

# CAN DO COLORADO EBIKE PROGRAM

## FINAL REPORT



# WHAT IS THE CAN DO COLORADO EBIKE PROGRAM?

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The Can Do Colorado eBike Program is designed to demonstrate that electric bikes, or eBikes, are a safe, healthy, and convenient way to take essential trips around town. The eBike Program seeks to support low income, essential workers, and the Fall 2020 Mini Pilot provided individuals with an eBike and equipment needed to ensure safe, year-round riding at no cost.

The eBike program is part of the Can Do Colorado Community Challenge, through which Colorado's state agencies, nonprofits, and other partners are offering a variety of resources to local communities and their respective businesses to help safely reopen the economy and point the state towards a healthier and more sustainable future.



# WHAT IS THE CAN DO COLORADO EBIKE PROGRAM?

## FALL 2020 MINI PILOT

The Fall 2020 eBike Mini Pilot was a partnership between the Colorado Energy Office (CEO), Bicycle Colorado, Northeast Transportation Connections (NETC) and the National Renewable Energy Laboratory (NREL). CEO provided overall program administration, Bicycle Colorado provided program development and support to participants, NETC was responsible for program implementation and outreach, and NREL created an app for data collection. Through the Mini Pilot, 13 low income essential workers in the greater Denver area received a Momentum LaFree E+ eBike (Class 1) and essentials including a helmet, pump, lock, lights, and more at no cost.<sup>1</sup>

Participants provided data and feedback about bike usage via an app, CanBikeCO, developed in partnership with NREL. The CanBikeCO app captures trip data, including distance, mode (e.g. eBike, car, transit) and trip purpose.

The Mini Pilot was designed to deploy a small number of eBikes quickly and use lessons learned to create a more robust at-scale pilot in the Spring of 2021.



**I've been feeling so closed in since March, that everything happened, just to get the eBike, I was so excited just to be free to ride and go wherever I want to go.**

<sup>1</sup>As defined in Colorado law, a Class 1 eBike is "an electric bicycle that only provides assistance when the rider is pedaling; the motor ceases at 20 miles per hour (mph)."



# WHAT IS THE CAN DO COLORADO EBIKE PROGRAM?

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## WHY EBIKES?

Household motor vehicle trips are one of the biggest drivers of transportation emissions in the country. In 2017 nearly 60% of household motor vehicle trips were 6 miles or less and 75% were 10 miles or less.<sup>2</sup>

Trips of these lengths are very doable by bike for most Americans. Meanwhile, more and more Americans are purchasing eBikes to replace trips they would otherwise take in a car.<sup>3</sup>

### **eBikes allow people to:**

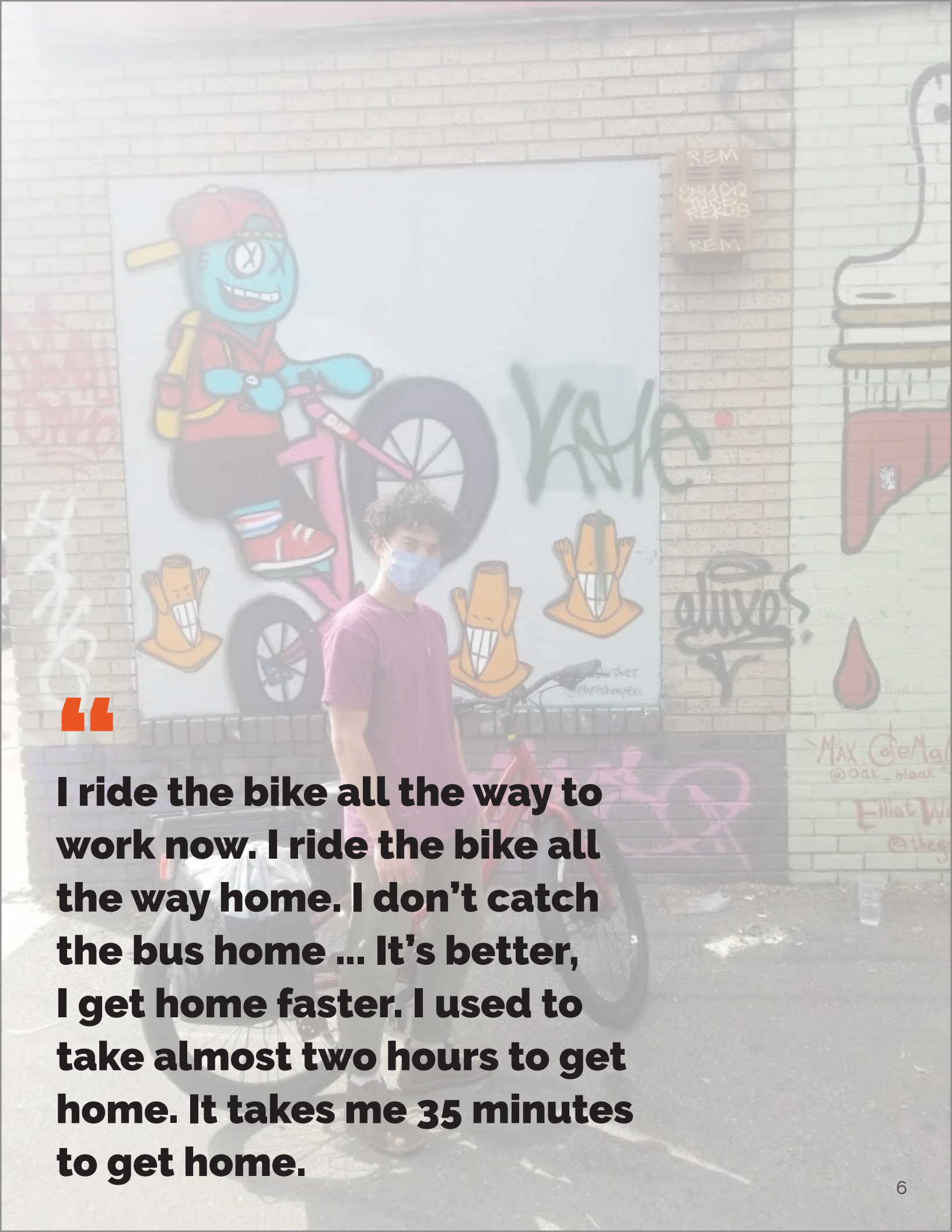
- easily bike greater distances and harder terrain (hills)
- bike with groceries, small deliveries and children
- bike at an older age or with mobility issues
- put aside worries about arriving sweaty or smelly at their destination

