
	-	-	-	4	-	-	4	4	-	-	4	-
Subtotal Programs												
				4	5	-	9	4	5	-	9	-
Total Housing												
				\$ 17	\$ 498	\$ 102	\$ 617	\$ 84	\$ 186	\$ 12	\$ 282	\$ 335

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Childcare

				Estimated outcomes (units)			City assets (\$M)		Non-City	Overall (\$M)	Cash (\$M)				In-kind
				Existing	New	Non-City	Existing	New	assets (\$M)		City	Dev't.	Partner	Subtotal	(\$M)
\$ million, except for unit outcomes															
Childcare															
Full day care (0-4 years old)															
Projects															
Childcare - RayCam - renewal & expansion of full day (0-4) spaces; (\$31.1M)				40 spaces	108 spaces	-	8	23	-	31	8	19	4	31	-
Childcare - West End Centre renewal - new full day (0-4) spaces, design; (\$1.0M)				-	74 spaces	-	-	1	-	1	-	1	-	1	-
Childcare - Vancouver Aquatic Centre - new full day (0-4) spaces (potential); (\$15.9M)				-	74 spaces	-	-	16	-	16	-	13	3	16	-
Childcare - Future projects - new full day (0-4) spaces (tbd); (\$15.9M)				-	74 spaces	-	-	16	-	16	-	13	3	16	-
Projects (in-kind)															
Childcare - St. Paul's Hospital (Phase 1) (in-kind, non-city) - new full day (0-4) spaces; (\$11.8M)				-	-	49 spaces	-	-	10	10	-	-	-	-	10
Childcare - 1444 Alberni St. (in-kind) - new full day (0-4) spaces; (\$11.8M)				-	56 spaces	-	-	12	-	12	-	-	-	-	12
Childcare - 1940 Main St. (in-kind) - new full day (0-4) spaces; (\$7.8M)				-	37 spaces	-	-	8	-	8	-	-	-	-	8
Childcare - 1157 Burrard St. (in-kind) - new full day (0-4) spaces; (\$7.8M)				-	37 spaces	-	-	8	-	8	-	-	-	-	8
Childcare - 427-477 West 49th Ave. (in-kind) - new full day (0-4) spaces; (\$7.8M)				-	37 spaces	-	-	8	-	8	-	-	-	-	8
Childcare - 5812-5844 Cambie St. (in-kind) - new full day (0-4) spaces; (\$7.8M)				-	37 spaces	-	-	8	-	8	-	-	-	-	8
Other															
Conversion of part-day spaces to full day (0-4) care; (\$600K)				-	64 spaces	-	1	-	-	1	-	1	-	1	-
Grants to support new full day (0-4) Partner spaces; (\$5.4M)				-	-	100 spaces	-	-	5	5	-	5	-	5	-
Subtotal Full day care (0-4 years old)							9	99	16	123	8	51	10	70	53
Part day care (0-4 years old)															
Projects															
New part day (0-4) spaces delivered by the City; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Projects (in-kind)															
Childcare - St. Paul's Hospital, Phase 1 (in-kind, non-city) - new part day (0-4) spaces; (\$400K)				-	-	20 spaces	-	-	4	4	-	-	-	-	4
Other															
Grants to support part day (0-4) childcare spaces; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Part day care (0-4 years old)							-	-	4	4	-	-	-	-	4
School age (5-12 years old)															
Projects															
Childcare - RayCam - renewal school age (5-12) childcare spaces; (\$300K)				55 spaces	5 spaces	-	0	0	-	0	0	0	-	0	-
New school age (5-12) spaces delivered by the City; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Projects (in-kind)															
New school age (5-12) spaces delivered by development; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Other															
Grants to support new school age (5-12) Partner spaces; (\$3.0M)				-	-	60 spaces	-	-	3	3	-	2	1	3	-
Subtotal School age (5-12 years old)							0	0	3	3	0	2	1	3	-
Programs															
Childcare facility programs															
Capital maintenance - Childcare; (\$600K)				-	-	-	1	-	-	1	1	-	-	1	-
Renovations - Childcare; (\$900K)				-	-	-	1	-	-	1	1	-	-	1	-
Planning & studies - Childcare; (\$3.5M)				-	-	-	-	4	-	4	-	4	-	4	-
Small capital grants for non-City owned childcares; (\$400K)				-	-	-	-	-	0	0	0	-	-	0	-
Subtotal Programs							2	4	0	5	2	4	-	5	-
Total Childcare							\$ 11	\$ 102	\$ 23	\$ 136	\$ 11	\$ 57	\$ 11	\$ 79	\$ 58

