



DISTRICT OF WEST VANCOUVER
750 17TH STREET, WEST VANCOUVER BC V7V 3T3

9.

COUNCIL REPORT

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| Date: | July 19, 2022 |
| From: | Jenn Moller, Director of Engineering & Transportation Services Heather Keith, Senior Manager, Climate Action & Environment |
| Subject: | Ebike Incentive Pilot Initiative |
| File: | 1700.09 |

RECOMMENDATION

THAT

1. staff be directed to prepare an electric bicycle and adaptive mobility device incentive pilot program targeted to low-income residents;
2. staff fund the electric bicycle and adaptive mobility device incentive pilot at an estimated cost of \$135,000 through the Environmental Reserve Fund; and
3. staff report back to Council following implementation of the pilot, allowing for a period of initial data collection to assess and evaluate the achievements of the initial incentive intake.

1.0 Purpose

This report has been prepared in response to Council’s December 6, 2021 motion regarding launching of a District of West Vancouver e-bike financial incentive pilot program with the District and City of North Vancouver.

2.0 Legislation/Bylaw/Policy

Council adopted the District’s Corporate Energy and Emissions Plan (Community EEP) in October 2016, which includes a series of actions to guide GHG reduction in through reducing auto dependency and increasing opportunities for transit and active travel.

Council recently adopted Environmental Reserve Fund Bylaw No. 5188, 2022 to support climate action and environmental protection initiatives. A Council resolution is required for the use of the funds.

3.0 Council Strategic Objective(s)/Official Community Plan

Council Strategic Plan

This report aligns with Council's Strategic Objectives:

- 4.0 Improve mobility and reduce congestion for people and goods.
- 4.1 Collaborating with the North Shore municipalities, First Nations, and regional, provincial, and federal agencies to reduce traffic congestion and improve transit options on the North Shore.
- 4.3 Diversify, expand, and improve the safety and appeal of active transportation options.

Official Community Plan

Section 2.4 regarding "Mobility and Circulation" supports policies that encourage walking, cycling, and accessible transportation options within our community and across the region.

4.0 Financial Implications

The estimated budget to support the initial development and initial phase of intake for this program is \$135,000 which is made up of up \$100,000 in incentive disbursements and \$35,000 to cover administration costs. The proposed budget is consistent with programming costs for the District of North Vancouver program. The proposed administration cost is a high-level estimated cost. Should Council choose to move forward with a coordinated program development alongside DNV, it is anticipated that cost efficiencies will be realized.

Should Council choose to move forward with the program, staff propose the program be funded through the Environmental Reserve Fund as this initiative is anticipated to contribute to the reduction of GHG emissions in the community and meeting the District's emissions reduction targets. On the basis a component of the programming costs is an estimate, any remaining or unutilized funds shall be returned to the Environmental Reserve for use towards other climate action initiatives. Similarly, any remaining funds from the incentive program itself would be returned to the Environmental Reserve.

5.0 Background

5.1 Previous Decisions

Council, at its December 6, 2021, regular meeting, passed the following resolutions:

THAT

1. Council direct staff to report back to Council in the first quarter of 2022, regarding the launching of a District of West Vancouver e-bike financial incentive pilot program; and
2. staff be directed to explore a North Shore wide program with staff at the District of North Vancouver and the City of North Vancouver.

5.2 History

On April 11, 2022 the District of North Vancouver (DNV) Council directed staff to prepare an electric bicycle and adaptive mobility device incentive pilot program targeted to low-income residents and that a funding request to support the pilot program form part of the 2023 annual budget process.

Based on a similar District of West Vancouver (DWV) Council motion, DNV staff recommended a coordinated North Shore program approach, citing the City of North Vancouver (CNV) is aware of DNV efforts to develop an e-bike subsidy.

The pilot program is intended to be modelled around the e-bike incentive program implemented by the District of Saanich (Saanich) in October 2021. Saanich's pilot program framework draws from the extensive work completed by researchers with the University of British Columbia's Department of Civil Engineering and School of Community and Regional Planning.

6.0 Analysis

6.1 Discussion

Staff have reviewed the Saanich e-bike incentive program to form the basis of this report and the recommendations to Council on how to proceed, while incorporating the needs and characteristics of the District's residents. Staff have also been in discussion with DNV to explore collaborating on delivery of such a program.

Pilot Program Design

The framework of the pilot incentive program would consider the following:

- Two tiers of incentives, based on household income, in order to improve equitable distribution of climate action funds;
- Minimum incentives to reduce free-ridership and improve induced demand of the program;
- Study of program impacts on GHG emission reductions, trip substitution, vehicle shedding, and household transportation costs;

- Target a minimum number of participants to have enough data to formulate reasonable conclusions on the successes and achievements of the pilot.

Staff recommend developing an equity-based program with additional eligible devices, widening the range of mobility devices from that considered in Council’s motion, to include E-bikes, E-tricycles, and Electric front-drive Wheelchair attachments. This device eligibility is consistent with DNVs proposed incentive pilot programming.

