



SAANICH COMMUNITY E-BIKE INCENTIVE PILOT PROGRAM **Interim Findings Report**



Prepared by the Saanich Sustainability Division
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Executive Summary

The Saanich Community E-bike Incentive Pilot offered an incentive on the purchase of new e-bikes by Saanich residents for personal transportation in a program that ran from October 2021 through November 2022. As one of 133 actions in Saanich's Climate Plan, it aimed to reduce greenhouse gas (GHG) emissions from personal transportation through e-bike substitution for vehicle trips, to incorporate equity in design, to maximize co-benefits, and to evaluate the results. It was developed in partnership with the Greater Victoria Community Social Planning Council (CSPC) and researchers at the University of British Columbia's Research on Active Transportation (REACT) Lab. It was the first program of its kind among municipalities in BC.

Transportation from personal vehicles is typically the biggest single source of GHG emissions in our community. Affordability is a concern in our community, and transportation is a significant household cost. The E-bike Pilot was designed to reduce GHG emissions while maximizing co-benefits and improving equity in our community. It can also serve as proof of concept to encourage senior levels of government to implement larger scale programs.

The results of the pilot to date are as follows:

- The program was very popular with residents and exhausted funding before demand was met.
- The incentives for the lowest income tier filled up most quickly, followed by the non-income qualified tier and then the median income tier.
- Equity measures included in the program were successful at reducing barriers to the e-bike program and to e-bikes for lower income residents.
- Collected demographic data shows that reducing barriers to e-bikes for lower income households resulted in a more diverse group of participants overall along not only income but also gender, age, ability, ethnicity, and newcomer to Canada statuses. However, more work is required to achieve participation rates that are proportional to the overall population in Saanich.
- Between 27% and 35% of participants in income qualified tiers lived in Multi Unit Residential Buildings, townhouses or basement suites (based on addresses that provided unit numbers).
- Most participants were located within the Urban Containment Boundary, but there was also participation from rural Saanich residents.
- Anecdotal feedback received from participants was overwhelmingly positive about the role the program played in helping them to access e-bikes and improve their transportation affordability, convenience, and health.
- Residents suggested program changes including assessing individual rather than family income, allowing more than one e-bike incentive per household, using net income rather than total income thresholds; providing extra incentives for equipment needed for carrying children on e-bikes, and custom adaptations required for people with physical disabilities; and including other forms of micro-mobility in future programs.
- The full UBC study will include three waves of surveys: once at or near the e-bike purchase date, three months following e-bike purchase, and 12 months following e-bike purchase.

The survey includes participants in the Saanich E-bike Pilot and a control group from within the capital region that includes those who purchased an e-bike or a conventional (non-electric) bike. The full UBC survey will be available in Fall 2023.

- Initial findings from the UBC study¹ from the first two of three survey waves show that:
 - The incentive program motivated people to purchase e-bikes who would not otherwise have purchased them;
 - E-bike riders increased cycling more than those who purchased conventional bikes; and
 - E-bikes are being used to replace motor vehicle trips and do so at twice the rate than the conventional bike control group in the study.

Overall, the pilot was successful at motivating new e-bike purchases, and participants are using their e-bikes to replace vehicle trips. Therefore, incentives for e-bikes do succeed in reducing GHG emissions from personal transportation while delivering multiple co-benefits such as improved affordability and exercise levels.

Given the promising initial results and the need to reach our 2030 climate targets, it is recommended that e-bike incentives continue to be offered for income-qualified tiers while awaiting the final UBC study results. The proposed 2023 incentive offers are outlined in Table 1 below:

Table 1: Proposed incentives and costs for 2023 program

Item	Detail	Incentive amount	# Incentives	Total cost
E-bike	LICO *1.6 E-bike	\$1,400	50	\$70,000
	LICO *2.1 E-bike	\$1,000	50	\$50,000
Safety Course	Discounts for E-bike Safety Skills Courses	\$55	20	\$1,100
	Admin fee per course	\$100	5	\$500
Contingency				\$8,400
Total			100 incentives	\$130,000

A lottery system approach to incentive distribution was explored in detail. However, staff recommend continuing to use the RecOnline system due to the technological constraints associated with establishing a lottery system and the high setup costs and resources required without significant benefits in accessibility to the program.

A one-time resource request will be included for Council’s consideration as part of the 2023 budget to support the delivery of an additional 100 e-bike incentives as outlined in Table 1. This

¹ The full UBC study will includes three waves of surveys: once at or near the e-bike purchase date, three months following e-bike purchase, and 12 months following e-bike purchase. The survey includes participants in the Saanich E-bike Pilot and a control group from within the capital region that includes those who purchased an e-bike or a conventional (non-electric) bike. The full UBC survey will be available in late 2023.

will build on the momentum already achieved through the pilot program, continue to raise awareness of the value of e-bikes, achieve further GHG reductions and other co-benefits, and assess the impact of the amended incentive amounts to uptake. This additional information will be useful to share with the Province in anticipation of a potential provincial e-bike incentive program.

Qualitative research would be conducted on the 2023 incentive intakes with support from the Community Social Planning Council and would be available in the same timeframe as the UBC Study (fall 2023). Final study results for both the 2021/22 pilot and the 2023 intakes will be shared with Council and other interested parties in late 2023 and used to inform recommendations for any future ongoing e-bike incentive program.

1.0 Context

This report provides interim results and associated recommendations for the Saanich Community E-bike Incentive Pilot Program that ran from October 2021 through November 2022. It is intended to assist those interested in e-bike incentive program design and related topics to understand the development and interim results, in addition to making recommendations for the continuation of an e-bike incentive program in 2023 while final pilot study results are awaited.

1.1 Climate Plan Direction

In 2019, District of Saanich Council declared a Climate Emergency and followed this with approval of the Climate Plan: 100% Renewable and Resilient Saanich in January 2020. The Climate Plan outlines the actions needed to:

- Cut greenhouse gas (GHG) emissions in half by 2030 & net zero by 2050;
- Transition to 100% renewable energy by 2050; and
- Prepare for a changing climate.

Transportation is the largest source of our community-wide greenhouse gas (GHG) emissions, responsible for 57% of our total emissions in 2018. Most of these emissions are from the use of personal vehicles, light trucks and SUVs, which could be reduced considerably by a mode shift to public transit and active transportation. This mode shift provides more co-benefits to the community than simply shifting from fossil fuel vehicles to electric vehicles.

In order to achieve adequate GHG emissions savings in the transportation sector, the Climate Plan included a modelled pathway, which shows we must achieve all of the following objectives by 2030:

- 22% of trips by active transportation
- 14% of trips by public transit
- Transition 36% of personal vehicles to electric vehicles
- 100% of transit buses electrified

To achieve these objectives, the Climate Plan identified 22 Mobility actions, including accelerating the implementation of the Active Transportation Plan and requiring EV charging-ready new construction. One of these actions is *Climate Plan Action M1.2: Pilot an electric bicycle incentive program*.

1.2 Benefits of e-bikes

E-bikes are a relatively new technology that holds potential to reduce GHG emissions in the transportation sector and reduce barriers to active transportation by residents. Preliminary studies have found e-bikes are used for longer trips than conventional bicycles, with an average distance per trip of 6.1km (Aono & Bigazzi, 2019). That distance is longer than both the average bike trip distance (3.3km) and the average car trip length (5.3km) in Saanich as found in the CRD's Origin-Destination survey (Malatest, 2017) and shown in Table 2 below.

Table 2: Average trip length by mode in Saanich

Mode	Average Trip Length
Car	5.3 km
Transit	4.8 km
Bike	3.3 km
Walking	1.0 km

Source: 2017 CRD Trip Diary for Saanich

This trip distance boost compared to non-electric bikes means e-bikes may be able to replace more car trips than cycling alone and help the active transportation infrastructure we build to be used for longer trips.

Additionally, anecdotal evidence shows that electric bicycles overcome many barriers to non-electric cycling, including:

- ease of covering hilly terrain;
- ease of transporting young children;
- ease of transporting heavy goods such as groceries;
- less physical fitness required – making cycling available to more people of diverse ages and abilities; and
- less need for exercise clothes – increasing convenience of cycling for different types of trips.

E-bikes overcome many barriers to electric vehicle adoption, including:

- lower purchase costs;
- lower operating costs;
- lower barriers to charging (any electrical outlet can be used, rather than the specialized charging typically used for electric vehicles); and
- improved opportunities for of regular moderate exercise, with resulting physical and mental health benefits.

E-bikes deliver more environmental and community benefits than electric vehicles do, including:

- improved road safety (e-bikes have slower speeds and less mass than electric vehicles);
- less pollution from tire particulates;
- less wear and tear on roads;
- less materials needed for manufacturing;
- more physical activity for residents;
- less electricity needed to transport people per kilometer travelled; and
- reduced footprint required for parking and road space.

A meta-analysis of 24 published studies on e-bike usage (Bigazzi A. a., 2020) found that e-bike users substitute many different kinds of trips with e-bikes, including walking, non-electric cycling, public transit, and driving personal vehicles. This analysis shows that e-bikes are not only used for recreation or to make existing cycling trips easier, but can also displace driving and the associated GHG emissions from internal combustion engines.

The CRD's 2020 [Housing and Transportation Cost Estimate Study](#) shows that the average Saanich household has 1.7 vehicles, an annual household cost for transportation of \$12,294, and an average annual household housing cost of \$16,152. Reducing transportation costs frees up space in a budget for housing and other needs. Using an e-bike to replace vehicle trips

reduces money spent on fuel and wear and tear on a vehicle. If an e-bike allows a household to shed a vehicle (e.g. moving from a two car family to a car plus e-bike family), then even bigger cost savings can be achieved.

1.3 Pilot program development process

Given this context and direction, staff undertook significant research and engagement with key stakeholders and partners to develop an e-bike incentive program and deliver on Climate Plan Action M1.2. This included the completion of a detailed feasibility study in March 2021, which was used to inform the program design and to assist with funding proposals.

1.3.1 Partnerships

The District established partnerships early in the program development with the Community Social Planning Council (CSPC) of Greater Victoria and with researchers at UBC Research on Active Transportation (REACT) Lab.

Community Social Planning Council of Greater Victoria

The CSPC partnered with Saanich to advance climate justice in the region, supporting the incorporation of equity into the program pilot design. This has been supported by funding from the Vancouver Foundation for the CSPC [Transportation, Access, Climate, and Economic Security \(TACES\) Program](#). Saanich staff benefitted from CSPC input on equity in program design throughout the design process, including their facilitation of workshops with local providers of income-qualified programs on best practices and alignment opportunities, convening a lived experience advisory committee, and working with the Inter Cultural Association (ICA) of Greater Victoria, the City of Victoria, the Capital Regional District (CRD), and Capital Bike on an event with the ICA's adult English Language Learners to learn about road safety, try e-bikes on newly completed AAA bike infrastructure, and learn how it fit into climate action in the region.

UBC Research on Active Transportation Lab

Since understanding the effects of incentive programs is vital to determining whether they continue and expand in the future, Saanich was interested in partnership with academic researchers. Saanich partnered with researchers at the UBC REACT Lab React Lab; a group dedicated to finding ways to make transportation systems more effective, sustainable, equitable, and healthy and who were interested in accessing data from a local e-bike incentive program. A research project on the pilot incentive program was established with funding from NSERC and support letters and funding from Saanich, the Capital Regional District (CRD), the CSPC, and non-profit One Earth.

1.3.2 Engagement

Considerable public engagement had already been completed prior to the program design stage in relation to e-bikes generally and potential interest in an e-bike incentive program. This included a survey of over 700 respondents conducted for the CRD, which identified barriers to e-bike adoption in the community (Watt Consulting Group, 2018) in addition to extensive public engagement conducted for the Saanich Climate Plan and the Saanich E-mobility Strategy, which outlined community support for an E-bike Incentive Pilot Program.

Further engagement was then undertaken during program design, which focused on low income residents, local e-bike industry and other levels of government. A comprehensive overview of this engagement is included in the Community E-Bike Incentive Pilot Program Feasibility Study. In summary, the engagement with low income residents showed cautious interest in an e-bike incentive program and engagement with the local e-bike industry showed support and offered useful feedback that informed the eligibility criteria for the program. The CRD and the BC Ministry of Transportation and Infrastructure and the BC Ministry of Energy, Mines, and Low-Carbon Innovation were interested to learn more about the results of the program but not in collaborating on program delivery or delivering a similar program themselves at that time.

2.0 Program design

The program design was informed by the detailed feasibility study (including considerable research) and engagement noted in Section 1 above. Given this was the first program of its kind in BC with limited examples of similar programs elsewhere it was expected that there would be some level of flexibility in program delivery in order to address any immediate challenges or lessons learned.

The goals of the pilot were to:

1. Provide a simple to use incentive program with high participant satisfaction ratings
2. Provide a program that is accessed by households across the income spectrum in Saanich
3. Reduce greenhouse gas emissions in personal transportation
4. Increase physical activity levels of participants during transportation activities
5. Reduce household transportation costs
6. Collect high quality data from participants to enable rigorous evaluation of program impact, including:
 - a. Trip substitution
 - b. Vehicle shedding
 - c. Household transportation cost impacts
7. Support the local clean economy and employment
8. Increase community awareness of the value of e-bikes to accelerate wider community adoption.

2.1 Incentive amounts and income thresholds

The E-bike Pilot provided three different incentive levels based on household income:

- Tier 1 - \$350
- Tier 2 - \$800
- Tier 3 - \$1,600

The feasibility study outlines the reasons for these amounts, which are based on econometrics modelling (Bigazzi and Berjisian 2021 Transportation Research Annual Meeting Presentation) and include a major emphasis on reducing free-ridership, or, in other words, inducing new people who would not otherwise have purchased an e-bike, to participate in the program. By reducing free ridership, the program increases its climate action effectiveness by changing

behaviours and reducing GHG emissions rather than simply rewarding those who would have already done the action without the incentive money.

The program also provided tiered discounts for an E-Bike Safety Skills Course provided by local non-profit Capital Bike. Table 3 provides details of the incentives and course discounts.

The feasibility study explored a number of options for income thresholds. The final thresholds align (besides rounding differences) with the income criteria for the CleanBC Income Qualified Program, and with the Saanich Oil to Heat Pump Financing Program. The lowest threshold is 1.6% of the Low Income Cut Off (LICO) for communities of our size (region) and the middle threshold is 2.1% of LICO, which approximates a median income in our region.

The income thresholds and incentive levels were not changed throughout the pilot. The discounts for e-bike safety skills courses offered to participants were increased after the launch of the program since initial uptake was low.

Table 3: Incentive tier income qualification thresholds

# of people in household (includes children)	Household income (before tax) – includes income of main income earning adults in the family* over the age of 18.		
1 person	Up to \$42,600	Up to \$55,900	Over \$55,900
2 persons	Up to \$53,000	Up to \$69,600	Over \$69,600
3 persons	Up to \$65,200	Up to \$85,600	Over \$85,600
4 persons	Up to \$79,100	Up to \$103,900	Over \$103,900
5 persons	Up to \$89,800	Up to \$117,800	Over \$117,800
6 persons	Up to \$101, 200	Up to \$132,900	Over \$132,900
7 or more persons	Up to \$112,800	Up to \$148,00	Over \$148,00
E-bike incentive level	\$1,600 incentive	\$800 incentive	\$350 incentive
Discount for E-bike Skills Safety Course	\$55	\$40	\$20
Proof of income required?	Yes	Yes	No

*Family members include a married or common law couple and children in the home. It does not include unrelated roommates, landlord and tenant, etc. Refer to "[census family](#)" definition by Statistics Canada for more details. Single people can report single income. In cases with multiple adult family members at the household with incomes, show the income only for the top two earners.

Income documentation requirements are outlined in the application form, which can be found in Appendix A.

1.3.3 Pilot program incentive funding

In addition to the funding that was secured by partners for the research and equity components of the pilot program as noted above, additional funding support was provided by the Federation of Canadian Municipalities (FCM) Green Municipal Fund (GMF), the Sustainability Division Climate Action Reserve Fund (CARF) and Council contingency fund.

2.2 Number of participants

The e-bike incentive pilot required a minimum of three hundred participants to ensure a statistically valid result from the associated UBC study. It was identified that a sizeable number of income-qualified participants would be beneficial to include in the pilot in order to gain greater insight into the impact that e-bikes have for lower income individuals. However, this was the first program of its kind in British Columbia and, as such, there was a level of uncertainty regarding the uptake by income-qualified participants. Engagement with industry and key stakeholders, including the Community Social Planning Council (CSPC), indicated potential difficulty filling the income-qualified incentives, particularly those in Tier 3. This was mainly due to barriers to access and assumed lower availability of secure bike parking (e.g. in apartments). Therefore, the pilot was originally designed with lower targeted numbers in the income-qualified tiers due to both the anticipated slower uptake in these tiers and also budget constraints when no grant application had been confirmed (see Table 4).

