



**Public Works and Transportation Committee
Electronic Meeting**

**Council Chambers, City Hall
6911 No. 3 Road**

**Wednesday, July 19, 2023
4:00 p.m.**

Pg. # ITEM

MINUTES

PWT-4 *Motion to adopt the **minutes** of the meeting of the Public Works and Transportation Committee held on June 21, 2023.*



NEXT COMMITTEE MEETING DATE

September 13, 2023, (tentative date) at 4:00 p.m. in the Council Chambers.

ENGINEERING AND PUBLIC WORKS DIVISION

- 1. EXTENSION OF CONTRACT - 6676P - SUPPLY OF HYDRO-VAC SERVICES**

(File Ref. No. 10-6000-01) (REDMS No. 7267122)

PWT-17

See Page PWT-17 for full report

Designated Speaker: Ben Dias

STAFF RECOMMENDATION

- (1) *That Contract 6676P - Supply of Hydro-Vac Services be extended for an additional two year term, commencing August 1, 2023, with McRae's Environmental Services Ltd. up to the total contract value of \$13,517,165 as described in the report titled "Extension of Contract 6676P - Supply of Hydro-Vac Services", dated June 12, 2023, from the Director, Public Works Operations; and*
- (2) *That the Chief Administrative Officer and the General Manager, Engineering and Public Works be authorized to execute the extension of the contract with McRae's Environmental Services Ltd.*



2. **AWARD OF CONTRACT - 8148P - PROVISION OF TRAFFIC CONTROL SERVICES**

(File Ref. No. 10-6000-01) (REDMS No. 7243551)

PWT-21

See Page PWT-21 for full report

Designated Speaker: Ben Dias

STAFF RECOMMENDATION

- (1) *That Contract 8148P - Provision of Traffic Control Services be awarded for a three year term commencing August 1, 2023, to Lanesafe Traffic Control Ltd. as the primary service provider and with A TS Traffic and The Universal Group serving as secondary and tertiary backup service providers respectively, at an estimated total contract value of \$2,104,254, as described in the report titled "Award of Contract - 8148P - Provision of Traffic Control Services" dated June 12, 2023, from the Director, Public Works Operations; and*
- (2) *That the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to execute the contracts with Lanesafe Traffic Control Ltd., ATS Traffic and The Universal Group.*



3. **ENERGIZE RICHMOND TOOLKIT FOR COMMUNITY ACTIVATION**

(File Ref. No. 10-6125-01) (REDMS No. 7136403)

PWT-26

See Page PWT-26 for full report

Designated Speaker: Peter Russell

Public Works & Transportation Committee Agenda –Wednesday, July 19, 2023

Pg. # ITEM

STAFF RECOMMENDATION

That the stakeholder engagement and community activation Toolkit outlined in the staff report titled "Energize Richmond Toolkit for Community Activation", dated June 15, 2023, from the Director, Sustainability and District Energy, be received for information.

☐

4. MANAGER'S REPORT

ADJOURNMENT

☐



Public Works and Transportation Committee

Date: Wednesday, June 21, 2023

Place: Council Chambers
Richmond City Hall

Present: Councillor Carol Day, Chair
Councillor Michael Wolfe
Councillor Chak Au
Councillor Kash Heed
Councillor Alexa Loo

Also Present: Councillor Laura Gillanders (by teleconference)
Councillor Andy Hobbs
Councillor Bill McNulty

Call to Order: The Chair called the meeting to order at 4:00 p.m.

MINUTES

It was moved and seconded

That the minutes of the meeting of the Public Works and Transportation Committee held on May 17, 2023, be adopted as circulated.

CARRIED

AGENDA ADDITIONS

It was moved and seconded

That:

- (1) *Air Quality Monitoring be added to the agenda as Item No. 7A; and*
- (2) *No. 5 Road and Cambie Road Intersection Update be added to the agenda as Item No. 7B.*

CARRIED

Public Works & Transportation Committee
Wednesday, June 21, 2023

DELEGATIONS

1. (1) Nathan Davidowicz, former Richmond resident, expressed his concerns regarding the cancellation of the 480 bus route, referencing his submission (attached to and forming part of these minutes as Schedule 1).
- (2) James Yu, Richmond resident, spoke to the cancelled 480 bus route. He referenced his submission (attached to and forming part of these minutes as Schedule 2) and commented on the petition to reinstate the route.

In response to queries from Committee, the delegation advised that (i) they have contacted TransLink regarding the 480 bus route cancellation and were advised that the 480 route would be 1-4 minutes slower than the alternative routes, (ii) the petition was signed by a number of Richmond residents as well as those living in surrounding municipalities, (iii) the petition has been submitted to TransLink but is still open to accept more signatures, and (iv) the fundamental difference between the 480 bus route and the new route is that the new option requires additional transfers.

In response to queries from Committee, staff advised that (i) the reduction in service to the 480 bus route in January 2020 was likely due to low ridership, (ii) typically there is one representative per municipality on the Mayors' Council on Regional Transportation, and (iii) TransLink is considered to be experts in transit authority for the region.

Discussion ensued regarding the impact of the cancelled 480 bus route. As a result of the discussion, the following **motion** was introduced:

It was moved and seconded:

- (1) *That the City of Richmond write a letter to TransLink outlining concerns with respect to the 480 bus route; and*
- (2) *That a TransLink representative be invited to a future Council meeting to provide a brief update on the 480 bus route.*

Discussion ensued regarding restoring bus schedules to pre-pandemic service levels. As a result of the discussion, staff were directed to provide a memorandum cataloguing changes to bus service levels at the next Public Works and Transportation Committee meeting.

CARRIED

Public Works & Transportation Committee
Wednesday, June 21, 2023

PLANNING AND DEVELOPMENT DIVISION

2. KITTIWAKE DRIVE - TRAFFIC CALMING PILOT PROJECT UPDATE

(File Ref. No. 10-6450-09-01) (REDMS No. 7233657)

In response to queries from Committee, staff noted that (i) the recommended asphalt speed cushions will have a height of 7 centimeters and (ii) the installation of a specialty crosswalk is a separate issue.

It was moved and seconded

That Option 3 to implement a pilot project for the temporary installation of two asphalt speed cushions on Kitiwake Drive for a trial period of six months, as described in the staff report titled "Kitiwake Drive - Traffic Calming Pilot Project Update" dated May 19, 2023 from the Director, Transportation, be endorsed.

CARRIED

3. 2023 ROAD SAFETY INITIATIVES UPDATE AND VISION ZERO REVIEW

(File Ref. No. 10-6450-09-01) (REDMS No. 7215288)

In response to queries from Committee, staff noted that (i) the City proactively liaises with school principals regarding any safety concerns or issues related to active construction projects near schools, (ii) the Richmond Poverty Reduction Coalition will be invited to all future Transportation Safety Advisory Committee meetings, (iii) Transportation staff can attend a Hamilton Advisory Committee meeting prior to discuss lowering the speed limit in the Hamilton area, and (iv) ICBC provides data on motor vehicle related fatalities and can provide statistics over a longer time frame.

It was moved and seconded

That the road safety initiatives, as outlined in the staff report titled "2023 Road Safety Initiatives Update and Vision Zero Review" dated June 5, 2023 from the Director, Transportation, be received for information.

CARRIED

Public Works & Transportation Committee
Wednesday, June 21, 2023

ENGINEERING AND PUBLIC WORKS DIVISION

4. 2022 ANNUAL WATER QUALITY REPORT

(File Ref. No. 10-6000-01) (REDMS No. 7233576)

It was moved and seconded

- (1) *That the annual report titled "2022 Annual Water Quality Report" dated May 17, 2023, from the Director of Public Works Operations, be endorsed; and*
- (2) *That the annual report titled "2022 Annual Water Quality Report" dated May 17, 2023, be made available to the community on the City's website and through various communication tools including social media channels and as part of community outreach initiatives.*

CARRIED

5. DRAINAGE CANAL BANK FAILURE REPAIRS-12506 VICKERS WAY

(File Ref. No. 10-6340-20-P.2022CD00096Vol) (REDMS No. 7237488)

In response to queries from Committee, staff noted that (i) the drainage canal bank failure was caused by the placement of heavy stacks of tiles on City property by a business operating on the adjacent private property and (ii) the City is seeking an order that the City be compensated for all damages to the City property, as well as all repair costs.

It was moved and seconded

That funding of \$1,000,000 from the Drainage Improvement Reserve Fund for the drainage canal bank failure repairs at 12506 Vickers Way, be approved and that the Consolidated 5 Year Financial Plan (2023-2027) be amended accordingly, as detailed in the report titled "Drainage Canal Bank Failure Repairs - 12506 Vickers Way" dated May 23, 2023, from the Director, Engineering.

CARRIED

6. CIRCULAR PROCUREMENT POLICY IMPLEMENTATION AND PROGRESS UPDATE

(File Ref. No. 10-6125-07-04) (REDMS No. 7181733)

In response to queries from Committee, staff noted that the demolition of Minoru Aquatic Centre followed the Council adopted policy of 80 per cent waste diversion.

Public Works & Transportation Committee
Wednesday, June 21, 2023

It was moved and seconded

That results of the implementation of circular economy criteria into projects and procurement activities, as noted in the staff report titled "Circular Procurement Policy Implementation and Progress Update," dated May 8, 2023, from the Director, Sustainability and District Energy, be posted online to inform the public.

CARRIED

7. DIKE MASTER PLAN - PHASE 4 REPORT

(File Ref. No. 10-6060-01) (REDMS No. 7182372)

In response to queries from Committee, staff noted that each project would have preliminary and detailed design that would include public engagement and qualified environmental professionals to provide input regarding habitat compensation.

It was moved and seconded

That the "Dike Master Plan – Phase 4 Final Report," as attached in the staff report titled "Dike Master Plan – Phase 4 Report," dated May 23, 2023, from the Director, Engineering, be endorsed for capital project and development planning purposes.

CARRIED

7A. AIR QUALITY MONITORING

(File Ref. No.)

Discussion ensued regarding the possibility of installing additional air quality monitoring stations. As a result of the discussion, staff were directed to connect with Metro Vancouver to investigate the possibility of more air quality monitoring stations in Richmond.

7B. NO. 5 ROAD AND CAMBIE ROAD INTERSECTION UPDATE

(File Ref. No.)

In response to queries from Committee, staff noted that the No. 5 Road and Cambie Road intersection improvement project is progressing, with construction anticipated to begin in late 2023. As a result of the discussion, staff were directed to develop a critical path and report back to Council before August 2023.

8. MANAGER'S REPORT

Capstan Canada Line Station

Staff shared that TransLink has postponed the opening of the Capstan Station, with an anticipated opening of February 2024.

5.

Public Works & Transportation Committee
Wednesday, June 21, 2023

ADJOURNMENT

It was moved and seconded

That the meeting adjourn (5:06 p.m.).

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Public Works and Transportation Committee of the Council of the City of Richmond held on Wednesday, June 21, 2023.

Councillor Carol Day
Chair

Shannon Unrau
Legislative Services Associate

From: [Nathan Davidowicz](#)
To: [CityClerk](#)
Subject: Re: PWT Committee
Date: June 6, 2023 12:39:48 PM

City of Richmond Security Warning: This email was sent from an external source outside the City. Please do not click or open attachments unless you recognize the source of this email and the content is safe.

