
From: Park Board GM's Office
Sent: Saturday, April 09, 2022 2:32 PM
To: PB Commissioners
Cc: PB SLT (Senior Leadership Team) - DL; PB Communications; Embley, Erin
Subject: 2023-2026 Capital Plan - Council Workshop Questions - Board Update

Hello Commissioners,

After the first 2023-2026 Capital Plan Council workshop held last week (Mar 31), Councillors sent questions to staff for follow-up. The [responses to these questions](#) were posted publicly in advance of the second Council workshop held on Apr 7.

The following topics related to Parks and Recreation were included in the responses (question #s noted for reference):

- Park Amenities, including washrooms - #2, #24, #35
- Recreation Facilities - #4, #15, #16, #39, #40
- Seawall - #5, #13
- Electrification of equipment - #10
- Tree Canopy/Climate - #11, #12, #14, #54
- Food - #46

Note that some of the questions were directed to other departments and so may not reflect Park Board staff responses. We will continue to share information regarding the capital plan as it becomes available.

Regards,

Donnie



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I live and work on the unceded, ancestral territories of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and səliilwətaʔ (Tsleil-Waututh) peoples.

**Staff Responses to Questions from City Council Concerning the 2023-2026 Capital Plan
Questions Received from Council Between March 31, 2022 and April 6, 2022**

Distributed to Vancouver City Council on April 7, 2022

1. Can we see some sort of distribution of investments by neighbourhood? Relative to population, or relative to past investments, whatever seems most useful? – Councillor Boyle

Response to follow

2. I know staff are working on a public washroom strategy. Are there funds earmarked within this capital plan to be able to implement that washroom strategy? If not, what would it look like to do so, and what amount would staff recommend? – Councillor Boyle

Staff are developing the strategy for the improved access to water and public washrooms that aligns with the human rights framework and consider relevant safety and accessibility concerns for Vancouver residents most vulnerable to the opioid crisis. This strategy is currently in its early phases, and specific asset and capital requirements have not yet been identified. Staff expect to bring the strategy to Council in early 2023.

Staff are implementing accessibility upgrades to existing washrooms as prioritized through the Universal Accessibility Study and funded through the accessibility program.

The current draft plan allocates \$5M to park building renovations and a portion of this will be for improving park washrooms. In addition \$2.5M is allocated to build new park washrooms.

3. Can we see how the transportation investments are split between investments for sidewalks/pedestrians, bicycle infrastructure, and cars? I know we can't easily divide it all up like that, but a rough sense of the investments in each area is helpful. – Councillor Boyle

The transportation investments can be grouped into the primary areas of rehab and growth:

- For growth, we are looking at about 40% of the portfolio invested in walking, 40% in cycling, 10% transit and 10% cars. (Noting that it can be difficult to make a clear distinction, considering many of our improvements such as new signals, Active Transportation improvements (e.g. Haro, greenways) etc. benefit multiple modes)
- For street pavement/sidewalk rehab, we estimate ~90% serves vehicles (including goods movements and transit), 10% serves pedestrians, & less than 1% serves cycling (Noting that cycling is understated, given that cyclists also commonly utilize streets outside of strictly designated cycling routes)

Further to the above, there are significant investments in structural/seismic work on Granville & Cambie Bridges, which serve all modes.

4. Could staff provide some costs and timelines for larger projects not included in the plan currently? Particularly the West End Hub, Britannia, and the Marpole Civic Centre and Library? If we aren't fully funding these projects in this capital plan, it's helpful for us to know and be able to share with those communities what we are doing to keep the projects moving forward, and when they can expect to see things built. – Councillor Boyle

West End Community Hub - Staff are recommending that \$30M be included in the Capital Plan to proceed with the design phase. Discussions with the VSB are ongoing to coordinate with the redevelopment of King George Secondary School. Construction will be ready to start in 2027 assuming VSB and City funding is secured. Construction costs are TBD pending the Renewal Plan and building design outcomes, but anticipated to be in the range of \$200M.

Britannia – Existing budget of \$17M from 2019-2022 Capital Plan is sufficient to complete rezoning in 2023 and design of Building 1 by 2026. Discussions with VSB are ongoing to align capital planning processes as needed to initiate construction. Construction will be ready to start in 2027 assuming funding is secured at that time. Construction costs for Building 1 are TBD pending the rezoning and building design outcomes, but anticipated to be in the range of \$145M.

Marpole Civic Centre and Library – There is sufficient funding in the 2019-2022 Capital Plan to complete the planning and scoping phase. Construction costs are TBD pending the rezoning and building design outcomes, but anticipated to be in the range of \$105M. Options are being explored to provide a larger branch library on an interim basis until the larger Civic Centre project is completed.