Table 4: E-Bike Pilot Program Targeted Incentives

Incentive Type	Incentive amount	Target # Incentives Distributed	Incentives Budget	% of Funds
Tier 1: Above median	\$350	180	\$63,000	32%
Tier 2: Income-qualified (median to ~LICO+2.1%)	\$800	80	\$64,000	32%
Tier 3: Income qualified (~LICO+1.6% and below)	\$1,600	40	\$64,000	32%
contingency			\$9,000	5%
	Totals	300	\$200,000	100%

It should be noted that these were target numbers and a level of flexibility was desired to allow for some changes in their distribution as lessons were learned during the early stages of the pilot but being cognizant of the need for a minimum number of participants (300).

Additional funding became available during delivery of the program allowing for more incentives to be provided. Based on lessons learned regarding high demand for income qualified incentive tiers during the program launch and a desire to have more income qualified participants included in the UBC study, this additional funding was used to supplement the \$800 and \$1,600 incentive tiers through 2 additional program pilot intakes.

2.3 Eligibility criteria

Summary eligibility criteria are outlined below, and full eligibility criteria are available in the terms and conditions document in Appendix B.

Applicant criteria

- Must reside in Saanich at least 50% of the year
- Only one application per Saanich household (address)

E-bike criteria

- Purchase of new e-bikes (not used) costing \$1,800+
- Minimum 1 year warranty
- Meets BC Motor Vehicle Act “Motor Assisted Cycle” definition
- For personal, not commercial use

2.4 Point of sale incentive

Local e-bike vendors in the CRD were invited to opt in to providing a point-of-sale incentive. To access the point of sale incentive, a participant would need to be pre-approved by Saanich, and inform Saanich which vendor they had decided to purchase their e-bike from. The District would then inform that particular vendor that the particular resident had been pre-approved for a particular amount to be taken off at the till, and that Saanich would reimburse the vendor after receiving the Point of Sale Incentive Form and a detailed receipt.

2.5 Addressing equity during design

The following equity measures were included in the design.

Structural

- Commitment to equity included in pilot design, in line with the Saanich Climate Plan equity commitments; and
- Saanich staff completed the Equity Foundations Course training from the Urban Sustainability Directors Network (USDN) and employed a number of existing equity lenses in the development of the program including the Multnomah County and the Saskatoon lenses.

Procedural (inclusion)

- Engaged early in the process with equity-denied people and the community organizations who work with them, including:
 - Surveyed Saanich L.I.F.E program members;
 - Partnered with the Community Social Planning Council (CSPC) in their TACES program, which included a lived experience advisory committee and a Targeted Universality working group consisting of local organizations providing income-qualified programs; and
 - Worked with the Intercultural Association and their English Language Learner students.

Distributional (access)

- Larger incentives for lower income households (LICO, median, above median) held in separate “buckets” than the non-income qualified incentives;
- Fixed incentive amount rather than percentage of e-bike price;
- Accessibility for low-computer access residents;

- Multiple options for providing proof of income, including the Endorsement Form;
- Pre-approval process for rebates;
- Point of sale incentive option (incentive provided at till by participating vendors); and
- Speciality adaptive bikes allowed in program.

2.6 First Come First Served Approach

During program design, staff engaged the Province, CRD and other local governments, recognizing the potential for others to learn from the pilot and potentially launch their own program, which could include Saanich residents. Therefore, alignment with other climate rebate program processes, particularly those at the provincial level, was an important design aspect to ensure the program could potentially be replicated at a larger scale.

There are many well established climate-focused rebate programs administered by other cities, provinces and the federal government which employ a standard first-come first-served approach, even when there is extremely high demand. Some examples are the BetterHomes BC rebates, the CleanBC Go Electric rebates, the Scrap-It program, the federal Greener Homes Grant etc. This has also been the approach taken by Saanich for other programs and rebates and was applied in the design for the e-bike pilot.

3.0 Program delivery

There was a desire by staff to implement the pilot program by early fall 2021 in order to take advantage of behaviour changes established during COVID-19 (i.e. an uptake in more walking and cycling) and to deliver the program when the weather would support new bike users. While a grant application had been submitted to the FCM Green Municipal Fund (GMF) in early 2021, staff were uncertain whether the grant would be successful based upon the unique nature of the program and decision timelines were lengthy. As such, Council committed funding as part of the 2021 budget in order for the pilot program to be designed and launched in the desired timeframe.

Around the time of program launch, staff learned that the FCM GMF grant application had been successful and recommended to Council that the grant funds be used to deliver additional income qualified incentives. This allowed the program to respond to the unexpected high levels of demand in the lower income tiers and to enable more participants in the UBC survey from income-qualified participants, providing extra data.

As such, the pilot program was ultimately delivered through three separate intakes between October 2021 and November 2022 as summarized in Table 5.

Table 5: Incentive intake dates

Intake	Incentive tiers	Launch/Open Date	Close Date
1	\$1600	October 12, 2021	October 15, 2021
	\$800		October 20, 2021
	\$350		February 23, 2022
2	\$1600 only	April 13, 2022	April 29, 2022
3	\$800 only	June 2, 2022	November 22, 2022

3.1 First incentive intake

The first incentive intake opened on October 12, 2021. All three incentive tiers were open at the same time.

The following key public communications activities were undertaken to launch the pilot program:

- Program webpage (www.saanich.ca/ebike)
- Media release
- Social media posts
- An event for Greater Victoria Intercultural Association (ICA) adult English Language Learner classes hosted by the ICA in partnership with the City of Victoria, Capital Regional District, and the CSPC, with assistance from Capital Bike who provided rental e-bikes and e-bike instruction and guided rides for ICA students and staff

Sustainability staff made themselves available by phone and at the front counter, supported by planning department and municipal hall reception staff who were briefed on the program launch. Printed copies of the pre-approval and the rebate forms were available at the planning department counter and could be downloaded from the program webpage.

The program webpage information included:

- pre-approval and rebate application forms
- program terms and conditions
- eligibility criteria
- incentive amounts
- discount for e-bike safety skills course information
- process to apply
- local e-bike vendor list
- income qualification table
- frequently asked questions
- contact information for Sustainability staff

Participants were given the following two options to apply for the incentive:

Incentive after purchase

1. Purchase a qualifying e-bike from the e-bike vendor of your choice (can be local, online, or elsewhere) and submit your application and receipt for an incentive. Pre-approval is available but not required. Terms and conditions apply.

OR

Point of Sale Incentive through Vendor

1. Request pre-approval from Saanich. (*Pre-approval was required for a point-of-sale incentive.*)
2. Receive confirmation from Saanich that you are pre-approved.
3. Bring your confirmation to a participating e-bike vendor in the Capital Region (not online) to access a point of sale incentive on your e-bike. (Terms and conditions apply.)

The pre-approval and rebate form asked for proof of residence in Saanich, proof of household income for the income-qualified tiers and some general demographic questions. The rebate form required proof of purchase of a qualifying e-bike in the form of a receipt.

The pilot had been designed to maximize accessibility to income qualified individuals, which included offering a broad range of ways to apply. Applications were accepted by mail, phone, in person at Saanich municipal hall and online through our secure file transfer service. The secure file transfer service (MOVEIT) required a resident to ask staff to send them an individual email invitation to use MOVEIT. It was not an automated system or one that residents could use out of Saanich employee work hours.

3.1.1 Launch experience & uptake

The launch saw considerable media coverage including the Times Colonist, CBC Radio and Global News among other outlets. While the pilot was expected to be popular, the media coverage led to extremely high numbers of applications for the income qualified tiers within the first few days. Staff were not only fielding many calls and e-mails from interested residents, but also from media and several municipalities in BC and beyond requesting more detailed information about the program.

In addition, a very high number of requests for the MOVEIT file transfer service were also received. Many residents had technical issues using the MOVEIT system, and it added an extra time delay to receiving and processing applications.

In response to the high volumes, and as a protective measure for applicants, the program website and other channels were updated to include strong recommendations to get pre-approved, rather than purchase an e-bike and then submit a rebate request, as the incentives were being allocated very quickly. The website was also updated to notify the public regarding the status of incentive availability and that staff were taking longer than anticipated to process applications at that time due to the high volumes received within a short timeframe.

While there were difficulties expected in reaching the targeted participants for the income-qualified incentive tiers, these difficulties were not realized during the pilot launch. The program design targeted only 40 participants in the \$1,600 incentive tier, but 77 applications (mainly pre-approvals) had been received by the time this incentive tier was closed on October 15, 2021. The \$800 incentive was then closed on October 20, 2021 with 43 applications received. While the targeted 80 participants in the \$800 incentive tier were not fully allocated by that time, this tier was closed to ensure sufficient funds would be available to accommodate the additional participants in the \$1,600 rebate tier.

It is important to note that these applications had not all been processed by the date the incentive tiers were closed and it was expected that a small number of the applications would not be eligible. In addition, most of the applications were pre-approvals, which would allow 30 days for the applicant to purchase an eligible e-bike following notification that their pre-approval application had been approved. As such, staff were aware that it would take several weeks or months before all incentives were distributed and final numbers were known.

After being date and time stamped, applications were reviewed for eligibility, including:

- Completed form
- Address in Saanich
- Not a duplicate address to those previously approved
- Proof of residence
- In the case of the income-qualified tier, proof of household income
- In the case of a rebate form, proof of purchase of a qualifying e-bike within the program timelines.

If any information was missing, applicants were contacted to ask for the correct information, with follow up contacts by email and phone.

If a pre-approval was complete and eligible, and there were spaces available in the income tier, applicants received an email informing them that they were pre-approved and had 30 days to purchase an e-bike and to submit proof of purchase in order to qualify for the incentive.

If a rebate application was complete and eligible, applicants received an email informing them that they were approved for an incentive and that it would be mailed to their home within 2-3 weeks.

This review stage in the first intake took a number of weeks for staff to complete, given the high volume of applications received. Staff closed the incentive tiers, as shown in Table 5, based on

how many applications had been received and how many spaces were available in each incentive tier. Once the incentive tiers were closed, residents were invited to join an e-newsletter list to learn about any program updates and future incentives.

3.2 Second and third incentive intake

Once the FCM GMF grant funding was confirmed in early October, staff prepared a report for Council that provide an overview of early findings from the pilot launch and made a recommendation to spend the grant funding on additional income qualified incentives.

Council approved the additional incentives at the November 22, 2022 meeting as outlined in Table 6. In the second and third intake, funds were used solely for the two lower income tiers in order to reach at least 100 recipients in each incentive tier. This was done to improve equity in distribution of funds and to improve the number of lower income participants in the UBC study.

Table 6: Revised incentive targets by incentive tiers

Incentive Type	Incentive amount	Original Target# Incentives	Original Budget	Proposed # Incentives	Updated Budget	% of Funds
Tier 1: Above median	\$350	180	\$63,000	180	\$63,000	20%
Tier 2: Income-qualified (LICO*1.6 to LICO *2.1)	\$800	80	\$64,000	100	\$80,000	25%
Tier 3: Income qualified (LICO*1.6 and below)	\$1,600	40	\$64,000	100	\$160,000	50%
Contingency			\$9,000		\$15,000	5%
Totals		300	\$200,000		\$318,000	100%

Based on lessons learned from the pilot launch, the following changes were made for distribution of the additional incentives through the second and third intake:

- The pre-approval step was made mandatory - both for point-of-sale incentives and rebates to residents to ensure no purchases were made without applicants first being reviewed for eligibility and ensuring there was still an incentive available for them.
- Registration was centralized through Saanich Recreation's RecOnline Active Net system - this provided an electronic system to implement the first-come first-served approach. While this reduced the range of ways to apply, it offered an existing, well-established Saanich system to automate registration in a high demand program that reduced administrative burden and provided greater immediate transparency.
- An automated waitlist was established - through the RecOnline system, which enabled staff to reach out to the next person on the waitlist should any successful applicants not meet eligibility criteria or drop out through the process. Waitlisted applicants were able to call Saanich recreation to determine where they were on the waitlist, which improved customer service and provided alignment with other Saanich programs.
- Only one incentive tier was open at one time – starting with the largest incentive (\$1,600). This reduced the number of applicants applying at one time in order to reduce the

administrative burden and provide faster response and processing times for each application. By opening the largest incentive tier first (\$1,600) this also enabled eligible income qualified participants the opportunity to apply for the \$800 incentive if they were unsuccessful in accessing a \$1,600 rebate.

The RecOnline Active Net system is used for many popular programs that fill up quickly and take a waitlist. It provides an automated, transparent, low-barrier system with instant feedback to applicants about the first-come, first-served process and their status in the program or on the waitlist. Support for using the RecOnline system is available in-person at our rec centres and on the phone by recreation staff and is available for a wider range of hours than our Municipal Hall is open. On enrolment day, recreation staff were available a half hour earlier than usual to help with any in-person requests for enrolment assistance.

Communications were launched approximately two weeks prior to the RecOnline enrolment opening to allow residents to learn about the program, create a RecOnline account if they didn't already have one, and make arrangements to be available at the time the enrolment opened.

3.3 UBC Study

Participants who received an incentive were invited to participate in the UBC study. Participants were provided information about the study and were invited to participate by following a link or QR code or calling a phone line that offered translation services in multiple languages. The study was promoted through the following channels:

- Pilot program webpage
- Pre-approval email
- Confirmation of rebate email
- Letter accompanying rebate cheque
- Reminder email

Participation in the study was voluntary, and no personal information was shared between the District and UBC researchers.

3.4 E-Bike safety skills courses

Participants who received an incentive were invited to redeem their discount for upcoming E-bike Safety Skills Courses. These E-bike Safety Skills Courses were provided by Capital Bike, a local non-profit that provides cycling education for "utility" cycling (cycling skills for transportation rather than for sport). The half-day courses involved an in-classroom session to learn cycling theory and safe practices, then on-bike skills in a protected area including stopping and starting, shoulder checking, signalling, and turning, and then a guided group ride on a variety of cycling infrastructure. The courses were regularly \$65 per participant. At pilot launch, the program offered \$10, \$18, and \$25 discounts for the different incentive tier recipients. Participation in the courses was very low, so the discounts were increased to \$20, \$40, and \$55 respectively, and offered retroactively to all participants during the second and third intake.

4.0 Interim Pilot Program Results

4.1 Incentives distributed

A total of 389 incentives were distributed over a period of 13 months with at least 100 incentives distributed in each incentive tier (Table 7). Given the attrition among applicants and the inclusion of a small contingency, the programs accepted slightly more applicants than targeted spaces in order to ensure that targets were met. The majority of funds went to the largest incentive tier, which aligns with the commitment to helping overcome financial barriers to climate-friendly transportation adoption and to the distributional aspect of climate equity.

Table 7: Incentives issued

	1st intake	2nd intake	3rd intake	Total incentive recipients	Total \$	% funds
\$1600 Tier	61	40		101	\$161,600	52%
\$800 Tier*	28		77	105	\$ 84,000	27%
\$350 Tier	183			183	\$ 64,050	21%
Totals	272	40	76	389	\$308,850	

4.2 Pre-application & Point of Sale choices

During the first intake, applicants had the choice of whether to purchase an e-bike and submit a receipt for a rebate or to seek pre-approval for the program. Pre-approval provided the applicant with confirmation that their income and residence documentation was acceptable and that funds were available for an incentive of a particular amount, which was reserved for them for 30 days while they shopped. Table 8 outlines that majority of income-qualified applicants sought pre-approval (92-93%) compared with 59% in the non-income qualified group.

Table 8: Pre-application route for the first intake

	1st intake # pre-applied	1st intake % pre applied
\$1600 Tier	56	92%
\$800 Tier*	26	93%
\$350 Tier	108	59%

Additionally, participants had the choice of whether to purchase the e-bike and submit proof of purchase then wait for an incentive, or to access an e-bike at a participating point of sale vendor and have the incentive taken off the purchase price at the till, with the vendor being reimbursed by Saanich. Table 9 demonstrates that income qualified applicants accessed the point-of-sale process much more frequently than applicants in the non-income qualified tier.

Table 9: Point of sale incentives

	Total incentive recipients	# POS	% POS
\$1600 Tier	101	29	29%
\$800 Tier*	105	30	29%
\$350 Tier	183	7	4%

The final intake provided additional \$800 incentives. Several applicants inquired about whether additional \$1,600 incentives would be made available in future, but no commitment was made by staff. Table 10 demonstrates that 60% of applicants in the final intake that received the \$800 incentive would have qualified for the \$1,600 incentive if it were available at the time they applied (this information was not collected in the first intake).

Table 10: \$800 recipients who would have qualified for \$1600 incentive by income (final intake only)

\$800 recipients' income qualifications	Number	Percentage
Would qualify for \$1600	46	60%
Would not qualify for \$1600	27	35%
Uncertain (endorsement form does not include income level)	4	5%

4.3 Waitlist and attrition experience

The first intake did not take a waitlist, while the second and third intakes took a waitlist through the RecOnline system.