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Park and public open spaces

				Estimated outcomes (units)			City assets (\$M)		Non-City	Overall (\$M)	Cash (\$M)			In-kind	
				Existing	New	Non-City	Existing	New	assets (\$M)		City	Dev't.	Partner	Subtotal	(\$M)
\$ million, except for unit outcomes															
Parks & public open spaces															
Park land															
Land acquired by City															
New land for parks; (\$22.5M)				-	0.35 ha	-	-	23	-	23	-	23	-	-	
Land transferred to City by development (in-kind)															
New park land in East Fraser Lands (in-kind); (\$ -)				-	3.3 ha	-	-	-	-	-	-	-	-	-	
New park land at Pearson-Dogwood site (in-kind); (\$ -)				-	1.4 ha	-	-	-	-	-	-	-	-	-	
New park land at Oakridge Centre site (in-kind); (\$ -)				-	0.9 ha	-	-	-	-	-	-	-	-	-	
New park land at Little Mountain site (in-kind); (\$ -)				-	0.2 ha	-	-	-	-	-	-	-	-	-	
New park land at Alberni & Nicola Streets (in-kind); (\$ -)				-	0.1 ha	-	-	-	-	-	-	-	-	-	
Subtotal Park land							-	23	-	23	-	23	-	-	
Seawall & waterfront															
Seawall & shoreline															
Maintenance / repairs of seawall or shoreline; (\$4.5M)				-	-	-	5	-	-	5	5	-	-	5	-
Upgrades to existing seawall or shoreline; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
New section of seawall or shoreline in East Fraser Lands (in-kind); (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
New section of seawall or shoreline in Northeast False Creek (in-kind); (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Seawall / shoreline planning; (\$7.0M)				-	-	-	2	5	-	7	4	4	-	7	-
Deconstruction Creekside Expo deck (initial phases); (\$1.0M)				-	-	-	1	-	-	1	1	-	-	1	-
Waterfront walkway-bikeway															
Upgrades to waterfront-walkway bikeway; (\$2.0M)				1-2 km	-	-	2	-	-	2	1	2	-	2	-
New waterfront walkway-bikeway in East Fraser Lands (in-kind); (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
New waterfront walkway-bikeway in Northeast False Creek (in-kind); (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Marine structures															
Maintenance / repairs of marine structures; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Renewal of marine structures; (\$1.0M)				1 structure	-	-	1	-	-	1	1	-	-	1	-
New marine structures; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Seawall & waterfront							11	5	-	16	11	5	-	16	-
Urban forest & natural areas															
Urban forest															
Street trees - replacement; (\$5.0M)				~9,000 trees	-	-	5	-	-	5	5	-	-	5	-
Street trees - new; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Park trees - replacement; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Park trees - new; (\$2.5M)				~2,500 trees	-	-	-	3	-	3	-	3	-	3	-
Forest management/enhancement program; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Tree planting program on private land; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Natural areas															
Convert park land to healthy habitat; (\$5.5M)				-	-	-	6	-	-	6	2	4	-	6	-
Urban agriculture															
Local food assets; (\$360K)				-	-	-	-	0	-	0	-	0	-	0	-
Subtotal Urban forest & natural areas							11	3	-	13	7	7	-	13	-

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Park and public open spaces (continued)

				Estimated outcomes (units)			City assets (\$M)		Non-City	Overall (\$M)	Cash (\$M)				In-kind (\$M)
				Existing	New	Non-City	Existing	New	assets (\$M)		City	Dev't.	Partner	Subtotal	
\$ million, except for unit outcomes															
Parks & public open spaces															
Park amenities															
New parks															
Expansion of W.C. Shelly Park (phase 1); (\$3.7M)				-	0.15 ha	-	-	4	-	4	-	4	-	4	-
Expansion of Burrard Slopes Park (phase 1); (\$12.0M)				-	0.5 ha	-	-	12	-	12	-	12	-	12	-
New 'East Park' in Southeast False Creek (phase 1); (\$16.8M)				-	-	-	-	17	-	17	-	17	-	17	-
New park at Alberni & Nicola; (\$3.0M)				-	0.085 ha	-	-	3	-	3	-	3	-	3	-
New parks in East Fraser Land; (\$5.4M)				-	-	-	-	5	-	5	-	5	-	5	-
New parks at Pearson-Dogwood site; (\$3.9M)				-	-	-	-	4	-	4	-	4	-	4	-
New 'wedge park' at Little Mountain site; (\$250K)				-	0.21 ha	-	-	0	-	0	-	0	-	0	-
New park at Oakridge Centre (phase 1, in-kind); (\$10.0M)				-	3.6 ha	-	-	10	-	10	-	-	-	-	10
Expansion of Delamont Park (phase 1); (\$1.9M)				-	-	-	-	2	-	2	-	2	-	2	-
Existing parks															
Park renewal program; (\$6.3M)				1 - 2 parks	-	-	6	-	-	6	5	1	-	6	-
Yaletown Park redevelopment; (\$4.0M)				0.14 ha	-	-	4	-	-	4	-	4	-	4	-
West End waterfront parks (phase 1 implementation); (\$10.0M)				-	-	-	10	-	-	10	-	10	-	10	-
Playgrounds & spray parks															
Renewal & upgrades of playgrounds & spray parks; (\$6.0M)				8 - 10 projects	-	-	6	-	-	6	4	2	-	6	-
New playgrounds & spray parks; (\$1.3M)				-	1 spray park	-	-	1	-	1	-	1	-	1	-
Sport courts & skate parks															
Renewal & upgrades of sport courts & skate parks; (\$2.4M)				2 - 4 projects	-	-	2	-	-	2	1	1	-	2	-
New sport courts & skate parks; (\$1.3M)				-	1 - 2 projects	-	-	1	-	1	-	1	-	1	-
Ball diamonds & playfields															
Renewal & upgrades of ball diamonds & playfields; (\$3.6M)				6 - 12 projects	-	-	4	-	-	4	3	0	-	4	-
New ball diamonds & playfields; (\$3.3M)				-	1 - 2 projects	-	-	3	-	3	-	3	-	3	-
Other sports amenities															
New track & field facility; (\$10.7M)				-	1 facility	-	-	11	-	11	-	11	-	11	-
Dog off-leash areas															
Renewal of dog off-leash areas; (\$500K)				1 project	-	-	1	-	-	1	1	-	-	1	-
New dog off-leash areas; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Upgrades dog off-leash area at Emery Barnes Park; (\$900K)				1 project	-	-	1	-	-	1	-	1	-	1	-
Other amenities															
Renewal of other amenities; (\$750K)				-	-	-	1	-	-	1	1	-	-	1	-
New other amenities; (\$667K)				-	-	-	-	1	-	1	-	1	-	1	-
Park planning															
Planning & studies - Parks; (\$1.5M)				-	-	-	-	2	-	2	1	1	-	2	-
Subtotal Park amenities							34	76	-	110	16	84	-	100	10



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Park and public open spaces (continued)