Thank you. Could you please distribute the following:

Here is the original announcement from Sept. 7, 1979 of the Richmond-UBC bus route.

https://www.translink.ca/-/media/translink/documents/rider-guide/buzzer-archives/1970s/1979/buzzer_1979_09_07.pdf#view=fitH

Additional information is available by looking up bus No. 480 on the 2019 bus summaries

<https://public.tableau.com/app/profile/translink/viz/2019TSPR-BusSeaBusSummaries/TheWorkbook>

In 2019 the 480 bus carried just over 1M riders (1011000)
Weekdays only from about 6 am to 9 pm (15 hrs per day compared to 20 hrs per day on other Richmond buses)
On an average day it had 4,060 riders or on average about 32 riders for each trip.
There were 66 trips to UBC and 62 trips from UBC
However during the peak UBC Winter session(Sept. to April) these yearly averages are higher.

Most bus trips were done by articulated 18 m (60 ft) buses.

In January 2020 the 480 bus was cutback to operate only during rush hours about 5 hrs per day.
providing 30 trips to UBC and 30 trips from UBC
In late March 2020 all the 480 bus trips were cancelled.

The 480 bus is a good example of the " Death Spiral of Transit "

What's a public transit death spiral? It's a vicious cycle of service cuts and fare hikes that push people away from public transit and into their cars, further decreasing public transit systems' revenue, which leads to further service cuts that impact Canadians' ability to get to work, school, groceries, social services, and other daily essentials.

If this is allowed to happen, it will make roads more congested, increase carbon emissions and air pollution, and have the greatest impact on society's most vulnerable - who have no other options.

(1) From Environmental Defence:(Nate Wallace)
<https://www.theglobeandmail.com/opinion/article-service-cuts-to-public-transit-are-just-the-first-step-in-a-death/?>
<https://environmentaldefence.ca/wp-content/uploads/2023/02/Public-Transit-Funding-Media-Backgrounder-Final.pdf>

<https://environmentaldefence.ca/report/public-transit-path-to-net-zero/>
<https://environmentaldefence.ca/2023/03/21/atu-canada-and-environmental-defence-call-on-premiers-minister-freeland-to-save-public-transit-in-upcoming-budgets/>
(2) From CBC Radio: <https://www.cbc.ca/player/play/2162910787554>
(3) From Vox: <https://www.vox.com/future-perfect/23653855/covid-transit-fares-buses-subways-crisis>

Thank you
Nathan Davidowicz

Dear TransLink customer relations team,

My name is James Yu, and I wrote to your team several weeks ago regarding the 480 service. I wish to thank you for your earlier correspondence regarding the discontinuation of the route. I appreciate the depth and extent of your analysis regarding the route and its alternatives, and understand that actions regarding restoration of service are significant investments.

Please find attached to this email a petition to reinstate the 480 service. This petition was signed digitally by over 655 individuals and counting, and 270 individuals have agreed to release their names in writing with the included text. We collectively continue to believe that your analysis of the current state of service does not match our experiences on the corridor, and that restoration of the 480 would be beneficial to all parties involved. I would appreciate if this petition and email could be forwarded to planning.

I appreciate and understand that current service provisions prevent easy allocation of service to the 480. However, like how the revised 44 was a result of innovative and unique problem-solving, I encourage TransLink to find innovative ways to provide faster, more efficient service on the 480 corridor, as engagement on the petition indicates that the service is in demand. If improving service quality for commuters contributed to the revised 44, it must contribute to restoration of the 480. For consideration by planning, I would like to know whether one or all of the following improvements would be feasible and allow the 480 to be restored efficiently with as minimal a cost as possible:

1. Reroute **northbound (not southbound)** service on the 480 via the Sea Island Connector WB and Arthur Laing Bridge instead of Bridgeport Road EB and Oak Street Bridge.

As you mentioned, bridge traffic is an issue for the 480. However, I do not believe that traffic is an issue in the southbound direction, seeing as the Granville Street bus lanes and the 71st Avenue bus priority signalized on-ramp allow the 480 to bypass the majority of existing traffic in the area. It is correct, however, that there is limited possibility for transit priority on the northbound Oak Bridge ramp. Google Maps data indicates that routing northbound service (only) via the Sea Island Connector and Arthur Laing instead may be faster during the morning peak hour, given that the route is physically shorter and that there are fewer traffic signals. Moreover, unlike the Oak Street Bridge, there is an HOV priority lane along the entire length of the Arthur Laing on-ramp, allowing the 480 to bypass merge-induced traffic on this bridge. This would make northbound service significantly faster, more sustainable long-term, and further put the speed of the 480 ahead of alternatives. I acknowledge that this would come at the cost of two local stops in the Marpole area; however, the savings to service hours are better than having no service at all, and the two stops are served by high frequency high capacity routes which easily and quickly connect to the 480 at 71st & Granville.

2. Reroute the 480 to use 49th, Marine, Dunbar and 41st instead of operating straight down 41st, in both directions.

This would reduce service duplication between the R4 and 480 and provide new express service to relieve capacity on the 49. This capacity is much-needed as the 49 often operates crush-loaded into 41st, Marine and Wesbrook Village, preventing passengers in the area from using the service. This would also allow the 480 to use the bus-only left turn onto 49th from Granville, which means service would not be stuck in traffic on the left turn to 41st from Granville. While there is some heavy traffic on Marine between 49th and Dunbar, this traffic is comparable to the existing traffic in Kerrisdale (where bus priority measures are also impossible due to parking demands), and so runtimes should be comparable. Express service has already operated on 49th and Marine during detours, so there is precedent for such a change.

3. Reroute the 480 at UBC to continue down Marine Drive to the bus loop instead of turning into 16th and Wesbrook Mall, in both directions.

Google Maps data indicates that this would be faster northbound due to the significant traffic pinch point on Wesbrook between 16th and Thunderbird. More importantly, however, express stopping procedures on SW/NW Marine Drive would provide two benefits to transit users. For commuter students, Marine Drive bus stops would allow students to disembark closer to their lecture halls, shortening the commute in both directions in comparison to all alternative services. For students who live on-campus, the additional capacity on 480 coaches at UBC as a result of early disembarking allows these students to use the 480 as a "residence connector" between residences along Marine and the bus loop, which would relieve capacity on the severely overcrowded 68 shuttle route. Buses deadheading to/from the garage can also operate in-service at these stops, providing bidirectional capacity relief for the 68. There is precedent for conventional service to operate here as this was the official 480 detour during the 2010 Olympics. This change would shorten commuter student commutes, provide relief for the 68, generate additional ridership, reduce service duplication further and shorten runtime in the northbound direction.

4. Reduce or discontinue the 9 extension between Alma and UBC, and reinvest service hours into the 480.

I understand that available service hours are limited. However, since 44 service is being expanded this Fall, there must be hours available for investment. Nonetheless, there are several options to reallocate existing service to the 480. 2022 Transit Service Performance Review data indicates that the 9, which operates at a high frequency between Alma and UBC during peak hours, is very low ridership. Peers I have spoken to corroborate this information. Given that the peak hour 9 extension to UBC is duplicated by the high frequency 4, 14 and 99 services, and that the TSPR indicates the 4 and 14 have available capacity as well, it would be a more efficient use of these service hours to reduce or entirely discontinue this extension in favour of reinvesting the hours into the much more in-demand 480. Instead of having buses operate empty into/out of UBC during peak hours, they would be much better used restoring pre-pandemic service on the Richmond-UBC corridor, as that is where service is demanded. This setup for the 9 is similar to how the local 41 does not continue to UBC because it too has duplicate local service (49) which continues to UBC.

5. Invest savings from 319 reductions induced by the R6 RapidBus into the 480.

As there will be reductions in 319 service once the R6 RapidBus opens next year, these newly open resources could be reinvested into the 480.

6. In tandem with a reduced or discontinued 9 extension, operate the 480 out of Vancouver Transit Centre instead of Richmond Transit Centre.

The current deadhead between RTC and UBC is very long, as is the deadhead between RTC and Bridgeport Station. If buses operated out of VTC instead, there would be a very significant saving of service hours during all peak hours in all directions. The following considerations indicate this:

- Morning deadhead from VTC to Bridgeport: this is reverse-peak travel and shorter, as opposed to RTC-Bridgeport which is much longer and in peak direction traffic.
- Morning deadhead from UBC to VTC: this is much shorter than UBC-RTC, since buses only need to run to Marpole instead of traveling all the way down Hwy 99.
- Afternoon deadhead from VTC to UBC: this is again, much shorter than RTC-UBC, since buses only need to run from Marpole.
- Afternoon deadhead from Bridgeport to VTC: this is, again, reverse-peak travel and shorter, as opposed to Bridgeport-RTC which is much longer and peak direction.
- Additional capacity at VTC to accommodate the 480 would arise from the proposed #9 extension reductions, as conventional buses from the 9 extension would shift 1-1 to the 480.

Collectively, these improvements would allow the 480 to run more efficiently, faster and serve more passengers while using fewer service hours and requiring less new hour investments.

The 480 is a key regional connection designed to compensate for the unique geometry of our region. Like the diagonal, direct connection the express 430 makes between Richmond and Metrotown in the east, the 480 creates a diagonal, direct connection between Richmond and UBC in the west, being both more convenient and faster than alternative service. Back in the 2000s when the 98 B-Line launched, capacity relief measures had to be added soon after in the form of the 488 and 492 express services which diverged from the 98 route. Similar to this, the 480 is needed now as a capacity relief measure which diverges from the R4 RapidBus.

While you mentioned in your analysis that the R4-Canada Line option takes 43-46 minutes whereas the 480 would take 47 minutes, this does not account for overcrowding on the R4 preventing Richmond and South Fraser passengers from taking full advantage of it. In the northbound direction, pass-ups at Cambie are severe enough that my peers and I have to take the 49 to avoid being 10+ minutes behind schedule. This route takes several minutes more than the R4, which means the 480 would be faster than our current commute even without any of my proposed improvements. In the southbound direction, lineups for the R4 at UBC can often be several hundred students long, which can mean 10+ minute delays even when service is on time. Again, the 480 would be faster, as passengers would not be funneled into one service.

The on-time performance of the R4 does not mean that students arrive on-time, as pass-ups force students onto delayed, later arrivals.

While overcrowding on the eastern portions of the R4 and 49 are an issue, this is an issue that dates to well before the pandemic. Overcrowding on the western areas, however, was accelerated by the discontinuation of the 480. We believe that pre-pandemic service standards at UBC should be restored prior to implementing new service improvements; it is unfair to the several thousand long-distance UBC commuters who face a continuously worsening commute for our corridor to be cannibalized while progress advances with us left behind. As you are adding service to the 44 and 250 corridors with West Vancouver-UBC direct service, despite the fact that the 44 and 250 rank well behind the R4 and 49 in terms of overcrowding in the 2022 Transit Service Performance Review, it would be severely inequitable not to restore pre-pandemic service levels on the wider-serving 480 as well. Overcrowding on the Canada Line between King Edward and Broadway is also an issue; however, if the 99 is as viable of an alternative as has been stated, then passengers from Richmond who currently use it to reach UBC would shift to the 480, adding capacity to the Canada Line in this area.

Moreover, overcrowding on this segment is not mutually exclusive with the overcrowding in our segment. As you mentioned, overcrowding between Richmond and 41st will be worsening with the Fall opening of Capstan Station, and a reinstated 480 funded by reallocations from the 9, when considering Richmond passengers who take the 99 to UBC would shift to the 480, would provide the additional capacity required to accommodate this. Furthermore, peers I have spoken to that currently drive on the Richmond-UBC corridor would have otherwise used the 480 had it existed. If the 480 were to be reinstated, this would reduce vehicle traffic levels on the Richmond-UBC corridor, improving speeds for all users in the area.

