

CITY OF NANAIMO

BUSINESS CASE – eBike Rebate/Grant

CURRENT OVERVIEW

Nanaimo has several Policy documents that support active and sustainable transportation. These start with land use planning in the Official Community Plan, and migrate through the Transportation Master Plan down to staff level working documents. As part of the 2019-2022 City of Nanaimo Council Strategic Plan, Livability and Environmental Responsibility were identified as two of the four Strategic Priorities. These reinforce the goal of providing accessible and inclusive mobility to all Nanaimo residents. Council indicated further support for these strategic priorities by passing a motion at the July 15th Finance and Audit Committee meeting requesting Staff to include a business case for an eBike grant as part of the upcoming Budget Discussions.

BUSINESS ISSUE

The most recent population projections indicate that the population of Nanaimo will grow from about 94,000 in 2016 to 135,000 by 2046, with seniors projected to make up the largest proportion of the population. This growth will bring more demand to the transportation system, which will result in congestion, delay, and the additional production of GHGs. The historical approach to this problem would have been to build more and bigger roads. This approach is costly, unsustainable, and is not healthy for the community. It also does little to improve transportation accessibility for lower income people who may not be able to afford to own a private vehicle. Instead, the Transportation Master Plan adopted the strategy of managing growth through mode shift. This approach maximizes efficiency of the existing road network to support necessary vehicle trips; enhances walking, biking, and transit services; and provides more equitable transportation options for people in all income brackets. The goals of the Master plan are noted in Table 1.

Mode	2012 (%)	2041 (%)	Growth factors
Walking	8.5	12	2x
Biking	1.0	4	5x
Transit	2.5	8	5x
Personal Vehicle	88	76	1.25x

Table 1 - Nanaimo Travel Mode Splits

Currently in Nanaimo, congestion and delay are minimal; and fostering a shift such as the one outlined in the Transportation Master Plan is challenging. While people may feel there is a need to do better, the impact to mobility on a daily basis isn't sufficient to drive people to seek alternative means. For the City to encourage a mode shift among people who have access to private vehicles, it is necessary to focus efforts on making walking, biking, or transit more appealing and easier to use. It is also important to recognize that many Nanaimo residents do not have access to private vehicles and use active transportation out of necessity, and not necessarily by choice. We know that low-income people are more likely not to have access to private vehicles, and therefore, have more limited access to the wider City.

Some common remarks regarding cycling in Nanaimo are that it's too hilly, the lineal nature of the City makes distances too great, or that there aren't enough bike lanes or safe streets. The City is continually adding bike lanes and enhancing road safety, but there isn't anything that can be done to change the geography. What does appear to be helpful in overcoming this challenge is the introduction of electric assist bikes and scooters. A recent major research project by a Vancouver Island University student

(Gibson, 2020) found that, while there are increasing levels of eBike ownership and interest in eBikes in Nanaimo (especially among older people), purchase cost is the most significant barrier preventing further eBike use in the city.

The Province of British Columbia offers an eBike rebate program for people who trade in or scrap a vehicle; however, this is only accessible to people who have a private vehicle to spare.

EXPECTED OUTCOME

Residents view electric assist variants of bikes and scooters as a way to overcome some of the barriers of cycling in Nanaimo. The addition of an eBike Grant Program could support mode shift away from personal vehicles, while providing opportunities for better access to the City for low-income residents.

Considering that there are almost 250,000 trips made in Nanaimo daily, shifting 250 from car to bike has a relatively small impact on the overall system, however any shift is positive. There would also be equity benefits if the program successfully reaches low-income individuals who currently have transportation access limitations.

OPTIONS

Option #1 – Add a eBike Grant Program

Introduce an eBike grant program with an annual grant pool of \$10,000. The explicit details of the grant program would be formalized once the funding has been secured, but the expectation is that this program is intended to reduce financial barriers for residents wishing to travel by eBike, but not having the means to afford one.

With this in mind, staff envision adopting an application process similar to the Parks, Recreation, and Culture LEAP program as a preliminary screening for applicants. Additional screening criteria would include limitations on place of residency (must be within the City) and registration with Project 529, among others.

Suggested Grant:

The Provincial Scrap-It program currently offers \$1,050 towards a new eBike valued over \$1,200, when a currently licenced vehicle is scrapped. In the interest of being able to have greater impact, it is suggested that the City use a lower dollar value per grant. The suggested initial formula would be that the City funds 50% of the purchase price of any new eBike, up to a maximum of \$250. Considering that average cost of a new eBike is around \$2,000, this would not have a significant impact on cost considerations, but it would enable the City to offer up to 40 grants and therefore have a greater overall impact on the community.

Benefits:

- Reduce the financial barrier of eBike ownership
- Provides an opportunity to fill the gap in the provincial program by offering a rebate program with more accessible eligibility requirements
- Reduced GHG's as residents shift from vehicles to bikes
- Increase in eBike ownership within Nanaimo by up to 40 units/year

Weaknesses:

- Grant may be insufficient to allow low income residents the ability to purchase an eBike

Financial Analysis:

- An annual grant pool of \$10,000 funded from the Emission Reduction Reserve, to be revaluated based on success of program in the first year to guide future funding commitments.
- A new program such as this also carries with it additional demand on staff time. Based on experience from other similar programs it is anticipated that this could be as much as 250 hours for the first year.

Option #2 – Utilise the ReImagine Process to Explore Other Opportunities to Reduce Barriers to Healthy and Sustainable Mobility

The Nanaimo ReImagine process is already underway and includes a variety of opportunities to gather information to better understand the barriers individuals are facing when trying to move throughout our community. This information could then be used to identify the most effective actions by the City to support healthy, sustainable, and inclusive mobility. Potential options could include a conventional bike grant program, greater subsidisation of transit, or the development of a subsidised bike or micro mobility scooter share program. This approach would allow for a fulsome public engagement process as well as thorough consideration as to what the most impactful actions should be by the City.

Benefits:

- Allows for complete data collection to gain meaningful understanding of problem
- Facilitates public engagement to ensure overall community awareness and support
- Provides opportunity to fully explore options and seek out partnership opportunities
- Ensure funding has the maximum impact

Weaknesses:

- Delays implementation

Financial Analysis:

- Staff time would be required to explore additional opportunities and implementation costs.

SUMMARY

Accessible, Sustainable, and Affordable are 3 of the 6 visions of the Nanaimo Transportation Master Plan. Staff are constantly seeking opportunities to advance these visions, however they need to be done with a clear problem statement, goal, and plan. Creating an eBike grant would support these visions in a timely manner; however, without more information the outcome is unclear. A more thorough process, such as ReImagine Nanaimo, would delay the implementation of a new program but would enable staff to gain a better understanding of what barriers residents are facing which would then enable staff to identify the most effective solutions.

Reference:

Gibson, E. (2020). Cycling into the future: Assessing attitudes towards e-bikes in a mid-sized, sprawled Canadian city. <https://viurrspace.ca/handle/10613/23159>