5. What are the Park Board plans around seawall reconstruction? Is there a long term plan that makes the seawall more resilient to climate change? – Councillor Boyle

The current draft capital plan contains \$4.5M for regular seawall repair and maintenance. This funding will address high priority repair and maintenance of the existing structure but not seawall or shoreline renewal or construction. The draft capital plan includes \$7M for seawall and shoreline planning, which will be used to undertake hazard mapping work to understand current and future coastal conditions, vulnerability assessment to understand which areas are most at risk, and develop design principles and an approach to coastal adaptation and sea level rise. This work will consider resiliency of existing infrastructure in the face increasing severity and frequency of storms and public access to amenities.

Funds for seawall reconstruction (\$30M) are requested as an Emerging Priority item in the draft capital plan. Informed by the seawall and shoreline planning, this work will focus specifically on developing a new approach to seawall repair, renewal and maintenance. This project will be responsive to our commitment to reconciliation, climate change (sea level rise and increasing frequency and severity of storm events), and the impact that this hardened structure has on the sensitive intertidal marine environment. Specifically, projects elements include a coastal process study, coastal squeeze assessment and intertidal environmental study to develop and evaluate different options for the future of the seawall and implement discreet pilot projects.

6. Are suicide barriers including in the capital funding plan for the Granville Bridge? I know there were discussions happening with senior levels of government about that funding. Were we successful in finding other funds to cover this cost? Or does that piece remain unfunded? – Councillor Boyle

Means prevention as part of the Granville Bridge project is not currently funded in this capital Plan. However, discussions with our health partners and others are ongoing to understand appropriate design and costs associated with it.

7. In the list of unfunded childcare it lists a decommissioned school site – what school is that? – Councillor Boyle

VSB indicated a potential opportunity to retrofit/repurpose a decommissioned portion of a school to accommodate a suite of childcare functions (full-day 0-4 care, School Age Care, Preschool, and other child and family services). The potential school is in east Vancouver, however the VSB has requested confidentiality until the opportunity can be confirmed.

8. The Council approved Heritage Plan includes a greater emphasis on MST and on intangible cultural heritage. Can we get numbers of how our heritage dollars in the Capital Plan are being shifted toward greater investments in those areas? – Councillor Boyle

Heritage incentive programs (2019) promote conservation of built heritage with associated intangible components where present.

Staff engaging with MST in identifying Indigenous cultural heritage sites & direction on needs/requirements. Will be developing new intangible cultural heritage incentive program with ACCS. Program also intended to support areas of cultural redress (for example Chinatown) arts and other cultural heritage spaces (for example music venues). Staff have one project in DTES at Development Permit in which a cultural space triggering heritage coordinated approach.

Indigenous cultural sites may come forward in the Heritage Register or supported through the development of new, more appropriate processes and tools. Additional funding may be required. Staff report on VHR upgrade in 2023. Cultural redress sites as well as arts & cultural sites should also be included.

Guidelines for the Heritage Conservation Grant Program be updated in the next cycle to waive the Heritage Register requirement for sites of Indigenous significance (will be useful to be sure cultural redress sites as well and arts & culture are also looked at).

9. If the Firehall Theatre isn't included this year, are there temporary repairs that can allow it to stay open for another four years? i.e. can it be done in stages? Or is there senior government funding? If we don't include it, will it have to close? – Councillor Boyle

- In capital queue > 10yrs, 110 years old building, 40 years since major work, building in very poor repair, end of life systems, dressing rooms do not meet union requirements, washrooms do not either
- **Accessibility:** Theatre supports all Bodies Dance yet no code compliant wheel chair access anywhere, lack of dignity with long narrow side entrance, no access to washroom during performance, no access to lobby, bar, rehearsal or offices. Public complaints have been received by City.

- **Upgrades:** City & NPO recently explored upgrades but with overall condition, systems & layout not possible without renewal.
- **Funding:** Staff anticipate >\$3M other funding also NPO anticipate additional ~250-500K. City commitment required to confirm partner funding (& needs to be shovel ready). Budget will be adjusted when/if partner funding confirmed.
- **Phasing:** Feasibility needs assessment is completed & concept planning is near completion Q2. Project is phased. Phased 2 is significant work in adjacent Police Museum. This budget (Phase 1) includes shared elevator, entrance & accessibility for both buildings.
- **Timing:** City requires total budget to proceed to RFP. If not supported theatre would not close but operations including revenues significantly negatively impacted for at least 6 years. Costs will escalate.

10. What is timeline for replacing diesel/fossil fuel equipment with electric equipment? – Councillor Carr

Regarding small/landscaping/hand held equipment:

- Approximately one third of small equipment in Parks' fleet is electric.
- Where we can replace with market ready electric technology we are replacing as rapidly as possible.
- Our annual goal is to replace about 25% of our equipment with electrical each year subject to pandemic supply chain issues, existence of electric equipment (e.g. chainsaws) and adequate charging infrastructure

Regarding diesel/fossil off-road engines:

- We have ~170 pieces of heavy equipment, including compressor trailers, backhoes, excavators, as well as bulldozers and large compactors at the landfill.
- Where we can replace with market ready electric technology (forklifts and greens mower for example) we are replacing as rapidly as possible.
- However, large construction equipment such as the bulldozers and large compactors used at the landfill will likely not be able to go electric for at least the next decade.
- In the meantime, we have switched 80% of equipment from fossil diesel to renewable diesel
- Additionally, this plan continues our progress on replacing pre-2015 diesel engines. In 2015, the phase-in of the significantly more stringent Tier 4 diesel emissions standards was finished. This Tier 4 standard mandates the reduction of non-GHG emissions from diesel engines by 90% compared to pre-2004 engines.