Thank you for your consideration of these potential changes, as well as the petition. I acknowledge that any service reallocation is a monumental task, but we collectively believe that service restoration will be well worth the effort. We look forward to hearing from you.

Sincerely,

James Yuming Yu, BSc

Ph.D. Student of Economics, UBC

Dear TransLink administrators,

We, the students and staff of UBC and supportive members of the public, call on TransLink to restore the suspended 480 bus service between Bridgeport Station and UBC to uphold the standards of equity and fairness for students in our region.

With the 480 suspended, students from Richmond and the communities of Ladner, Tsawwassen, North Delta, Surrey and White Rock are now required to transfer via the Canada Line and R4 RapidBus to reach campus. TransLink has stated that this alternative is 1-4 minutes faster than the 480 would be during peak hours when accounting for transfers; this does not however account for the severe delays and overcrowding on the R4 that has prevented Richmond and SoF students from using it in the first place. The closest alternative is the 49, which takes several minutes more than the R4 due to being a local service with no transit priority, putting it behind the 480 in terms of speed. Moreover, due to the added transfer and shoulder-to-shoulder overcrowding, students are unable to spend as much of the commute studying as otherwise. This has deducted several hours of study time per week and forced students to take time away from their friends and family, worsening their mental health.

Additionally, the current complexity of the commute between Richmond and UBC has drawn many students away from transit entirely. Students are drawn away from Richmond dining and rental options and face more expensive options closer to campus because the crowding and transfers are not worth the financial savings. Students have also resorted to driving between Richmond and UBC, which has worsened traffic in the area and is slowing buses down.

TransLink is restoring the previously suspended West Vancouver-UBC service for the upcoming Fall semester, under the justification that capacity is required on the UBC-Downtown and Marine Drive corridors. To restore this pre-pandemic service while also ignoring the overcrowding situation between UBC and Richmond caused by the lack of pre-pandemic service standards is severely inequitable, especially when considering that the Richmond-UBC corridor serves significantly more communities and that the 480 saw twenty times more ridership than the West Vancouver-UBC service. If improving service quality for commuters contributed to the restoration of West Vancouver-UBC service, it must play a factor in the restoration of the 480.

We the 655 signatories from [the petition] demand that the standards of equity and fairness be upheld for students in our region. We ask that the 480 be reinstated, at least for peak hours peak direction, between Bridgeport Station and UBC.

We appreciate your time in considering this matter.

Sincerely,

The undersigned on behalf of the 655 signatories.



City of Richmond



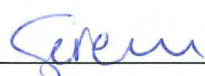
Report to Committee

To: Public Works and Transportation Committee **Date:** June 12, 2023
From: Suzanne Bycraft **File:** 10-6000-01/2023-Vol 01
Director, Public Works Operations
Re: **Extension of Contract - 6676P - Supply of Hydro-Vac Services**

Staff Recommendation

1. That Contract 6676P – Supply of Hydro-Vac Services be extended for an additional two year term, commencing August 1, 2023, with McRae's Environmental Services Ltd. up to the total contract value of \$13,517,165 as described in the report titled "Extension of Contract 6676P - Supply of Hydro-Vac Services", dated June 12, 2023, from the Director, Public Works Operations; and
2. That the Chief Administrative Officer and the General Manager, Engineering and Public Works be authorized to execute the extension of the contract with McRae's Environmental Services Ltd.

Suzanne Bycraft
Director, Public Works Operations
(604-233-3338)

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Finance Department	<input checked="" type="checkbox"/>	
Purchasing	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO
		

Staff Report

Origin

At the July 27, 2020 Council meeting, the following resolution was adopted during consideration of the staff report entitled “Contract 6676P – Supply of Hydro-Vac Services”:

1. That contract 6676P – Supply of Hydro-Vac Services for an initial three-year term be awarded on an “as and when requested” basis to McRae’s Environmental Services Ltd. as the most responsive and responsible bidder. The initial three-year term is estimated at \$7,277,841 exclusive of taxes and 10% contingency; and
2. That approval from Council will be requested prior to staff executing an option to renew the contract for a further two-year term, for a maximum total term of five years; and
3. That the Chief Administrative Officer and the General Manager, Engineering and Public Works be authorized to execute the contract with McRae’s Environmental Services Ltd.

The initial three year term of Contract 6676P is due to expire on July 31, 2023. This report requests approval from Council for the execution of the two year renewal up to the total term of five years.

This report supports Council’s Strategic Plan 2022-2026 Focus Area #3 A Safe and Prepared Community:

3.3 Ensure the community is collectively prepared for emergencies and potential disasters.

3.4 Ensure civic infrastructure, assets and resources are effectively maintained and continue to meet the needs of the community as it grows.

This report supports Council’s Strategic Plan 2022-2026 Focus Area #4 Responsible Financial Management and Governance:

4.2 Seek improvements and efficiencies in all aspects of City business.

Analysis

Background

The City utilizes vacuum truck services to assist with the operation, maintenance and construction of underground assets. The services include, but are not limited to:

- Hydro excavation;
- Flushing services;
- Catch basin cleaning;
- Hydraulic root cutting;
- Pumping services;
- Stand-by services; and
- Emergency and disaster response support.

The City currently employs its own fleet of three hydro-vacs to conduct the above services; however, in the case where in-house resources are unavailable or fully allocated, the City will make use of an external contractor to support operations on an "as and when required" basis. Having an external service provider to support various work activities provides the City with resources when needed without the high capital outlay costs associated with this specialty piece of equipment. This approach helps to support both capital and maintenance projects and includes temporary surges in resource requirements, flow control and bypass systems to support emergency service breaks, repairs and significant weather events.

Request for Proposals 6676P – Supply of Hydro-Vac Services

Question for Proposal (RFP) 6676P – Supply of Hydro-Vac Services was posted onto BC Bid on February 8, 2020 and closed on March 25, 2020. Three proposals were received by the closing date with an evaluation committee scoring and determining that McRae's Environmental Services Ltd. provided the best overall value to the City.

Contract Terms

Escalation: Annual escalation increase of 2.5% and 1.5% was set for Year 4 and 5 of the contract respectively.

Approval is requested from Council for staff to execute the optional year 4 and 5 of the contract to the maximum term of 5 years that was reflected in the original Request for Proposals (RFP) document.

Staff recommends the proposed extension as the original tendering process identified the lowest price and best value. As part of the terms, there were no inflationary increases for years 1, 2 and 3 of the contract and the stipulated increases for years 4 and 5 are below current consumer price index trends (4.38% annualized). If the City were to go to market for this work, we would expect higher market pricing than the extension opportunity offers as the avoided inflationary costs in the first three years of the contract would yield higher market pricing. Current hydro-vac service pricing is higher than what the City will incur by executing the optional year 4 and 5 pricing.

Financial Impact

Contract Value

The total estimated value of this contract over the recommended five year term is \$13,517,165 as summarized in Table 1.

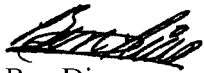
Table 1 – Estimated Contract Value and Initial Three Year Term Spending

Contract Year	Contract Value
Year 1 (August 2020 – July 2021)	\$ 2,425,947
Year 2 (August 2021 – July 2022)	\$ 2,425,947
Year 3 (August 2022 – July 2023)	\$ 2,425,947
Optional Year 4 – 2.5% Increase (August 2023 – July 2024)	\$ 2,486,596
Optional Year 5 – 1.5% Increase (August 2024 – July 2025)	\$ 2,523,895
Subtotal	\$ 12,288,332
Contingency (10%)	\$ 1,228,833
Total Contract Value	\$ 13,517,165

Contract 6676P is funded by various capital, receivable and operating budgets as applicable on an “as and when required” basis. The City has the option to extend the initial three year contract for two additional one-year terms, for a total added value of \$5,010,491 exclusive of taxes and 10% contingency.

Conclusion

This report requests approval from Council to execute the option to renew Contract 6676P – Supply of Hydro-Vac Services with McRae’s Environmental Services Ltd. for a further two year term, for a maximum total term of five years up to July 31, 2025.



Ben Dias
Manager, Sewerage & Drainage
(604-244-1207)

BD:vm



City of Richmond

Report to Committee

To: Public Works and Transportation Committee
From: Suzanne Bycraft
Director, Public Works Operations




Date: June 12, 2023
File: 10-6000-01/2023-Vol01

Re: Award of Contract - 8148P - Provision of Traffic Control Services

Staff Recommendations

1. That Contract 8148P – Provision of Traffic Control Services be awarded for a three year term commencing August 1, 2023, to Lanesafe Traffic Control Ltd. as the primary service provider and with ATS Traffic and The Universal Group serving as secondary and tertiary backup service providers respectively, at an estimated total contract value of \$2,104,254, as described in the report titled “Award of Contract – 8148P – Provision of Traffic Control Services” dated June 12, 2023, from the Director, Public Works Operations; and
2. That the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to execute the contracts with Lanesafe Traffic Control Ltd., ATS Traffic and The Universal Group.

Suzanne Bycraft
Director, Public Works Operations
(604-233-3338)

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Finance Department	<input checked="" type="checkbox"/>	
Purchasing	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO
		

Staff Report

Origin

The Engineering & Public Works Department executes a variety of operation, maintenance and rehabilitation related work on the City's infrastructure. This work is often located in roadways that require traffic control services, which include Traffic Management Plans and Traffic Control Personnel as required by WorkSafeBC and the Ministry of Transportation and Infrastructure.

To engage qualified service providers, a procurement process was undertaken via a Request for Proposals (RFP) 8148P – Provision of Traffic Control Service.

This report presents the results of this RFP and recommends the award of contract to Lanesafe Traffic Control Ltd. as the primary services provider with ATS Traffic and The Universal Group as the secondary and tertiary services provider respectively.

This report supports Council's Strategic Plan 2022-2026 Focus Area #3 A Safe and Prepared Community:

Community safety and preparedness through effective planning, strategic partnerships and proactive programs.

3.3 Ensure the community is collectively prepared for emergencies and potential disasters.

3.4 Ensure civic infrastructure, assets and resources are effectively maintained and continue to meet the needs of the community as it grows.

This report supports Council's Strategic Plan 2022-2026 Focus Area #4 Responsible Financial Management and Governance:

Responsible financial management and efficient use of public resources to meet the needs of the community.

4.2 Seek improvements and efficiencies in all aspects of City business.

Analysis

Request for Proposals 8148P – Provision of Traffic Control Services

The above referenced RFP posted on BC Bid on March 3, 2023 and closed on March 31, 2023.

The RFP requested proponents to submit proposals for the provision of traffic control services to support capital, maintenance and receivables projects for the City of Richmond Operations group.

Costs include provision of traffic management plans, traffic control personnel, and all traffic control equipment materials required for completion of the work. The RFP advised interested proponents that the City would engage the highest ranked successful proponent when possible. Proponents were advised that if the highest ranked successful proponent is unavailable, the City

would reserve the right to instead contact the second and then the third successful proponent if necessary.

Nine (9) proposals were received by the closing date from the following proponents:

- Argo Safety Services Ltd.
- ATS Traffic
- Coast to Coast Traffic Solutions Ltd.
- Green Valley Traffic Control Ltd.
- High Road Traffic Control Ltd.
- Lanesafe Traffic Control Ltd.
- P.S. Traffic Pro Services (2012) Inc.
- Safe Route Traffic Management
- The Universal Group

Proponents were requested to provide pricing based on an estimate of the number of annual traffic control hours required (13,000 regular service hours, 500 weekday evening service hours, and 500 weekend service hours). In addition, proponents were required to provide fixed pricing for the three year term.