				Estimated outcomes (units)			City assets (\$M)		Non-City assets (\$M)	Overall (\$M)	Cash (\$M)				In-kind (\$M)
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner	Subtotal	
\$ million, except for unit outcomes															
Parks & public open spaces															
Park buildings, infrastructure & vehicles															
Park buildings															
Renovations - Park buildings; (\$5.0M)				5 - 7 projects	-	-	5	-	-	5	3	3	-	5	-
Capital maintenance - Park buildings; (\$5.0M)				-	-	-	5	-	-	5	5	-	-	5	-
New park buildings; (\$3.3M)				-	2 - 3 projects	-	-	3	-	3	-	3	-	3	-
Park pathways															
Maintenance & renewal of park pedestrian infrastructure; (\$2.5M)				-	-	-	3	-	-	3	3	-	-	3	-
Universal access improvements to park pedestrian infrastructure; (\$1.0M)				-	-	-	1	-	-	1	1	1	-	1	-
New pedestrian infrastructure; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Park roads & parking lots															
Maintenance & renewal of park vehicular infrastructure; (\$2.5M)				-	-	-	3	-	-	3	3	-	-	3	-
Park infrastructure															
Maintenance, upgrading & renewal of park electrical & water infrastructure; (\$3.3M)				-	-	-	3	-	-	3	3	0	-	3	-
Stanley Park cliff maintenance (Prospect Pt.- 3rd Beach); (\$500K)				2.0 km	-	-	1	-	-	1	1	-	-	1	-
New park electrical & water infrastructure; (\$4.0M)				-	-	-	-	4	-	4	-	4	-	4	-
Potable water reduction/reuse program; (\$2.0M)				2 projects	-	-	2	-	-	2	2	-	-	2	-
Park vehicles & equipment															
Renewal of vehicles & equipment - Parks; (\$13.2M)				75 vehicles	-	-	13	-	-	13	13	-	-	13	-
Electrification of vehicles & equipment - Parks; (\$3.4M)				48 vehicles	-	-	3	-	-	3	3	-	-	3	-
New vehicles & equipment - Parks; (\$3.1M)				-	60 vehicles	-	-	3	-	3	3	-	-	3	-
Subtotal Park buildings, infrastructure & vehicles							38	10	-	49	38	11	-	49	-
Decolonization, arts & culture															
Decolonization & policy development															
Co-management framework; (\$200K)				-	-	-	-	0	-	0	0	-	-	0	-
Cultural visibility on the land; (\$300K)				-	-	-	-	0	-	0	0	-	-	0	-
Decolonization strategy; (\$500K)				-	-	-	-	1	-	1	1	-	-	1	-
Subtotal Decolonization, arts & culture							-	1	-	1	1	-	-	1	-
Total Parks & public open spaces							\$ 94	\$ 118	-	\$ 211	\$ 72	\$ 129	-	\$ 201	\$ 10

2023-2026 CAPITAL PLAN  
SUMMARY

Arts, culture & heritage

				Estimated outcomes (units)			City assets (\$M)		Non-City	Overall (\$M)	Cash (\$M)				In-kind
				Existing	New	Non-City	Existing	New	assets (\$M)		City	Dev't.	Partner	Subtotal	(\$M)
\$ million, except for unit outcomes															
Arts, culture & heritage															
Cultural facilities															
Projects															
Historic Joy Kogawa House renewal; (\$1.4M)				-	-	-	1	-	-	1	0	-	1	1	-
FireHall Theatre renewal & expansion, detailed design; (\$700K)				3,000 sq.ft.	4,200 sq.ft.	-	1	-	-	1	1	-	-	1	-
Projects (in-kind)															
New artist studios at 5910-5998 Cambie (in-kind); (\$6.1M)				-	10,100 sq.ft.	-	-	6	-	6	-	-	-	-	6
New cultural hub at Burrard & Davie (in-kind); (\$15.6M)				-	15,800 sq.ft.	-	-	16	-	16	-	-	-	-	16
New music presentation Centre at the Plaza of Nations (in-kind, non-City); (\$ -)				-	-	20,000 sq.ft.	-	-	-	-	-	-	-	-	-
Grants															
Cultural capital grant program; (\$5.0M)				-	-	-	-	-	5	5	5	-	-	5	-
Chinatown cultural partnership grants; (\$1.0M)				-	-	-	-	-	1	1	1	-	-	1	-
Programs															
Capital maintenance - Cultural facilities; (\$16.0M)				-	-	-	16	-	-	16	16	-	-	16	-
Renovations - Cultural facilities; (\$1.0M)				-	-	-	1	-	-	1	1	-	-	1	-
Civic theatre upgrades; (\$2.0M)				-	-	-	2	-	-	2	2	-	-	2	-
Planning & studies - Cultural facilities; (\$400K)				-	-	-	-	0	-	0	0	-	-	0	-
Subtotal Cultural facilities							21	22	6	49	27	-	1	28	22
Entertainment & exhibition															
Projects															
PNE Amphitheatre renewal & expansion; (\$59.0M)				-	-	-	-	59	-	59	59	-	-	59	-
PNE infrastructure renewal & upgrades; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Programs															
Capital maintenance - Entertainment & exhibition; (\$5.2M)				-	-	-	5	-	-	5	5	-	-	5	-
Renovations - Entertainment & exhibition; (\$300K)				-	-	-	0	-	-	0	0	-	-	0	-
Subtotal Entertainment & exhibition							6	59	-	65	65	-	-	65	-
Public art															
Programs															
New public art delivered by the City; (\$5.0M)				-	-	-	-	5	-	5	-	5	-	5	-
New public art delivered by development (in-kind); (\$10.0M)				-	-	-	-	10	-	10	-	-	-	-	10
Maintenance of Public Art; (\$2.0M)				-	-	-	2	-	-	2	1	1	-	2	-
Subtotal Public art							2	15	-	17	1	6	-	7	10
Heritage															
Grants															
Heritage Incentive Program; (\$15.0M)				-	-	-	-	-	15	15	-	15	-	15	-
Heritage Facade Program; (\$1.2M)				-	-	-	-	-	1	1	1	-	-	1	-
Grant to Heritage Foundation; (\$1.2M)				-	-	-	-	-	1	1	1	-	-	1	-
Projects															
Chinatown Memorial Square redesign; (\$2.5M)				-	-	-	3	-	-	3	-	3	-	3	-
Subtotal Heritage							3	-	17	20	2	18	-	20	-
Total Arts, culture & heritage							\$ 31	\$ 96	\$ 23	\$ 151	\$ 94	\$ 24	\$ 1	\$ 119	\$ 32