11. What is the survival rate of the 150,000 newly planted trees as well as older trees? – Councillor Carr

The 150,000 trees were planted on various sites (streets, parks, forest restoration areas, private property and through the tree sale) and as such it has not been possible to monitor the survival rates in all locations. The most accurate information can be derived from the street tree inventory that is well documented and monitored annually - new plantings on streets experienced less than 5% mortality since 2010. More recently, Urban Forestry are undertaking an inventory of all trees in parks and golf courses and expect to have more accurate information to inform management decisions in the future. In the meantime, the existing street tree inventory consisting of approximately 160,000 street trees experiences requires approximately 1% of the trees to be removed annually due to old age,

environmental stresses, pests/pathogens, development and infrastructure renewal. This percentage may increase if extreme heat events become more common and other stressors are exacerbated.

12. Are we planting different tree species for climate change – and what about leafy big canopy? – Councillor Carr

Yes, Urban Forestry have been working closely with Metro Vancouver, UBC, the tree nursery community and other professionals to develop lists of climate adapted species. This compendium of species is still in process as some species may be climate adapted, but have other less favorable traits such as vulnerability to pests and pathogens or a tendency to be invasive. In the meantime, Urban Forestry are planting climate adapted species based on the observed and documented performance of species within the climatic region. Per the big leafy canopy, there are currently projects in place that aim to convert entire blocks of species from small stature under-performing species to large stature species that will mitigate heat island trends. These species conversions are best suited to large boulevards (>5' wide) that have ample soil volume to support large stature trees for decades to come.

The Green Infrastructure Branch within Engineering has partnered with Urban Forestry to design, co-fund, and build tree planting infrastructure trenches in hyper-urbanized areas, such as the 100 new street trees planted in tree trenches along Richards St in 2021. The tree trenches are an example of tree planting infrastructure that allows for larger and healthier canopy trees by giving the tree roots more soil volume and access to air and rainwater. In the next capital plan, the Green Infrastructure Branch will build on this collaboration with Urban Forestry to build new tree pit infrastructure for large canopy trees in tree deficient and high urban heat island areas - additional funding will be necessary to meaningfully expand this work in critical areas of the city, to help mitigate heat island effects.

13. Why is seawall repair NOT in this capital plan? – Councillor Carr

The current draft capital plan contains \$4.5M for regular seawall repair and maintenance. This funding is to address high priority repair and maintenance of the existing structure – not to construct new or renew seawall or shoreline infrastructure. Seawall reconstruction is not included in the capital plan because staff need to further advance critical work around coastal adaptation and collaboration with the Host Nations to determine the most appropriate approach to this work.

14. Give examples of key investments to achieve climate adaptation. – Councillor Carr

Within the current draft plan:

- Shoreline planning and coastal adaptation (\$7M)
- Park electrification strategy and pilot projects (e.g. EV and electric landscaping/small equipment charging infrastructure, power for filming and events) (\$2M)
- Wetland / meadow creation, habitat, and stewardship projects. (\$1M/yr)

Outside the current draft plan/unfunded elements

- Green Infrastructure/Rainwater integration into parks for natural carbon sequestration, access to nature equity habitat (Beaconsfield, Hastings, John Hendry) \$5M
- Still Creek parks, riparian habitat (Slocan, Falaise, Charles) \$3M
- Lost Lagoon tidal marsh reconnection project with MST; % grant funded \$6M (total \$18M)

- Decommissioning or conversion to recirculating of water features in non-compliance (including QE, Charleson Park waterfall) \$2M
- Investment in the creation of new planting pits in low canopy hyper-urbanized areas to support climate adaptation. These sites can cost up to \$15k per tree pit, with only 10% of this cost being the cost of the tree installation. (\$18.5M)

15. What is happening with crumbling Aquatic Center? – Councillor Carr

Structural assessments and repairs are underway following March 15 failure of stucco panel at VAC. Structural assessments allowed for reopening on March 18 through an alternate entrance. Monitoring and repairs will continue to maintain safety until renewal of facility is completed.

Renewal and expansion of the VAC is provisionally funded in the current draft capital plan with \$103.5M.

16. Donnie stated recreational facilities provide safety for vulnerable residents in extreme heat, cold, air quality events. Is the coverage city-wide? How many of our recreational facilities are energy retrofit for this resilience vs. how many yet to do? – Councillor Carr

The coverage is citywide. As part of the Climate Emergency Action Investment funding recently approved by Council on March 2, 2022, \$2 million was approved to support existing building retrofits, with a target to reduce greenhouse gas (GHG) emissions and simultaneously provide safe centres during extreme weather and air quality events to improve climate resiliency. Three (3) community centres, two (2) library branches, and one social ops center have been identified for the initial feasibility studies to replace existing gas-fired equipment with electric heat pump systems.