They give people freedom of mobility while reducing their carbon footprint.

<sup>2</sup> [U.S. Department of Energy](#)

<sup>3</sup> [National Institute for Transportation and Communities](#)





“

**I ride the bike all the way to work now. I ride the bike all the way home. I don't catch the bus home ... It's better, I get home faster. I used to take almost two hours to get home. It takes me 35 minutes to get home.**

# PARTICIPANT SNAPSHOT

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AGE RANGE:

**20-57 YEARS**

**MEDIAN: 40**



GENDER BREAKDOWN:

**MALE: 9**

**FEMALE: 4**



PRIMARY LANGUAGES SPOKEN:

**ENGLISH**

**SPANISH**



INDIVIDUAL INCOME:

**60%**

STATE MEDIAN INCOME  
(APPROX. \$30,864 ANNUALLY) OR BELOW



LOCATIONS:

**NORTHEAST DENVER**

**WEST DENVER**

**COMMERCE CITY**

**AURORA**



PARTICIPANT OCCUPATIONS:

NURSING ASSISTANT  
MEDICAL RECEPTIONIST  
WAREHOUSE WORKERS  
STD SCREENER  
COMMUNITY ADVOCATE  
MARIJUANA HORTICULTURALIST



AVERAGE TRIPS TAKEN BY BIKE PER WEEK

**3**

TRIPS



EDUCATION

**HIGH SCHOOL: 4**

**SOME COLLEGE: 4**

**BACHELOR'S DEGREE: 1**

**GRADUATE DEGREE: 2**



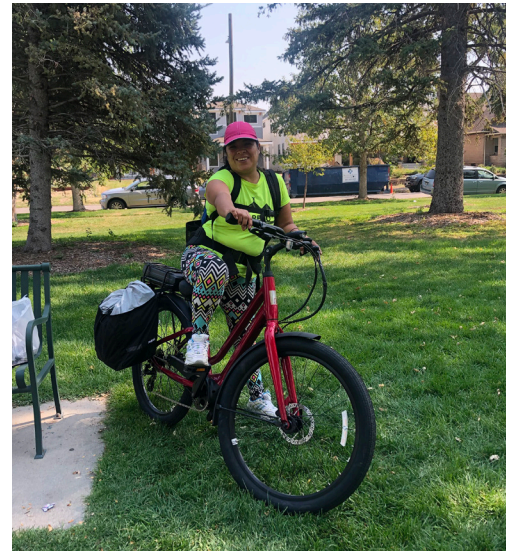
RACE / ETHNICITY

HISPANIC OR LATINX: 3  
WHITE: 3  
BLACK OR AFRICAN AMERICAN: 5  
ASIAN AMERICAN: 1  
BIRACIAL: 1  
OTHER: 1

## PARTICIPANT SNAPSHOT

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**“ I just feel more efficient, more free.**



**“ I like it because it frees my mind up away from the world for just a moment.**

Just get away get their fresh breath of air. Go out to city park, ride city park, go through here real quick. Take a deep breath stretch, come back home, then I'd be like, Okay, I'm back to reality. But I love it. It gets me away for a moment.