4.3.1 Second intake waitlist and attrition

The second intake, which provided an additional forty of the \$1,600 incentives opened on 13 April 2022. As with many high demand Saanich programs, registration was full within the first minute, at which point the system began taking a waitlist.

Staff completed a first review of RecOnline program registrants for eligibility based on the addresses provided. Seven applicants had duplicate home addresses either within that same intake or from previous incentive recipients from the first intake (October 2021), and one applicant was not from Saanich. These applicants were notified that they were not eligible. Those remaining were invited to submit their pre-application form, proof of address, and proof of income. Two applicants were over the income threshold and were removed. Removing these non-eligible applicants allowed 11 waitlisted participants to access the incentive. For this intake, those who signed up for the RecOnline program within the first two days of enrolment opening were able to access the incentive.

Staff waited until all \$1,600 incentives were distributed until the third intake was opened. This meant all pre-applications were reviewed for eligibility (including those being added in from the waitlist), e-bikes were purchased and reviewed for eligibility (including any extension requests), incentive cheques were distributed, and the waitlist was closed so that those on the waitlist were

aware that there were no remaining \$1,600 incentives but that the \$800 incentive intake would open soon. This process took approximately two months to complete.

4.3.2 Third intake waitlist and attrition

The third intake, which provided an additional seventy-seven of the \$800 incentives opened on 7 June 2022. Registration was not filled until 28 June 2022, or 21 days later, and then the system began taking a waitlist. The waitlist remained open until 22 November 2022, as those in the program were reviewed for eligibility and those who did not qualify and/or did not complete a purchase by their respective deadlines were removed from the program, and the next person from the waitlist was invited to submit their pre-approval documents.

A total of 74 people who enrolled in the third intake were ineligible for various reasons. These included:

- not having an address in Saanich;
- another applicant or e-bike rebate recipient already having the same address;
- not meeting the income qualified threshold or eligibility requirements;
- having purchased the e-bike before the intake enrollment date;
- withdrawing from the program without purchasing an e-bike (many noted that they were interested but the incentive wasn't sufficient to make the e-bike affordable for them);
- not submitting pre-approval documents by their deadline (reasonable extensions were provided where requested);
- choosing to buy an ineligible used e-bike instead;
- having registered for the program but not responding to multiple phone or email messages from Saanich staff in order to move to the pre-approval stage.

This substantial attrition rate allowed many waitlisted individuals to access the \$800 incentive. Staff began calling waitlisted individuals to pre-screen them before sending them the pre-application package. More than 25 waitlisted individuals were screened out through this process, for reasons outlined above or simply failing to return calls or emails from Saanich staff. Ultimately, those who applied or enrolled in the RecOnline program or waitlist between June 7 and September 11 were able to access incentives.

Table 11 shows the attrition rates between applicants being pre-approved and then not providing proof of purchase for an e-bike by their deadline, and therefore not receiving an incentive. As shown below, there were remarkable differences between the tiers. The April \$1600 intake and the June \$800 intake were advertised in essentially identical ways.

Table 11: Attrition between pre-approval and submitting proof of purchase

	Total incentive recipients	# pre-approved but did not proceed	% pre-approved but did not proceed
\$1600 Tier	101	4	4%
\$800 Tier	105	84*	80%
\$350 Tier	183	70	38%
Totals	388		

** This total does not include the over twenty-five individuals who applied through Active Net but were screened out by phone call before being invited to submit pre-approval documents (for reasons such as not living in Saanich, not meeting the income requirements, having already purchased an e-bike, etc.). With those individuals included the attrition rate would be over 100%.*

4.4 Participating vendors

A total of nineteen local vendors opted into becoming point of sale incentive vendors. Participation was open to any e-bike vendors in the Capital Region who also provided in-region e-bike maintenance services, sold qualifying e-bikes, and agreed to the reimbursement process from Saanich. As part of industry engagement, Saanich approached as many e-bike vendors in the region that were found through an online search. Some vendors opted in before launch, and slightly over half the vendors joined shortly after the program launch, likely due to the positive media stories and customer inquiries. No vendors opted out of the point of sale system during the program. Saanich received positive feedback from participating vendors, including the impact of the program on sales, the speed at which Saanich reimbursed the vendors (usually within a month of receiving the receipt/invoice), and interest in participating in future programs should they become available.

4.5 E-Bikes purchases

The average cost for an e-bike in the program overall was \$2,940. Table 12 and Figure 1 show that there was a large variability in maximum costs in the program by tier with the maximum and average e-bike cost being lowest for the \$1,600 tier (\$6,500 and \$2,581) and highest for the \$350 tier (\$14,995 and \$3,197). The minimum costs were quite similar, which is likely due to the minimum cost requirement of the program (\$1,800).

E-bike purchase costs

Table 12: E-bike purchase costs

	\$ 1,600 incentive recipients	\$ 800 incentive recipients	\$ 350 incentive recipients	Overall
minimum cost	\$ 1,849	\$ 1,800	\$ 1,815	\$ 1,800
maximum cost	\$ 6,500	\$ 9,599	\$ 14,995	\$14,995
average	\$ 2,581	\$ 2,783	\$ 3,197	\$ 2,940
median	\$ 2,299	\$ 2,299	\$ 2,399	\$ 2,395

Figure 1: E-bike purchase costs by incentive tier



While the BC Motor Vehicle Act’s regulations provide a definition of an e-bike, they do not provide any definitions for cargo e-bikes. The Province’s Specialty Use Vehicles Incentive (SUVI) program includes a definition of cargo e-bikes for their incentives. The focus in the SUVI program is hauling cargo for business fleets. Therefore, their definition excludes some e-bikes that were incentivized in the Saanich pilot that can accommodate cargo, such as on e-trikes, and additional passengers to the rider, such as the RadRunnerPlus. The Saanich pilot used a broader provisional definition of cargo e-bikes than the SUVI program, namely an e-bike or e-trike that includes as an integrated portion of their design the ability to transport either a person in addition to the rider and/or a sizable platform or box to transport items.

As shown in Table 13, 42 (11%) e-bikes in the program were identified by Saanich as cargo e-bikes. It should be noted that the highest cost cargo e-bike in the program was for a custom adaptive e-bike that allows the rider to safely transport a passenger in a wheelchair. That cost was an outlier compared to the other cargo e-bikes in the program. The median costs for the cargo e-bikes is very similar to the costs for non-cargo e-bikes in the program.

Table 13: Cargo e-bikes purchased

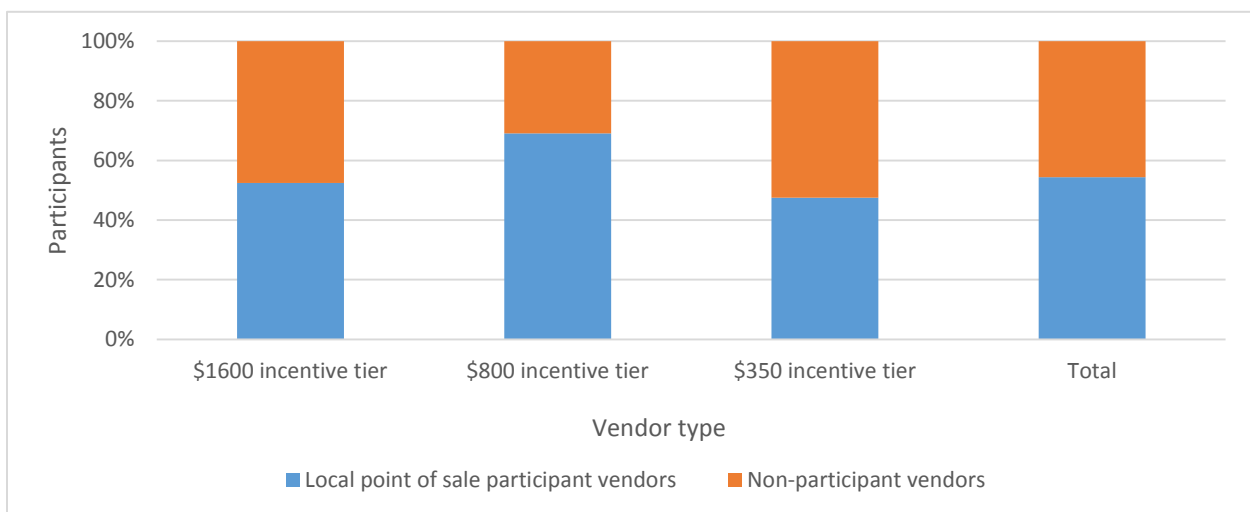
Incentive level	\$ 1,600	\$ 800	\$ 350	Overall
# of cargo e-bikes purchased	15	10	17	42
Minimum cost	\$ 2,299	\$ 1,999	\$ 2,237	\$ 1,999
Maximum cost	\$ 6,500	\$ 9,599	\$ 14,995	\$ 14,995
Average	\$ 2,881	\$ 3,096	\$ 4,075	\$ 3,415
Median	\$ 2,399	\$ 2,399	\$ 2,399	\$ 2,399

As shown in Table 14, participants on average slightly favoured purchasing e-bikes from the local point of sale participant vendors (54%). Non-participant vendors could be vendors within the CRD, particularly big box stores, who did not choose to become point-of-sale vendors, or vendors from outside of the CRD, particularly online vendors.

Table 14: Purchases from participating vendor list

E-bike Purchases by Vendor	\$ 1,600 tier participants		\$800 tier participants		\$ 350 tier participants		Combined	
	#	%	#	%	#	%	#	%
Point of sale participant vendors	53	52%	66	63%	87	48%	206	53%
Non-participant vendors (local or non-local)	48	48%	39	37%	96	52%	183	47%
Total	101	100%	105	100%	183	100%	389	100%

Figure 2: Purchases from Participating vendor list



4.6 E-bike safety skills courses

4.6.1 Participation

A considerable discount was provided for e-bike safety skills courses delivered by local non-profit Capital Bike, which cost \$65 before discounts and Saanich also covered the course admin fees. While these half-day courses were heavily promoted, offered at considerable discount and provided on a regular basis on weekends throughout the year, participation rates were very low (5% overall) in all of the incentive tiers, as shown in Table 15.

Table 15: E-bike safety skills course discounts

Incentive tier	Course Discount	Discounted Course Cost	Total # redeemed	% of participants
\$1600 incentive tier	\$ 55	\$ 10	5	5%
\$800 tier	\$ 40	\$ 25	7	7%
\$350 tier	\$ 20	\$ 45	6	3%
Total			18	5%

4.6.2 Feedback

Evaluation forms were provided to the Safety Skills course participants, and eight participants responded (a 44% response rate). Feedback was overwhelmingly positive, with 75% of respondents saying they are planning on riding more now than they were before the course. It is not clear at this point why the courses had low participation rates. It could be that most participants felt they already had the necessary skills, but for those who did not, the courses were helpful.

4.7 Demographics

4.7.1 Location

Participants' home addresses were mapped and demonstrated good distribution across all areas of Saanich, with most participants within the Urban Containment Boundary, following population density in Saanich generally (Figure 3). Other patterns such as proximity to multi-use trails or frequent transit routes or denser neighbourhoods or villages were not readily apparent.

Figure 3: Map of \$1600 incentive participants' home addresses

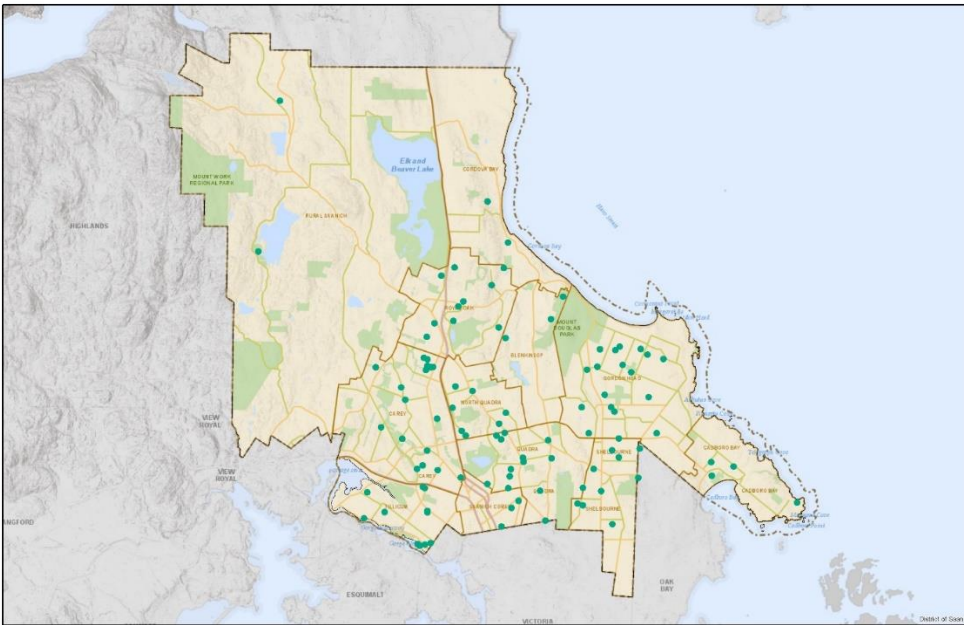


Figure 4: Map of \$800 incentive participants' home addresses

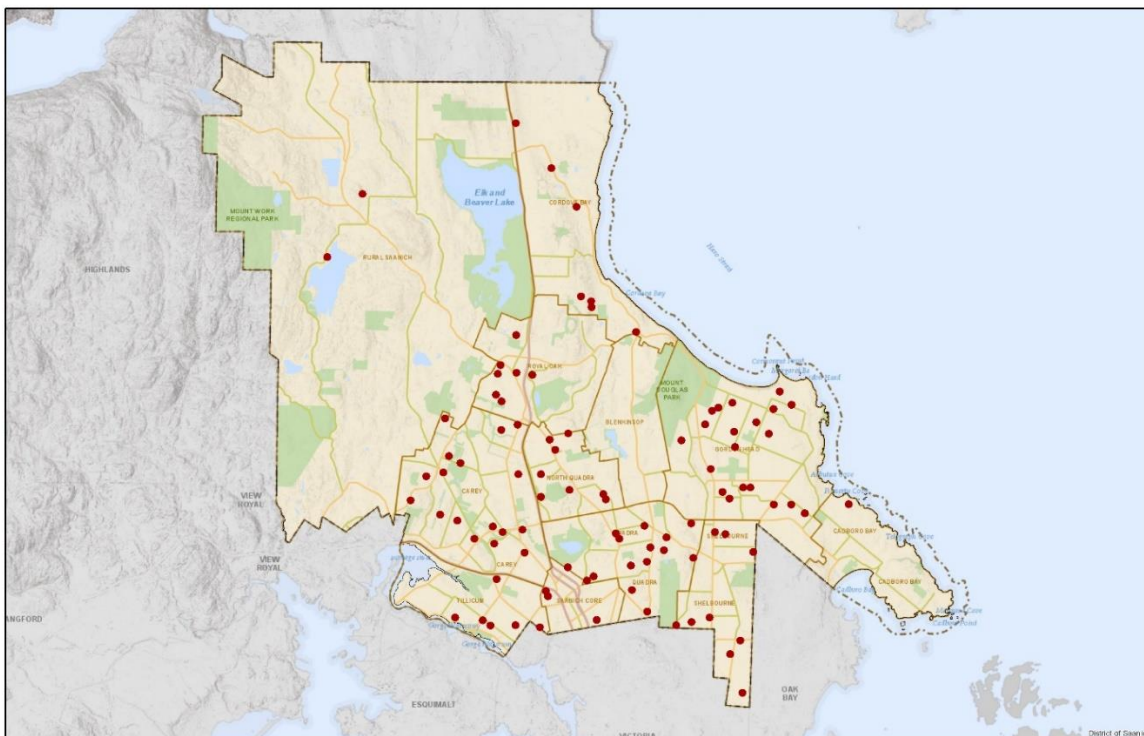
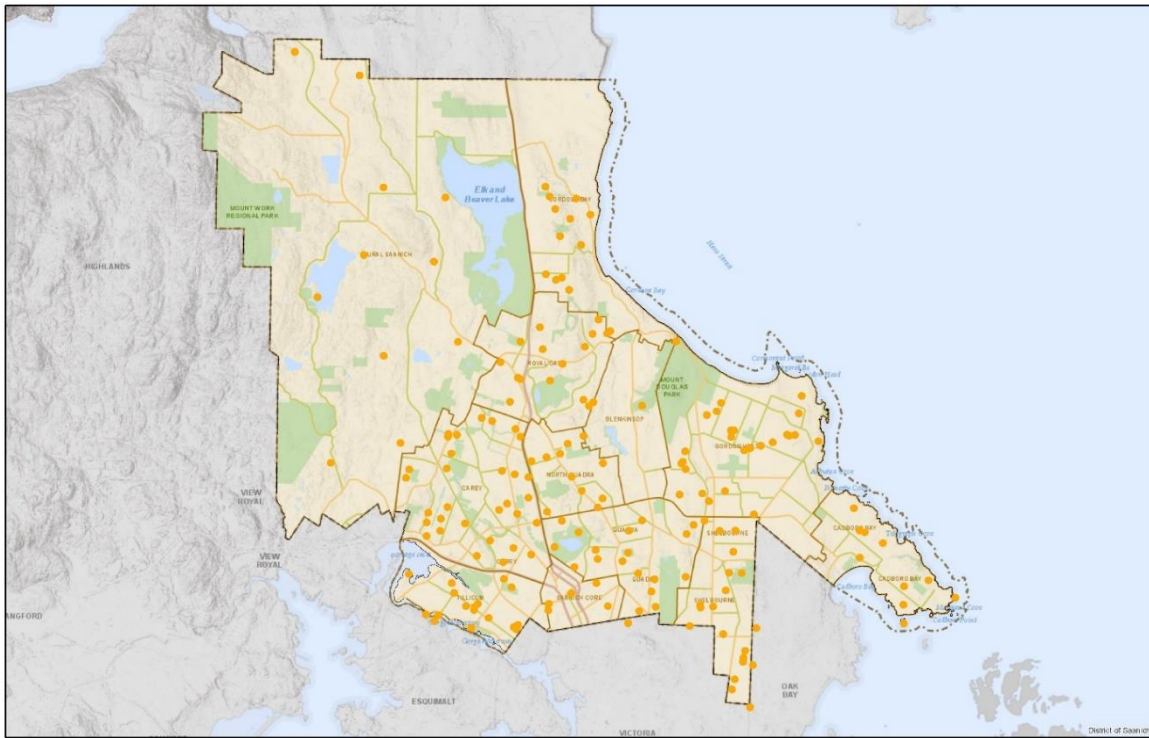