Review Process

Staff undertook independent reviews of the proposal responses. Proposals were scored and evaluated against pre-determined criteria that included:

- Corporate profile and capacity;
- Project understanding, approach, methodology, and work plan;
- Dispatch process and response time capability;
- Demonstrated experience and references; and
- Financial proposal, including hourly rates.

Interviews were held with representatives of the highest scoring proponents to confirm their ability to meet the City's service and operational requirements. Based on the team's evaluation of proposals and interviews held with proponents, Lanesafe Traffic Control Ltd.'s proposal received the highest overall score and was therefore ranked first. The evaluation results of the RFP are summarized in Table 1.

Table 1 – Evaluation Summary and Award Recommendation

Ranking	Name of Proponent	RFP Score	Proponent's Pricing Based on 3-Year Contract Term
1	Lanesafe Traffic Control Ltd.	82.37	\$ 1,912,958
2	ATS Traffic	76.38	\$ 1,788,086
3	The Universal Group	73.17	\$ 1,805,594
4	Argo Safety Services Ltd.	69.65	\$ 1,659,911
5	P.S. Traffic Pro Services (2012) Ltd.	62.75	\$ 1,774,251
6	Coast to Coast Traffic Solutions Ltd.	61.60	\$ 1,543,478
7	Green Valley Traffic Control Ltd.	54.04	\$ 1,734,663
8	High Road Traffic Control Ltd.	53.49	\$ 1,939,660
9	Safe Route Traffic Management	41.12	\$ 1,626,818

Based on staff's evaluation of the proposals received and further clarification, Lanesafe's proposal received the highest overall score and therefore was ranked first (shown in Table 1). Staff determined that Lanesafe Traffic Control Ltd. has the greatest ability to meet the scope and nature of the work and provides best value to the City due to their dispatch process and the size of their staff, equipment and material complement, which in turn allows for better response to City's emergency needs.

Contract Term

The general scope of this contract includes:

- Providing traffic control services on an as and when required basis for various job sites, including for work and projects in connection with all aspects of roads, utilities, boulevards and medians, as well as special events and emergencies; and
- Providing all of the personnel, labour, supervision, management, facilities, vehicles, tools, equipment, signage, devices, accessories, supplies, fuel, and other materials which are necessary or incidental to the design and provision of the traffic control services.

The recommended contracts are for a three year term with the intention that a majority of the work be assigned to Lanesafe Traffic Control Ltd. Contract prices with the three highest rank proponents Lanesafe Traffic Control Ltd., ATS Traffic, and The Universal Group will be fixed for the three years.

Financial Impact

The total value of the contracts over the recommended three year term is estimated at \$2,104,254 as summarized in Table 2.

Table 2: Total 3-Year Term Contract

Contract Year	Contract Cost
Year 1 (August 2023 – July 2024)	\$ 625,068
Year 2 (August 2024 – July 2025)	\$ 637,569
Year 3 (August 2025 – July 2026)	\$ 650,321
Subtotal	\$ 1,912,958
Contingency (10%)	\$ 191,296
Total (3 Years)	\$ 2,104,254

A contingency has been added to cover the costs of additional service requests, unforeseen emergency capital or maintenance projects or additional coordination with development related works. The contract will be funded by various capital, receivable and operating budgets as applicable on an “as required” basis. The estimated total value of work to be awarded under these contracts over the three year term is based on historic usage and predicted estimates of annual Traffic Management Plan requirements and Traffic Control Personnel hours.

Conclusion

This report presents the results of a competitive procurement under 8148P – Provision of Traffic Control Services. It is recommended that the contract be awarded to Lanesafe Traffic Control Ltd. as the primary service provider with ATS Traffic and The Universal Group as the secondary and tertiary service provider respectively, and that the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to execute the contract for the three year term at a total amount of \$2,104,254 with anticipated commencement on August 1, 2023.



Ben Dias
Manager, Sewerage & Drainage
(604-244-1207)

BD:vm



City of Richmond

Report to Committee




To: Public Works & Transportation Committee
From: Peter Russell
Director, Sustainability and District Energy
Date: June 15, 2023
File: 10-6125-01/2023-Vol 01
Re: Energize Richmond Toolkit for Community Activation

Staff Recommendation

That the stakeholder engagement and community activation Toolkit outlined in the staff report titled "Energize Richmond Toolkit for Community Activation", dated June 15, 2023, from the Director, Sustainability and District Energy, be received for information.

Peter Russell, BAsC, MSc, MCIP RPP
Director, Sustainability and District Energy
(604-276-4130)

Att. 3

REPORT CONCURRENCE		
ROUTED TO: Community Social Development	CONCURRENCE <input checked="" type="checkbox"/>	CONCURRENCE OF GENERAL MANAGER 
SENIOR STAFF REPORT REVIEW	INITIALS: 	APPROVED BY CAO 

Staff Report

Origin

Council endorsed the development of the Energy Poverty Reduction Toolkit for Low Income Households and their Service Providers (Toolkit) on September 27, 2021. When brought forward, the stated purpose of the Toolkit was to create a resource, in collaboration with participating non-profit sector leaders, whose work will assist households experiencing low income in reducing their energy related expenses and contribute to a reduction in community greenhouse gas emissions (GHGs). Through the development of the draft Toolkit, it was determined that the material would be helpful and appropriate for multiple audiences. As a reflection of this, the Toolkit was rebranded as the Energize Richmond Toolkit to promote inclusion and equitable participation for all members of the Richmond community. Despite the name change, households experiencing low income are still a core audience. As proposed, the Toolkit focuses on stakeholder activation to support target households. The work aligns with the City's Community and Energy Emissions Plan 2050 (CEEP 2050), *Action 1.4.5: Develop a decarbonisation strategy for affordable housing in partnership with stakeholders*. The Toolkit also addresses important social equity issues noted in CEEP 2050 and the City's Social Development Strategy. This report provides an update on the outcomes of the first phase and outlines the key milestones needed to complete the final phases of the initiative.

This report supports Council's Strategic Plan 2022-2026 Focus Area #2 Strategic and Sustainable Community Growth:

Strategic and sustainable growth that supports long-term community needs and a well-planned and prosperous city.

This report supports Council's Strategic Plan 2022-2026 Focus Area #5 A Leader in Environmental Sustainability:

Leadership in environmental sustainability through innovative, sustainable and proactive solutions that mitigate climate change and other environmental impacts.

5.1 Continue to demonstrate leadership in proactive climate action and environmental sustainability.

This report supports Council's Strategic Plan 2022-2026 Focus Area #6 A Vibrant, Resilient and Active Community:

Vibrant, resilient and active communities supported by a wide variety of opportunities to get involved, build relationships and access resources.

This report also supports Action 2.9 in the City's 2021–2031 Collaborative Action Plan to Reduce and Prevent Poverty in Richmond:

Develop programs and services that respond to the specific needs of demographics at risk of or living in poverty (e.g. energy poverty reduction programs, financial literacy training for young adults, family-based outreach programming).

Analysis

Energize Richmond Toolkit

Energy poverty is caused by a combination of factors including insufficient income, high energy costs and the energy efficiency of the building. A household typically experiences energy poverty when the amount spent on fuels and electricity exceeds 6% of net income. Staff assessed multiple data sources and engaged several community stakeholders to inform the development of the Toolkit.

Goals of the Toolkit were to create a resource in which service providers and community groups can engage community members experiencing low income to increase their awareness of climate and energy issues and to support these households in the creation of action plans that will reduce energy consumption, energy-related expenses and GHG emissions. While the Toolkit (Attachment 2) was developed with an eye to support households experiencing energy poverty, staff see the resulting Toolkit as a resource for all households. The Toolkit will help all residents prepare for the impacts of climate change. Development of the Toolkit used a community engagement and activation approach that sought to build capacity in the non-profit sector, enabling them to help their customers more effectively.

Phase One – Research and Design through Collaboration with Sector Leaders

This phase included collaboration with local non-profit and government Sector Leaders who are actively working within the Richmond community. The goal of these collaborative efforts is to build the Sector Leaders organizational capacity to better assist the households they support in reducing their energy costs, as well as identify key material to be communicated to Community Leaders through the Toolkit. Through dialogue with these Sector Leaders, energy poverty-related resources and incentives needed to facilitate this work were identified. Non-profit and government Sector Leaders who represent or reach relevant audiences were identified as key groups to engage. A total of 17 leaders were interviewed to ensure that the Toolkit's design reflects community interests, values and concerns. A table outlining the non-profit and government Sector Leaders interviewed, and the questions asked, are provided in Attachment 1.

Interviews were 60 minutes in length and included questions as noted in Attachment 1. The interviews aimed to identify and understand the interests, values and concerns of residents around climate change impacts and high-energy costs, and determine the supports needed to address these issues. The interview questions focused on opportunities, challenges and priorities related to community engagement for households with low income. Specific questions were included to identify the current level of engagement on climate and energy issues, and gaps in services and resources for residents with low income.

Results

Interviews with non-profit and government Sector Leaders revealed that the residents they support are concerned about the high cost of living, climate events such as heat waves, and are especially concerned about how these factors affect the health of the most vulnerable populations in their community. In the interviews, the leaders responded positively to the proposed Toolkit

content and stated that a knowledge gap currently exists around available energy conservation and efficiency resources. Interviewees shared the following feedback:

- The term, “energy poverty” is ambiguous and may create social stigma for those who identify as living on low income. As a result, staff propose adjusting the name of this initiative from the “Energy Poverty Reduction Toolkit” to, “Energize Richmond”;
- Toolkit materials should be translated into other languages to reduce engagement barriers;
- Many residents experiencing low income are renting their homes, therefore the Toolkit should include resources for renters and landlords;
- Community Leaders, or Energize Richmond Leaders, are trusted members who are active in their community and should host the dialogue sessions; and
- Preferred methods of engagement include in-person, hands-on workshops with refreshments.

Phase Two – Toolkit Development and Training of Community Leaders

Targeted Community Leaders are key members, and trusted advisors, of the numerous unique and diverse groups that make up the fabric of Richmond. Staff developed initial Toolkit materials, including an event survey and interview guide to aid in evaluation, see Attachment 2 for the Draft Toolkit Facilitation Guide. Contents of the draft Toolkit were informed by the feedback gathered through interviews with Sector Leaders and from experience gained in Boston, Cambridge and Vancouver. Dialogue materials and the facilitation guide are structured around the following action themes:

1. Saving Energy and Cutting Carbon Emissions
2. Preparing for Changing Climate
3. Living with Resilience
4. Enhancing Mobility
5. Building Community

Draft Toolkit content will be further refined based on additional feedback from stakeholders who participate as Community Leaders. Currently the Toolkit addresses the following material and issues:

- A guide for Community Leaders detailing how the Toolkit works, how to access support and find resources, tips on how to facilitate and evaluate a community dialogue and action planning event, and a sample agenda;
- A PowerPoint presentation outlining energy costs, climate risks, related City programs, and how community members can take action in keeping with climate and energy action goals;
- Fact sheets on the impacts and risks of climate change as well as an outline of the City’s actions to address energy and climate change;

- A menu of action items that community members can take to advance climate and energy goals with links to resources;
- An energy and climate action planning workshop guide to assist event participants to map out the steps they are going to take;
- Event surveys and worksheets to track outreach with participants post event, actions that have been taken, barriers to participation, and additional resource needs; and
- Event marketing templates (signage, social media, email).