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Community facilities

				Estimated outcomes (units)			City assets (\$M)		Non-City assets (\$M)	Overall (\$M)	Cash (\$M)				In-kind (\$M)
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner	Subtotal	
\$ million, except for unit outcomes															
Community facilities															
Libraries															
Projects															
Joe Fortes Branch Library - renewal & expansion, design; (\$2.0M)				4,500 sq.ft.	10,000 sq.ft.	-	1	1	-	2	1	1	-	2	-
Renovation of Central Children's Library; (\$3.5M)				-	-	-	4	-	-	4	-	-	4	4	-
Renovation of Central Library Level 2 & 3; (\$2.5M)				-	-	-	3	-	-	3	-	-	3	3	-
Oakridge Library: furniture, equipment + collection; (\$2.4M)				-	-	-	-	2	-	2	-	2	-	2	-
Programs															
Capital maintenance - Libraries; (\$5.8M)				-	-	-	6	-	-	6	6	-	-	6	-
Renovations - Libraries; (\$700K)				-	-	-	1	-	-	1	1	-	-	1	-
Subtotal Libraries							14	3	-	17	8	3	6	17	-
Archives															
Projects															
Interim rehabilitation / renovation of Archive facilities; (\$4.0M)				-	-	-	4	-	-	4	4	-	-	4	-
Programs															
Capital maintenance - Archives; (\$500K)				-	-	-	1	-	-	1	1	-	-	1	-
Renovations - Archives; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Archives							5	-	-	5	5	-	-	5	-
Recreation facilities															
Projects															
RayCam Community Centre - renewal & expansion; (\$49.0M)				27,250 sq.ft.	12,750 sq.ft.	-	33	16	-	49	33	16	-	49	-
West End Community Centre - renewal & expansion, design; (\$3.1M)				37,800 sq.ft.	24,200 sq.ft.	-	1	2	-	3	1	2	-	3	-
West End Ice Rink - renewal & expansion, design; (\$1.5M)				18,000 sq.ft.	18,000 sq.ft.	-	1	1	-	2	1	1	-	2	-
Vancouver Aquatic Centre - renewal & expansion; (\$140.0M)				65,000 sq.ft.	tbd	-	103	37	-	140	103	37	-	140	-
Projects (in-kind)															
New North East False Creek Community centre (in-kind); (\$41.7M)				-	40,000 sq.ft.	-	-	42	-	42	-	-	-	-	42
New North East False Creek Ice rink (in-kind); (\$25.0M)				-	31,000 sq.ft.	-	-	25	-	25	-	-	-	-	25
New East Fraser Lands Community Centre (in-kind); (\$47.0M)				-	36,000 sq.ft.	-	-	47	-	47	-	-	-	-	47
Programs															
Capital maintenance - Recreation facilities; (\$19.1M)				-	-	-	19	-	-	19	19	-	-	19	-
Renovations - Recreation facilities; (\$2.3M)				-	-	-	2	-	-	2	2	-	-	2	-
Subtotal Recreation facilities							160	169	-	329	160	55	-	215	114

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SUMMARY

Community facilities (continued)

\$ million, except for unit outcomes				Estimated outcomes (units)			City assets (\$M)		Non-City assets (\$M)	Overall (\$M)	Cash (\$M)				In-kind (\$M)
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner	Subtotal	
Community facilities															
Social facilities															
Projects															
New social/cultural space in West End Community Hub, design; (\$1.0M)				-	20,000 sq.ft.	-	-	1	-	1	-	1	-	-	
Neighbourhood house capital project grants; (\$5.0M)				-	-	-	-	-	5	5	5	-	-	5	-
Projects (in-kind)															
Youth Centre at 5812 Cambie (in-kind); (\$8.0M)				-	-	-	-	8	-	8	-	-	-	-	8
Grants															
Social capital grant program; (\$1.1M)				-	-	-	-	-	1	1	1	-	-	1	-
Downtown Eastside capital grant programs; (\$4.5M)				-	-	-	-	-	5	5	5	-	-	5	-
Programs															
Capital maintenance - Social facilities; (\$2.9M)				-	-	-	3	-	-	3	3	-	-	3	-
Renovations - Social facilities; (\$1.4M)				-	-	-	1	-	-	1	1	-	-	1	-
Planning & studies - Social facilities; (\$4.0M)				-	-	-	-	4	-	4	4	-	-	4	-
Subtotal Social facilities															
							4	13	11	28	19	1	-	20	8
Non-profit office space															
Projects															
New non-profit office space at 5740 Cambie (in-kind); (\$12.4M)				-	14,500 sq.ft.	-	-	12	-	12	-	-	-	-	12
Subtotal Non-profit office space															
							-	12	-	12	-	-	-	-	12
Cemetery															
Programs															
Maintenance & upgrades of cemetery facilities; (\$1.0M)				-	-	-	1	-	-	1	1	-	-	1	-
Subtotal Cemetery															
							1	-	-	1	1	-	-	1	-
Total Community facilities															
							\$ 183	\$ 198	\$ 11	\$ 391	\$ 191	\$ 60	\$ 6	\$ 257	\$ 134