“  
**Since I got the eBike and then joined this program, I’m no longer using a car ... And then after this [bike], I only want to take a ride or a walk on foot. It’s changed me a lot.**



# PILOT STRUCTURE

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## PROGRAM GOALS

The overarching objective of the Can Do Colorado eBike Program is to provide low-income essential workers with eBikes and demonstrate that eBikes are a safe, healthy, and convenient way to take essential trips around town.

The Fall 2020 Mini Pilot of the program was intended to provide a proof of concept toward achieving that objective by eliminating barriers to eBike adoption by low income Coloradans in the greater Denver area.

## INDIVIDUAL OWNERSHIP MODEL

The Fall 2020 Mini Pilot took the form of an individual ownership model. Participants were given a Momentum LaFree E+ eBike, plus the following essentials at no cost to them:

- A helmet
- A durable lock
- A front and rear light
- A repair kit, multitool, and portable tire pump
- A floor pump
- A bike bag that sits on the rear rack
- Thorn proof and spare tubes
- Cold weather Bar Mitts
- A free tune up at SloHi Bikes

All funding for the Fall 2020 Mini Pilot was provided by the Colorado Energy Office.

All funding for the Fall 2020 Mini Pilot was provided by the Colorado Energy Office. The project team arrived at this model because they saw it serving multiple objectives, including:

- Providing riders with a sense of ownership of their eBikes and full autonomy during their travel
- Supporting an efficient rollout within months of program announcement
- Giving participants the ability to use the bike for personal and work trips
- Giving administrators the ability to better track behavior change over time
- Removing as many barriers for participation as possible on the part of approved applicants.

The project team was confident that this would encourage the greatest ridership of the bikes, by allowing participants immediate access to a bike rather than requiring multiple steps to sign up for and pick up a bike.

# PILOT STRUCTURE

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## INDIVIDUAL OWNERSHIP MODEL CONTINUED

The COVID-19 pandemic was also a consideration in choosing this model. COVID-19 has had a dramatic impact on the bicycling industry, with skyrocketing demand for individually-owned bicycles. This complicated bike and essentials purchasing, with high demand limiting the bike options and essentials we were able to choose from. In addition, given the lead time for eBikes and equipment, the team had to purchase eBikes without knowing the size required by the eventual participants.

The project team is unaware of evidence that COVID has had a dramatic impact on bikeshare usage, but felt that individual ownership would be more attractive than a shared model at this time.

## DATA COLLECTION

Participants in the program were expected to submit data and feedback using the CanBikeCo App developed in partnership with the National Renewable Energy Laboratory.

The CanBikeCo App works on iOS and Android devices and provides insight into participant travel habits and CO<sub>2</sub> savings generated by switching automobile and transit trips to trips on an eBike. The feedback and data collected via the CanBikeCo App will be crucial to making the future of this and similar programs successful.

No identifiable information about participants will ever be shared outside of the program administrators, nor are participants tracked through the app beyond their regular manual data submissions.

Additionally, each participant completed a 30-45 minute semi-structured, open-ended interview with a trained qualitative researcher. For Spanish-speaking participants, the interviews were conducted in Spanish and translated into English for analysis. Participants were asked questions about

# PILOT STRUCTURE

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## DATA COLLECTION CONTINUED

their experience learning to use their eBike, transportation habits, program feedback, and advice for future participants. All interviews were transcribed and de-identified to maintain confidentiality. An inductive, thematic approach was used to analyze the data generated from the interviews. The interviews were rapidly analyzed by a trained qualitative researcher to identify common themes among the interviews.

## PARTNERS

**The Colorado Energy Office (CEO) aims to reduce greenhouse gas emissions and consumer energy costs by advancing clean energy, energy efficiency and zero emission vehicles to benefit all Coloradans. CEO has been the state-level administrator of the Can Do Colorado eBike Program, contracting four primary partners on program administration, implementation, bike distribution, data collection, and more.**

**A brief description of each partner and their roles can be found below.**

### Program administrator: Bicycle Colorado

Bicycle Colorado is a statewide nonprofit organization based in Denver. They envision a Colorado where riding a bicycle is always safe and convenient for everyone, where bicycling is the top choice for recreation and every day trips, and where the benefits of bicycling are experienced and valued by all people in our state.