17. Which library branches have NOT been upgraded with HVAC systems and what are the barriers? – Councillor Carr

All VPL branches, except Kerrisdale, have air conditioning and heating to support community needs during climate events and minimum commercial filtration (MERV 8). Four locations (Central, Renfrew, Mount Pleasant, Terry Salman have HVAC systems built for MERV 13+ and act as cleaner air spaces. HVAC at other buildings is not set up for MERV 13 due to age/lease status. Assessment and design would be \$30-40K per branch, not including implementation. Kerrisdale library was not included in upgrades to the rest of the facility for A/C and has portable air filtration units in place. Kitsilano also has portable air filtration.

- Carnegie, South Hill, Dunbar, Collingwood, Kitsilano, Fraserview, Marpole, Kerrisdale and Joe Fortes would require significant upgrades to support better HVAC due to age of the buildings.
- Britannia, Champlain Heights, Kensington, Oakridge and West Point Grey branches are in leased or co-located spaces and the City is not responsible for upgrading the HVAC system. The new Oakridge will open in 2024 with HVAC/air filtration.

As part of the Climate Emergency Action Investment funding recently approved by Council, REFM is undertaking feasibility studies to retrofit existing civic facilities, with a target to reduce greenhouse gas (GHG) emissions and simultaneously provide safe centres during extreme weather and air quality events. The Renfrew and Kitsilano branches are priorities. With the current allocated funding, Renfrew is

anticipated to proceed into implementation and construction in 2022/2023; Kitsilano will be made shelf-ready while funding is sought.

18. Joe Fortes will be at capacity when it opens? – Councillor Carr

The current Joe Fortes branch is 4,500 square feet, and received 290,000 visits in 2019. It is the third smallest branch in the system and the second most heavily used on a per square foot basis, after Carnegie, with more than twice the traffic per square foot of other branches. The West End/Downtown has experienced high growth in the past 10 years with an increase of over 6000 new residents, and this growth is projected to continue for the next 10 years adding approximately 2500-5000 new residents. The VPL Facilities Master Plan identified a target branch size of 20,000 square feet, slightly larger than Renfrew branch, to meet the projected growth and high community needs, and the consultants undertaking the current WE Connect Master Planning process confirmed the need for this size. The Capital Plan provides for a size of 14,500 square feet, leaving a gap of 5,500 square feet. At 14,500 square feet and the 2019 traffic levels, the branch would be full when it opens (with traffic levels comparable to Renfrew, Champlain, and Firehall), however, with the increased population we can expect use will increase and exceed capacity. Conflict between patrons that staff must resolve will therefore continue because spaces that are too heavily used are unable to simultaneously meet the varied needs of the seniors, teens, families, and those without daytime shelter – the current situation at Joe Fortes.

19. Where are there liquefaction worries and how do we cope with that unless we move? – Councillor Carr

The majority of industrial land in Vancouver lies in flood plains and liquefaction zones, so relocating Manitoba works yard to an alternate site with better soils is not feasible. After a comprehensive geotechnical analysis of the site our consultant team provided several recommendations to address liquefaction-induced settlement and other geotechnical concerns at Manitoba Yard including: locating tall buildings in the N/E quadrant which has the best bearing conditions; soil mixing or pier foundations for low-rise buildings; a potential seismic dike at the southern boundary of the site comprised of a grid of soil mix columns.

20. What % of our heavy duty vehicles are using RNG? Is there enough RNG accessible? – Councillor Carr

- We have 47 vehicles currently using RNG which is a little over 2% of our overall fleet, and 10% of our heavy duty vehicles.
- We have been running at 100% RNG the last few months, and the latest forecast from FortisBC suggests we should be able to continue running at 100% for the foreseeable future.
- In addition to RNG, 30% of the fleet is diesel-powered and uses ~50% of the total fuel
- We have 605 diesel-powered units, 50% are heavy trucks, 40% are heavy equipment, and 10% are light duty
- In 2021, 80% of the diesel that we used was renewable diesel. The remaining 20% is at small sites (major Parks, and VFRS firehalls) that we are working with our fuel delivery to get serviced in 2022. We expected to have our first 100% renewable diesel month in 2022.

21. ETA for phasing out all diesel/fossil off-road engines and fuel landscaping equipment? – Councillor Carr

- Engineering has ~170 pieces of heavy equipment that falls under the off-road engine designation (compressor trailers, backhoes, excavators, as well as bulldozers and large compactors at the landfill).
- In more general terms, it's very challenging to provide an ETA for diesel/fossil off-road engines. Where we can replace with market ready electric technology (forklifts and greens mowers for example) we are replacing as rapidly as possible.
- However, large construction equipment such as the bulldozers and large compactors used at the landfill will likely not be able to go electric for at least the next decade, if not longer.
- In the meantime, we are working hard to switch all of this equipment from fossil diesel to renewable diesel. We've made significant progress over the last few years and now, 80% of the diesel used in 2021 was renewable diesel
- Additionally, this plan continues our progress on replacing pre-2015 diesel engines. (In 2015, the phase-in of significantly more stringent Tier 4 diesel emissions standards was finished. This Tier 4 standard mandates the reduction of non-GHG emissions from diesel engines by 90% compared to pre-2004 engines.)
- Please refer to question 10 for Park Board equipment.

