



## Program Overview

Piloted in 2020 with a Nova Scotia Connect 2 grant, Easyride was an electric bicycle pilot project that aimed to overcome perceived barriers to choosing cycling as a means of transportation. *When individuals are handed the tools and taught the skills required, making sustainable transportation decisions is an Easy Ride.*

### Project Summary

There are many long-term benefits to encouraging sustainable alternatives to the single occupant vehicle including less road congestion, reduction in greenhouse gas (GHG) emissions, improved air quality, and lower demands on healthcare costs related to chronic disease.

Transportation is responsible for 27% of GHG emissions in Nova Scotia. The municipal target according to the Integrated Mobility Plan (2016) is to reduce GHG emissions by 30% by 2020. To achieve GHG reductions in the transportation sector, more people will need to shift to sustainable modes of transportation such as walking and cycling.

There are however recognized barriers that prevent people from using clean transportation, such as cycling, for daily trips. The common themes across many studies regarding barriers to choosing cycling include infrastructure, level of fitness, distance, topography, age, and visible exertion (perspiration upon arrival) (MacArthur et al, 2017, MacArthur et al., 2018).

The Easyride electric bicycle pilot project will introduce members of the public to pedal assist bicycles and provide participants with the tools to use active transportation regularly. The Ecology Action Centre would provide 8-12 employees of participating organizations with access to electric pedal assist bicycles and then track their usage over a 30-day period. Throughout the trial period, we will support participants with urban cycling training that includes rules of the road, bike skills and how to plan safe travel routes. Those that will be using the bikes will be provided with information relating to how the e-bikes differ from a regular bike, and how to best utilize the features available. At the conclusion of each trial period, each business will be offered an Easyride bike on long-term loan (one to three years) for their employees to use as part of the company fleet. The remainder of the bikes will then be tuned up and moved to the next participating organization and the process repeated.

The Easyride program seeks to reduce not only the perceived barriers to cycling but also the time and financial constraints involved with test riding and shopping for an electric bike.

In preparation for the Connect 2 funding application, the Ecology Action Centre worked with local bike shops to test ride models of e-bikes to discern which model would best meet the fleet requirements. Considerations for the bicycle selection included bike frame and fit (which model would suit a range of heights), comfort, simplicity of controls, power range, and level of maintenance required. Once a shortlist had been made, a poll was taken in relation to aesthetics to determine which style and color people found most appealing. It was determined that the Electra Townie Go! 8i was the ideal bicycle for the pilot project. This is a one-size-fits-most model with a lightweight, aluminum step-thru frame and comfortable saddle. There are 4 modes of electric support; eco, tour, sport and turbo enabling the rider to keep pace more easily with traffic when required. The 8-speed internal gear hub requires little maintenance and polished silver proved the most popular color choice in an inter-staff poll, aligning with our intent for the fleet to be recognizable.

The one-size-fits-most model, a helmet, rack, and lock are provided to the employee. Technical information, safety training, and route planning workshops are also provided to the employee without any financial commitment from the individual. Participation in the program is monitored and supported by our staff and project steering committee to ensure people are getting the most out of the program and adjustments can be made throughout the pilot.

After the project is complete, participants may elect to continue to utilize the Easyride bike that will remain as part of the company fleet on long term loan (maximum three years). We encourage partners to purchase their own e-bikes suitable for their individual needs. The promotion of e-bikes supports local bike stores, use of new infrastructure, and creates higher visibility of people utilizing e-bikes as a mode of transport that is quick, clean, efficient and ideally leading to a flow on effect of higher use of e-bikes for daily transportation.