Community Leader training will support them in hosting dialogue events that are engaging, interactive and empowering. Integration of polling, quizzes, group discussion, games and activities will support this goal. The Toolkit design and materials will allow in-person events, with optional virtual programming. Online aspects of the Toolkit will be made accessible by employing tools and platforms that are commonly used and easy to engage with, and by considering participants' access to internet and technology. Translation services will be provided based on community need.

The opportunity to participate as a Community Leader will be promoted through the City website, social media, and relevant non-profit sector organizations. Interested individuals will be required to complete a registration form. Selected Community Leaders will receive the Toolkit and training in hosting energy and climate dialogues, action planning workshops, and an honorarium to recognize their time, expertise and commitment.

Following the training session, each leader will be encouraged to host a minimum of one event in their community. City staff will attend events to listen and provide information about City initiatives. Community Leaders, event participants and City staff will be engaged as part of Toolkit evaluation. Information and feedback will be gathered through pre-event and post-event surveys and interviews.

Based on the implementation schedule, Phase Two is intended to last four months and will be complete in November 2023. Staff will provide an update to Council highlighting the outcomes of this phase.

Financial Impact

None.

Conclusion

Motivating and enabling residents to take their own actions to reduce GHG emissions has been identified in the City's Community Energy and Emissions Plan. The Energize Richmond Toolkit is a pilot that equips and empowers community members as leaders in engaging their social networks in climate and energy issues. Through peer-to-peer dialogues and action planning sessions, Energize Richmond Leaders inspire their community to take steps to reduce energy use and carbon emissions. Additionally, the program will advance Action 2.9 in the City's 2021–2031 Collaborative Action Plan to Reduce and Prevent Poverty in Richmond related to development of programs that respond to the needs of demographics at risk of or living in poverty in Richmond.

June 15, 2023

- 6 -



Chad Paulin, M.Sc., P.Ag.
Manager, Environment
(604-247-4672)

Att. 1: Toolkit Stakeholder Interviews
Att. 2: Toolkit Facilitation Guide
Att. 3: Climate Leader Presentation

Toolkit Stakeholder Interviewees

Name	Organization	Date
Emy Lai	City of Richmond (Green Ambassadors) Sanitation/Recycling Assistant, Public Works	August 3, 2022
Ahmed Omran	S.U.C.C.E.S.S.	August 4, 2022
De Whalen	Richmond Poverty Reduction Coalition	August 3, 2022
Hajira Hussain	Richmond Food Bank Society	July 28, 2022
Patrick Caraher	Aboriginal Housing Management Association	August 8, 2022
Tabitha Geraghty	Chimo Community Services	August 10, 2022
Ruth Taverner	Richmond Family Place	August 11, 2022
Parm Grewal	Richmond Multicultural Community Society	August 10, 2022
Jeannie Jacobson	Connections Community Services Society	August 12, 2022
Carol Dickson	RCRG Better at Home Program	September 29, 2022
Ella Huang	Richmond Centre for Disability	September 23, 2022
Steven Lamothe	Ministry of Social Development and Poverty Reduction, Community Integration Teams	September 30, 2022
Tamas Revoczi	Sea Island Community Association	September 29, 2022
Mini Kahlon	Ministry of Social Development and Poverty Reduction	October 11, 2022
Alan Sakai	Steveston Community Association	October 24, 2022
Yasmin Abraham	Empower Me	October 26, 2022
Sue Varley	City of Richmond	October 26, 2022

Toolkit Stakeholder Interview Questions

Q1: To begin, can you tell me a bit about what you do, what your group does and the constituents you work with?

Q2: What are your personal concerns about climate risks (e.g. temperature, air quality, sea level, flooding)? What are your personal concerns about energy? What makes you most concerned looking ahead?

Q3: How are climate impacts and high energy costs affecting your community right now?

Q4: What is the best way to connect these issues with your constituent group? What are their primary concerns and how do you see climate resilience and energy affordability overlapping with them?

Q5: Are there particular questions about climate change or energy that you think your community has and would like to have more information about?

Q6: What type of resources and actions might people be open to learning about and engaging with?

Q7: What barriers to engagement exist and how could they be overcome?

Q8: What would it look like to partner with the City to share a program out to residents ? How best to engage? How could the City support you, supporting them? Resources needed?

Q9: What are the best communication channels for reaching people in the community? How do they prefer to connect?

Q10: Are you aware of any existing funding or community programs that address these issues?

Q11: Who else should we be talking to as we gather input on the program design?

TABLE OF CONTENTS

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6	DIALOGUE OUTLINE
8	FACILITATION NOTES

ENERGIZE RICHMOND is a City of Richmond Toolkit that connects community members to climate and energy resources that help save money, prepare for climate impacts, and create a healthy and resilient Richmond for all.

Energy costs are on the rise and for many households, they are becoming a burden. The impacts of climate change are also being felt as we experience more extreme weather. The City of Richmond is taking many steps to address these challenges. Community members have an important role to play as there are numerous ways to contribute. Our shared experiences and how we confront and respond to them connect us as a community.

**QR Link:
Richmond
Climate Action
Programs**



Not everyone is equally affected. Some households are more at risk of experiencing energy cost burdens and the effects of climate change and fossil fuels, including people with low income, racialized communities, recent immigrants, and seniors. Fossil fuels—oil, gas, and coal—drive climate change and cause harmful air pollution. Air pollution is linked to lung and heart diseases, asthma attacks, and even premature death. Our recognition of and capacity to address these inequities is key.

The path forward is an Energized Richmond where we work together to cut energy use and carbon emissions and to prepare our community for a changing climate.

As an Energize Richmond Leader, you are making a vital contribution to the place we call home by engaging your friends, families and/or peers in conversations about energy and climate change and what Richmond is doing and guiding them through a planning process where they decide the ways in which they want to take action.

ABOUT

As an Energize Richmond Leader, the Toolkit provides training resources to help you facilitate dialogues on climate action. This guide will help you design and implement your event. To learn more about your role and expectations, please refer to the document “Energize Richmond Leaders: Toolkit Overview and Expectations”.

HOW TO USE THIS GUIDE

The following guide outlines resources and offers tips for how to facilitate a dialogue about energy and climate change and an action planning session. It is designed to support Energize Richmond Leaders slide deck presentation but can also be used as a stand-alone resource to support your dialogue.

We recommend that you review this guide before facilitating a dialogue. Take notes, jot down ideas and questions, and identify terms that may be unfamiliar to you or your group. It may be helpful to print out this guide and have your marked-up version with you during the dialogue.

It may take up to 60 minutes to review this guide, depending on the length of your dialogue. If you plan to use the complete slide deck presentation that corresponds to this guide, plan for at least 60 minutes to review this guide and prepare.

GETTING STARTED

When you are ready to plan your dialogue on climate action, it is most important to think about WHO you are talking to and HOW you can best connect with them.

The best dialogues are with people who are already in your network and who see you as a trusted member of that network. That may be your neighbours, co-workers, housemates, teammates, customers, clients, employees, members of the same social group or place of worship, and many more.

When you know who, sort out how. Do you only have a brief amount of time with your group? Will using a PowerPoint presentation help the conversation, or will the group be more comfortable without? Are there members of the group who need additional consideration to participate, such as time constraints, childcare, or language support?

Your Leader training will also ask these questions and set you on a path for success with your dialogue. If you haven't thought through these questions yet, take 15 minutes now before you continue reading through this facilitation guide. For more tips and guidance on organizing your event, such as inviting participants, choosing a format, and online platforms to use, refer to the **Energize Richmond Leaders Dialogue Event Planning Guide** and **Technology Guide**.

(cont.)

GETTING STARTED

TIPS

If you are ready to go, here are a few general tips as you approach your dialogue:

▶ **Focus on actions.** It's important to talk about challenges related to energy and climate change, **but focus the conversation on actions underway in the community and the roles community members can play.** Allow the time and space for people to talk through the problem, but pivot those reactions to productive conversations on the need for bold individual, community and collection action.

▶ **Share personal stories.** When appropriate, use storytelling to convey your message or ground your point. When sharing how climate impacts you personally, talk about the experience rather than the topic or issue.

▶ **Be respectful and empathetic.** You are responsible for yourself and the people around you. Please ensure you review the ground rules with the group at the start of the session (see "Group Agreements" on slide 5 of the Community Leader Presentation). Be aware of how current events could impact your conversation and your participants and be sensitive to those impacts.

▶ **You don't need to have all of the answers.** If you get asked a question and you don't know the answer, say that but promise to follow up or connect the person asking the question with someone who does. You are not expected to be an expert, and it is okay to tell your group that.

There is strong support among Canadians that we must not back away from efforts to combat climate change. Expect to be met with support, creativity, and productive conversation.

HOW TO CUSTOMIZE

The Energize Richmond Toolkit was built for and with the Richmond community. Before creating the Toolkit, leaders from a broad range of community organizations shared their insight into what would be a successful outreach Toolkit. Their input was incorporated into this guide and other materials to ensure the Toolkit works for the community it serves.

The same intention should be made when facilitating your dialogue, because Richmond is made up of many diverse communities. This guide, and the materials that support it, are made to be customized for your group and dialogue.

Here are a few tips for customizing your dialogue:

- ▶ **Cut content but keep the sequencing.** If your group is ready and willing to discuss everything, that is great and go for it! If you have less time or you want to focus on a specific topic or action area, you can cut or skip over content, but the order of discussion is intentional to focus the conversation on solutions.
- ▶ **Use facts, stories, and images that resonate with your group.** Your group will be most engaged if the conversation is relevant and timely. Help the members of your dialogue connect by using facts, stories, and even images that relate to them.
- ▶ **Try humour.** Climate change is a serious issue, but this is a conversation with neighbours and friends. It is okay to be lighthearted at points without undermining the urgency of the issue.
- ▶ **Be creative.** The best way to customize your dialogue is to be creative. No two conversations are meant to be the same. While the guide offers the framework for conversation, it should not box you in.

DIALOGUE OUTLINE

Section 1—Introduction

(slides 1-6)

- Welcome : Greeting, acknowledgement of Indigenous land and traditional territories and technology reminders
- Personal and participant introduction
- Toolkit overview and plan for the day
- Group agreements
- Survey thoughts on energy and climate change
- Participant introductions and motivations

Section 2—Let's Talk About Energy

(slides 7-14)

- We use energy and electricity every day
- Where does our energy come from
- What are you thoughts on energy?
- Discussion question
- Energy impacts
- Carbon emissions from transportation
- Benefits of clean energy

Suggested break (5-15 min.)

Section 3—Let's Talk About Climate Change

(slides 15-23)

- Climate change is impacting us now
- Floods, sea level rise and heat
- Poor air quality
- Some people are more at risk
- Discussion question

(cont.)

DIALOGUE OUTLINE

Section 4—Let's Talk About Solutions

(slides 24-42)

- Vision and path forward
- Saving Energy and Cutting Carbon Emissions
- Preparing for a Changing Climate
- Living with Resilience
- Enhancing Mobility
- Building Community

Section 5—Creating a Personal Energy Savings and Climate Action Plan

(slides 43-58)

- Overview
- Saving Energy and Cutting Carbon Emissions
- Preparing for a Changing Climate
- Living with Resilience
- Enhancing Mobility
- Building Community
- Workplan Instructions

FACILITATION NOTES

Section 1—Introduction *(slides 1-6)*

► **Slide 1**—Welcome your participants to your meeting space and thank them for their time and commitment to listen and engage over the allotted time. If hosting your event online, go over technology reminders.