Bicycle Colorado was hired to act as a program administrator. In collaboration with CEO, they developed the program framework, application, scoring rubric, written and video training materials, participant support documentation, facilitation of project team meetings, and coordination with the bike shop partner to order bikes and essentials. They were also the primary partner responsible for reviewing applications, distributing bikes, and analyzing data collected through the program.

# PILOT STRUCTURE

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## PARTNERS CONTINUED

### **Bicycle Colorado was further responsible for:**

- Gathering qualitative data from participants and partners
- Adjusting outreach and support plans based on participant feedback
- Determining how program administrator expectations matched reality of program administration and adjusting budgets as needed
- Engaging potential Spring 2021 stakeholders to inform CEO's Request for Applications
- Creating a final project report and providing recommendations for the Spring Pilot.

### **Community partner: Northeast Transportation Connections (NETC)**

Northeast Transportation Connections is a Transportation Management Agency dedicated to building sustainability in neighborhoods. They do this by reducing the number of single-occupant cars and trucks on the road. This decreases pollution, cuts down on traffic, and helps neighbors live healthy, active lives.

As the chief community partner for the Can Do Colorado eBike Program, NETC worked to promote the program within their community, find eligible applicants and encourage them to apply to participate. With their knowledge of the community, NETC was crucial in the applicant selection process. They also worked to provide support to participants before and after receiving their bikes. NETC provided educational trainings and helped participants with maintenance needs when necessary. Importantly, NETC reviewed all program documents to ensure they were appropriate and took into account the needs and interests of the community served by the program.

### **Bike shop partner: SloHi Bikes - City Park**

SloHi Bike Company has been serving the Denver community since 2013, and opened their City Park location in 2018. They aim to build the bicycling community by specializing in cargo bikes, kids' bikes, and family biking.

SloHi was the primary partner in recommending, purchasing, building, and distributing high quality Class 1 eBikes and equipment for the Fall 2020 Mini Pilot of the Can Do Colorado eBike program, and was selected based on its community-based focus and proximity to participants.

# PARTNERS & PROGRAM BUDGET

## PARTNERS CONTINUED

### Data collection partner: National Renewable Energy Laboratory (NREL)

The National Renewable Energy Laboratory advances the science and engineering of energy efficiency, sustainable transportation, and renewable power technologies and provides the knowledge to integrate and optimize energy systems.

NREL developed the CanBikeCO app, through which participants provided data about their trips and feedback about the program. The information received from the CanBikeCO app at the time of publication has been very encouraging, and will be used to further improve the program in the Spring 2021 Pilot.

## PROGRAM TIMELINE

<b>July 23:</b> Bicycle Colorado hired for program development	<b>September 1:</b> NETC hired for community outreach	<b>September 14:</b> Application deadline	<b>September 26:</b> All bikes distributed
<b>August 12:</b> Bikes + accessories ordered via SloHi Bikes	<b>September 8:</b> Application distributed	<b>September 18:</b> Applicants selected and notified	<b>December 31, 2020</b> Data and feedback collection complete



# PARTNERS & PROGRAM BUDGET

## BUDGET OVERVIEW

The Can Do Colorado eBike Program has a total budget of \$500,000. Approximately \$52,500 was allocated for the Fall 2020 Mini Pilot and the remaining \$447,500 will be used to fund a larger Spring Pilot in 2021.

Partner Organization	Role/Tasks	Budget
Program Administrator: Bicycle Colorado	Lead program development Lead implementation Lead participant selection Education and training material support Video production Ongoing support Reporting Support in developing the Spring Pilot	\$23,200
Community Partner: NETC	Support program development Applicant outreach Participant selection Ongoing Support	\$4,264
Bike Shop Partner: SloHi Bikes	Bike and equipment procurement Bike assembly	\$24,937
Data Collection Partner: NREL	Develop CanBikeCO app Analyze data from participant trips and survey responses	\$0 <sup>4</sup>
<b>Total</b>		<b>\$52,401</b>



**I think it was a blessing to be chosen.**

<sup>4</sup> The National Renewable Energy Laboratory, operated by Alliance for Sustainable Energy, LLC, for the U.S. Department of Energy (DOE) under Contract No. DE-AC36-08G028308, provided program support at no cost. This work was supported by the Laboratory Directed Research and Development (LDRD) Program at NREL.

# BIKES AND ESSENTIALS

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## THE MOMENTUM LAFREE E+



The Momentum LaFree E+ (pictured) is a Class 1 eBike. A battery above the wheel and electric motor attached to the pedals provides assistance up to 20 miles per hour (mph) and only when a rider is pedaling. The bike has five different levels of assist and can travel up to 65 miles on a single charge.