Figure 5: Map of \$350 incentive participants' home addresses



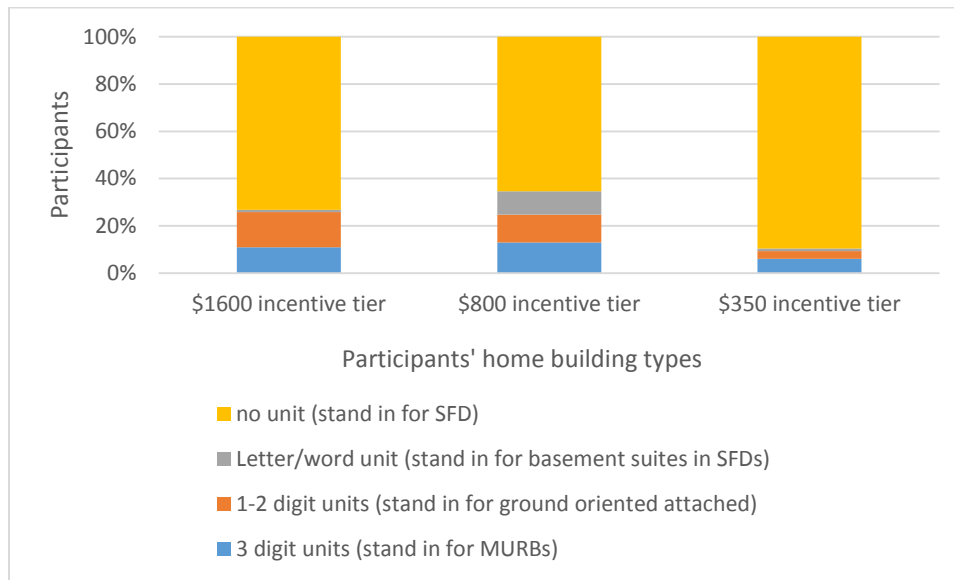
4.7.2 Building type

Building type may impact residents' ability to safely store and charge an e-bike. While a specific question about building type wasn't asked, Table 16 and Figure 6 below show how the presence and type of unit number in an address may indicate building type of participants.

Table 16: Building types of participants' homes

Unit Type in Address	\$350 incentive participants		\$800 incentive participants		\$1,600 incentive participants	
3-digit units (stand in for multi-unit buildings)	11	6%	13	12%	11	11%
1-2 digit units (stand in for ground oriented attached)	6	3%	13	12%	15	15%
Letter/word unit (stand in for basement suites in SFDs)	2	1%	11	10%	1	1%
No unit (stand in for SFD)	164	90%	68	65%	74	73%
Total	183	100%	105	100%	101	100%

Figure 6: Building types of participants' homes



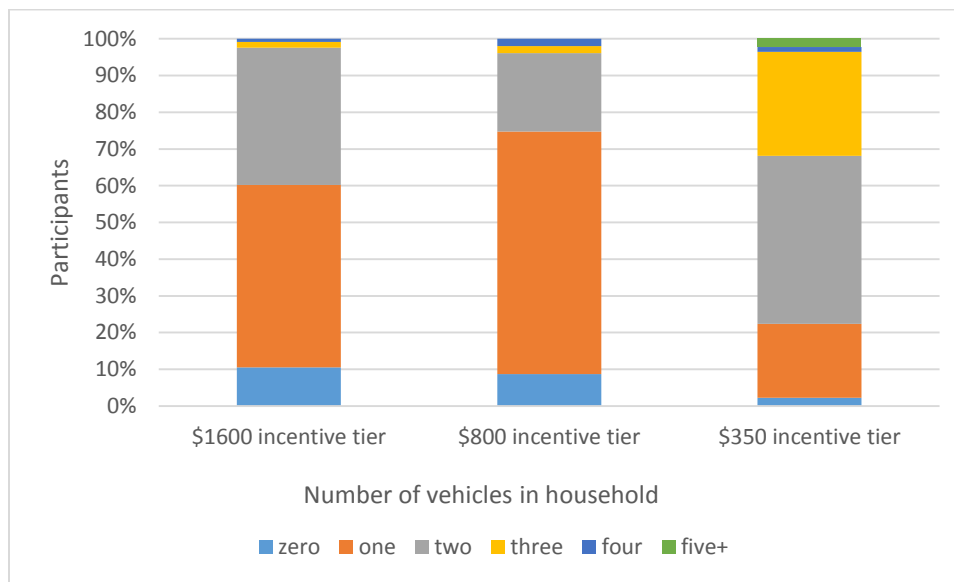
4.7.3 Vehicle ownership

On the application forms, participants were asked “how many working motor vehicles (cars, trucks, motorcycles) are currently available to the members of your household, including yourself.” Table 17 and Figure 7 show that while there were a smaller number of vehicles generally in the income qualified tiers, vehicle ownership was still generally high with a minimum of 89% of households (\$1,600 tier) having at least one car. This demonstrated that there was an opportunity to see potential vehicle shedding as a result of the program.

Table 17: Number of vehicles in household by incentive tier

# Vehicles in household	\$350 incentive participants		\$800 incentive participants		\$1,600 incentive participants	
zero	5	2%	9	9%	13	11%
one	45	20%	68	66%	61	50%
two	102	46%	22	21%	46	37%
three	63	28%	2	2%	2	2%
four	3	1%	2	2%	1	1%
five+	5	2%	0	0%	0	0%
Total respondents	223	100%	103	100%	123	100%

Figure 7: Number of vehicles in household by incentive tier



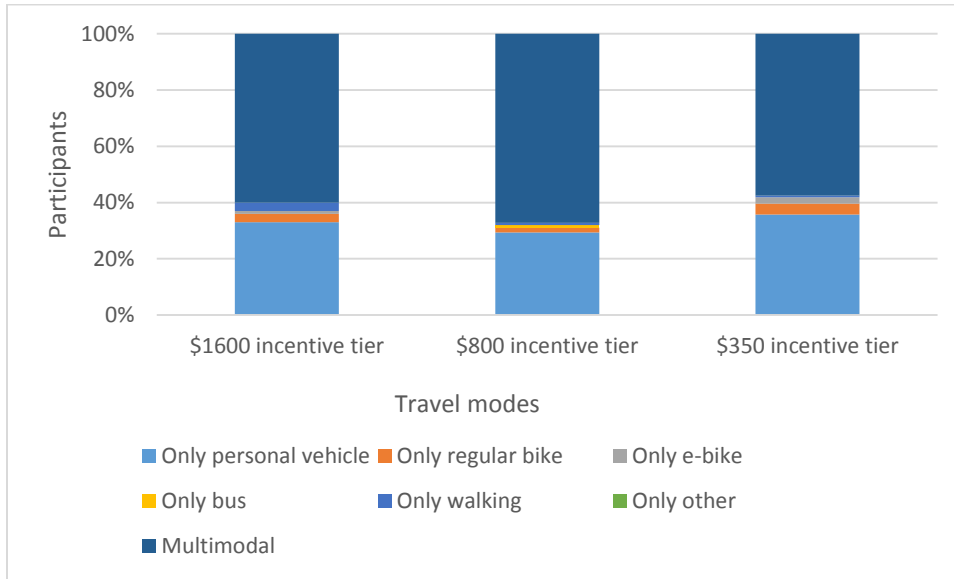
4.7.4 Travel modes

At the time of application to the program, participants were asked “which of the following do you usually use to travel at least one day per week for any purpose?” As shown in Table 18 and Figure 8, a majority of respondents were multi-modal in each of the incentive tiers.

Table 18: Reported travel modes at application by incentive tiers

	\$1,600 incentive participants		\$800 incentive participants		\$350 incentive participants	
	Count	Percentage	Count	Percentage	Count	Percentage
Only personal vehicle	33	33%	37	35%	64	36%
Only regular bike	3	3%	1	1%	7	4%
Only e-bike	1	1%	0	0%	4	2%
Only bus	0	0%	1	1%	0	0%
Only walking	3	3%	1	1%	1	1%
Only other	0	0%	0	0%	0	0%
Multimodal	60	60%	65	62%	103	58%

Figure 8: Reported travel modes at application by incentive tiers



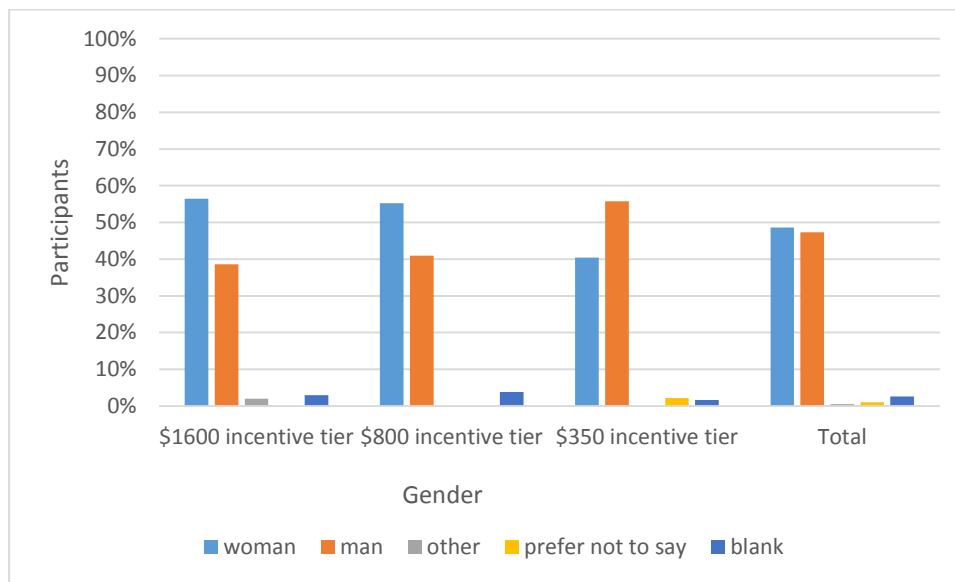
4.7.5 Gender

At the time of application to the program, participants were asked for their gender and invited to select all that applied. Table 19 and Figure 9 summarize gender participation by incentive tier.

Table 19: Gender of participants by incentive tier

Gender	Participants by Incentive Tier			
	\$1,600	\$800	\$350	Total
Woman	57	58	74	189
Man	39	43	102	184
Other gender	2	0	0	2
Prefer not to say	0	0	4	4
Blank	3	4	3	10
Total incentive recipients	101	105	183	389

Figure 9: Gender of participants by incentive tier



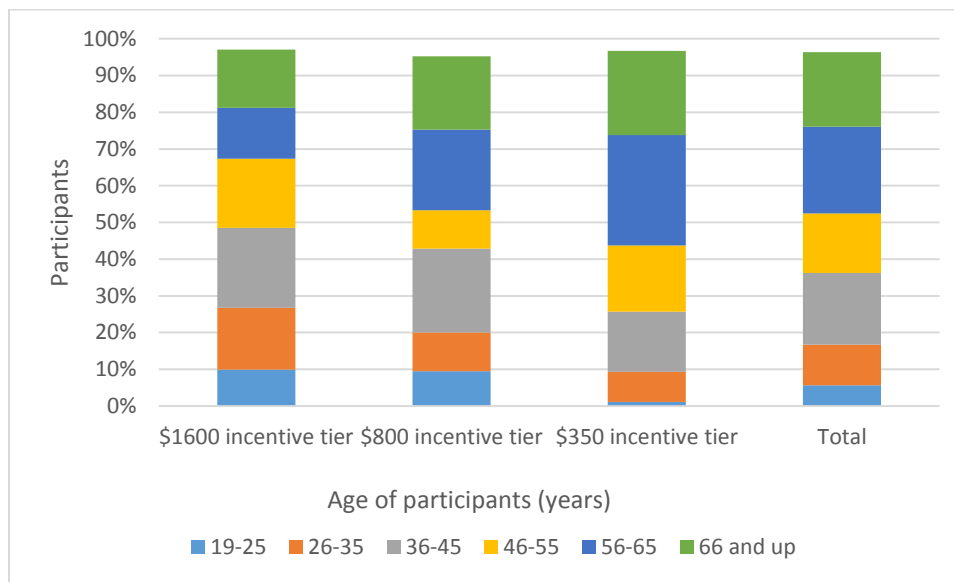
4.7.6 Age

At the time of application to the program, participants were asked to report their age. Table 20 and Figure 10 demonstrate that while both income-qualified tiers skewed younger than the non-income qualified tier there was generally good participation from all age ranges within the program.

Table 20: Ages of participants by incentive tier

Age	\$1,600 incentive participants		\$800 incentive participants		\$350 incentive participants		Total
	Count	Percentage	Count	Percentage	Count	Percentage	
19-25	10	10%	10	10%	2	1%	22
26-35	17	17%	11	10%	15	8%	43
36-45	22	22%	24	23%	30	16%	76
46-55	19	19%	11	10%	33	18%	63
56-65	14	14%	23	22%	55	30%	92
66 and up	16	16%	21	20%	42	23%	79
Blank	3	3%	5	5%	6	3%	14
Total incentive recipients	101		105		183		389

Figure 10: Ages of participants by incentive tier



4.6.7 Identities

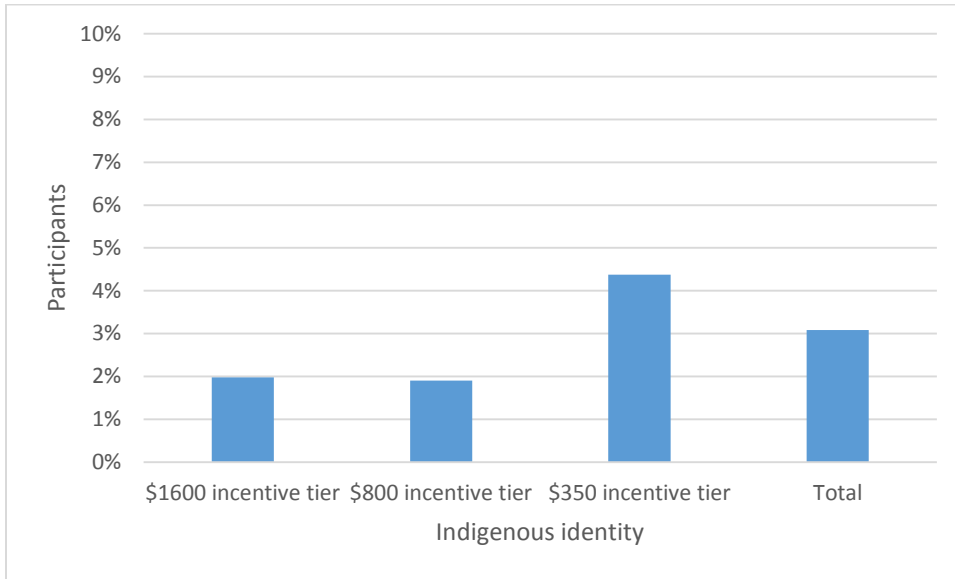
Participants were asked at the time of application to share which of the following equity-denied groups they identified with (multiple options could be selected). As shown in Table 21 and Figures 9 - 11 there were more people with equity-denied identities in the income-qualified tiers than in the non-income qualified tier.