► **Slide 2**—Introduce yourself and share a few personal details. This may include where you live, work, and/or play in the city. Share why you’ve become an Energize Richmond Leader and if using the presentation, include a fun photo of yourself or something that represents you.

Ask participants to share their names, if they live, work, and/or play in Richmond and what they value most about their community. Take note of how they define community—it may be different than how you and others define it. Also take note of similarities or overlap in responses to help guide further discussion points. Another way of asking this is “what do you love most about your city?”

► **Slide 3**—Provide an overview of the Energize Richmond Toolkit. Remind participants why you are there and what you hope to achieve. Be clear that you want to motivate actions that save energy, cut carbon emissions, prepare for climate impacts and when possible, save money at the same time.

► **Slide 4**—Use this slide to outline the discussion so that everyone knows what to expect of the conversation.

► **Slide 5**—Walk through agreements on how you will work together as a group. Feel free to customize. If participants know each other well, you may not need this step, unless not everyone is in alignment around energy and climate issues.

► **Slide 6**—At this point it’s important to survey participants to hear how they’re thinking about energy issues **before** proceeding further into the discussion. This can be done verbally or by using the online version of the survey—whatever works best for you and your participants.

FACILITATION NOTES

Section 2—Let's Talk About Energy (slides 7-14)

► **Slide 7—Let's Talk About Energy.** Introduction slide.

► **Slide 8—We use energy and electricity every day.** You can skip this slide if you feel your participants have a good understanding of what energy is used for.

► **Slide 9—Where does our energy come from?** Do you know where British Columbia gets its energy from? British Columbia's energy mix is primarily composed of sources such as hydroelectric power, gas and biomass.

If you like, you could show this short video about hydropower:

<https://youtube/OeqKLiEwZO>

► **Slide 10—What are your thoughts on energy?** This is a good time to bring people into the conversation by asking people a few questions about energy use and cost.

► **Slide 11—Did you know?** Close to 20 percent of households in Richmond are spending twice as much as other Canadians.

You can ask participants to calculate the percentage of their income they spend on energy using this formula: To figure out your energy costs, take your average monthly energy bill cost and divide it by your combined monthly household income (after tax). Then multiply by 100 to determine your energy consumption cost. For example, if you and your partner have a combined income of \$5000/month (after tax) and you pay \$300/month on your energy, $(300/5000 * 100 = 6\%)$ you spend 6% of your income on your energy costs.

(cont.)

FACILITATION NOTES

► Slide 11 (cont.)–Sources:

- 18% of Richmond households spend 6%+ on their energy needs.
- “Households that spend more than 6% of their after-tax household income on home energy services (or roughly twice the national median) have high home energy cost burdens, and are said to be experiencing energy poverty.” And, “Most households in Canada spend less than 3% of their after-tax income on their energy needs.”

► **Slide 12–We need energy, but...** Many people do not know that fossil fuels are the primary source of carbon emissions and that there are health risks associated with using gas appliances such as asthma.

► **Slide 13–57% of Richmond’s carbon emissions comes from transportation**

► **Slide 14–Clean energy is better for everyone.** Climate change is also causing energy costs to rise to manage extreme heat.

FACILITATION NOTES

Section 3—Let's Talk About Climate Change *(slides 15-23)*

► **Slide 15—Let's talk about climate change.** You could skip over this section if you want to focus on energy issues. Similarly, you could skip the energy section and dive into climate change, depending on what your group will be most interested in and the amount of time you have.

If you plan to cover this section, pause here and ask the group what is causing climate change. If you are hosting your event online, participants can answer out loud, or type their answers into the chat, or you could set up a poll in Zoom (see the Technology Guide). While the focus of your dialogue isn't on the causes of climate change, it can be helpful to briefly describe the main cause: the burning of fossil fuels like coal, oil and gas to generate electricity and heat, to power our cars, trucks and other forms of transportation, and to make the products and goods we use. (If you show a video the group may already have heard the answer but you can have some fun reviewing it.)

If you like, you could share a short video for some fun and/or inspiration. Here are a few ideas:

- UBC Climate Hub "Climate Comeback":
facebook.com/watch/?v=2417458868369603
- Bill Nye The Science Guy climate change explainer: youtu.be/EtW2rrLHs08
- Bill Nye The Science Guy mad about lack of climate action:
youtu.be/IvySCXP5RnE (maybe not appropriate for some as he swears a bunch)

► **Slide 16—Climate change impacts us all now.** It's important to place the risk of climate change in the present given many people still feel it is a distant threat. And remind people we can come together to address it.

FACILITATION NOTES

► **Slide 17–Heavy rain and flooding.**

► **Slide 18–Rising sea levels.** For slides regarding climate impacts, don't feel you need to be an expert. The slides have plain, clear language about the overall trends which is what most people care about.

► **Slide 19–Hotter, drier summers.** How many days over 25°C will there be in 2050 if we don't cut carbon emissions? We're expecting our current number of 22 hot days per year to reach nearly 55 hot days by 2050.

► **Slide 20–Poor air quality.**

► **Slide 21–The number of days our air quality is being degraded by wildfire smoke is increasing.**

► **Slide 22–Just as energy costs impact some more than others, the same is true for climate change.** Talking about equity is important as policies and programs need to address the disproportionate impacts of climate change. This would be a good time to take questions. If you don't know the answer, let people know you will find out and get back to them.

► **Slide 23–What climate impacts are you most concerned about and why?** Give folks a chance to answer this question either in an all-participant format if you have a small group or by breaking people into small groups to discuss. The impacts of climate change can be overwhelming and it is helpful for people to process the risks together.

You might want to answer first to kick things off. Also, capture notes or ask volunteers to take notes so the feedback regarding what climate impacts people are most concerned by can be shared with City of Richmond staff to consider in relation to climate plans and programs.

Following this discussion, you may want to take a break.

FACILITATION NOTES

Section 4—Let's Talk About Solutions (slides 24-42)

► **Slide 24—Let's Talk About Solutions.** Introduction slide.

► **Slide 25—Our path forward...**

► **Slide 26—Energize Richmond Actions.** These two slides are about pivoting to solutions which will take up the remainder of the dialogue. First going over what the City of Richmond is doing in this section, then what your participants can do to contribute, and finally into the personal action planning session. If you only had time to show one slide, choose the Energize Richmond Actions slide to help focus the following discussion.

► **Slide 27—Richmond has a plan.** There are a number of plans and programs in place that address energy and climate change across a range of City departments. We've organized them into five action buckets so it is easier for people to see how it all adds up. *If you are running short on time, you could just go over this slide and skip to the actions people can take under the five areas.*

► **Slide 28—Saving Energy and Cutting Carbon Emissions.** This section is about ways the City of Richmond is working to save energy and cut climate emissions from energy use. Let the group know you'll walk through these five action areas, and that the following slides provide more information on City-led initiatives and pathways for them to take action. This will help the group narrow down their areas of interest while they explore the various steps within each one.

► **Slide 29—What the City is Doing.** Net zero means that greenhouse gas emissions from human activities are in balance with emission reductions. We cannot get to net zero without greatly cutting back the production and use of fossil fuels. Carbon neutral means that buildings are constructed in a way that they don't generate carbon emissions. This is done by building to the highest levels of energy performance which in British Columbia is called the Step Code. Local governments can choose to adopt the Step Code and at what level.

FACILITATION NOTES

► **Slide 30–What the City is Doing.** Community owned energy, energy efficiency, and clean energy are covered here.

► **Slides 31-34–Preparing for a Changing Climate.** This section is about steps the City of Richmond is taking to prepare for and reduce the risk of extreme weather events, sea level rise, and other climate impacts.

We can think of resilience to climate change as the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt and thrive, no matter what kinds of chronic stresses and acute shocks they experience.

► **Slides 35-38–Living with Resilience.** This section covers programs to generate a circular economy and manage waste, increase food security and environmental protection. Circular economies reduce waste and pollution and regenerate natural systems. Food recovery cuts emissions and waste by redistributing food. Food security efforts include increasing the sustainability of agriculture in Richmond including cutting carbon emissions.

► **Slides 39-40–Enhancing Mobility.** This section is about the ways in which the City of Richmond is making transportation more sustainable and affordable. This is key given transportation is the largest source of emissions in the community.

► **Slides 41-42–Building Community.** Building strong connections within our communities (e.g., neighbours, workmates, schoolmates, members of our faith communities) is critical to being resilient to the impacts of climate change.

Pause here to ask participants for their thoughts on these priorities and for other ideas for what the City could be doing. You or the City staff member with you can take note of suggestions.

FACILITATION NOTES

Section 5—Creating a Personal Energy Savings and Climate Action Plan (slides 43-58)

► **Slides 43-56—Creating a personal energy savings and climate action plan.** This section of the dialogue should be the most engaging with your group. Start it off by asking the group a question—what can you do to save energy and take climate action? You may ask the group to think about actions they are not already taking because you will soon lead them into creating their own climate action plan. Ask, or call on, a few people to share their responses. It may help to start by sharing your own response and include what action area it falls under.

The slides in this section have examples of actions but there is a full list available in the Action Planning Guide [need to link to the guide here]. You may choose not to use the presentation and walk through the guide instead. Or you may decide to give people about five minutes to walk through the guide on their own and then leave time for any questions that come up.

► **Slides 57-58**—At this point you can ask the group whether they would like to develop individual climate action plans or come up with something to work on together.

- *If they prefer to work individually:* Use the next 5-10 minutes and ask everyone to think about their personal action plan—what they can do to save energy and take climate action. The responses to the previous discussion question should help people come up with ideas. After 10 minutes, bring the group back together and ask people to share some of the actions they came up with.
- *If they prefer to come up with a collective plan:* Split them into smaller groups. If you are online, choose groups of about three using the breakout function in Zoom (see Technology Guide for more detail). Ask the groups to brainstorm ideas for collective action—meaning ways in which they can work together.

(cont.)

FACILITATION NOTES

► Slides 57-58 (cont.)

- Ask groups to pick a note taker and let them know that each group will report back to the larger group with their ideas. Allow 15-20 minutes for the smaller group discussion. You can share the deck and allow folks to add their ideas to the last slide.
- Let the group know that the dialogue is coming to a close. Ask the group to take 10 minutes to fill out the survey that will record the actions they plan to take and also gather their feedback on the event. This will help Toolkit organizers understand the impact the Toolkit is having and help improve the Energize Richmond Toolkit. Names and personal information do not need to be shared.
- If action items for the group were discussed, go over them and outline next steps to take.
- If you feel comfortable, share your contact information for members of your group to follow up with questions or feedback. You are not required to share your information. If you don't want to, you can change that part of this slide to "Thank You" and regardless, be sure to thank the group for their time.

Welcome



Please check that your correct name is on the participant list. (Click “participants” at the bottom of your screen.)



Please keep your audio muted unless you're speaking.



Please use the “raise hand” function if you would like to speak.

Energize Richmond





Hello!

I live in [Location] here in Richmond. You may see me[Insert Activity]. I became an **Energize Richmond Community Leader** because [Rationale for Becoming a CL].

Today we will...

1

Learn about the ways in which energy and climate issues are impacting Richmond.

2

Hear about what the City of Richmond is doing to help.

3

Talk about the ways we can save energy and money, prepare for climate impacts, and create resilient households and neighbourhoods.

4

Create an action plan!