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Public safety

				Estimated outcomes (units)			City assets (\$M)		Non-City assets (\$M)	Overall (\$M)	Cash (\$M)				In-kind (\$M)
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner	Subtotal	
\$ million, except for unit outcomes															
Public safety															
Fire & rescue															
Projects															
West End fire hall (FH#6) - renewal & expansion, design; (\$1.5M)				7,676 sq.ft.	10,000 sq.ft.	-	1	1	-	2	1	1	-	2	-
Downtown South fire hall (FH#8) - renewal & expansion; (\$35.6M)				7,700 sq.ft.	10,300 sq.ft.	-	15	20	-	36	31	5	-	36	-
Programs															
Capital maintenance - Fire & rescue; (\$1.5M)				-	-	-	2	-	-	2	2	-	-	2	-
Renovations - Fire & rescue; (\$700K)				-	-	-	1	-	-	1	1	-	-	1	-
Renewal of vehicles & equipment - VFRS; (\$11.4M)				15 vehicles	-	-	11	-	-	11	11	-	-	11	-
Electrification of vehicles & equipment - VFRS; (\$200K)				10 vehicles	-	-	0	-	-	0	0	-	-	0	-
New vehicles & equipment - VFRS; (\$4.7M)				-	10 vehicles	-	-	5	-	5	5	-	-	5	-
Subtotal Fire & rescue							30	26	-	56	50	6	-	56	-
Police															
Projects															
VPD Headquarters - planning & scoping; (\$1.0M)				-	-	-	-	1	-	1	1	-	-	1	-
Programs															
Capital maintenance - Police; (\$5.6M)				-	-	-	6	-	-	6	6	-	-	6	-
Renovations - Police; (\$1.9M)				-	-	-	2	-	-	2	2	-	-	2	-
Renewal of vehicles & equipment - VPD; (\$15.5M)				170 vehicles	-	-	16	-	-	16	16	-	-	16	-
Electrification of vehicles & equipment - VPD; (\$3.4M)				45 vehicles	-	-	3	-	-	3	3	-	-	3	-
New vehicles & equipment - VPD; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Police							26	1	-	27	27	-	-	27	-
Animal control															
Projects															
Animal Control Centre renewal & expansion; (\$22.0M)				16,000 sq.ft.	8,000 sq.ft.	-	15	7	-	22	22	-	-	22	-
Programs															
Capital maintenance - Animal control; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Renovations - Animal control; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Animal control							15	7	-	22	22	-	-	22	-
Total Public safety							\$ 71	\$ 34	-	\$ 105	\$ 99	\$ 6	-	\$ 105	-



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Civic facilities & equipment

				Estimated outcomes (units)			City assets (\$M)		Non-City	Overall	Cash (\$M)			In-kind	
\$ million, except for unit outcomes				Existing	New	Non-City	Existing	New	assets (\$M)	(\$M)	City	Dev't.	Partner	Subtotal	(\$M)
Civic facilities & equipment															
Administrative facilities															
Programs															
Capital maintenance - Administrative facilities; (\$5.1M)				-	-	-	5	-	-	5	5	-	-	5	-
Renovations - Administrative facilities; (\$5.6M)				-	-	-	6	-	-	6	6	-	-	6	-
Subtotal Administrative facilities							11	-	-	11	11	-	-	11	-
Service yards															
Projects															
Sunset Yard renewal, phase two detailed design; (\$2.0M)				-	-	-	2	-	-	2	2	-	-	2	-
Programs															
Capital maintenance - Service yards; (\$4.2M)				-	-	-	4	-	-	4	4	-	-	4	-
Renovations - Service yards; (\$1.6M)				-	-	-	2	-	-	2	2	-	-	2	-
Subtotal Service yards							8	-	-	8	8	-	-	8	-
Vehicles & equipment															
Programs															
Renewal of vehicles & equipment - Other; (\$1.0M)				5 vehicles	-	-	1	-	-	1	1	-	-	1	-
Electrification of vehicles & equipment - Other; (\$800K)				15 vehicles	-	-	1	-	-	1	1	-	-	1	-
New vehicles & equipment - Other; (\$500K)				-	30 vehicles	-	-	1	-	1	1	-	-	1	-
Subtotal Vehicles & equipment							2	1	-	2	2	-	-	2	-
All City facilities															
Programs															
Planning, studies, project management & other support - All city facilities; (\$18.0M)				-	-	-	3	16	-	18	18	-	-	18	-
Energy optimization program; (\$8.0M)				-	-	-	8	-	-	8	8	-	-	8	-
Facility resilience & improvement programs; (\$10.0M)				-	-	-	10	-	-	10	10	-	-	10	-
Subtotal All City facilities							21	16	-	36	36	-	-	36	-
Total Civic facilities & equipment							\$ 41	\$ 16	-	\$ 57	\$ 57	-	-	\$ 57	-