Table 21: Equity-denied identities by incentive tier

Identities	Participants by Incentive Tier			
	\$1600	\$800	\$350	Total
Visible minority	15	25	10	50
Person with disability	18	11	3	32
Indigenous	2	2	8	12
Immigrant or newcomer	14	3	5	22
LGBTQ2S+	9	5	9	23
None of the above	25	44	85	154
I choose not to answer	8	8	17	33
Blank	10	7	46	63

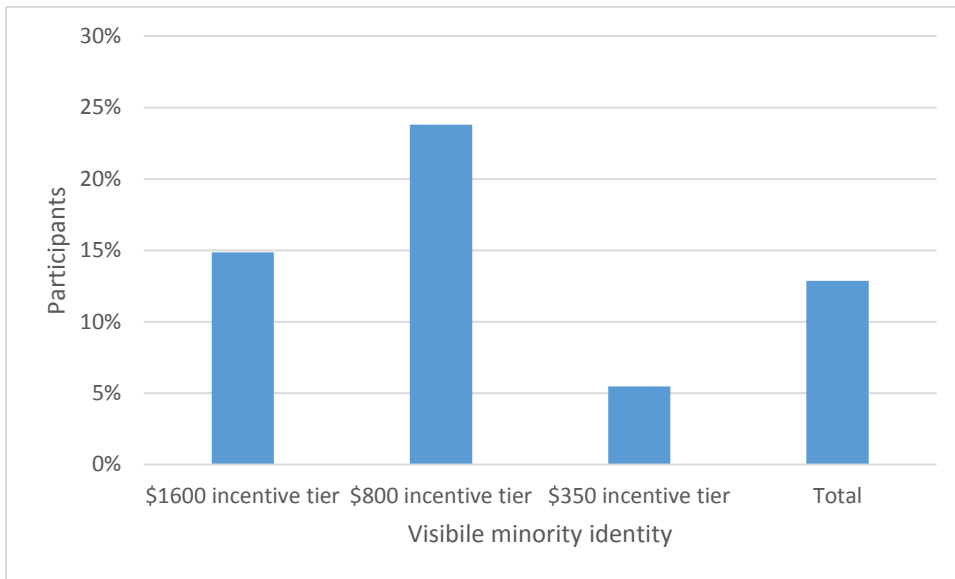
The 2021 Census of population shows that in Saanich, 3% of residents are Indigenous. As shown in Figure 11, 3% of participants in the program reported being Indigenous, but there are a very small number of participants in this category (see Table 21) making it difficult to draw inferences from for the program design generally.

Figure 11: Percentage of participants identifying as being Indigenous



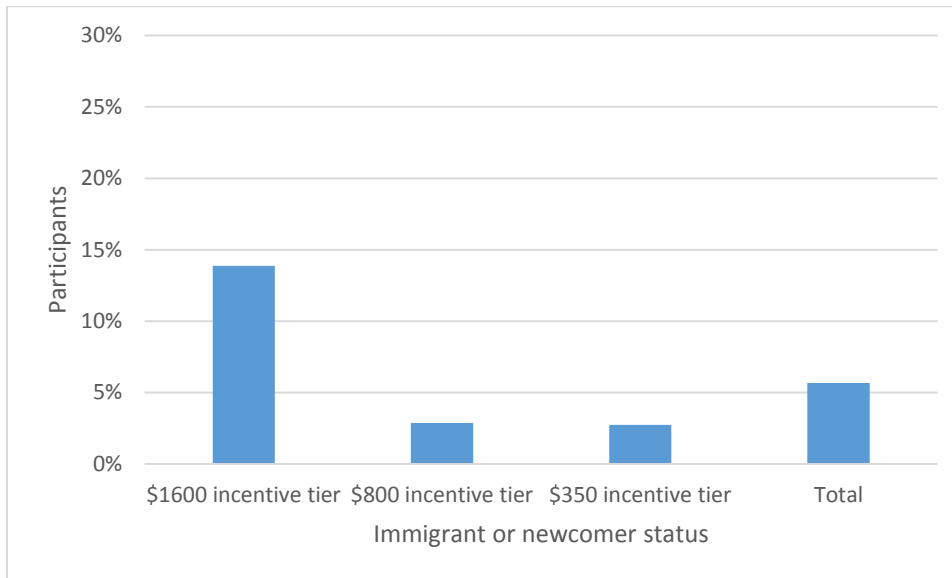
The 2021 Census of population shows that in Saanich, 24% of residents are a visible minority. As shown in Figure 12, while the income-qualified tiers did reach a higher percentage of visible minority participants than the non-income qualified tier, the pilot had fewer visible minority participants than the overall Saanich population.

Figure 12: Percentage of participants identifying as visible minority by incentive tier



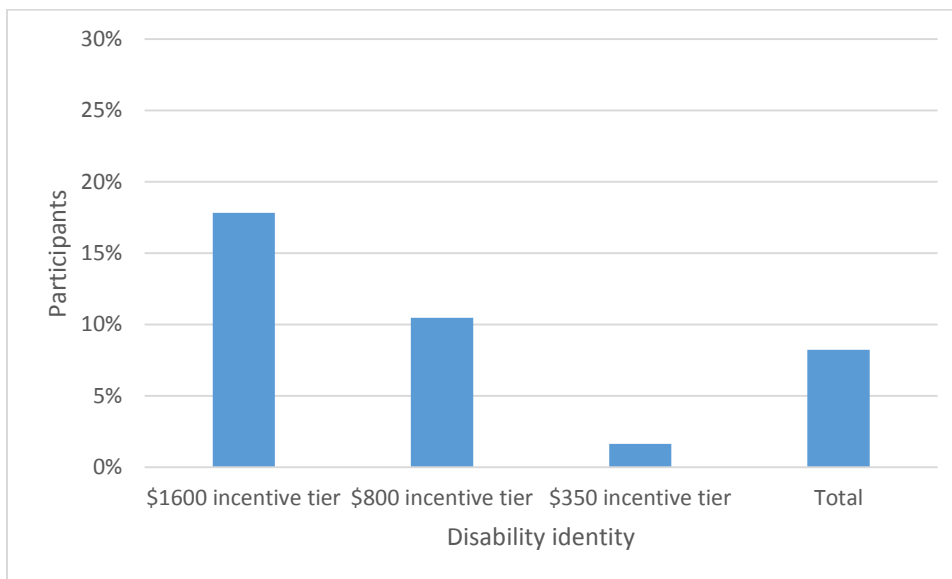
The 2021 Census of population shows that in Saanich, 22% of residents are an immigrant or newcomer (including those who immigrated to Canada decades earlier, not only recent immigrants). As shown in Figure 13, while the income-qualified tiers did reach a higher percentage of immigrant or newcomer participants than the non-income qualified tier, the pilot had fewer immigrant or newcomer participants than the overall Saanich population.

Figure 13: Percentage of Participants identifying as an immigrant or newcomer by incentive tier



The 2017 Canadian Survey on Disability² shows that 22% of Canadians have a disability. As shown in Figure 14, while the income-qualified tiers did include a higher percentage of people with a disability than the non-income qualified tier, the pilot had fewer participants with disabilities than the overall Canadian populations.

Figure 14: Percentage of participants identifying as a person with disability by incentive tier



² Measuring Disability in Canada infographic. Statistics Canada. Released December 2022. [Measuring disability in Canada \(statcan.gc.ca\)](https://www150.statcan.gc.ca/n1/pub/82-625-x/2022001/article/00001-eng.htm)

4.8 Program costs and staff resources

Table 22 provides an overview of non-staff costs that were incurred during the program, excluding Saanich's contribution to the UBC study costs.

Table 22: Final Pilot Program Costs

Item	Cost (pre-tax)
Launch event (Included e-bike rentals, cycling instructor time, administration fees for host group, photography fees, and honoraria for photo subjects)	\$2,520*
Promotional and incidental costs	\$100
E-bike Safety Skills Courses	\$1,330
Incentives	\$309,650
Total	\$313,600

* In addition, the City of Victoria and CRD contributed \$1,000 and \$2,000 respectively to the launch event, as the event promoted cycling and road safety rather than only the e-bike program.

The e-bike pilot was developed and delivered in-house by Saanich staff. Program administration required up to three Sustainability staff during the highest application volume periods in addition to support from planning administration for counter submissions and questions, legal and finance staff in development, communications staff during launch, and finance and recreation centre staff for processing incentives cheques and handling online registrations through the Recreation online system.

Given the unique nature of this pilot program across North America, the associated research and equity analysis and high interest from external parties, considerable time was required to design, administer, monitor and report on the program and share knowledge and lessons learned with interested audiences. This equated to approximately 80 hours of staff time on average a month over an 18 month period. Considerable efficiencies would be expected for any similar future program administration, both in terms of hours required per applicant as well as the type of staff required for different tasks.

4.9 Qualitative feedback from public and participants

Considerable feedback from non-program participants was received and responded to. Much of the feedback was positive with some negative comments related to the appropriateness or efficacy of incentivizing e-bikes as a technology or the fairness of the incentive levels provided, including the consideration that there were not enough incentives to meet demand. This correspondence often asked questions related to the program design that had been addressed or explored within the feasibility study and this information was provided in responses.

Additionally, there were a number of specific suggestions for improving the program in the future from both participants and non-participants, including that Saanich:

- Provide more incentives for more people and be sure to promote it widely;
- Provide bigger incentives to help low income people and people with disabilities more;
- Use a lottery system instead of first come, first served approach;
- Allow multiple people in a household to access e-bike incentives;
- Measure individual income rather than economic family income in the household;

- Use net income rather than total income thresholds to better support small businesspeople and professional artists;
- Allow private disability rather than only provincial disability as proof of income;
- Provide larger incentives for equipment required for transporting young children by e-bike;
- Provide larger incentives for adaptive e-bikes for people with physical disabilities;
- Provide incentives for parking, locks, and maintenance; and
- Provide learn to cycle courses for adults who are newcomers to Canada so they can more easily benefit from e-bike programs.

Alongside the UBC study, participants were invited to submit feedback to the program at any time and many positive comments were received. Select quotes are provided below:

“We are happy owners of a new ebike to transport our daughters to and from school and more. Thank you so much for offering this rebate incentive. It has helped us move in the direction we were wanting to go by getting rid of our second car and purchasing an ebike. It will be life changing for us.”

“I am a newcomer to Canada.[...] I would like to participate in the program as I have been slowly saving to purchase a car that will enable me to apply for jobs that are two buses away or more than 30 minutes to cycle. However, I also like not being part of the problem, polluting and congesting the roads, so am reluctant to buy. Not to mention the costs of running a car. Yet, it also means that I am still in a job I don't much enjoy. Having a greater range to travel by bicycle I believe would be my happy medium.”

“It's great for older people with the motor to get up hills. My wife and I have been 20 years since we rode a bike – the e-bike makes it possible for older folks to get some exercise.”

“Thank you. This will be great for me and my kids. Will cut down the use of my car by so much! “

4.11 Interest from other parties

High levels of interest in the program were expressed by municipalities in BC and beyond. Staff were contacted by over a dozen local governments directly and numerous researchers during the program launch. Given this high interest, the Community Energy Association (CEA) hosted a webinar on the program on November 24, 2022, with presenters from Saanich, UBC and the Community Social Planning Council (CSPC). The webinar was attended by over 100 people representing multiple organizations and municipalities across BC and beyond. Staff also made presentations on the program to the national Climate Caucus network and in two sessions of the Livable Cities Forum in Victoria in 2022. The District has also shared information about the program with staff from multiple Provincial Ministries.

4.12 Feedback from vendors

Point of sale participant vendors were invited by email to complete a short survey on their experience with the pilot program, both after the first intake and after the final intake. Due to low responses, vendors were also called, and were asked about issues such as frequency of

returns and their return policies and supply chain issues. Feedback was overwhelmingly positive, and included (most of the below are from notes from phone conversations):

- *Please do it again!*
- *The program was “awesome. It was “incredible for business,” especially during the slow season in Oct/Nov/Dec. It boosted excitement and traffic into the store during the slow season. Summer would be overwhelming for a launch.*
- *“yes we would like to participate again! The payment process is easy and we have no with it. Over all I think the program is great!”*

5.0 UBC REACT Lab Study - Interim findings

Researchers at the University of British Columbia (UBC) Research on Active Transportation (REACT) Lab are undertaking a study on the Travel Behaviour and Greenhouse Gas (GHG) Impacts of the Saanich E-Bike Incentive Program.

The objectives of the study are to determine:

- 1) the true GHG mitigation impacts of e-bike adoption across different segments of the population; and
- 2) the cost-effectiveness of e-bike purchase incentives as a GHG mitigation strategy.

5.1 Methodology

The study includes three participant sub-groups to enable 2 important contrasts to be analysed: incentivized versus non-incentivized purchasers, and electric versus conventional bicycle purchasers. As such, the study includes an opt-in sample of Saanich E-bike Incentive Pilot Program participants and then a control group who were not part of the program but recently purchased either electric or conventional bicycles.

The study methods were developed by careful consideration of the existing literature and trade-offs among precision, reliability, response rate, participant burden, sample bias, and other factors. The GHG impact estimates are based on self-reported travel behaviour of study participants through completion of surveys.

A total of three survey waves will be completed: Wave 1 is around the bicycle purchase date, Wave 2 is three months following purchase, and Wave 3 is 12 months following purchase. Each wave records data on the following:

- 1) the purchased bicycle;
- 2) typical weekly travel activity in the preceding month;
- 3) the last three trips taken using the purchased bicycle; and
- 4) household composition and socio-demographics including vehicle ownership.

Wave 2 indicates the short-term travel behaviour impacts, and Wave 3 will indicate the long-term impacts. The three-wave panel survey design provides more reliable data than a cross-sectional or before/after survey, but at the cost of sample attrition due to higher participant burden.

The study timeline is outlined in Table 23.

Table 23: UBC Study timeline of data collection and major reports

Task	Fall 2021	Winter 2022	Spring 2022	Summer 2022	Fall 2022	Winter 2023	Spring 2023	Summer 2023	Fall 2023
Wave 1 data collection									
Wave 2 data collection									
Wave 3 data collection									
Reports					Interim				Final

The original study plan was shorter, based on a program duration of six months. However, the timeline was extended as additional incentives became available in order to increase sample size by extending Wave 1 intake to a full year. This enabled the study to include more data from income-qualified participants.

5.2 Recruitment

The incentive recipient sample was recruited directly by Saanich staff as part of the e-bike incentive pilot program. The comparison, non-incentivized sample was recruited by UBC staff through online and bike shop advertisements, including both conventional and electric bicycle purchasers. Recruitment fliers and cards were distributed to bicycle shops in the CRD in October, 2021 and online ads were posted on Facebook and Instagram.

To increase survey accessibility, recruitment materials included options for telephone-based study participation, including telephone interpretation in other languages; this option was exercised by one participant (in English). Inclusion criteria for both samples were:

- Residents of the Capital Regional District (greater Victoria, BC),
- Considering or having recently purchased or acquired a new bicycle (or electric converter), and
- At least 16 years of age (in accordance with the MVA).

People were encouraged to participate through the offer to opt-in to draws for five gift cards of \$25 each in Wave 1, 5 gift cards of \$40 each in Wave 2, and 5 gift cards of \$50 each in Wave 3.

5.3 Interim results

At the cut-off time for inclusion in the Interim Report (September 1, 2022), there were 390 complete survey responses in Wave 1 and 192 complete survey responses in Wave 2 including both participants in the e-bike incentive pilot program and those in the control group. Wave 3 has not been completed at the time of this report. The full sample is comprised of 39% Saanich Program participants (incentive recipients) and 61% Comparison sub-sample in both Waves 1 and 2. The e-bike incentive pilot program participants joined steadily over the year of the data collection as incentives were distributed by Saanich, while the Comparison participants were mostly recruited during online advertising in January and February 2022.

All samples had good gender balance, similar to the Saanich e-bike pilot program participants, and most demographic indicators are similar across samples. Compared to the e-bike incentive program overall, the UBC study sample is slightly older, with a higher percentage visible minority. The Wave 2 attrition had minimal effect on sample demographics.

Interim findings from the first two waves are available but have limitations. For instance, comparisons of survey respondents in the participant and control group to the general population and regression analysis to control for weather, COVID recovery, gas prices, and other factors will not be completed until the final analysis. The final analysis will occur once the full data set has been collected (the end of wave 3) in Fall 2023. The final analysis will also provide a GHG reduction estimate from the program.