Group Agreements

- **Be respectful and empathetic:** Everyone brings their own unique and valuable experiences
- **Share the air:** Step back if you tend to speak a lot to allow others who aren't as comfortable to step into the conversations
- **Be present:** Minimize distractions and avoid trying to multitask



**What motivated you
to join the event?**

Let's talk about energy



We use energy and electricity every day.

We rely on energy to power the systems and devices that make our lives comfortable, convenient, and productive. We need energy to:

- Heat and cool our homes
- Light our streets and houses
- Cook our food
- Use our tv's and computers
- Power our transportation services

Where does our energy come from?

In Canada, our energy comes from several sources, including:

- **Fossil fuel energy** (oil, gas, coal)
- **Renewable energy** (solar, wind, hydro)

Do you know
where British
Columbia gets its
energy from?

What are your thoughts on energy?

Do you know how much energy you use to light, heat or cool your home?

- Do you use electricity or gas to heat your home?

Do you think you spend too much money on your energy bills?

- Do you find you're spending more because your house gets too hot in the summer or too cold in the winter?
- What actions do you currently take to save money on your energy bills?

Did you know...

If your energy costs are disproportionately high, there are programs and resources available to help you lower your energy use, increase the comfort of your home, and save money on your bills.

We need energy, but...

The need for energy is undeniable, but using it can be **expensive for families** and **creates pollution**. The energy we produce—especially from burning fossil fuels like oil and gas—to heat buildings, power transportation, and make and move the things we consume, is a major source of carbon emissions and air and water pollution.



**57% of Richmond's carbon emissions
comes from transportation alone**

Clean energy is better for everyone

Carbon emissions drive climate change. And **climate change is causing energy costs to rise** in order to manage extreme heat and cold events, which are happening more often. We need to start using cleaner sources of energy powered by the sun and wind to **protect our climate** and **help families save money.**

**Let's talk about climate
change**



Climate change impacts us all now.

As we encounter hotter temperatures, heavier rainfall, and risk of flooding, we experience **climate disruption**. Our shared experiences, and how we confront and respond to them, **connect us as a community**.

Heavy rain and flooding

Heavy rain events are becoming more frequent and intense. Autumns and winters in Richmond are getting warmer and wetter.

Did you know...

The atmospheric river events of 2021 marked Richmond's biggest storm in half a century with over 130 mm of rain in a 3 day period. That's enough water to fill a standard swimming pool! Other than small isolated situations, the City's drainage system protected the island from any major impacts.

Learn More About the City of Richmond's Flood Protection Initiatives:



Flooded fields at Walter Lee Elementary School during the November 2021 atmospheric river events.
(Carlos Silva, Twitter)



Fraser River flooding. (City of Richmond BC, Twitter)

Rising sea levels

Climate change is making Richmond more vulnerable to coastal and Fraser River flooding. Warmer temperatures, melting ice, and warming oceans are causing water levels to rise.

The City of Richmond sits 1 meter above sea level and is part of the Fraser River floodplain. **Over the next 30 years, sea levels are expected to rise by 50 cm and by 1 meter in the next 80 years**, putting our homes, businesses, parks, and wildlife habitats at risk. Over the next 50 years, the City will be raising dikes to 4.7 metres to meet the year 2100 sea level rise projections, with the ability to further raise to 5.5 metres.



Learn More About the City of Richmond's Climate Action Programs:

Hotter, drier summers

Summers in Richmond are getting warmer. On average, the Metro Vancouver area gets 22 hot days per year (+25° C).

Extreme heat can be dangerous for our health. The western heat dome that we experienced in 2021 was the deadliest weather event in Canada, causing 619 heat-related deaths in BC between June 25-July 1.

How many days over 25 C will we have in 2050 if we don't cut carbon emissions?

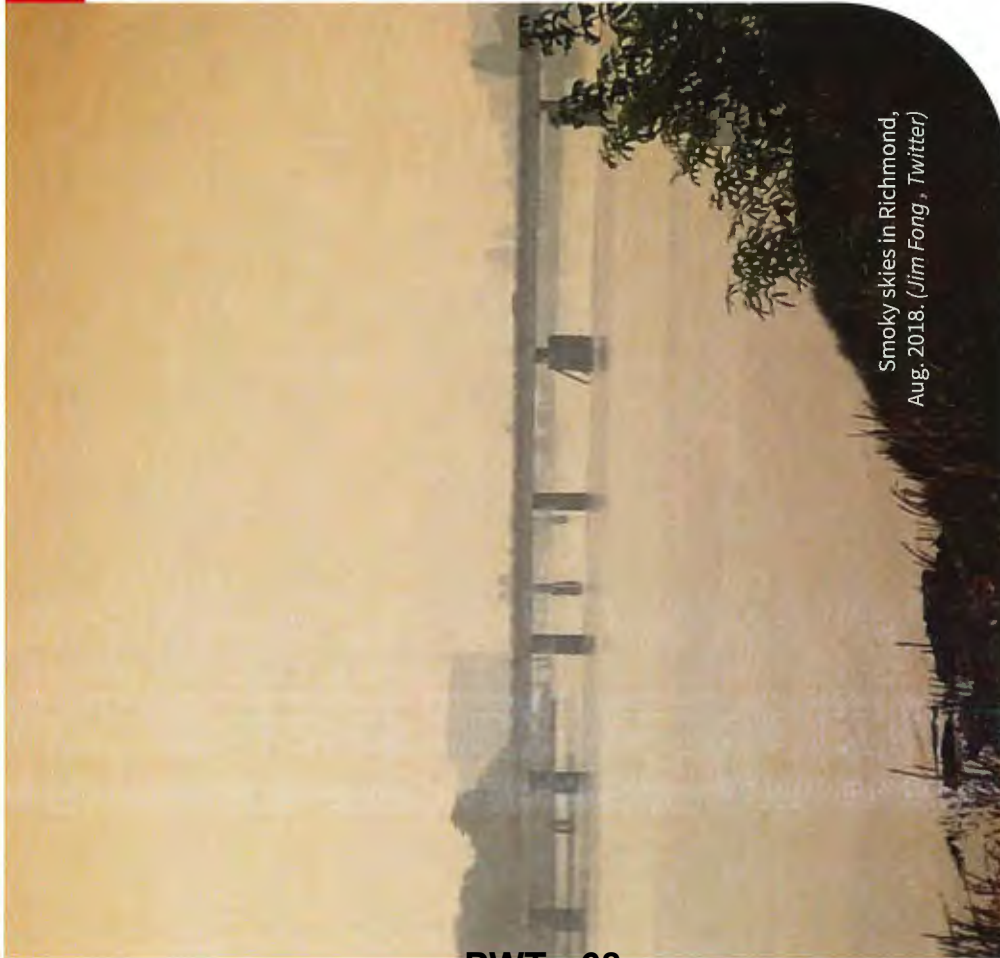
Learn More About City Resources for Staying Safe in Hot Weather:



Poor Air Quality

Poor air quality from smog and wildfire smoke impacts physical and mental health, outdoor work, recreation, and tourism.

Young children, the elderly, and those with poor health or compromised immune systems are more likely to get sick from air pollution.



Smoky skies in Richmond,
Aug. 2018. (*Jim Fong, Twitter*)

The number of days our air quality is degraded by wildfire smoke is increasing

Wildfire smoke degraded air quality for eight days during the summer of 2015, a record total of 19 days in 2017, and 22 days in 2018.

Daily doctor visits for asthma and prescriptions filled for asthma relief medication increased to far above average.

In October 2022, **Metro Vancouver's air quality was ranked 3rd worst in the world.**



Get Up-To-Date Air Quality Data from the Province of BC's Richmond South Air Monitoring Station:

Just as energy costs impact some more than others, the same is true for climate change.

Climate impacts are experienced disproportionately across households experiencing low income, racialized communities, recent immigrants, seniors, children, people with disabilities, people with chronic health conditions and unhoused people.

As changes to our climate intensify and become more frequent, so too will the shocks and stresses experienced by our neighbours who have been systematically excluded.



What climate impacts are you most concerned about and why?

Let's talk about solutions



Our path forward...

We have **an opportunity** to save money, increase comfort, and tackle the climate crisis at the same time. And we can do it in a way that builds an affordable, healthy and resilient Richmond for all.

Energize Richmond city actions

Richmond's vision is to be a **sustainable and healthy island city** that meets the needs of the present without compromising the ability of future generations to thrive. It's a place where people live, work, and prosper in a welcoming, connected, accessible and vibrant community.

Richmond has a plan.

Together we can...



**Save Energy and Cut
Carbon Emissions**



Live with Resilience



Build Community



**Prepare for a
Changing Climate**



Enhance Mobility



Saving Energy & Cutting Carbon Emissions

Conserving energy is a great way to address climate change while saving money, and increasing the comfort of your business or home.





Saving Energy & Cutting Carbon Emissions

What the City is doing

Net Zero by 2050:

Richmond's Community Energy and Emissions Plan (GEEP) 2050 includes multiple actions within eight strategic directions that together will set Richmond on a path to achieve 50% reduction in community GHG emissions by 2030, and reach net zero emissions by 2050.

Retrofit Existing

Buildings: The City is retrofitting existing municipal buildings and shifting to low-carbon heating and cooling.

Carbon Neutral

Buildings: Richmond has adopted the highest level of the province's Step Code for high energy performance. All new buildings will have low-carbon energy systems and will be built to top energy performance standards by 2027.



Learn More About the City of Richmond's Community Energy and Emissions Plan (GEEP) 2050:



Saving Energy & Cutting Carbon Emissions

What the City is doing

Community Owned Energy:

Richmond is leading the way in developing publicly owned, regional district energy systems that deliver low-carbon, affordable and clean energy and help lower building costs.

See what the Lulu Island Energy Company is All About:



Efficient and Clean Energy: Through its Energy Management Program, Richmond is cutting energy use, promoting efficient uses of energy and increasing the use of renewable energy via incentives and promotion of best practices.



Preparing for a Changing Climate

We can prepare now so we're ready for climate-related
disruptions and emergencies.





Preparing for a Changing Climate

What the City is doing

Flood Management: Richmond has the most comprehensive flood management system in the province and work is underway to improve the overall system and dikes in particular to withstand sea level rise and other climate impacts.

Check Out the City's Flood Protection Management Strategy:



Rainwater Management: The City has a plan to manage stormwater and reduce its impact on drainage infrastructure and water quality, while also finding ways to use rainwater as a resource. This is especially important due to the expected increase in rainfall intensities due to climate change.



Preparing for a Changing Climate

What the City is doing

Natural Areas: Richmond has a strategy to manage and improve its natural areas and the ecosystem services they provide, like clean air and water, biodiversity and recreation opportunities. The plan prioritizes long-term sustainability, collaboration, and adaptation to climate change, so everyone can continue to benefit from the city's natural areas in the face of a changing climate.



Learn About the City's
Ecological Network
Management Strategy:

Urban Forest: The City is working on building an urban forest that can withstand climate change impacts like heat stress, waterlogging, and pest outbreaks. Urban forests offer many benefits such as cooling the air, absorbing rainwater, reducing air pollution, and capturing carbon, which can help the city adapt to climate change.



Check Out the City's Public
Tree Management Strategy
2045:

Let's talk about solutions



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Together we can...



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Carbon Emissions**



Live with Resilience



Build Community



**Prepare for a
Changing Climate**



Enhance Mobility



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Check Out the City's Public
Tree Management Strategy
2045:



Preparing for a Changing Climate

What the City is doing

Invasive Species:

The City has a plan to reduce the risks posed by invasive species, which can proliferate due to climate change and ecological shifts. By addressing the threat of invasive species, we can help protect our natural areas and ensure that they remain healthy and resilient for generations to come.