22. Who's responsible for putting in power drops for the film industry and locations commonly used for community festivals and events? What's in the plan for this? – Councillor Carr

Funding for the provision of power kiosks for the film industry is being provided directly by the film industry, and implemented through Engineering. There is currently some limited funding in the Capital Plan to support power access for e-bikes, food trucks, digital advertising and other community power needs. Staff will try where possible to prioritize locations where there are co-benefits.

23. What is being included in this plan in terms of connecting schools to cycling networks? – Councillor Carr

While we don't have programs that are explicitly funding cycling connections between schools and the larger network, we are prioritizing connections through some of our existing programs such as the School Program and investments in active transportation, including:

- The current funding for the school program focuses on supporting 3-6 schools per year on providing basic missing pedestrian infrastructure (e.g. curb ramps, crosswalks, flashing beacons, bulges, sidewalk, raised crosswalks), as walking is the most popular way of active travel to school.
- Connecting schools to the cycling network is addressed when feasible through other capital programs, when the school is adjacent to planned bike routes or within close distance (e.g. active corridors, slow streets/neighbourhood traffic management).
- Through our 5-year cycling plan update, we have mapped out key destinations such as schools, community centres and care facilities etc. across the City. This plays a key role as we prioritize new and upgraded routes to improve our cycling network and access to key destinations.

24. Adding 9 drinking fountains – how many are estimated to be needed city wide? – Councillor Carr

CoV Engineering currently owns and operates approximately 60 drinking fountains within the public right of way. Park Board owns and operates approximately 180 drinking fountains within parks across the City.

In coordination with VEMA, ACCS, and Parks, Engineering will conduct GIS analysis to identify areas of the City that are underserved in terms of public access to water and develop a strategy to determine desired level of service and improve access through additions of permanent drinking fountains and bottle filling stations.

Engineering added nine new permanent drinking fountains over the 2019-2022 Capital Plan, and continues to operate seasonal Access to Water Infrastructure (temporary drinking fountains, handwashing stations and misting stations).

The 2023-2026 Draft Capital Plan includes 20 additional permanent drinking fountains. Engineering is also replacing water quality sampling stations at end of life with permanent drinking fountains to achieve multiple benefits, where feasible and appropriate.

25. Where are remaining unprotected areas in terms of coastal flood risk? What is solution for Musqueam? – Councillor Carr

All floodplain areas in Vancouver are considered “unprotected”, but with varying levels of hazard exposure and risk. Under current climate conditions (i.e. even before projected sea level rise occurs) the Fraser River floodplain from Knight Street west to the Musqueam Reserve would be flooded during a coastal flood event, as would portions of the Jericho/Locarno neighbourhood from Sasamat to Discovery Streets.

At present, Vancouver has a 700 m section of coastal flood protection infrastructure at East Fraser Lands (River District) from Kerr to Kinross Streets which provides partial protection from coastal flooding. East Fraser Lands is only “partially protected” as it is a discontinuous section of flood protection without any connection to high ground. During a major coastal storm today, it is expected floodwaters from the Fraser River would surround this isolated section. The East Fraser Lands flood protection will continue to be constructed in pace with development.

The Musqueam Indian Band (MIB) are continuing to plan for coastal flood protection for their community. The City of Vancouver is collaborating with MIB to ensure our adjacent plans and strategies are coordinated and provide a continuity of protection.

26. Green roofs mitigate risks from heavy rains. What are successes/challenges in increasing green roofs in the city? – Councillor Carr

Green roofs can be a very useful tool for reducing risks from heavy rains, particularly for larger, flat-roofed buildings. The City has seen a significant increase in green roofs in recent years. This success can be attributed to the City’s rainwater management requirements for rezoning applications as well as development permits along the Cambie corridor. Thirty percent of all development applications with rainwater management plans accepted for building permit to date include green roofs as part of the proposed design and the proportion is expected to increase based on received applications being processed.

Anecdotally, the increase in green roofs may also be due in part to roofs being increasingly considered amenity space (designers are including more planter boxes and green space on rooftops). The City's rainwater requirements are expected to be strengthened over the next 1-2 years, which should further increase the uptake in green roofs. The biggest challenges to date for green roofs has been reluctance by designers to include green roofs on wood-frame buildings (due to perceived insurance and risk concerns) and competition for space on roofs (with heat pumps, solar panels, amenity space, etc).

27. What would help reduce construction waste? – Councillor Carr

There are two types of construction waste generated in the City:

- 1. Building construction and demolition.**

This type of waste is regulated by the City's Green Demolition Bylaw which specifies that pre 1910 homes must be deconstructed and pre 1940 homes require recycling of 75% of the waste generated. This bylaw is under review and will be updated in early 2023 to move the datelines forward.