With these caveats in mind, the interim findings indicate that:

- **People kept the bikes they purchased:** all but 3 survey respondents in Wave 2 still had their new bicycle (for all participant sub-groups).
- **Incentives motivated purchases that wouldn't otherwise have been made:** the incentives resulted in new e-bike purchases by those who would not have purchased an e-bike if an incentive was not available. Larger incentives attracted a higher proportion of these new purchasers than the smaller incentives. Only 15% of program participants who received the \$1,600 incentive would have made the same purchase were the incentive not available compared to 64% of program participants who received the \$350 incentive. This is an extremely low level of free-ridership compared to most common incentive programs.
- **People are riding regularly:** averaging 3-4 times per week.
- **E-bikes are replacing vehicle trips and are more likely than non-electric bikes to replace vehicle trips:** consistently, automobile was the travel mode most frequently replaced by e-bike trips (41% to 46% of e-bike trips), while conventional bicycle trips less frequently replaced automobile trips (18% to 20% of conventional bicycle trips).
- **E-bikes are used for utility more than recreational travel:** the most reported trip purposes for e-bikes (incentive program participants) were travel to work or school followed by personal shopping or errands. Exercise/leisure was the smallest reported trip purpose category for these participants. In comparison, the most reported trip purposes for respondents who purchased a conventional bicycle (control group) was for exercise and leisure in both Wave 1 and Wave 2.
- **E-bikes are exceeding expectations:** respondents' experiences with new e-bikes, reported in Wave 2, greatly exceeded expectations. In particular, respondents reported using their e-bikes even more than expected, despite intended mode substitution already being a primary consideration in purchasing.
- **Program participants *increased* their total cycling activity much more than conventional bicycle purchasers:** E-bike purchasers increased total weekly cycling km by ~5x that of conv bike purchasers (30 vs 6 km/week net increase). Since the initial levels of cycling activity before the incentivized purchases were much lower in the program than the (non-incentivized) control group, the differences are bigger if we look at % changes. The program group's total cycling increased by 2x-3x, whereas the control groups increased <55%.

The final study, following Wave 3 survey collection in Fall 2023, will not only include additional data, but also further assessment such as regression analysis and so the results may differ from preliminary findings. A final report from UBC with greater detail related to methodology and results will be provided at that time and presented to Council in addition to other interested parties.

6.0 Discussion

6.1 Equity measures

Equity measures included in the program were successful at reducing barriers to the e-bike program and to e-bikes, as outlined in Table 24.

Table 24: Equity measures and impacts

Equity Measure	Impact
Structural	
Commitment to equity included in pilot design vision and targets.	Impacted partnerships, budget, and design from the start, rather than as an add-on at the end.
Saanich staff completed training on climate equity and employed equity lenses in the development of the program.	Resulted in changes to the program design, including the development of the event with the Intercultural Association English Language Learner students.
Procedural (inclusion)	
Collaboration between the District and the CSPC.	<ul style="list-style-type: none"> • Provided valuable subject matter expertise • Connected District with other practitioners and formed a lived experience advisory committee • Partnership assisted both the District and the CSPC's funding proposals, including the Vancouver Foundation for the TACES program; and the UBC REACT Lab's funding request to NSERC.
Engaging early in the process with equity-denied people and the community organizations who work with them.	Assisted in program design that resulted in a program that offered a valuable climate solution for lower income households and overcame barriers to participation.
Collaborated with and compensated the Greater Victoria Intercultural Association.	Obtained photos of local racially diverse people enjoying e-bikes, which helped with promotion of the pilot.
Distributional (access)	
Larger incentives for lower income households (LICO, median, above median) were held in separate "buckets" than the non-income qualified incentives.	Targets in each income tier were met rather than budgets being disproportionately accessed by select income tiers.
Fixed dollar amount incentives rather than percentage of e-bike cost incentives.	Incentive dollars weren't skewed to the most expensive e-bikes, which we saw were predominantly purchased by the non-income qualified participants.
Accessibility for low-computer access submission via online portal, mail, and in-person at rec centres, and phone or in-person support throughout the process.	Good participation rates from people across income tiers, ages, newcomer to Canada, and disability status.

Equity Measure	Impact
Multiple options for providing proof of income including the Endorsement Form.	Residents were not turned away for not having their taxes up to date, and some flexibility was available for those whose financial situations changed during the year and were not yet reflected in their Notices of Assessment from the previous tax year.
Pre-approval process.	In the first intake, when offered the choice of pre-approval or submitting a receipt, the two income-qualified tier participants overwhelmingly (over 90%) chose the pre-approval route compared to 59% of the non-income qualified applicants. This indicates that having certainty about incentive access is important for lower income participants.
Point of sale incentive option (incentive provided at till by participating vendors).	Reduced the upfront cost and potential interest payments. Accessing the incentive at the till was more common in the income qualified tiers (29%) than in the non-income qualified tier (4%), showing this measure was important for reducing income barriers to e-bike adoption.
Vendor choice (local point of sale participant vendors or other vendors).	There was no discernable income-based pattern for choosing point-of-sale participant vendors vs. other vendors. However, having the option to order bikes from outside of the CRD enabled those who required adapted bicycles for disability reasons to source appropriate bicycles. Only one adaptive bicycle was purchased in the program and it was sourced from outside the CRD.
Quick turnaround time for cheques.	The program had a very quick turnaround time for delivering incentive cheques – most often cheques were mailed well within a month from receiving the proof of purchase. This meant that participants who put their purchase on credit did not incur high interest costs for the incentivized portion of their e-bike.

As was seen in the demographic findings, addressing barriers faced by low income households also ended up improving participation rates from a wider range of ages, and from women, visible minorities, people with disabilities, and newcomers to Canada. The pilot did reach the same proportion of Indigenous people as in the Saanich population generally, but the sample size was very small so it is difficult to draw conclusions from the data. However, the program still did not reach a representative percentage of participants by disability, immigration, or visible minority, status. Future programs must work to improve distribution of incentives to these groups.

Based on the interim findings, it is recommended that e-bike incentive programs embed equity considerations and continue to collect demographic data to enable ongoing evaluation of the impact of such a program across different equity-denied groups.

6.2 Incentive amounts

6.2.1 Tier 3 - \$1,600 income qualified incentive

The \$1,600 incentives for the lowest income tier were allocated the most quickly of the tiers and had by far the lowest attrition rates and extremely low free-ridership. While interim findings indicate that the incentive induced e-bike purchases are resulting in behaviour changes that would provide a reduction in GHG emissions, calculations for the cost and marginal cost per ton of GHG saved for each incentive tier will be provided in the final UBC study. It is important to recognize that demand did exceed supply of incentives available in this tier (as was expected), and this should factor into any future program design.

6.2.2 Tier 1 - \$350 non-income qualified incentive

The \$350 incentives for the non-income qualified tier had higher attrition rates than the \$1,600 incentives. There were fewer administrative tasks required for this incentive level as there was no income-verification step and nearly half the participants in this tier skipped the pre-approval stage and simply submitted proof of purchase and a rebate application form.

However, this tier still took over four months to fill all incentive spaces (for the \$350 intake to close) and the interim findings from the UBC study indicate that there was considerably greater free-ridership compared to the other incentive tiers, albeit this level of free-ridership is still considerably lower than that in many provincial and federal climate incentive programs. The final UBC study will have more definitive findings about the impact of different incentive amounts in the different income tiers, and recommendations about maximizing incentive impact and optimizing cost per ton of GHG emission reductions. While a greater number of incentives can be provided at smaller cost in this incentive tier, and less administrative resources were required, a non-income qualified tier similar to this incentive level is not recommended before the final study findings are delivered in late 2023.

6.2.3 Tier 2 - \$800 income qualified incentive

The \$800 incentives for median-income and below households had the highest attrition rates and consequently the highest administrative time requirements. Extra administration was mainly in the form of reviewing and processing more applicants per incentive delivered and considerable follow up via phone or email related to timelines and unresponsive applicants.

The \$1,600 intake and the \$800 intake were promoted and accessed in essentially identical ways and while the timing was different (April launch vs. June launch), both were released in good bike riding weather timeframes and outside of major vacation times. However, participant behaviour within each intake was dramatically different. This suggests that the reason for higher attrition is unlikely to be the RecOnline system or documentation requirements. It could be that those in the lowest income tier have more experience accessing income-qualified programs, or it could be that the incentive level in the \$800 tier was not motivating enough for participants to actually complete the process and access the incentive.

60% of those who received incentives in this tier had incomes low enough that they would have qualified for the \$1,600 incentive if it were available at the time they applied. Due to the high administrative burden and higher attrition rate, this incentive level is not recommended before the final UBC study findings are delivered in late 2023, which will provide more definitive

findings about the impact of different incentive amounts in the different income tiers, and recommendations about maximizing incentive impact and optimizing cost per ton of GHG emission reductions. However, the interim findings indicate that an income incentive amount between \$800 and \$1,600 may be appropriate for the two income-qualified tiers combined. It would be valuable to explore this alternative incentive level prior to the final results of the UBC study to help inform a future e-bike incentive program.

6.3 Feedback and discussion

The District received feedback from residents asking for changes in the income verification procedures and incentives for related purchases. Table 25 below outlines the feedback and comments for future program design.

Table 25: Resident feedback and discussion

Feedback	Discussion
Income testing	
Allow multiple people in a household to access e-bike incentives	Eliminating the one incentive per household restriction would remove a barrier to participation in the program. However, given high demand for incentives, and the ability to share e-bikes among household members, it would be more beneficial at the community scale for more households to be able to access the program than to allow more than one e-bike per household. Additionally, the one e-bike per household restriction provides a disincentive for misuse of the incentives.
Measure individual income rather than economic family income in the household	Requiring family rather than individual income increased paperwork requirements for applicants and excluded people, especially including adults living with their parents for economic and/or cultural reasons. It would be worthwhile to connect with income-tested program practitioners to discuss emerging practices, such as the CleanBC Go Electric income qualified program that launched after the E-bike pilot.
Use net income rather than total income thresholds to better support small businesspeople and professional artists.	Interested residents who operate small businesses could qualify instead for the Special Use Vehicle Incentive (SUVI) program if they plan to purchase a cargo e-bike for business use. That option might be a better fit than the Saanich pilot for interested residents. However, it would be worthwhile to connect with income-tested program practitioners to discuss emerging practices.
Allow private disability rather than only provincial disability as proof of income	Private disability payments are quite distinct from provincial disability as proof of income, as private disability payments may be relatively short term.
Additional Incentives	
Provide more incentives for more people	The initial incentive budget was based on the number of participants needed for the UBC study, rather than meeting demand in the community. It will be costly to provide enough incentives to meet demand for this technology. Future program budgets can be based on the results of the UBC study regarding cost per ton of GHG emission reductions of

	<p>this program compared to other potential climate programs, along with co-benefit comparisons, in order to properly allocate climate spending. While awaiting UBC study results, a small program that provides incentives to low income households can be considered, due to the demonstrated benefits of the program for climate and affordability.</p>
<p>Provide larger incentives for equipment required for transporting young children by e-bike</p>	<p>There is very little local data about how e-bike incentives and e-bike adoption impacts transportation behaviour of parents and caregivers who transport young children, and whether there is a need for incentives beyond those provided in the pilot. Future programs could explore options for data collection on this topic.</p>
<p>Provide larger incentives for adaptive e-bikes for people with physical disabilities</p>	<p>There is very little local data about how e-bike incentives and e-bike adoption impacts transportation behaviour of people with disabilities, and whether there is a need for incentives beyond those provided in the pilot. Future programs could explore options for data collection on this topic.</p>
<p>Provide incentives for parking, locks, and maintenance</p>	<p>The incentives provided in the pilot proved adequate for overcoming barriers to adoption of e-bikes, including for low-income residents. The interim UBC study results indicate that most participants are retaining their e-bikes and using them on a regular basis. These findings do not indicate a need for incentives for parking, locks, or maintenance. However, safe e-bike parking is identified as a barrier to e-bike adoption in the CRD survey. Secure parking should be included in infrastructure improvements and plans outside the scope of this incentive program.</p>
<p>Additional services</p>	
<p>Provide learn to cycle courses for adults who are newcomers to Canada so they can more easily benefit from e-bike programs.</p>	<p>This recommendation can be explored outside the scope of this incentive program.</p>

6.4 GHG reduction potential of e-bikes

Most participants in all incentive tiers reported in their application forms that they had access to and regularly used personal vehicles, meaning that e-bikes are not only appealing to those who are using transit and non-electrified active transportation options. While the final UBC Study results are not yet available, indications are that the e-bikes, as predicted, are being used to replace car trips, and are being used for longer trips than non-electric bikes.

Additionally, the interim results show that the e-bikes are being used multiple times a week on average for commutes to work, school, and errands. These findings indicate that the program is reducing GHGs from personal transportation. The full extent of those GHG reductions and the cost per ton compared to other potential climate action programs will be calculated once final Wave 3 survey results are analysed and the UBC Study is finalized.

6.5 Approaches for handling high demand

As with many other climate and social programs in Saanich, BC and beyond, the pilot experienced more demand than spaces available. This was primarily for the \$1,600 lowest income incentive tier as seen by the short time for program spaces to fill and the low attrition rates. The delivery of a second and third intake enabled staff to amend the program to better accommodate for the high demand through the use of the RecOnline process. The splitting of the incentive tiers in different intakes also allowed additional lessons to be learned regarding the attrition rates for each of those incentive amounts. Any future e-bike incentive program with a similar level of incentive to that in tier 3 (\$1,600) will be expected to have high demand and should be designed to accommodate that demand efficiently and transparently.

Two delivery systems were explored to address this; a lottery system and findings from the RecOnline system.

6.5.1 Lottery system

While lottery systems are not generally used by Saanich for access to programs or by other local government, provincial or federal climate incentive programs, this approach was suggested and discussed at Council as part of the November 2021 report following the high demand experienced in the initial program launch.

A simple lottery system in which entrants' names are printed and then drawn from a hat holds several transparency challenges. For instance, residents would not be able to independently verify that their name had been included in the draw or that the draw was conducted fairly. As such, this approach is not recommended.

Locally, School District 61 has moved to using a third-party lottery system, specifically the Random.org random number generator service, for enrolment into French Immersion classes. It is a paid service and requires a small fee for each draw. It maintains a record of the draw for 5 years, and allows those who were entered in the draw to check that they were entered and whether or not their entry was drawn.

To reduce the risk of people entering the draw multiple times, and thus reducing the randomness and fairness of the draw results, some level of pre-validation is required before applicants are entered into the draw. Options were explored to determine an appropriate validation route (Appendix D). There would be additional costs and IT needs to set up systems to remove duplicates.

In order to comply with privacy requirements, personal information should not be uploaded into the third party in the lottery draw. Therefore, registration would need to occur via an online survey administered by Saanich first where personal information is collected by Saanich and stored in compliance with privacy requirements. Staff would then assign each entrant a personal identification number that does not include personal information. This identification number would then be uploaded into the lottery random draw system rather than directly uploading personal identifiers such as a name, email address, or phone number. This additional survey step adds administrative requirements and may result in potentially less participant trust in the process.

The potential process for administering a lottery system for the e-bike incentive program are outlined below:

- **Step 1: Promote the program** – registration intake would be via an online survey over a set period of time. The survey must include address format control to easily screen for duplicate addresses based on submission date/timeline without the need for manual entry to excel.
- **Step 2: Registration intake period via Online Survey** – the survey must include address format control to easily screen for duplicate addresses based on submission date/timeline without the need for manual entry to excel.
- **Step 3: Close intake and review pre-applications** - entries reviewed to ensure they have a Saanich address and to screen for duplicate addresses. Any duplicate addresses could be decided on a first come first served system.
- **Step 4: Assign personal identification codes** - to protect privacy, each registrant would be assigned a personal identification code that would be uploaded into the draw system.
- **Step 5: Upload personal identification codes into third party draw service** - no personal information is uploaded into the third party random number generator in order to protect privacy.
- **Step 6: Draw numbers** – Include an extra margin to account for those anticipated to drop out between being drawn and qualifying for the incentive. A record of the drawing will be maintained on the third party draw website for 5 years. Entrants can access the drawing to see that their personal identifier code they were assigned by Saanich staff.
- **Step 7: Inform all registrants** – of the following:
 - Their personal identification code
 - Whether their code was drawn or not
 - How they can check their number was entered.
 - That they should consider themselves on a waitlist and will be informed if another draw is completed to fill spaces.
 - How they will be informed once all the incentives are allocated and we close the waitlist.
- **Step 8: Invite successfully drawn registrants to submit evidence of eligibility** – this would now initiate the same process as in pilot intakes 2 and 3.
- **Step 9: Additional draw(s)** – if needed due to attrition.
- **Step 10: Close the program** – once all incentives are allocated and inform all remaining registrants that the program has closed.