Learn About
Invasive
Species:

Cooling Centres:

During heat waves and poor air quality events, the City provides clean air cooling stations in community centers, pools, water parks, libraries and arenas to help residents vulnerable to heat stress and poor air quality. It also offers tips on how to stay cool from health authorities.



Where to
Cool Down:

Emergency Programs:

Richmond's emergency programs protect people's lives, public infrastructure, private property, and the environment during emergencies or disasters. These programs help the City deal with climate-related impacts, such as flooding and provide a vital safety net for the community in times of crisis.



Emergency
Preparedness
in Richmond:



Preparing for a Changing Climate

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Emergency
Preparedness
in Richmond:



Living with Resilience

Our everyday choices—such as what we eat, the waste we create, what we choose to buy, and our energy and water use—can help us both become more resilient, save money, and cut carbon emissions.





What the City is doing

Circular Economy: The City has policies in place, like the Circular City Strategy, that reduce greenhouse gas emissions and support sustainable practices. A circular economy can have a variety of positive impacts that go beyond economics and the environment, including the elimination of waste and pollution, preserving products and materials and regenerating natural systems, all playing an important role in the achievement of climate change targets.

Learn About the
Richmond Circular City
Strategy:



Waste Management: Richmond's waste management system diverts 79% of landfill waste from single detached homes and duplexes and reduces greenhouse gas emissions. And as of March 2022, the City has banned plastic bags, straws and foam food containers to further reduce unnecessary single-use plastics and promote the circular economy.

See How Richmond is
Re-Thinking Waste
Management:





What the City is doing

Food Recovery: Richmond wants to help businesses use their resources better and practice circular economy in their operations. As part of this vision, the City partnered with a company called FoodMesh, which helps redistribute food. Together, they made the Richmond Food Recovery Network. This helps local food businesses take their unsold food and use it for something more valuable instead of throwing it away.

Food Security: Agriculture plays a significant role in the economy of Richmond, occupying more than 40% of the city's land base. The City has a plan to help manage land use and make people more aware of food security issues. This plan also helps make agriculture more sustainable and reduces the impact of climate change on farming.



Learn About the Richmond Food Recovery Network; Food Mesh:



What the City is doing

Environmental Enhancement Grant:

Local community groups can apply for funding up to \$2500 and individuals up to \$500 to carry out inclusive projects that enhance, restore or conserve Richmond's unique island natural environment. Eligible initiatives include invasive species pulls, native tree planting, watercourse enhancement, shoreline and street clean-ups, wildlife education, and creating or enhancing habitats for birds, pollinators, and beneficial insects.

Discover How to Access Funds
to Carry Out Your Own
Environmental Enhancement
Project:





Enhancing Mobility

Transportation accounts for 57% of the City's carbon emissions. Focusing on making more climate-friendly transportation choices will help us save money on gas, avoid parking fees, and be ready for disruption.





Enhancing Mobility

What the City is doing

Sustainable Transportation:

Richmond is committed to making it easier and safer for residents, employees, and visitors to get around by walking, rolling, cycling or taking public transit. By investing in infrastructure such as new transit shelters, crosswalks, bike lanes, and cycling facilities throughout the city, the City aims to reduce greenhouse gas emissions from transportation and make low-carbon transportation options more accessible for everyone.



Learn How the City
Supports Active
Transportation:

Low-Emission Vehicles: The City requires all new residential parking spaces to have an electric vehicle (EV) charging outlet to encourage EV adoption and reduce air pollution and greenhouse gas emissions. The City is also building a network of public EV charging stations for efficient and sustainable service and is shifting its own fleet of vehicles towards green operations by purchasing vehicles that have lower emissions.



Find Out Where You can
Charge Your EV:



Building Community

Knowing our neighbours and being ready to support each other makes us all stronger in the face of climate and other emergencies.





Building Community

What the City is doing

Complete Communities: To create complete communities with a diverse range of affordable housing options, Richmond is encouraging the development of compact neighbourhoods. This will make it easier for residents to walk, roll, and cycle within and between neighbourhoods, promoting better health while also reducing air pollution on quieter and safer roads and increasing social equity and inclusion.

Neighbourhood Celebration Grant Program: Communities can receive up to \$2,000 to fund events that bring people of different backgrounds together. This includes neighborhood block parties, picnics, and cultural celebrations. Local artists are encouraged to partner with non-profit organizations to develop proposals that use art to strengthen communities and foster social connections.

Creating a personal energy savings and climate action plan



Energy Savings and Climate Action Plan

What can you do to
prepare for and reduce
climate impacts?



Enhancing Mobility

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Energy Savings and Climate Action Plan

What can you do to
prepare for and reduce
climate impacts?



Saving Energy & Cutting Carbon Emissions

What you can do

1

The **CleanBC** Better Homes and Home Renovation website, administered by the Province of BC, includes all utility rebates for improving your home's energy efficiency and reducing GHGs through building upgrades.

Find Out
More From
CleanBC:



2

Reduce your energy use. If you live in an income-qualifying household, **order a free energy savings kit** and take advantage of free installation and energy coaching.

3

Get to know your energy bill. Understanding how much energy you use and when can help you take control and manage your bills. Check out the **FortisBC** and **BCHydro** websites if you need help making sense of your energy bill.



Saving Energy & Cutting Carbon Emissions

What you can do

4

Electric heat pumps use $\frac{1}{3}$ of the energy consumed by gas furnaces and hot water heaters in winter, and they keep you cool in summer. Check **CleanBC** for rebates.

5

Whether you rent or own your home, you can **improve energy efficiency**. For example, you can **insulate your home** for cooler summers and warmer winters, and you can **check for drafts and use weatherstripping** to make your space more comfortable on a budget.

6

Join a program like BC Hydro's **Team Power Smart** for tips on how to save money through smart energy choices. Take the energy Reduction Challenge and commit to reducing your electricity use by 10%. After 365 days, you'll earn a \$50 reward if you've met your goal.



Saving Energy & Cutting Carbon Emissions

What you can do

7

If you're facing utility services disconnection or are having trouble paying your energy bills, you may be eligible for the BC Hydro customer **crisis fund grant**.

Learn How BC Hydro can
Provide Assistance During
a Crisis:





Preparing for a Changing Climate

What you can do

1

Prepare your home and family for emergencies. Create a MyRichmond account to subscribe to **Richmond BC Alert** notifications and make sure you and your family have an **emergency plan and emergency kits** (including for your pets).

Stay Informed
with Richmond
BC Alert:



2

Know where the **cooling centres, spray parks, outdoor swimming pools, and cleaner air spaces are near you** (available at richmond.ca or by calling 3-1-1). All community centres and public libraries have air conditioning.



Preparing for a Changing Climate

What you can do

3

Prepare your property and help reduce the risk of flooding by **ensuring proper drainage. Learn about Richmond's flood protection systems** working to keeping the city safe.

4

Stay up to date with news, events and information by signing up for the **Climate Action eNewsletter**.

Keep Up-To-Date with City News:





Living with Resilience

PWT - 110

What you can do

1

Grow, buy and share more local food.

Community food markets and community kitchens provide access to fresh local food and opportunities to learn with others. Join or start a **community garden** and try growing some of your own food.



Learn About Richmond's Community Garden's; managed by Urban Bounty

2

Use an app like

FoodMesh or **Too Good To Go**

that partners with local restaurants and bakeries to reduce food waste. Check out **Love**

Food Hate Waste and

the **Richmond**

Community Ideas Hub

for other easy and fun ways to reduce waste.

3

Share, reuse, and repair what you have, and **donate, recycle, or trade unwanted goods.**

Your unwanted products may qualify for a **take back program**, where producers, retailers, and consumers share the responsibility of collecting and recycling.



Living with Resilience

What you can do

4

Apply for the **Environmental Enhancement Grant** to enhance, restore, or conserve Richmond's natural environment. Eligible projects include tree planting, invasive species removal, wildlife education, and habitat creation.

5

Support local businesses committed to social equity and sustainability to strengthen our local economy and increase resilience to global disruptions. Buying local can also reduce carbon emissions. Check out **LocoBC** and **SupportLocalBC**.

6

Support city policies that reduce greenhouse gas emissions and value sustainable practices like the **Circular City Strategy**.



Enhancing Mobility

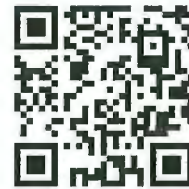
What you can do

1

Walk, bike, ride an e-scooter or take transit when possible and support community organizations that advance active transportation. Richmond has an extensive network of both on- and off-street **cycling routes**.

2

Lead your school or workplace in participating in **Bike to School Week** or **Bike to Work Week** and the **Commuter Challenge**.



Get Involved
with HUB:

3

Contact TransLink about the **TravelSmart for Newcomers** program to help people new to Canada get comfortable with taking transit.



Get Information
on Travelling
Smart through
Richmond:



Enhancing Mobility

What you can do

4

Choose a **car share** for **trips** you need to make by vehicle. Learn more about **car-sharing**, **carpooling** and ride-sharing.

5

If you're a person with a disability, or a senior, consider hosting **Travel Training** to get comfortable using public transit. Seniors with low income and persons with disabilities can access the **BC Bus Pass Program** to reduce the cost of transit.

6

Support **City policies** that reduce carbon emissions from transportation and foster better public transit and active transportation.



Enhancing Mobility

What you can do

7

If you're going to purchase a car, choose electric. Electric cars don't create emissions and use $\frac{1}{3}$ of the energy consumed by internal combustion engine vehicles. Visit **CleanBC Go Electric** to learn about federal and provincial incentives and other programs to support the transition to an electric vehicle.

8

Have an older car? Consider scrapping it and claiming a rebate. **BC SCRAP-IT** encourages vehicle owners to replace high-polluting 2000 and older vehicles with cleaner forms of transportation. Program participants may choose from vehicle incentives towards the purchase of a 2008 or newer model vehicle, transit passes, bicycle incentives, car share and ride share services, or cash.



Building Community

What you can do

1

Check out **The Community Coolkit**, a do-it-yourself guide for community members wanting to engage with their neighbours in climate-proofing their block and caring for the places where they live. The Coolkit is full of fun tools and hands-on activities to help you see your neighbourhood in a new way, make climate change visible, and re-imagine your future.

Learn More About the
Community Coolkit from
the Collaborative for
Advanced Landscape
Plannings (CALP):



2

Get to know your neighbors and be ready to assist during climate change events. Develop a communication plan, such as a call-tree, to ensure important information is shared and vulnerable neighbors are contacted.



Building Community

What you can do

3

Richmond's **Neighbourhood Celebration Grant Program** provides funding for initiatives that reconnect residents through grassroots community events and shared experiences. Eligible events include block parties, community picnics, and cultural celebrations. Local artists are also encouraged to develop proposals in partnership with nonprofits and neighbourhood groups.

4

Partner with your community association to host a sustainability-focused event like a **clothing swap** and spread the word through the city **calendar of events**.

I/we
commit
to...

Use this space to write down your next steps.

FOR EXAMPLE:

- Talk to a neighbour about setting up a call tree
- Figure out how to take transit instead of a car for one of my regular errands
- Sign up for the Greenest City newsletter so I can stay informed about opportunities to provide my input on City plans related to Climate Emergency
- Report back to my Community Climate Leader

Climate Action Ideas

Add your idea here

Add your idea here

Add your idea here

Add your idea here

Add your idea here

Add your idea here