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Streets

				Estimated outcomes (units)			City assets (\$M)		Non-City assets (\$M)	Overall (\$M)	Cash (\$M)				In-kind (\$M)
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner	Subtotal	
\$ million, except for unit outcomes															
Streets															
Building a resilient network															
Bridges & structures															
Granville Bridge rehabilitation & seismic upgrades; (\$45.0M)				-	-	-	45	-	-	45	27	-	18	45	-
Cambie Bridge rehabilitation & seismic upgrades; (\$30.0M)				-	-	-	30	-	-	30	18	-	12	30	-
General bridge rehabilitation program; (\$3.8M)				-	-	-	4	-	-	4	4	-	-	4	-
Retaining wall & slope rehabilitation; (\$1.0M)				-	-	-	1	-	-	1	1	-	-	1	-
Street lighting															
Street lighting rehabilitation; (\$27.3M)				3,000 lights	-	-	27	-	-	27	25	-	3	27	-
H-frame replacement; (\$6.0M)				8 blocks	-	-	6	-	-	6	6	-	-	6	-
Trolley pole replacement; (\$5.5M)				400 poles	-	-	6	-	-	6	6	-	-	6	-
New street lighting; (\$1.0M)				-	100 lights	-	-	1	-	1	-	1	-	1	-
New & upgraded street lighting delivered through development (in-kind); (\$16.0M)				160 lights	1,440 lights	-	2	14	-	16	-	-	-	-	16
Pavement rehabilitation															
Major road network rehabilitation; (\$22.5M)				15 cen-km	-	-	23	-	-	23	-	-	23	23	-
Arterial road rehabilitation; (\$19.0M)				10 cen-km	-	-	19	-	-	19	19	-	-	19	-
Local roads rehabilitation; (\$10.0M)				22 cen-km	-	-	10	-	-	10	10	-	-	10	-
Design investigation - streets & structures; (\$1.4M)				-	-	-	1	-	-	1	1	-	-	1	-
Sidewalks & pathways															
Sidewalks rehabilitation; (\$5.0M)				900 panels	-	-	5	-	-	5	5	-	-	5	-
Traffic signals															
Signal rehabilitation; (\$26.0M)				50 signals	-	-	26	-	-	26	18	-	8	26	-
New signals; (\$8.4M)				-	16 signals	-	-	8	-	8	-	7	2	8	-
New & upgraded signals delivered through development (in-kind); (\$17.0M)				4 signals	32 signals	-	2	15	-	17	-	-	-	-	17
Vehicles & equipment															
Renewal of vehicles & equipment - Streets; (\$20.6M)				105 vehicles	-	-	21	-	-	21	21	-	-	21	-
Electrification of vehicles & equipment - Streets; (\$4.6M)				85 vehicles	-	-	5	-	-	5	5	-	-	5	-
New vehicles & equipment - Streets; (\$1.0M)				-	55 vehicles	-	-	1	-	1	1	-	-	1	-
Subtotal Building a resilient network							231	40	-	271	166	8	65	238	33

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SUMMARY

Streets (continued)

				Estimated outcomes (units)			City assets (\$M)		Non-City	Overall (\$M)	Cash (\$M)				In-kind (\$M)
				Existing	New	Non-City	Existing	New	assets (\$M)		City	Dev't.	Partner	Subtotal	
\$ million, except for unit outcomes															
Streets															
Improving mobility															
Transit integration & reliability															
Rapid transit office; (\$6.9M)				-	-	-	-	7	-	7	-	5	2	7	-
Bus transit improvements; (\$5.0M)				-	-	-	-	5	-	5	2	2	2	5	-
Active transportation corridors & complete streets															
Active transportation & complete streets; (\$38.4M)				-	20 km	-	-	38	-	38	-	29	10	38	-
New sidewalks; (\$4.9M)				-	1.9 km	-	-	5	-	5	-	4	1	5	-
Transportation planning & monitoring; (\$12.0M)				-	-	-	-	12	-	12	3	9	-	12	-
Street improvements delivered through development (in-kind); (\$70.0M)				16.0 km	4.0 km	-	56	14	-	70	-	-	-	-	70
Transportation safety & accessibility															
School program; (\$3.0M)				-	-	-	-	3	-	3	-	3	-	3	-
At-grade rail crossings; (\$5.0M)				8 xings	-	-	-	5	-	5	-	4	1	5	-
Arterial & construction management; (\$2.0M)				-	-	-	-	2	-	2	-	2	-	2	-
Transportation safety; (\$2.0M)				-	20 fl. beacons	-	-	2	-	2	-	2	-	2	-
Ferry docks; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Neighbourhood transportation															
Neighbourhood traffic management & spot improvements; (\$2.0M)				-	8 projects	-	-	2	-	2	-	2	1	2	-
Pedestrian curb ramps; (\$4.0M)				-	400 ramps	-	-	4	-	4	-	3	1	4	-
Subtotal Improving mobility															
							56	99	-	155	5	64	17	85	70
Supporting public life															
Streetscape amenities															
Horticulture; (\$1.0M)				-	-	-	-	1	-	1	1	-	-	1	-
Street furniture & bike racks; (\$500K)				-	-	-	-	1	-	1	1	-	-	1	-
Public realm electrification; (\$4.3M)				-	-	-	-	4	-	4	4	-	-	4	-
Public realm EV charging infrastructure; (\$4.3M)				-	-	-	-	4	-	4	4	-	-	4	-
Washrooms															
Washrooms renewal; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
New washrooms; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	-
Public gathering & place making															
Public gathering / plazas; (\$5.8M)				-	-	-	-	6	-	6	-	6	-	6	-
Equity & Cultural Redress public space projects; (\$2.0M)				-	-	-	-	2	-	2	-	2	-	2	-
Commercial high street corridors															
Gastown / Water St. public space & transportation improvements; (\$10.0M)				-	-	-	10	-	-	10	9	1	-	10	-
West End public space & transportation improvements; (\$10.0M)				-	-	-	-	10	-	10	-	10	-	10	-
Curbside vehicle management															
Metered & pay parking; (\$7.0M)				-	-	-	7	-	-	7	7	-	-	7	-
Subtotal Supporting public life															
							17	28	-	45	26	19	-	45	-
Total Streets							\$ 304	\$ 167	-	\$ 471	\$ 196	\$ 90	\$ 82	\$ 368	\$ 103