#### **YEAR ONE 2020**

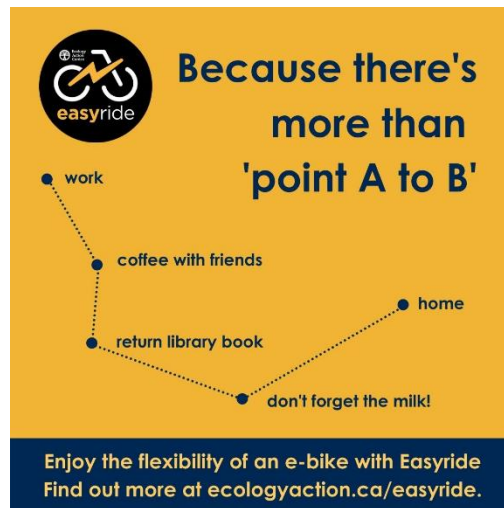
Bikes and accessories were purchased after much research, and the bikes were branded in the winter. Due to the COVID-19 pandemic and consequent lockdowns the program lay dormant until October when 5 Nova Scotia Health workers were recruited to use the bikes. The trial period went right up to the December holiday break due to a mild winter and no second cohort lined up. The participants were very keen to utilize the bikes during this health crisis when being on public transport was not ideal, and the mental health benefits of riding were evident.

#### **YEAR TWO 2021**

An internal cohort at the Ecology Action Centre was trained to have the bikes in use whilst lockdowns prevented further public engagement. Participants had the option to take a bike for the duration of the cohort or to share a bike that was kept at the office. At least 2 of the 6 participants used the

bike regularly, with one purchasing a regular bike at the end of the loan period to keep up their new riding habits. The next cohort of 4 were municipal transportation/public works employees, paid for by the municipality. The next cohort of 4 were trained and shared one bike. They were employees from the municipal compliance department who had plans to purchase their own fleet to enable them to work more efficiently in downtown areas. Since their cohort, their own fleet has been purchased and they continue to utilize our online training modules and contract EAC for in-person sessions for staff that request further training.

In 2021 we received an HRM AT Education and Promotion Grant to offer small businesses owners and non-profits the opportunity to participate in the program. With a fleet of 12, the idea was to have 3 groups of 4 people, each group from a different business/organization. We had 1 of those groups filled by the same non-profit. The others were a mix of different business owners and employees. At the end of the year the nonprofit cohort pooled their money to buy one of the bikes for an employee's 40<sup>th</sup> birthday (a participant that used the e-bike non-stop, even taking it on vacation!) The second group with this funding was made up of 4 small business owners and 2 employees that loaned one bike per business. The final group for this funding consisted of 2 employees from a local aged care facility and 2 others. Other times throughout the year we had the municipality pay to participate. (The municipality eventually bought their own e-bikes for employees to use at various locations throughout their workday. Of the others, 3 participants purchased bikes from us as we downsized the fleet).



**Have you considered the Easyride Initiative for your workplace?**

**Learn more at [ecologyaction.ca/easyride](https://ecologyaction.ca/easyride)**

### YEAR THREE 2022

When scheduling groups from the same organization became more challenging, we opened it to individuals. Without funding we opted for a 'participation fee' model and shortened the cohorts from 6 weeks to 5 weeks. The \$200 fee contributed to the running of the program. Due to the sale of some of the bikes, we were able to cover at least one person per cohort if payment was a barrier. More concrete scheduling came into play and a plan was developed to slowly sell off the bikes for this final year. Registration opened to individuals with strict deadlines for registration, online training and survey completion, payment (\$200) and a set in-person training day and rain day. Three cohorts were booked with 5-6 people in June, July, and August for 5 weeks each, with one cohort of 4 people taking part in October which was

sponsored by EAC and a rural NS municipality. This partnership provided bikes to 4 people facing barriers to accessing housing and employment. Overall, the cohort was a success and for one participant in particular, life changing. The cohorts were timed with 1 week of turnaround to reduce storage requirements in between cohorts. We began the year with a fleet of 9 bikes with one being used for other programming.

After participant purchases, 5 bikes remained at the end of the season. Three bikes were offered for sale to participants and sold, one was unfortunately stolen, and the remaining one kept for future programming. We have found 6 bikes to be a manageable number to allow for a group of 4 or 5 and then one or two spare for events or to switch out in case maintenance is needed to prevent the participant going without.

## Lessons Learned

### Theft

How to lock up a bike most effectively was covered in the training session, both online and in person. Nevertheless, bikes were still seen out and about with questionable locking techniques. Only one bike was stolen. Now any e-bikes have air tags installed, should any go missing. One e-bike of 12 in 3 years isn't a terrible record. We hope that the lost bike is of use to someone who needs it.