- 2. Soil, concrete and asphalt from City water, sewer and construction projects**

Two of the materials (asphalt and concrete) are recovered for re-use. The soil, (which contains potentially recoverable aggregate) is currently shipped to the landfill for disposal, at a cost to the City.

There is an opportunity to recover aggregate from the soil to both: 1) reduce our landfilling costs and 2) also reduce purchases of new aggregate. We estimate approximately 15% (30,000 tonnes) of the soil sent to the landfill is aggregate. This aggregate could instead be diverted from landfill, extracted and re-used in our asphalt productions, saving in the range of \$450,000 per year.

The project to enable extraction of aggregate from soil is included as an unfunded element for Solid Waste of the 2023-2026 Draft Capital Plan

28. What is the cost now to relocate 220 Terminal Temp Modular Housing? – Councillor Carr

Staff have budgeted a preliminary cost of \$3M for the relocation of the 220 Terminal building. When the City originally constructed the 220 Terminal building, hard costs for its relocation were secured with the primary contractor until 2026. If these costs were not secured or a relocation site is not identified before 2026, the costs to relocate the 220 Terminal building would be much higher. Additional costs for design, studies and land prep have also been considered in the budget, but the full cost to relocate the 220 Terminal building will depend on the temporary site it is ultimately relocated to.

29. What is written into the plan to acquire land for affordable/supportive housing? – Councillor Carr

The current draft plan incorporates a significant budget for acquisition; including: \$90M for new social/supportive housing, \$20M for land acquisition to relocate/replace TMH at long term sites, and \$12M to purchase private SROs utilizing City capital. This increase in acquisition budget from the previous capital plan considers the City's existing landholdings that are under development (but not yet under construction) or anticipated for development in order to reach out long term housing targets as well as higher land costs to deliver social/supportive housing.

30. What are the plans to work with the Vancouver School Board in terms of affordable housing and child care and the estimated numbers of spaces? – Councillor Carr

Childcare: The City is currently working with the VSB to support the expansion of School Age Care spaces and programs, on school sites. Additionally, new opportunities are being mutually sought to create 0-4 childcare by: seeking development within new and seismically replaced schools; retrofitting decommissioned school space; and aligning childcare with potential future VSB led affordable housing initiatives. In general, the VSB (and Ministry of Education) does not yet have a capital program in place that will support new childcare space creation on school grounds.

Housing: The City is currently working with VSB to co-location uses at our 480 Broughton (Coal Harbour) project (~60+ units) as well as the Britannia redevelopment (unit yield under evaluation).

31. Overall, what percentage of the cost of arts and cultural space plans are being funded by partners and senior governments? – Councillor Carr

- City & non-City spaces funded through Cultural Spaces Grants (grants < 250,000): the 2019-2022 \$6M City investment leverages > \$30M in projects - 80% partners/government
- \$40M In-kind CACs: 100% developer
- Renewal City spaces: med/large projects not enough federal/provincial funding available for matching, some costs ineligible & City must commit before other funds will consider project. Estimate ~ 20% for mid sized projects. Less for larger.

32. Could we put housing on top of a new animal shelter building? – Councillor Swanson

Currently, housing is not a permitted use of the site and the site is owned by BC SPCA who are not contemplating other uses at this time that would trigger a rezoning application. This is due to significant donors and the need to get the project underway with a target completion date of 2025.

BC SPCA is open to exploring the potential of adding housing in the future, and the current concept design considers that possible expansion.

33. The SRO replacement fund is unfunded. Does that mean the \$1Billion plan for SRO acquisition is basically a pipe dream? – Councillor Swanson

Tripartite SRO Investment Strategy is heavily dependant on senior levels of government committing resources and will span over many years beyond the 2023-2026 capital plan period. In draft capital plan, \$12M has been budgeted to acquire the first priority sites, pending partnership with senior government. If further commitments are made, Staff have flagged unfunded amounts of \$ that may be prioritized and relocated across other housing budget lines items (e.g. land acquisition for social/supportive housing). Staff are actively working with the Provincial and Federal governments and are encouraged by the interest in replacing this outdated housing stock with self-contained shelter rate social housing. Staff will be updating Council on our work later this spring.

34. Could you outline the impact of a 2% tax increase for infrastructure? Could voters have an option to go for this, knowing we'd have faster and better upgrades of various infrastructure projects? – Councillor Swanson

The draft 2023-26 capital plan has already incorporated a 1% tax increase for each of the next 4 years (this is consistent with the 2019-22 capital plan). Should Council approve in principle an additional 1% tax increase for each of the next 4 years, an additional ~\$100M could be generated in the 2023-26 capital plan for renewal. This increase, however, will need to be approved by Council as part of the annual budget process in subsequent years

35. What is happening with the fieldhouse at Oppenheimer park and the washroom at CRAB park. They are desperately needed. Is there a plan for them to happen soon? – Councillor Swanson

- Oppenheimer Park Fieldhouse: The Oppenheimer Field House Restoration project is expected to complete later this month. During the construction and through to the reopening of the field house, public washrooms are available in a trailer on Gore St. Over the past number of months, the Carnegie Oppenheimer Park team have been operating programs and supporting community members in the park. The plan is to have a seamless transition of both programming and washroom accessibility as we near fully reopening the park to community.
- Two Portland Loo washrooms are being installed at Crab Park and are anticipated to open in early May.