6.5.2 RecOnline registration

RecOnline was used successfully for the second and third intake of the e-bike incentive pilot. The Saanich RecOnline system provides many benefits, including that it:

- is designed to handle high levels of interest for limited space programs on a regular basis (e.g. children’s summer camps and swimming lessons);
- protects privacy in line with Saanich’s policies and the BC Freedom of Information and Protection of Personal Privacy Act;
- has a built-in wait list system;
- has Recreation staffing support to help people create accounts in-person at Saanich Rec Centres and on the phone;
- sends automatic confirmation emails of status (either registered or waitlisted) for high levels of transparency;
- provides a more streamlined process with less administrative burden than a lottery system; and

- has already been used successful for administration of the e-bike incentive program.

Drawbacks include:

- the highest incentive tier (\$1,600) filled quickly so it requires residents to be available either online, on the phone, or at a Rec Centre at the time enrolment opens to secure a space rather than being placed on a waitlist; and
- it is a first come first served process which may be considered less fair than a random draw.

While the process requires applicants to create a RecOnline account, this can be beneficial for new account holders as it provides them with access to many other programs provided by Saanich that they would be unable to access without an account. Support was offered to new applicants well in advance of the e-bike incentive intake dates to ensure interested applicants were able to apply.

The process for administering the e-bike incentive program via RecOnline is already established and is outlined below.

- **Step 1: Promote the program** – provide notice of enrolment date and time so that residents have time to set up Active Net accounts if they do not already have one.
- **Step 2: Registration intake period through RecOnline** – access is either online or with support from Saanich staff over the phone or in person at Saanich recreation centres or the Municipal Hall. Program staff work with recreation staff to ensure additional staff are available at the recreation centres to support any applicants in person or on the phone.
- **Step 3: Automatic notice to registrants** - registrants receive nearly instantaneous notification (and/or email records) of whether they made it into the program or were waitlisted.
- **Step 4: Review for duplicate entries and valid addresses** – including household addresses that received incentives in the previous intakes. Only successful registrants are reviewed at this stage, which minimizes administrative burden.
- **Step 5: Invite successful registrants to submit evidence of eligibility** – this would now initiative the same process as in pilot intakes 2 and 3.
- **Step 6: Invite people from the waitlist** – to submit evidence of eligibility if needed due to attrition (following review of duplicate entries and valid address).
- **Step 7: Close the program** – once all incentives are allocated and inform all remaining waitlisted people that the program has closed.

6.5.3 Comparison and recommendations for approach

One reason to consider a lottery system rather than a first-come, first-served system is to overcome potential bias and barriers in the first-come, first-served application process. The e-bike incentive pilot had high levels of participation from diverse Saanich residents including those typically facing systemic barriers, and therefore may not be improved by a lottery system.

Conversely, the RecOnline system requires residents to be available at the enrolment opening date and time in order to secure a space in the program, whereas the lottery system would not have that same time constraint, and therefore may be less stressful for participants.

A comparison of the benefits and disadvantages of both approaches was completed and outlined in Table 26 below.

Table 26: Comparison of intake approaches

Criteria	RecOnline	Third Party Administered Lottery
Low Barrier for Intake	Medium - Help by phone and in-person at rec centres is available, and the system may be familiar to residents already. - However, residents may face barriers to being available at the time chosen to open enrolment.	Medium - Help would be available from a smaller team of Sustainability staff. - Residents would not need to be available at a specific limited time, but could apply over a longer time period (e.g. a two-week intake).
Equitable	High - This approach has resulted in diverse participants in the program.	Unknown - This approach has not been tested for the e-bike program but is assumed to not add any additional barriers.
Transparent	High - Automated confirmation emails sent to participants at the time they enter their information.	Medium - There would be a delay of potentially weeks between entering the draw and hearing back about results. - There would be a learning curve for participants to check their personal identification code was entered. - Residents would need to trust that there was no error in the personal identification code process between being assigned to their draw entry, sent to the online draw system, and being sent to them by email.
Trusted	High	Unknown
Wait listing automated	Yes	No
Email confirmation automated	Yes	TBD if web developers can accommodate. Additional budget needed.
Complies with Saanich IT and privacy	Yes	Potentially - a full Privacy Impact Assessment would be required.
Roll-out success	High - system successfully used before	Unknown - System testing would be required.
Rec staff ability to answer system inquiries	Yes	No
Cost	No additional cost to Saanich	Additional costs to Saanich – see Appendix D.

For the reasons explored above, staff recommend continuing to use the RecOnline system for administering the e-bike incentive program should a similar e-bike incentive program be offered in the future. Should direction be provided to test a third party administered lottery system a potential process has been identified, but it would require additional budget and administrative resources.

7.0 Recommendations and Next Steps

7.1 Value of continued e-bike incentives

Findings to date indicate incentives for e-bikes are successful in reducing GHG emissions from personal transportation while delivering multiple co-benefits such as improved affordability and exercise levels. Transportation is the biggest source of GHG emissions in our community and we are not on track to meet our 2030 mode share targets, so increased action is needed. It is therefore recommended that an e-bike incentive program continue to be offered in 2023 while awaiting the final UBC study, and that the recommendations from the final study are incorporated into the design of future climate programs.

7.2 Demand for e-bike incentives

As with many other climate and social programs in Saanich, BC and beyond, the pilot experienced more demand than spaces available. This was primarily for the \$1,600 lowest income incentive tier as seen by the short time for program spaces to fill and the low attrition rates. The second and third intakes took waitlists and funds were exhausted before those on the waitlist could access the incentives. Additionally, an e-bike incentive e-newsletter list was created for those interested in updates, and the list membership is at 417 contacts as of 5 December, 2022.

While many climate focused incentives have high demand and are often oversubscribed, the objective is not necessarily to meet total demand but may include driving the market and increasing community-wide knowledge and awareness. Any future e-bike incentive program with a similar level of incentive to that in the lowest income tier (\$1,600) will be expected to have high demand and should be designed to accommodate that demand efficiently and transparently.

The goal of this pilot is not to provide an incentive for every eligible home in Saanich. It is rather to collect information on the effectiveness of e-bike incentives that can then be used to help prioritize climate action investments in the future, and what role incentives can play towards reaching active transportation mode share and greenhouse gas emission targets.

7.2.1 Recommended approach for handling high demand

Two delivery systems to address high demand were evaluated; a lottery system and findings from the RecOnline system through which the second and third intake were administered on a first-come, first-served approach. These are detailed in section 6 of this report. One reason to consider a lottery system rather than a first-come, first-served system is to overcome potential bias and barriers in the first-come, first-served application process. However, it is not clear whether the first come first served approach did introduce barriers to participation, or if a lottery system would reduce them. Other approaches to reach diverse Saanich residents could be explored instead, such as providing adult learn to cycle classes for newcomers to Canada, or targeted outreach events to different cultural groups in Saanich.

A lottery system also has potential drawbacks for the District due to the need to develop new systems for collecting, verifying, and removing duplicate entries, potential privacy concerns, and limited immediate feedback for residents. These barriers to a roll out of a lottery system are

outlined in Appendix D. Based on the findings, the RecOnline system would be the lowest cost and least admin time option for delivering the program.

7.3 Proposed incentive levels and targets

Based on findings to date, an incentive program focusing on income-qualified residents will use funds in a way that reduces program free-ridership and therefore induces more behavior change than a non-income qualified program. It also improves co-benefits. Therefore, it is recommended that the District provide only income-qualified incentives in 2023, and that these incentive amounts be modified slightly based on program findings, as shown in Table 27.

The original decision to set the incentive for the lowest income tier at \$1,600 was based on the understanding from engagement that households in the lowest income brackets would have a very difficult time overcoming the price barrier at all, and that additional costs such as helmets, locks, lights, raingear, and maintenance would be too much of a barrier for these households to access the incentives. It was also a concern that lower income residents would face barriers due to housing type and tenure for weather-protected, secure bike parking. Given rapid uptake of the incentives, these did not appear to be a barrier for pilot participants.

In addition, 60% of those who accessed the \$800 incentive would have qualified based on their household income for the \$1,600 incentive if they had secured a spot in the \$1,600 intake. This indicates that the \$800 incentive was at least sufficient to overcome the cost barrier for a great many people in this income tier.

However, there was considerable attrition in the \$800 tier, resulting in higher administrative requirements. These attrition levels were not seen in the other incentive tiers, indicating that this incentive level may not be at the optimal level for this income qualified tier. It is recommended that the program test reducing the \$1,600 tier to \$1,400 and test increasing the \$800 tier to \$1,000 and measure the impacts on participant attrition and demographics.

7.3.1. Child transportation incentives

The Capital Regional District (CRD) origin-destination survey shows that children ages 5-10 are predominantly transported by vehicle (71.9%). It further shows that 8% of trips in our region were made to transport another person. Given the potential for e-bikes to carry children (and some cargo e-bikes to transport other adults) this is an area of further interest to help displace more vehicle trips in Saanich.

A survey of 433 people who cycle at least once a month in the Capital Region in 2021 showed that 10% of them always or often rode with children³, showing that it is possible to bike with children in our region, but that the pilot participants did not do so. It is unclear what the cause of this difference is.

The pilot did not collect data on whether participants intended to use their e-bikes for transporting children, nor did it collect information on whether child carrying equipment was also purchased. The pilot did receive informal qualitative feedback that multiple participants planned to use their e-bikes for transporting children. Further, the pilot did collect information on cargo e-

³ Impacts of Bicycle Infrastructure in Mid-Sized Cities Study (IBIMS). www.sfu.ca/ibims. Cities, Health & Active Transportation Research (CHATR) Lab. Simon Fraser University.

bike purchases. When including cargo e-bikes as defined by the SUVI program and smaller e-bikes with benches such as the RadRunner plus, 11% of e-bikes purchased in the program were cargo e-bikes. The lowest income tier participants chose cargo e-bikes more frequently than other income tier participants (15% vs. 9% in the highest income tier). Given that the CRD's findings that 8% of trips in the region are for transporting other people, and that cargo e-bikes are typically only used when children are aged 1-10, this rate of uptake of cargo e-bikes may be proportionate to residents' chauffeuring needs.

Providing additional incentives for cargo e-bikes may or may not result in proportionately increased GHG savings, and may or may not provide a similar or better cost per ton of GHG emission reductions. Therefore, it is recommended that the pilot expansion not provide additional incentives for cargo e-bikes at this time, but instead:

- continue to monitor the uptake of cargo e-bikes;
- collect additional information from participants about children in the household and their intent to transport them by e-bike to help understand the current uptake and GHG reduction potential; and
- provide educational materials on transporting children by e-bike, including FAQ content on the website and a discounted course from Capital Bike on transporting children by e-bike.

7.3.2. Customization for disability incentives

Given that nearly 15% of the participants in the lowest income tier identified as having a disability, and that e-bikes are likely not the best transportation solution for all people with a disability, it would seem that the incentives already were sufficient to overcome barriers for people with certain types of disabilities. Some customization of e-bikes may be required for other riders, and these customizations are likely costly. However, it is not clear how much of an impact additional incentives for access customizations have on community GHG emissions reductions. More engagement on transportation access generally is recommended between the District and groups representing people with disabilities to better understand priority focus areas.

In the interest of ensuring that climate investments can both overcome barriers to access for diverse Saanich residents, can be accessed by as many people as possible and can provide additional data regarding the use of e-bikes for transporting children, it is recommended that a set amount of e-bike incentives be provided in 2023 as outlined in Table 27.

Table 27: Proposed incentives and costs for 2023 program

Item	Detail	Incentive amount	# incentives/ units	Total cost
E-bike	Lowest Income Tier	\$1,400	50	\$70,000
	Middle Income Tier	\$1,000	50	\$50,000
Safety Course	Discounts for E-bike Safety Skills Courses	\$55	20	\$1,100
	Admin fee per course	\$100	5	\$500
Contingency				\$8,400
Total			100 incentives	\$130,000

7.4 Proposed evaluation

The Community Social Planning Council can provide qualitative research about the impact of the e-bike incentive program on transportation and overall affordability for participants. The qualitative research would include a short survey, a focus group, and a summary report. This research, valued at \$15,000, would be provided as an in-kind contribution. Should the additional incentives be approved for 2023, we anticipate that UBC will have sufficient funding to include the 2023 participants in the first two waves of the study surveys, adding additional data collection for the final UBC Study results. In addition, the findings associated with the change in incentive amounts and the additional qualitative research from the Community Social Planning Council will be presented to Council alongside the final UBC Study in late 2023. Results will be shared with other interested parties.

7.5 Proposed funding sources

The 2021-2022 pilot was funded through a combination of the Green Municipal Fund, a Council one time resource request, and a contribution from the Climate Action Reserve Fund. The GMF funding final disbursement is contingent on the final results of the UBC study, which is expected in Fall 2023. Staff are not aware of further external funding opportunities for a continued program in 2023.

A one-time resource request will be presented for Council's consideration as part of the 2023 budget in order to support the continuation of the Saanich e-bike incentive program as outlined in Table 27.

7.6 Collaboration with other jurisdictions

Staff are in conversation with the Province and other municipalities actively seeking opportunities to collaborate on future e-bike incentive programs. These parties are keen to review the findings of the UBC study. Additional data analysis and findings from the delivery of incentives in 2023 (as outlined in Table 27) will be useful information for these stakeholders and to further inform any future e-bike incentive program(s).

A Provincial or regional e-bike incentive program would likely provide efficiencies and additional funding sources. However, were any programs to be developed at the Provincial or at a collaborative municipal level, they would not be ready for a 2023 launch. Therefore, given the promising interim results, it is recommended that Saanich provide incentives to Saanich residents through an in-house program in 2023 as outlined in Table 27. This would allow Saanich to benefit from the associated GHG savings immediately, respond to community demand, seek opportunities to collaborate on a larger program and collect more information to share with potential partners.

Appendix A: Pre-application form

COMMUNITY E-BIKE INCENTIVE PROGRAM Pre-Approval Form



Saanich residents can be pre-approved for an e-bike incentive. Pre-approval allows you to reserve an incentive while you shop, and also to have the incentive applied at the time of sale from participating vendors. To access the incentive you must meet all program terms and conditions – see saanich.ca/ebike for details. E-bike must be purchased after receiving pre-approval from Saanich, not before.

Applicant info:		
NAME (as it should appear on your rebate cheque)	EMAIL	PHONE
<input type="text"/>	<input type="text"/>	<input type="text"/>
NAME (if different from above, that we should use to correspond with you)		
<input type="text"/>		
HOME MAILING ADDRESS (Must be in Saanich)	LINE1	<input type="text"/>
	LINE2	<input type="text"/>
	CITY	<input type="text"/>
	POSTAL CODE	<input type="text"/>
Are you a year-round Saanich resident? (Live at least 50% of the time at the above address)		<input type="checkbox"/> Yes <input type="checkbox"/> No

Review the table below to see which incentive level you could qualify for:

# of people in household (includes children)	Household income (before tax) - include income of main income earning adults in family* over the age of 18.		
1 person	Up to \$42,600	Up to \$55,900	Above \$55,900
2 persons	Up to \$53,000	Up to \$69,600	Above \$69,600
3 persons	Up to \$65,200	Up to \$85,600	Above \$85,600
4 persons	Up to FULLY SUBSCRIBED	Up to \$103,900	At FULLY SUBSCRIBED
5 persons	Up to FULLY SUBSCRIBED	Up to \$117,800	At FULLY SUBSCRIBED
6 persons	Up to \$101,200	Up to \$132,900	Above \$132,900
7 persons	Up to \$112,800	Up to \$148,000	Above \$148,000
E-bike incentive level:	\$1,600 incentive	\$800 incentive	\$350 incentive

*Family members include a married or common law couple and children in the home. It does not include unrelated roommates, landlord and tenant, etc. Refer to Dictionary, Census of Population, 2016 - Census family definition by Statistics Canada for more details <https://www12.statcan.gc.ca/census-recensement/2016/ref/dict/fam004-eng.cfm>. Single people living alone can report single income. In cases with multiple adult family members at the household with incomes, show the income only for the top 2 earners.

sustainability@saanich.ca | saanich.ca

This collection of personal information is authorized under the Local Government Act, Community Charter and section 26(c) of the Freedom of Information and Protection of Privacy Act. The information will be used for administering and evaluating the rebate program. Questions can be directed to the District's Privacy Officer at 770 Vernon Avenue, Victoria BC V8X 2W7 t. 250-475-1775, e. foi@saanich.ca.



COMMUNITY E-BIKE INCENTIVE PROGRAM Pre-Approval Form



Which incentive are you applying for?

\$350 - FULLY SUBSCRIBED
 \$800 (proof of income required)
 \$1600 - FULLY SUBSCRIBED

If applying for income-qualified incentive: How many family members live in the home?
 How many income earners in the family? (includes retirement and income assistance income)

How would you like to access the incentive?