The bike also features:

- Eight gears in the rear
- Hydraulic disc brakes that can stop in any weather conditions
- A rear rack for carrying extra items on the bike.

All participants received the Momentum LaFree E+ in the Metallic Red color shown.

## ESSENTIALS

To make trips easier, safer, and more accessible, participants were also given:

- A helmet
- A durable lock
- A front and rear light
- A repair kit, multitool, and portable tire pump
- A floor pump
- A bike bag that sits on the rear rack
- Thorn proof and spare tubes
- Cold weather Bar Mitts
- A free tune up at SloHi Bikes
- Training and information materials on all items listed above

SloHi Bike Company's expertise was crucial in deciding which bikes and essentials to purchase for participants. The total cost of 13 bikes, accessory sets, labor and maintenance for the Fall 2020 Mini Pilot was \$24,937.16.

# PARTICIPANTS

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## FALL 2020 MINI PILOT

In order to ensure the Fall 2020 Mini Pilot was a success, the project team worked to compile a list of highly qualified candidates who were ready to make the switch to eBikes as a primary transportation tool. The project team selected 13 program participants based on:

**Transportation need:** Whether it was a lack of reliable transportation, time, money, access, or another need, the eBike solved a transportation problem for the individual.

**Employment status and annual individual income:** Only applicants who made 60% State Median Income (SMI) or less were eligible to participate in the Fall 2020 Mini Pilot. During FY 2020-21, this amounted to \$30,864 per year or \$14.84 per hour in Colorado. Participants were asked to provide verification of their income status, and were given a number of ways to do so.

**Occupation and essential worker status:** Individuals were considered regardless of their status as an essential worker, but preference was given to those who provide services necessary for other Coloradans as defined in the [State's Public Health Order issued on April 9.](#)

**Location:** Only participants in the greater Denver area, and primarily in northeast Denver, were considered to ensure that NETC could provide support for participants within their service area.

**Commitment to use an eBike for transportation** to and from work and elsewhere

The final 13 participants were chosen out of an applicant pool of nearly 40 individuals who applied for the program. Participants came from a variety of backgrounds and occupations, and included community organizers, grocery tellers, medical receptionists, nursing assistants, STD screeners, and other essential workers. All applications were scored and rated on a quantitative rubric developed by program administrators.

Candidates were organized from highest score to lowest, with all candidates making above 60% SMI disqualified from the applicant pool. NETC's connections to the Northeast Denver community and to applicants was invaluable in further assessment and context-driven decision-making regarding the candidate pool.



# PARTICIPANTS

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## RIDERS

Since distributing the eBikes, participants have shared their experiences using the bikes with program administrators regularly. "The bike is a blast to ride and such a better economical and environmentally conscious choice," one participant told administrators. "I can get places quicker than on a bus," said another.

Read on for a snapshot of a few of the program participants:



### Ana Luisa

Works three jobs, including:

- Organizing community groups in East Denver, such as: one for women getting out exercising
- A community garden
- Babysitting regularly during the week for extra income.

One of the most active bicyclists of our recipients, Ana Luisa has been riding to work, the grocery store, to visit family and friends, and on rides with her son.

### Baw Mu

- Immigrated to Denver in 2019
- Member of the Karen ethnic group, native to Burma
- Provides translation support for his family.
- Rides to study at the Spring Institute for Intercultural Learning,



### Shalon

Works as an STD screener at a nonprofit in East Denver.

Her nonprofit:

- Focuses on bridging healthcare gaps in the Black community.
- Encourages employees to bike to work, including by providing secure bike parking
- Shalon has lost 10 pounds since picking up her eBike.

# PARTICIPANTS

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## RIDERS CONTINUED

### Michael

- Nursing assistant living in West Denver.
- On his way to pick up his bike he filled out a background check for DoorDash.
  - He was approved during our 1-on-1 bike training
  - Rode off to start making deliveries and make some extra money.



## PARTICIPANT SUPPORTS

Applicants were required to watch a pre-recorded info session about the program prior to applying, and approved participants were also required to attend one of two orientation sessions on the program. As part of the onboarding process into the program, participants received an array of training and educational materials about their bikes and the other essentials they received as part of the program.

Participants were also invited to attend in-person and virtual trainings hosted by Bicycle Colorado and NETC on rules of the road, safe riding practices, and basic bike tips and maintenance such as the proper way to lock up a bike and how to fix a flat tire. After applicants picked up their bicycles, as an extra precaution, Bicycle Colorado also registered bikes with the Denver Police Department and BikeIndex.org in the event that a bike was reported stolen.