### Setting Up the Program

It is recommended that all stakeholders have agreed on their level of involvement and any expectations regarding their contribution of time or funds and these agreements are signed before the project begins. This way the project can be scaled to funding and resources available. Provided helmets, locks, and pannier baskets meant that participants didn't need anything of their own, removing that barrier to accessing the program.

### The Training

Having an [online road safety course](#) and then one in-person session per group was a great time saver and made scheduling much easier. During the first two years, the training consisted of a live road safety webinar and then an in-person session (which was challenging to schedule to suit all participants). Due to this difficulty, much time was spent facilitating multiple one-on-one or small group sessions. By securing the training dates in advance, those that could not make it could put their name down for a future cohort.

There was lots of positive feedback about the safety sessions as they refreshed participants' knowledge of rules and laws while also increasing skills and confidence. Also, the safety sessions provided an opportunity for the program coordinator to assess each participant's level of skill, to be sure they could safely participate.



## The Bikes - Electra Townie Go 8i

Positive	Negative
Adjustable for a range of heights	A bit bulky and heavy for all participants, particularly shorter, slither people.
Hub gears are excellent for damage prevention and maintenance	Required participants to have secure indoor storage which excluded people in apartments without elevators or secure parking (locks provided)
Step through frame accessible for most	Platform style of bike rack required to transport if didn't fit/couldn't lift in vehicle
Polished silver looked sharp and was recognizable	Size of bike and wide cruiser style handlebars made fleet storage tricky
Controls very intuitive (Bosch)	



Whilst the bikes were bigger, people reported that they felt secure and visible when riding them, encouraging them to take up more road space than they might have otherwise. We partnered with two local bike shops. One was close to where the bikes were stored, which was incredibly convenient for last-minute tune-ups or issues; the bikes could be easily walked over and ridden back. Throughout the 3 years of the program, many more styles of e-bike became available. The Electras were the best option at the time, and we have since found other, more adjustable, and space-efficient models for current programs that require e-bikes (Tern).

### The Roll Out

Ecology Action Centre partnered with Halifax Bike Lab to create surveys and interviews for each participant for the first and part of the second year. This helped track the program's effectiveness and any changing attitudes to cycling in Halifax on an e-bike and cycling in general. The remainder of the 2<sup>nd</sup>, and 3<sup>rd</sup> year, surveys adapted from these originals were taken before participants received the bikes and at the end of the program.

In the 2<sup>nd</sup> year, some participants would have benefitted from more group rides or one-on-one riding to help them get over the initial barrier of getting out there. Unfortunately, staff didn't have the capacity to do this, which led to one or two bikes not being ridden very often.

### Where To Now?

We had such positive feedback from the participants, and some have purchased their own electric bike after (and some before) the end of their loan period. It has been of great value for people who are not regular cyclists to test how often they would use an electric bike instead of a motor vehicle to travel short distances. The concern about spending a lot of money to purchase an e-bike and then not riding it as much as they thought, was an oft-noted motivation to participate. The Easyride program helped participants assess their capacity for changing their transportation habits, with minimal investment.

The most common positive feedback from 2022 was the value of the in-person training, the ability to go further, up hills easily, and get more exercise. The greatest challenges centered around the weight of the bike, the need for a tray style bike rack to transport it further afield, and the lack of connected safe cycling infrastructure that would encourage less experienced cyclists to ride more often.

Electric bikes are becoming more and more prevalent, affordable, and designed to suit all purposes – there is still a place for long term loans to help ease folk into new mobility routines. At the end of the 2<sup>nd</sup> year, EAC began to slim down the fleet of 12. Post-pandemic, the office space required to store the bikes was needed once more. As the program had evolved into smaller cohorts, 12 bikes were too many, so we provided participants with the opportunity to purchase some of the bikes. This proved successful as many were then used to that model and eager to keep up their new habits. We facilitated a random draw if more folk were interested than we had available bikes, and we never had to advertise the bikes outside of the program participants.

As the program coordinator's capacity for this project became more limited, and as the EAC's transportation team assessed their priorities, it became clear that whilst the program was a great success and was of significant value to the community, it didn't have to be the Ecology Action Centre running this type of program. We look forward to other bike loan or bike share programs being available in Nova Scotia in the coming years.