36. What level of work is included in the \$6 million allocation for Gastown streets? And in the potential listed \$11 million in the following capital plan? – Councillor Kirby-Yung

The draft capital plan currently includes \$7M allocated for Gastown. However, an additional \$13M is needed to substantially advance design and road repairs over the next four years (for a total cost of \$20M).

The currently allocated \$7M will cover urgent near-term repairs to Water Street at Maple Tree Square, Trounce Alley and the Carrall St/Maple Tree Square plaza. However, an additional \$13M is required to fully advance engagement, detailed design, and geotechnical work for a flexible design and rehabilitation of Water St. as well as to implement the first section of the Water St. work between appx. Richards and Cambie St.

Looking ahead, a further \$13.5M will be needed in the 2027-2030 Capital Plan to complete the remaining rehabilitation of Water St. between Cambie to Powell St.

37. For Public Safety and VFRS, can you affirm that staff are working to include capital replacement funding for Fir hall #8 – Yaletown? – Councillor Kirby-Yung

There are 3 or 4 candidates for the next fire hall renewal project, including Fire Hall #8 in Downtown South. While the Preliminary Draft Capital Plan does not include funding for the renewal and expansion

of a fire hall, staff are exploring options and will report back to Council, either when the Draft Plan is presented on April 26 or when the Final Plan on July 6.

38. For Public Safety and VFRS, what are the options/what is the potential to provide funding for land acquisitions for a new firehall in the Cambie corridor? – Councillor Kirby-Yung

Given that this would be a new fire hall added to the network, staff would propose to fund the land acquisition with cash Community Amenity Contribution (CAC) funding, in line with the Cambie Corridor Public Benefit Strategy.

39. In the Community category, recreation facilities, what level of allocation would be made for the new for the East Fraser Lands Community Centre? With the recent Council approval of policy changes to expedite delivery of amenities in EFL, what is the timeline for the new community centre and can it be delivered and completed in the next capital plan? – Councillor Kirby-Yung

Currently the City is in discussions to have the Community Centre delivered by Wesgroup in-kind to expedite its delivery. The childcare facility on the roof-top will also be delivered by Wesgroup but funded by the City.

40. In the Community category, recreation facilities, what level of allocation would be made for the new for the Aquatic Centre renewal and expansion? Is there opportunity to augment this with CAC's from area development projects? What is the safety rating and lifespan of the current facility? – Councillor Kirby-Yung

Renewal and expansion of the VAC is a provisionally funded in the current draft capital plan with \$103.5M. This funding envelope does include some CACs from area development projects. The current facility has reached end of life, however, monitoring and repairs will continue to maintain safety until renewal of facility is completed.

41. For Arts & Culture of a potential \$145 million capital investment, \$59M or 41% is for the PNE Amphitheatre renewal which is financing supported by the City, but not a City capital cost that is repayable by the PNE. Further \$52.7M comes from developer in-kind projects and developer required public art contributions or 36% of the total A&C potential capital spend. Leaving a 23% investment from City direct funds. How do these ratios and investment levels compare to the last two capital plans? – Councillor Kirby-Yung

Response to follow

42. For Arts & Culture, can Council get more detail on the Firehall project? My understanding is there are some key upgrades needed for accessibility and functionality. Can some work begin in this capital plan? – Councillor Kirby-Yung

Response to follow

43. What would be included in the potential \$6M Chinatown cultural partnership grants? – Councillor Kirby-Yung

Response to follow

44. The Animal Control Centre is a significant potential allocation in the midst of a lot of priorities. Can this be deferred to the next 2027 Capital Plan? – Councillor Kirby-Yung

Response to follow

45. In the Civic category, I would like more detail about proposed allocation to planning and studies, as well as the breakout in this category overall? – Councillor Kirby-Yung

Response to follow

46. In the past Capital Plans, the City typically allocated some funds to our food strategy implementation, including community kitchen renovations, urban agriculture infrastructure and soil funding, food systems research to inform policy development, and other initiatives; however, in the current draft I don't see any funds allocated to urban agriculture or food security which are key priorities in Covid recovery. Several other areas with links to food systems infrastructure like Equity & Indigenous Projects and Capital Maintenance also seem to have funding gaps. I am wondering what information should I include in my next Food Policy Councillor liaison report on the Capital Budget and what is the best way to ensure that we include these items in future dialogues? – Councillor Wiebe

ACCS continues to bring forward the investments required to sustain and expand food assets and infrastructure, to support food security as part of access to basic human and cultural needs and ongoing resilience; however, these have not come forward due to other priorities identified. Lack of Capital budget allocations to food assets will compromise the City's ability to implement food policies in Spaces to Thrive, Vancouver Plan, and Broadway Plan.