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SUMMARY

One water: Potable water, rainwater & sanitary water

				Estimated outcomes (units)			City assets (\$M)		Non-City assets (\$M)	Overall (\$M)	Cash (\$M)				In-kind (\$M)
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner	Subtotal	
\$ million, except for unit outcomes															
Water, sewers & drainage															
Potable water															
Infrastructure renewal / Asset management															
Distribution mains renewal program; (\$83.0M)				60 km	-	-	83	-	-	83	83	-	-	83	-
Transmission main renewal program; (\$20.4M)				2.5 km	-	-	20	-	-	20	20	-	-	20	-
Connection renewal program; (\$6.7M)				1,200 cnxs	-	-	7	-	-	7	7	-	-	7	-
Meter renewal program; (\$4.0M)				2,200 meters	-	-	4	-	-	4	4	-	-	4	-
Water system components; (\$3.6M)				-	-	-	4	-	-	4	4	-	-	4	-
Water planning & site investigations; (\$5.2M)				-	-	-	5	-	-	5	5	-	-	5	-
Supporting growth & development															
Water upgrades to support growth (City-led); (\$5.0M)				3 km	-	-	5	-	-	5	-	5	-	5	-
Water upgrades to support growth (development-led, in-kind); (\$7.0M)				1.7 km	0.3 km	-	5	2	-	7	-	-	-	-	7
Connection upgrades to support growth; (\$14.0M)				500 cnxs	-	-	-	14	-	14	-	14	-	14	-
New meters to support growth; (\$2.0M)				-	500 meters	-	2	-	-	2	-	2	-	2	-
Vehicles & equipment															
Renewal of vehicles & equipment - Water; (\$3.0M)				20 vehicles	-	-	3	-	-	3	3	-	-	3	-
Electrification of vehicles & equipment - Water; (\$200K)				5 vehicles	-	-	0	-	-	0	0	-	-	0	-
New vehicles & equipment - Water; (\$500K)				-	10 vehicles	-	-	1	-	1	1	-	-	1	-
Resilience & climate adaptation															
Water seismic resilience upgrade program; (\$10.5M)				5 km	-	-	11	-	-	11	11	-	-	11	-
Water access programs supporting emergency preparedness; (\$1.4M)				-	-	-	-	1	-	1	1	-	-	1	-
Water quality programs; (\$425K)				-	-	-	-	0	-	0	0	-	-	0	-
Water conservation programs; (\$1.1M)				-	-	-	1	-	-	1	1	-	-	1	-
Accelerated water meter deployment program; (\$23.0M)				-	-	-	-	23	-	23	23	-	-	23	-
Subtotal Potable water							150	41	-	191	163	21	-	184	7
Rainwater & sanitary water															
Core network															
Smaller main renewal program (up to ~750 mm); (\$113.0M)				28 km	-	-	113	-	-	113	113	-	-	113	-
Larger main renewal program (~750 mm +); (\$113.0M)				12 km	-	-	113	-	-	113	113	-	-	113	-
Targeted separation program (strategic CSO & flood mitigation); (\$26.0M)				4 km	-	-	26	-	-	26	22	4	-	26	-
Sewer upgrades to support growth (city-led); (\$102.7M)				5 km	-	-	103	-	-	103	-	103	-	103	-
Sewer upgrades to support growth (development-led, in-kind); (\$27.5M)				4.5 km	0.5 km	-	25	3	-	28	-	-	-	-	28
Pump station renewals & upgrades; (\$31.0M)				7 stations	1 station	-	31	-	-	31	21	10	-	31	-
Maintenance & replacement of other components; (\$20.0M)				-	-	-	20	-	-	20	20	-	-	20	-
Green infrastructure renewal & upgrades; (\$41.0M)				2 ha	23 ha	-	5	36	-	41	5	36	-	41	-
Flood protection & drainage; (\$10.0M)				3 outfalls	-	-	10	-	-	10	10	-	-	10	-
Connections															
Connections renewal program; (\$10.0M)				900 cnxs	-	-	10	-	-	10	10	-	-	10	-
New & upgraded connections; (\$110.0M)				-	4,800 cnxs	-	99	11	-	110	-	110	-	110	-
Vehicles & equipment															
Renewal of vehicles & equipment - Sewers; (\$14.1M)				55 vehicles	-	-	14	-	-	14	14	-	-	14	-
Electrification of vehicle & equipment - Sewers; (\$500K)				10 vehicles	-	-	1	-	-	1	1	-	-	1	-
New vehicles & equipment - Sewers; (\$500K)				-	20 vehicles	-	-	1	-	1	1	-	-	1	-
Asset management & planning															
Asset inspections, investigations & monitoring ; (\$35.0M)				-	-	-	35	-	-	35	25	10	-	35	-
System strategy, policy & planning ; (\$29.2M)				-	-	-	29	-	-	29	20	9	-	29	-
Subtotal Rainwater & sanitary water							633	50	-	683	374	282	-	656	28
Total Water, sewers & drainage							\$ 783	\$ 91	-	\$ 874	\$ 537	\$ 303	-	\$ 840	\$ 35

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Waste collection, diversion & disposal