Table 1: Proposed Breakdown of Incentives

| Incentive Type | Incentive amount | Targeted number distributed | Total Funds Needed | Proportion of Funds |
|--|------------------|-----------------------------|--------------------|---------------------|
| Tier 1: Household Income below median to LICO | \$500 | 500 | \$25,000 | 25% |
| Tier 2: Household Income below LICO | \$1,500 | 50 | \$75,000 | 75% |
| | Totals | 100 | \$100,000 | 100% |

Income Qualification

Staff recommend that the low-income cut-offs (LICO) calculation be used to determine applicant eligibility for this program. A notice of assessment would be required as a supporting document for the program application. Statistics Canada uses a measurement to describe households and individuals who are considered “low-income”: LICO is an inflation-adjusted measure; it is calculated by adding 20% to the proportion of after-tax income to what the average family spends on food, shelter, and clothing, adjusted for family size and location. As captured within Table 2 below, a small but significant proportion of District residents would be considered low-income, though proportionally less than across Metro Vancouver.

Table 2: Income Information for District Households, Census Data

| | District of West Vancouver | Metro Vancouver CMA | District of West Vancouver | Metro Vancouver CMA |
|---|----------------------------|---------------------|----------------------------|---------------------|
| Census Data | 2016 | 2016 | 2021 | 2021 |
| Population | 42,473 | 2,463,431 | 44,122 | 2,642,825 |
| Households (“HH”) | 16,933 | 960,894 | 17,690 | 1,043,319 |
| Median total HH income, after tax* | \$76,687 | \$63,365 | \$90,000 | \$79,500 |
| Average total HH income, after tax* | \$142,717 | \$79,421 | \$145,000 | \$96,800 |
| Proportion of residents below LICO, after tax** | 15.50% | 13.90% | 10.90% | 7.70% |

Data Notes:

*Canada Census 2021 reference period for income data is 2020

**2020 income data is impacted by COVID job and employment reductions as well as COVID related government transfers, which had the net effect of reducing the prevalence of low-income populations

Eligibility Criteria

Staff recommend the following eligibility requirements as summarized in Table 3.

Table 3: Program Eligibility Criteria

| Participant Requirements | E-Bike Requirements |
|--|---|
| <ul style="list-style-type: none"> live in the District of West Vancouver be over 16 years of age apply for one rebate per household rebates are for personal and not business use | <ul style="list-style-type: none"> meets Motor Vehicle Act’s definition of a Motor Assisted Cycle or an adaptive device as described within the Pilot Program Design section of this report new equipment only, not used equipment will be considered no kits or conversions |

Pilot Evaluation

Staff from DNV and DWV have held initial discussions with University of British Columbia’s Department of Civil Engineering and School of Community and Regional Planning who have indicated they are keen to collaborate on this project and provide the same data collection that they are gathering for the City of Saanich.

It is envisioned that participants of the incentive program would be encouraged, but not required, to take part in the data collection study to understand whether and how their transportation behaviour changes as a result of an e-bike purchase.

Should Council approve this pilot program initiative, staff will further explore additional means of structuring the programming such that meaningful data could be collected to measure the pilot's success. Furthermore, evaluation of the initial incentive intake of the program success could lend itself to informing refinement and/or expansion of the program framework design for the purposes of future incentive intakes.

6.2 Sustainability

The transportation sector accounts for approximately 39% of the District's greenhouse gas (GHG) emissions that contribute to climate change. Auto oriented transportation is a significant contributor to greenhouse gas emissions and has other impacts (e.g. air quality and noise). Reduced auto-dependency and moving towards a more diverse mode split can help to reduce the community's impacts on the environment.

6.3 Public Engagement and Outreach

Should the incentive program be approved, staff will work with the Communications Division to develop a targeted communications plan to raise awareness about the incentive program and generate participation, using both print and digital communication tools.

7.0 Options

7.1 Recommended Option

THAT

1. staff be directed to prepare an electric bicycle and adaptive mobility device incentive pilot program targeted to low-income residents;
2. staff fund the electric bicycle and adaptive mobility device incentive pilot at an estimated cost of \$135,000 through the Environmental Reserve Fund; and
3. staff report back to Council following implementation of the pilot, allowing for a period of initial data collection to assess and evaluate the achievements of the initial incentive intake.

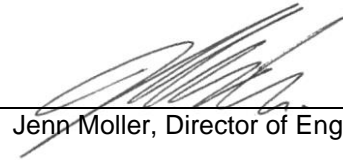
7.2 Considered Options

Council may request additional information or provide alternate direction (to be specified).

8.0 Conclusion

Staff have concluded that the delivery of an e-bike and adaptive mobility device incentive pilot program to District residents is feasible and would be contingent on budgetary approval. Should Council approve this pilot initiative, staff will continue to collaborate with the DNV on how to deliver such a program. Staff at both municipalities recommend the programs be delivered in a coordinated manner.

Author:



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Concurrence



Chrystal Boy, Deputy Director, Financial Services

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