47. Understanding our goal must be to reduce GHGs in the city by 45% to 50% by 2030, what capital plan investments will accelerate reductions the most, and do we have an overall cost estimate? –

Councillor Carr

Response to follow

48. What capital plan investments will have greatest impact on increasing resilience to climate change, extreme weather and their cost - e.g., what is the cost of installing heat pumps in all libraries, community centres, other city-owned buildings, including city-owned non-profit housing and childcare, that can be used as safe centres for public retreat in extreme weather? – Councillor Carr

Response to follow

49. What are the most critical capital investments needed for resilience to sea level rise? – Councillor Carr

Response to follow

50. What is the cost of installing solar hot water and solar PVC on public buildings, and have we calculated the ROI and pay back dates on reduced energy costs? – Councillor Carr

Installed costs for typical public building simple solar PV systems is approximately \$2/Watt, 15 year simple payback. Solar thermal varies significantly in cost depending on type of solar panel (unglazed, glazed, evacuated tube). Simple unglazed solar thermal project recently completed at 2nd beach pool had a cost of \$150/GJ energy savings, 15 year simple payback.

51. How many city buildings are still using fossil fuel heating and what is the cost to make all city-owned buildings carbon neutral? – Councillor Carr

All new city owned buildings are being constructed to be Passive House certified and 100% electric. The majority of existing city owned buildings still contain fossil fuel based systems because most have multiple complicated HVAC systems with some fossil fuel based systems that are being replaced as they reach end of life, or have been retrofit with low carbon electric systems but still have fossil fuel based systems for cold temperature backup, or backup for heat pump failure.

52. What is the cost of installing power drops to replace use of diesel/gas generators for the film industry, food trucks, community events? – Councillor Carr

There can be great variation in the cost of installation of film kiosks and food truck power supply depending on the location, distance to the BC Hydro supply, and capacity requirements. However, from a budgeting perspective:

- Food truck power supply cost. \$50-\$80k to supply and install
- Film kiosks cost about \$250-300k to supply and install since they require much higher capacity than a food truck.

53. Which schools can be most easily connected with safe active transportation connections to our cycling network, and cost of those connections? – Councillor Carr

Response to follow

54. What is our ultimate goal for urban tree canopy and the cost? – Councillor Carr

On December 8, 2021 Council unanimously approved the recommendations in the Climate Emergency Action Plan – Big Move 6: Natural Climate Solutions report, including: “THAT Council direct staff to work with the Vancouver Board of Parks and Recreation to develop a plan to increase the city-wide tree canopy from the current 23% to 30% (target adopted by Park Board in 2020) by 2050 and ground it in the Vancouver Plan land use strategy”, Appendix C of this report includes an estimate \$32M for the 2023-2026 Capital Plan, and \$300k/yr for the operating impact of ‘Equity-Driven Tree Planting’.

55. What is the cost of installing the EV infrastructure needed for the city’s fleet and equipment and potential for accessing federal money for installing EV charging? – Councillor Carr

The draft capital plan currently includes \$5.5M for expansion of EV infrastructure to support City’s fleet. This will result in ~200 additional charging stations (for total of ~300) over four years. This level of investment is sufficient to keep pace with City’s EV fleet expansion.

For every major EV infrastructure project undertaken by the City, opportunities for federal and provincial grant funding are explored. In 2022, the City has managed to secure \$400,000 in NRCAN funding as well as ~\$50,000 through the provincial Commercial Vehicle Pilot program.

56. As Metro Vancouver has made significant investments in new regional recycling and waste centre/zero waste infrastructure in both Coquitlam and Surrey. Can staff work with Metro Vancouver staff to explore options to provide similar regional infrastructure to replace the aging Vancouver South Transfer Station, and also explore the development of a facility closer to the downtown core that maximizes zero waste opportunities in partnership with local businesses and non-profits? – Councillor Wiebe

Response to follow

57. I was wondering if we could get an outcomes chart that could highlight important healthy city goals including CSO events(ltr), urban forest cover, park space per resident, reallocated Street Space(11%), water conservation/metering, blue/green systems, affordable housing build, food assets, air quality, slow street km, plazas, and more? – Councillor Wiebe

Response to follow

58. What is the capital funding needed meet the regional urban forest canopy standards for Vancouver in this term? What is the net tree goal for this capital plan? – Councillor Wiebe

Response to follow

59. Does the City have a risk matrix to better understand the risks associated with the underfunding of capital projects? – Councillor Wiebe

Response to follow

60. How is the accessible city strategy being funded or unfunded in this Capital Plan? – Councillor Wiebe

Response to follow

61. It the Greenway refresh funded in the capital Plan including the blueway and Fraser River Trail? – Councillor Wiebe

Response to follow

62. Is there a business case that council can review on the green rainwater infrastructure implementation plan? – Councillor Wiebe

Response to follow