Bicycle Colorado and Northeast Transportation Connections staff continue to support participants in the program. Participants received bi-weekly outreach from Bicycle Colorado through the end of 2020, and are encouraged to proactively reach out to staff members at Bicycle Colorado and Northeast Transportation Connections with questions or when they are in need of support.

All materials and outreach were provided in English and in Spanish.

# USAGE AND PARTICIPANT INTERVIEW FEEDBACK

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## EBIKE USAGE

All participants reported using their eBike at least 3 times per week, but many ride their eBike every day. Participants ride their eBikes to work, the gym, medical appointments, the grocery store, to visit family or friends, and for recreation around their neighborhood or on local bike paths. The majority of participants ride their eBike to work and as their primary mode of transportation. Of the participants who ride to work, most stated that eBiking saves them time, money, and is more enjoyable than public transportation, driving, or riding a non-electric bicycle.

The reasons that some participants stated they are unable to use their eBike to get to work are: time concerns, the distance is too far, needing to pick up or drop off children, and safety concerns about biking at night. Some participants who are currently unable to commute to work with their eBike have plans to help them use it to commute in the future, such as training physically, getting a bike for their children to ride with them, and moving closer to work.

## THE EBIKE LEARNING CURVE

Most participants described a quick learning curve to get comfortable with their eBike. Even for participants who were very comfortable riding conventional bicycles, it took some time to learn how to use the pedal-assist feature and manage their speed. Several participants recommended that new eBikers should practice riding in a parking lot or with an experienced eBiker before going on busy streets. Some explained that the road safety training from Bicycle Colorado was very helpful to learn the biking laws and safety concerns of an eBike. Several also stated that they changed their biking habits after this training, such as not riding on sidewalks or using a helmet.



# USAGE AND PARTICIPANT INTERVIEW FEEDBACK

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## ENJOYMENT

Beyond the benefits of efficient, healthy, and economical transportation, participants frequently said that they liked getting on their eBike because it was fun, and more fun than riding a regular bikes. Several participants stated that they would go on a ride for exercise or to clear their mind if they didn't have to go anywhere that day. Some participants mentioned they would take the long way home from work, or do extra loops of their ride to lengthen their time on their eBike. Several participants described riding their eBike as "meditative," and a good way to clear their head throughout the day.

## COMMUNITY

Getting an eBike also enabled participants to go on bike rides with friends and family for recreation and social connection. Many participants explained that this is a new activity for them, and a significant benefit during the pandemic. However, most participants only know a few people in their community who own bicycles, and few know people that use their bike to commute to work.

Several participants described a desire to be part of a bigger biking community. Many participants want to join group rides or bike-a-thons to meet new people and promote biking in their community. Some participants expressed hope to volunteer with future eBike programs. This sentiment was echoed by the staff at SloHi, who believe that getting eBikes to low-income individuals will help bolster the biking community and encourage more individuals to use eBikes to commute.



# USAGE AND PARTICIPANT INTERVIEW FEEDBACK

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## PERSONAL OWNERSHIP

All participants expressed gratitude about being a part of this program. Participants shared their desire to take good care of the bike, such as keeping it covered in the rain, or taking it upstairs to keep it safe from the elements and theft. Many participants said that they probably would not have purchased an eBike before joining the Can Do Colorado eBike Mini Pilot, mostly because of cost, but also due to not knowing if an eBike is worth the large expense, prior to owning one. However, since owning the eBike, several participants stated that they would save up for this type of bike if they hadn't been a part of this program.

Several have purchased extra gear for their bike, and plan for upgrades for their bike, such as getting a second pannier, painting the bike a different color, etc. Some described "showing off" their bike to friends, coworkers, and family members, and that members of their community are now interested in getting eBikes, after seeing their eBike. Some participants said that they would be unlikely to utilize a bikeshare program, if offered instead of a personal ownership model.



# USAGE AND PARTICIPANT INTERVIEW FEEDBACK

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## ECONOMIC BENEFITS

Most participants explained that a primary reason for applying for this program was for the economic benefit of an eBike. Participants described saving a significant amount of money on transportation costs with their eBike, including gas money and RTD fares. Some participants stated they hope to get rid of their car, or previously planned to get a car, but don't need to now that they own an eBike.

Participants also described some relief about having a free means of transportation that will always be available to them. One participant is now making an extra income, using the eBike for food delivery through an on-demand food delivery service. Overall, the eBike was viewed as an economic benefit for all participants.

## HEALTH BENEFITS

Participants also described the significant health benefits they have experienced since riding their eBike, including losing weight, having more energy, and feeling stronger and more fit. Some participants were surprised at how much they enjoy using the eBike for exercise, and that it is not difficult for them to be motivated to ride because it is so enjoyable. Many participants described that since getting their eBike, they have also felt a desire to eat healthier foods.