A rebate issued to me after I purchase the e-bike and submit my application form and e-bike receipt (the bike must be purchased on or after I receive a pre-approval confirmation from Saanich).
 A point of sale incentive applied by the e-bike vendor (only available from participating vendors in the Capital Region). I understand that if I choose this option, Saanich will directly inform my choice of vendor about my pre-approval amount.
 I would like to purchase from this vendor:
 I will inform Saanich which vendor I choose at a later date.

Participate in the E-Bike Study



Understanding the effects of incentive programs like this one is vital to determining whether they continue and expand in the future. Dr. Alex Bigazzi of the University of British Columbia is conducting an independent study on the effects of bicycle purchases on travel behaviour over time. Participation in the study is optional, and will not affect whether you receive a rebate through this program. No personal information will be shared between UBC and Saanich.
 To learn more and consider participating, click here www.tinyurl.com/UBCbikesurvey or contact the study team at react.lab@ubc.ca or 604-822-4426.
 Translation into other languages is available over the phone.

PROOF OF RESIDENCE - Please submit a copy of one of the below, showing your name and address in Saanich: (Other options may also be possible – contact sustainability@saanich.ca)

- BC Driver's Licence
- BC Identification Card
- BC Services Card
- Credit card or debit card or statement
- Utility bill
- Owner's Certificate of Insurance and Vehicle Licence issued by ICBC
- District of Saanich Property Tax Notice
- Statement of Employment Insurance Benefits
- Income Tax Assessment Notice

PROOF OF INCOME - (ONLY REQUIRED FOR \$800 and \$1600 INCENTIVE)

Please submit a copy of one of the below, or call us to discuss other options:

- Endorsement Letter from a relevant organization (see [link](#))
- Proof of Saanich L.I.F.E. program membership (LIFE sticker on your Rec Card), or
- Notices of assessment for two main income earners in the family, or
- Verification of income assistance or provincial public disability assistance (e.g. your cheque stub or Confirmation of Assistance)

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COMMUNITY E-BIKE INCENTIVE PROGRAM Pre-Approval Form



ABOUT YOU: (We would like to evaluate how well this program is being accessed by different parts of our community and the impact it may have on reducing climate pollution.)

My gender (select all that apply):		Age:	
<input type="checkbox"/> Woman	<input type="checkbox"/> 19-25	<input type="checkbox"/> 46-55	
<input type="checkbox"/> Man	<input type="checkbox"/> 26-35	<input type="checkbox"/> 56-65	
<input type="checkbox"/> My gender is: <input type="text"/>	<input type="checkbox"/> 36-45	<input type="checkbox"/> 66 and up	
<input type="checkbox"/> Prefer not to say			

(Optional) If you identify as a member of one or more of the following, please select all that apply.

<input type="checkbox"/> Visible minority	<input type="checkbox"/> LGBTQ2S+
<input type="checkbox"/> Person with Disability	<input type="checkbox"/> None of the above
<input type="checkbox"/> Indigenous	<input type="checkbox"/> I choose not to answer
<input type="checkbox"/> Immigrant or Newcomer	

Which of the following do you usually use to travel at least one day per week for any purpose? (Choose all that apply.)	<input type="checkbox"/> Personal vehicle (car/truck)	<input type="checkbox"/> Bus
	<input type="checkbox"/> Regular bike	<input type="checkbox"/> Walking
	<input type="checkbox"/> E-bike	<input type="checkbox"/> Other

How many working motor vehicles (cars, trucks, motorcycles) are currently available to the members of your household, including yourself?

How many licensed drivers are there in your household?

I confirm that I am applying for an incentive for an e-bike that (check the boxes to confirm):

- will be used by me/my household for personal transportation
- meets the BC Motor Vehicle Act definition of a "Motor Assisted Cycle"
- comes with at least 1 year warranty on parts
- is new (used/resold e-bikes are not eligible)
- hasn't already received a Saanich incentive at point of sale from a participating vendor
- will be purchased on or after my pre-approval confirmation from the District of Saanich
- The e-bike price after any discounts/sales/promotions have been applied and before accessories, shipping, taxes, or other additional costs have been added must be \$1,800 or above

sustainability@saanich.ca | saanich.ca

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COMMUNITY E-BIKE INCENTIVE PROGRAM Pre-Approval Form



- I agree to the terms and conditions of this program and confirm that any accompanying receipts, invoices and documents are complete and accurate.
- I understand that the District of Saanich is not liable for the performance or suitability of the products and services described in this application.
- I understand I may be contacted to confirm application details and also for program evaluation purposes for up to 12 months following applying to the program.

DECLARATION

I declare that the information on this application is correct and complete, and consent to the District of Saanich contacting me to administer and evaluate the program. I have read and understood the terms and conditions available at saanich.ca/ebike.

APPLICANT SIGNATURE:	<input type="text"/>	DATE:	<input type="text"/>
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Submit pre-approval form and supporting documents, if relevant

<p>By mail: Sustainability Division, Planning Department, District of Saanich, 770 Vernon Ave, Victoria, BC, V8X 2W7</p> <p>In Office: Drop off your form at the Saanich Municipal Hall 3rd Floor Planning counter during business hours (8:30am - 4:30pm Monday to Friday excluding statutory holidays).</p>	<p>Secure online portal: While we don't accept emailed applications, you can email sustainability@saanich.ca for instructions to a secure online portal to submit your application and supporting documents.</p>
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The District of Saanich will review your application and contact you within 10 business days.

For office use only

Reviewed by: <input type="text"/>	Rebate eligible for: <input type="text"/>
Date: <input type="text"/>	

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Appendix B: Terms and conditions

SAANICH COMMUNITY E-BIKE INCENTIVE PILOT PROGRAM Terms and Conditions



General incentive eligibility requirements

1. Applicants must meet all eligibility criteria to qualify for an incentive.
2. Applicant must be a year-round Saanich resident at the time of application (lives at least 50% of the time at a Saanich residential address).
3. One incentive is available per household (civic address).
4. Applicant must be a person of the age of majority, not a business or organization.
5. E-bike must be for personal transportation, not for business use.

Income-qualified incentive eligibility requirements

6. To access the income-qualified incentive, applicants must:
 - Declare the number of people in their [census family](#) who live in the household
 - In the case of a single adult earner household, provide acceptable proof of income for that earner
 - In the case of multiple earners in the family, provide acceptable proof of income for the top two adult income earners in the census family

If income information is not presented, or the income presented is over the threshold, then the applicant is not eligible for the income-qualified incentive.

E-bike requirements

7. The e-bike must:
 - a) meet the definition of "motor assisted cycle" in the BC Motor Vehicle Act.
 - b) meet the following criteria set out in the [Motor Assisted Cycle \(MAC\) Regulation](#):
 - electric motor with power output rating not exceeding 500 watts,
 - not capable of propelling the cycle faster than 32 km/hr. on level ground
 - wheels 350mm or more in diameter,
 - no more than 3 wheels in contact with the ground, and
 - motor shut-off mechanism separate from the accelerator controller, that allows the driver to turn the motor on and off from a normal seated position while operating the MAC or prevents the motor from turning on or engaging before the motor assisted cycle attains a speed of 3km/hr
 - motor must disengage if the operator stops pedaling, an accelerator controller is released, or the brake is applied.
 - c) be new, no used e-bike sales.
 - d) include a minimum 1 year warranty on parts.
 - e) be purchased on or after the date the District of Saanich confirms the applicant's pre-approval status for the program and before the deadline (30 days after pre-approval).
8. The e-bike price after any discounts/sales/promotions have been applied and before accessories, shipping, taxes, or other additional costs have been added must be \$1800 or above.

Privacy

9. By submitting an application, the applicant consents to the collection of personal information which is authorized under the Local Government Act, Community Charter and section 28(c) of the Freedom of Information and Protection of Privacy Act. The information will be used for administering and evaluating the rebate.

Effective Date: Updated March 2022 | saanich.ca/ebike

SAANICH COMMUNITY E-BIKE INCENTIVE PILOT PROGRAM

Terms and Conditions



10. Applicants are not required, but strongly encouraged, to participate in a UBC study which involves a total of 3 short surveys over a 12 month period following e-bike purchase to better understand the effect of e-bike incentives and ownership on transportation choices and greenhouse gas emissions.

Vendor Point of Sale

To be reimbursed for point of sale incentives for the Saanich E-bike Incentive Program, vendors must meet the following criteria:

11. Must provide local (within Capital Region) storefront or mobile repairs and maintenance services for the e-bike sold.
12. Must sell e-bikes that:
 - are new, and
 - have a minimum 1 year warranty on all parts, and
 - comply with the BC Motor Vehicle Act Motor Assisted Cycle Regulation criteria
13. Must provide detailed receipt for incentive applications showing at minimum:
 - Company name
 - Make and model of e-bike
 - Date sold
 - Price paid
 - Saanich point of sale discount provided
14. Must have a valid business licence within the Capital Region.
15. Must agree to receive and review email updates from the District of Saanich on important incentive program updates such as number or rebates remaining, changes in rebate amounts or terms and conditions.
16. Must be available to take calls from the District of Saanich to confirm any missing information receipts submitted for the incentive.
17. The District of Saanich reserves the right to remove a vendor from the vendor list for any reason at its sole discretion.

Other Conditions

18. To access the point of sale incentive through a vendor, the participant must be pre-approved by the District of Saanich.
19. E-bike must be purchased within eligible dates (after pre-approval confirmation and before deadline).
20. Incentive can only be claimed once per e-bike.
21. Incentive cannot exceed price paid for e-bike.
22. District of Saanich claims the greenhouse gas emission reductions from this program.
23. District of Saanich maintains the right to change the incentive program at any time.
24. District of Saanich has sole discretion to approve or reject applications for any reason.
25. District of Saanich is not a designer, manufacturer, or vendor of e-bikes and associated equipment, and makes no representations or warranties whatsoever as to the fitness of, the necessity for, the quality of, or the safety of the e-bike chosen by the applicant.

Appendix C: Endorsement form (final version)

COMMUNITY E-BIKE INCENTIVE PILOT PROGRAM Endorsement Form



This Endorsement Form is one way to verify income for the Saanich Community E-bike Incentive Pilot Program. Other income verification options are listed at saanich.ca/ebike.

Who can complete this form for an applicant?

- Must be familiar with the applicant’s financial situation.
- Must work for a relevant organization in a professional capacity such as social work or family services professional, health care professional, First Nation government, Native Friendship Centre, housing provider, religious organization leader, school principle or counsellor, or other organization with income-tested programs. (Contact sustainability@saanich.ca for questions.)
- Must agree to a short follow up call from Saanich Sustainability staff.

The Community E-bike Incentive Pilot Program provides incentives towards the purchase of an electric assist bicycle (e-bike) for personal use. The program is available to Saanich residents of all income levels. The amount of the incentive depends on the applicant’s income level, as described in the table below.

# of people in household (includes children)	Household income (before tax) - include income of main income earning adults in family over the age of 18.	
1 person	Up to \$42,600	Up to \$55,900
2 persons	Up to \$53,000	Up to \$69,600
3 persons	Up to \$65,200	Up to \$85,600
4 persons	Up to \$79,100	Up to \$103,900
5 persons	Up to \$89,800	Up to \$117,800
6 persons	Up to \$101,200	Up to \$132,900
7 persons	Up to \$112,800	Up to \$148,000
E-bike incentive level:	\$1,600 incentive	\$800 incentive

sustainability@saanich.ca | saanich.ca

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COMMUNITY E-BIKE INCENTIVE PILOT PROGRAM Endorsement Form



Endorsement Information

E-bike Incentive applicant	
NAME	HOME MAILING ADDRESS
	LINE1
	LINE2
	CITY
	POSTAL CODE
Endorser	
NAME OF ENDORSER:	TITLE:
ORGANIZATION:	
PHONE:	EMAIL:
<p>I (the endorser) have read and understand the income criteria of the Saanich Community E-bike Incentive Pilot Program above. I agree that the applicant for this e-bike incentive meets the income criteria for the following incentive level - check one:</p> <p><input type="checkbox"/> \$800 incentive</p> <p><input type="checkbox"/> \$1600 incentive</p>	
ENDORSER SIGNATURE:	DATE:

sustainability@saanich.ca | saanich.ca

This collection of personal information is authorized under the Local Government Act, Community Charter and section 26(c) of the Freedom of Information and Protection of Privacy Act. The information will be used for administering and evaluating the rebate program. Questions can be directed to the District's Privacy Officer at 770 Vernon Avenue, Victoria BC V8X 2W7 t. 250-475-1775, e. foi@saanich.ca.





Submit endorsement letter:	
<p>By mail: Sustainability Division, Planning Department, District of Saanich, 770 Vernon Ave, Victoria, BC, V8X 2W7</p>	<p>Secure online portal: While we don't accept emailed applications, you can email sustainability@saanich.ca for instructions to a secure online portal to submit this form.</p>
<p>In person: Drop off form at the Saanich Municipal Hall 3rd Floor Planning counter during business hours (8:30am - 4:30pm Monday to Friday excluding statutory holidays).</p>	

For office use only

Reviewed by:	Incentive eligible for:
Date:	

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Appendix D: Lottery system validation analysis

Table 28 provides details of the options that were explored in order to determine an appropriate validation route for an e-bike incentive using a lottery system that prevents multiple submissions. This analysis demonstrates that manual verification would be necessary in order to prevent people entering the draw multiple times (making the system unfair), to ensure one entrant per household, while protecting privacy.

Table 28: Duplicate lottery entrant screening options

Validation Type	Description	Suitability for E-bike Draw
Online Survey Tools		
<i>Remove duplicate survey entrants</i>		
Unrestricted	Allows the questionnaire to be completed more than once by the same respondent.	Unsuitable. Would allow people to enter the draw an unlimited number of times.
Cookie (Response)	Creates a cookie on respondent devices to allow only one response per device. This can be problematic as browsers can be set to block cookies from being created on the device. Respondents may also override this by clearing cookies ultimately allowing them to submit more than one response.	Unsuitable. Would allow people to enter the draw an unlimited number of times.
Cookie (Access)	Creates a cookie on respondent devices to allow only one access per device. The respondent will not be able to access the link a second time, even if they did not successfully submit the survey. This can be problematic as browsers can be set to block cookies from being created on the device. Respondents may also override this by clearing cookies ultimately allowing them to submit more than one response.	Unsuitable. Might both prevent people from entering the draw once or allow people to enter the draw an unlimited number of times, dependent on their technological knowledge.
IP Address	Allows only one response per IP address. This can be problematic if respondents share the same IP address, as you would in the same office.	Unsuitable. Would prevent people who legitimately would be eligible to enter the draw from entering e.g., students at a university or College. Alternatively, the same individual could enter multiple times from different IP addresses.
Home Address Verification		
<i>Only allow non-duplicate, verified Saanich addresses to enter the lottery draw, and require the entry address to match the address where the incentive cheque is sent.</i>		
Reviewing submitted proof of address	Reviewing personal information of proof of address (driver's licence, utility bill, etc.) that is required for pre-approval to match a	Unsuitable due to the considerable administration and time required for staff and residents, since there is no

Validation Type	Description	Suitability for E-bike Draw
	person with an address in Saanich prior to submitting into the draw.	restriction on the number of entrants during the intake period.
Verified Addresses and Geolocator	<ol style="list-style-type: none"> 1) Saanich uses Canada Post's AddressComplete tool in a webform to collect lottery entrants' verified Canadian addresses in a consistent format, along with their names, email addresses, and phone numbers. The webform would collect the information in a database accessible to Saanich staff in compliance with FOIPPA. The webform would also send a confirmation email to the lottery entrant. 2) Saanich staff use an address geolocator to remove addresses that were not in Saanich and to identify duplicate addresses. 	Potentially suitable, but requires additional staff time, costs, and privacy and technological feasibility analysis.

High level estimates for the final validation type in Table 28 are included in Table 29. These systems have not yet been tested and have not been reviewed for privacy considerations, so may not be technically feasible, but are provided for information. We also do not have timeline estimates from our web development contractor for these changes. The District is about to start a new RFP process for web vendors, meaning that these changes to the website quoted below would potentially also not have a long lifespan. Therefore, the Communications Division does not recommend this investment in our current website at this time.

Table 29: Potential costs for address validation

Item	Description	Low-Cost Estimate	High-Cost Estimate
Webform automated email reply	Atomic Crayon (website contractor)	\$2,750	\$2,750
Webform CSV download	Atomic Crayon (website contractor)	\$8,500	\$9,500
Incorporating Canada Post AddressComplete into Saanich's webform	Atomic Crayon (website contractor)	\$2,250	\$2,500
Canada Post AddressComplete cost per use	Low-cost estimate assumes up to 25,000 address lookups. If lottery has more entrants, costs will increase. For example, 100,000 address lookups cost \$7,000.	\$2,000	\$ 7,000
Random.org cost per entrant	Low-cost estimate assumes up to 3,000 entrants. If lottery has more entrants, costs will increase. For example, ,000 entrants would cost \$99.95	\$23	\$100
Total		\$15,523	\$21,850