				Estimated outcomes (units)			City assets (\$M)		Non-City assets (\$M)	Overall (\$M)	Cash (\$M)				In-kind (\$M)
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner	Subtotal	
\$ million, except for unit outcomes															
Waste collection, diversion & disposal															
Diversion															
Zero waste initiatives															
Maintenance & upgrades at Zero Waste facilities; (\$ -)				-	-	-	-	-	-	-	-	-	-	-	
Subtotal Diversion							-	-	-	-	-	-	-	-	
Collection & cleaning															
Public realm infrastructure															
Maintenance & renewal of litter & recycling cans/bins; (\$2.0M)				1,200 bins	-	-	2	-	-	2	2	-	-	2	
New litter & recycling cans/bins; (\$2.4M)				-	350 bins	-	-	2	-	2	2	-	-	2	
Collection & public realm cleaning programs															
Renewal of vehicles & equipment - Sanitation; (\$24.3M)				45 vehicles	-	-	24	-	-	24	24	-	-	24	
Electrification of vehicles & equipment - Sanitation; (\$1.1M)				15 vehicles	-	-	1	-	-	1	1	-	-	1	
New vehicles & equipment - Sanitation; (\$1.6M)				-	15 vehicles	-	-	2	-	2	2	-	-	2	
Technological enhancements; (\$2.0M)				-	-	-	-	2	-	2	2	-	-	2	
Subtotal Collection & cleaning							27	6	-	33	33	-	-	33	
Disposal															
Transfer station															
Maintenance & renewal of transfer station; (\$7.0M)				-	-	-	7	-	-	7	7	-	-	7	
Landfill non-closure															
Gas collection infrastructure; (\$20.0M)				50 points	-	-	20	-	-	20	20	-	-	20	
Maintenance / renovations / upgrades; (\$13.0M)				-	-	-	13	-	-	13	13	-	-	13	
Landfill closure															
Phase 5 - design; (\$3.5M)				27 ha	-	-	4	-	-	4	3	-	1	4	
Phase 5 North - closure implementation; (\$18.5M)				13 ha	-	-	19	-	-	19	13	-	6	19	
Phase 5 South - closure implementation; (\$20.5M)				14 ha	-	-	21	-	-	21	15	-	6	21	
Closure maintenance; (\$4.0M)				30 wells	-	-	4	-	-	4	4	-	-	4	
Landfill stormwater management; (\$10.0M)				-	-	-	10	-	-	10	10	-	-	10	
Vehicles & equipment															
Renewal of vehicles & equipment - Disposal; (\$10.5M)				10 vehicles	-	-	11	-	-	11	11	-	-	11	
Electrification of vehicles & equipment - Disposal; (\$200K)				5 vehicles	-	-	0	-	-	0	0	-	-	0	
New vehicles & equipment - Disposal; (\$200K)				-	5 vehicles	-	-	0	-	0	0	-	-	0	
Subtotal Disposal							107	0	-	107	95	-	13	107	
Total Waste collection, diversion & disposal							\$ 135	\$ 6	-	\$ 141	\$ 128	-	\$ 13	\$ 141	



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Renewable energy

				Estimated outcomes (units)			City assets (\$M)		Non-City assets (\$M)	Overall (\$M)	Cash (\$M)				In-kind (\$M)
				Existing	New	Non-City	Existing	New			City	Dev't.	Partner	Subtotal	
\$ million, except for unit outcomes															
Renewable energy															
Neighbourhood Energy Utility															
Generation															
New low carbon base load capacity for exisitng network (land); (\$3.5M)				-	5,000 sq.ft.	-	-	4	-	4	4	-	-	4	-
New low carbon base load capacity for existing network (planning & design); (\$2.5M)				-	tbd	-	-	3	-	3	3	-	-	3	-
New peaking capacity for existing network; (\$4.0M)				-	6 MW	-	-	4	-	4	4	-	-	4	-
New capacity for NEFC expansion; (\$1.8M)				-	tbd	-	-	2	-	2	2	-	-	2	-
Distribution															
Expansion of existing distribution network; (\$11.7M)				-	1.7 km	-	-	12	-	12	12	-	-	12	-
New service connections, including energy transfer stations; (\$7.0M)				-	20 cnxs	-	-	7	-	7	4	3	-	7	-
New distribution network for NEFC expansion; (\$2.0M)				-	0.3 km	-	-	2	-	2	2	-	-	2	-
New service connections & ETSs for NEFC expansion; (\$2.2M)				-	6 cnxs	-	-	2	-	2	1	2	-	2	-
Programs															
Maintenance & renewal of NEU assets; (\$4.6M)				-	-	-	5	-	-	5	5	-	-	5	-
System planning & overhead; (\$3.8M)				-	-	-	-	4	-	4	4	-	-	4	-
Subtotal Neighbourhood Energy Utility							5	39	-	43	38	5	-	43	-
Community electrification															
Zero emission vehicles															
Off-street EV charging infrastructure for non-City buildings; (\$6.0M)				-	-	700 stalls	-	-	6	6	6	-	-	6	-
Green buildings															
Energy retrofits for non-City buildings; (\$24.0M)				-	-	265,000 tCO	-	-	24	24	24	-	-	24	-
Subtotal Community electrification							-	-	30	30	30	-	-	30	-
Total Renewable energy							\$ 5	\$ 39	\$ 30	\$ 73	\$ 68	\$ 5	-	\$ 73	-

Technology

				Estimated outcomes (units)			City assets (\$M)		Non-City assets (\$M)	Overall (\$M)	Cash (\$M)			In-kind (\$M)	
\$ million, except for unit outcomes				Existing	New	Non-City	Existing	New			City	Dev't.	Partner		Subtotal
Technology															
Technology															
Technology programs															
Maintenance & upgrades of IT systems & infrastructure; (\$80.0M)				-	-	-	80	-	-	80	80	-	-	80	-
Technology transformation; (\$30.0M)				-	-	-	30	-	-	30	30	-	-	30	-
Subtotal Technology							110	-	-	110	110	-	-	110	-
Total Technology							\$ 110	-	-	\$ 110	\$ 110	-	-	\$ 110	-

Emerging priorities, contingency & project delivery

		Cash				
<i>\$ million</i>	Overall	City	Dev't.	Partner	Subtotal	In-kind
Senior government partnerships and/or other emerging priorities	70	70	-	-	70	-
Emerging climate adaptation priorities	20	20	-	-	20	-
Contingency	25	25	-	-	25	-
Delivery	39	36	3	-	39	-
<b>Overall</b>	<b>155</b>	<b>152</b>	<b>3</b>	<b>-</b>	<b>155</b>	<b>-</b>