**I wasn't doing too much physical activity [before getting my eBike]. And you know, my weight was up and I wasn't eating right. And the bike ... makes me want to jump on there just because of the fact that it's fun. And I enjoy riding.**

# CONSIDERATIONS FOR 2021 SPRING PILOT

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## OWNERSHIP MODEL

While the individual ownership model proved successful for the Fall 2020 Mini Pilot of the Can Do Colorado eBike Program, it should not be the only model considered by the Colorado Energy Office or program applicants in the Spring Pilot.

CEO should consider fully-developed program proposals that reflect a variety of models, including individual ownership, bike library or shared models, models in which participants are expected to pay a nominal fee or volunteer time to participate in the program, and other alternatives.

## BIKE SHOP PARTNER

Partnering with SloHi Bike Company was essential to the Fall Mini Pilot's success. A large part of that was due to their knowledge of the eBike industry, COVID-19's impact on the bike industry as a whole (more on that below), and their relationship with eBike manufacturers including Giant, the parent company of Momentum.

When reviewing applications for the Spring Pilot, CEO should prioritize proposals that indicate a strong partnership with a knowledgeable bike shop. A strong partnership will allow organizations who are not typically familiar with bikes and bike purchasing to participate in the program, will put the ordering logistics in the hands of an experienced partner, will ensure high-quality bikes are procured, and will go a long way toward making Spring program rollouts successful. Applications that do not indicate a strong partnership with a bike shop partner of some kind should not be prioritized.

## ORDERING EBIKES

As referenced in **Pilot Structure**, the COVID-19 pandemic has had a dramatic impact on the bike industry and supply chains. Uncertainty about the availability of eBikes and essential materials forced the project team in the Fall Mini Pilot to order bikes before applicants for the program were selected. Little has changed in terms of the pandemic's impact on the bike industry since the Fall Mini Pilot was launched. CEO should give preference to Spring Pilot proposals that anticipate potentially long lead times for bike and equipment orders in programmatic timeline.

# CONSIDERATIONS FOR 2021 SPRING PILOT

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## **PARTICIPANT OUTREACH AND SUPPORT**

Providing participants with support throughout the program required more proactive outreach than initially anticipated. Participants were very excited to receive their eBikes, but program administrators found that, on the whole, participants wouldn't actively seek out administrators to ask for support.

This may be because participants were concerned about "disappointing" program administrators, to use one participant's word. It may also be due to the fact that low income individuals are experiencing hardships in their everyday lives that take precedence and may prevent them from reaching out proactively to administrators.

Spring Pilot proposals that plan for ongoing participant support should be considered more highly by CEO than proposals with limited support after an eBike or eScooter is in the hands of participants. Proposals that demonstrate a plan to create simple ways for participants to ask for support should be weighted more highly still.

## **EBIKE MAINTENANCE**

While participants' requests for support were limited as noted above, participants did experience more issues with their bikes than anticipated. The vast majority of issues that participants needed help with were for a flat tire or recurring flat tire, even with the installation of thorn-proof tubes and tire sealant. Future iterations of this program should consider investing in more robust tires for participants to mitigate flat tire requests as well as additional training on flat-fixing and essential tools.

Additional maintenance requests included one chain replacement and one brake line replacement, both of which came from the same participant, and may have occurred after a fall while riding. While Spring Pilot applicants will be unable to anticipate every issue participants experience with their bikes, this further reflects the importance of durability in eBike and equipment purchases.

Spring Pilot proposals that reflect an investment in sturdy, durable eBikes and eBike parts, even at an added cost, should be given preference by CEO.

## **APPLICATION**

One element of the application was intended to gauge applicants' comfort and confidence on a bicycle. While meaning to provide program administrators with candid insight about how



# CONSIDERATIONS FOR 2021 SPRING PILOT

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successful a participant might be in quickly adopting eBikes for transportation, ultimately almost every applicant responded that they were "Very Comfortable" regardless of road size, speed or condition. In reality, that was not the case. At least two participants had not ridden a bicycle in more than a year at the time of their bike pickup, and one required substantial training from Bicycle Colorado staff on how to ride a bike after extended time off. Administrators of the Spring pilot should ensure riders are confident prior to acceptance in the program.

## CANBIKECO APP

The CanBikeCO app has been an effective tool for collecting data, but not without some issues. Participants had trouble with the app at times. It wouldn't consistently collect data across devices, and as the program continued and updates were made to the app, it seemed that the previous version became obsolete. Participants needed to be asked to update the app on their phone at multiple times throughout the Mini Pilot. This limited the amount of data collected as part of the Fall Mini Pilot.

Additionally, the data dashboard had significant limitations. At the time of this publication, it does not allow users or reviewers to differentiate between trip modes; all trips are logged and visible, but you cannot tell which trips were taken by eBike, by car, or other modes.

While data collection should be prioritized in any application for the Spring Pilot, CEO should consider applications with a variety of data collection methods that do not necessarily rely on the custom-built app. This would allow program administrators flexibility in serving their constituencies, and ensure that potential participants who do not have access to a smartphone could also participate.

Should CEO require the use of the CanBikeCO app by Spring administrators, further developing the app prior to the Spring rollout to work out additional kinks (and mitigate further updates) would be important. Additionally, the useability of the dashboard should be improved before rollout. Finally, the CanBikeCO app should be available in multiple languages prior to rollout to future participants.

## INCOME STATUS

CEO should consider awarding grants to applicants that exceed the 60% State Median Income threshold set in this iteration of the Can Do Colorado eBike program. This will likely broaden the applicant pool and reach more low-income individuals with transportation needs. CEO should also consider an expanded list of ways that applicants can prove they are income-qualified.

# CONSIDERATIONS FOR 2021 AT SCALE PILOT

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## TRANSLATION

Participants in the Fall 2020 Mini Pilot were able to access trainings and materials in English and Spanish with the help of the Community Language Cooperative. This was well worth the investment for Spanish-speaking participants, and CEO should ensure that all applicants include budget for this in Spring Pilot proposals.



**The exercise, meditative part of it, it's very head clearing ... it's just easier and a lot more fun.**



# CONCLUSION

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The Fall 2020 Mini Pilot of the Can Do Colorado eBike Program should be considered a success. In a short timeframe, program administrators created a program framework, selection criteria, application, and outreach documents prior to selecting participants and distributing 13 Class 1 eBikes and essentials.

Program administrators continue to communicate with participants, but the preliminary findings point toward participants adopting eBikes as a primary mode of transportation, taking care of themselves, their neighbors and Colorado's environment and air quality in the process.



# APPENDIX A: APPLICATION AND RUBRIC

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Potential applicants for the Fall 2020 Mini Pilot were given the document laying out the program timeline, expectations, and application process.

- [In English](#)
- [In Spanish](#)

Applicants were required to watch a pre-recorded information session about the program, which reinforced expectations and the program timeline. The information session was recorded in English and Spanish, and you can view either by clicking the links below:

- [English Information Session](#)
- [Spanish Information Session](#)

Following the information session, individuals were asked to submit their application via Google Forms. The application included questions on income, travel expenses, what participants would use an eBike for, participant comfort on a bicycle, and more. You can find the application below:

- [English Application](#)
- [Spanish Application](#)

As part of the application, participants were asked to submit verification of their income by one of the following means:

- Proof that you qualify for another statewide program for low-income individuals at 60% SMI, including:
  - Temporary Aid to Needy Families (TANF)
  - \* Supplemental Security Income (SSI)
  - Aid to the Needy Disabled (AND)
  - Supplemental Nutrition Assistance Program (SNAP)
  - Title IV or Title XVI of the Social Security Act.
  - Low Income Heating Energy Assistance Program (LEAP)
  - Weatherization Assistance Program (WAP)
- Proof that you qualify for Medicaid
- Proof that you qualify for Free/Reduced lunch programs
- Proof that you qualify for a Child Health Plan Plus (CHP+) at levels F- through K
- Your two most recent pay stubs if working an hourly or salaried position
- Your four most recent pay distributions if working a gig economy position
- If working both hourly/salaried position and a gig economy position, please provide both your two most recent pay stubs from your hourly/salaried position and your four most recent pay distributions from your gig economy position

# APPENDIX A: APPLICATION AND RUBRIC

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- A signed note from your employer affirming that the participant makes 60% SMI or less annually
- [Filling out this Participant Income Affirmation Document](#)

Finally, applications were scored by the program administrators using [this rubric](#), and further assessed by members of the project team.

# APPENDIX B: ONBOARDING AND SUPPORT MATERIALS

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Participants in the program were required to attend one of two orientation sessions with Bicycle Colorado and Northeast Transportation Connections prior to picking up their eBike. Bicycle Colorado and NETC hosted one orientation with only English speakers, and another with English and Spanish speakers. You can find recordings of each below:

- [Orientation #1 - English](#)
- [Orientation #2 - English](#)
- [Orientation #2 - Spanish](#)

Program administrators trained all participants on the bike and essential materials upon pickup, as well as the best way to securely lock bikes. Additionally, participants received a number of handouts and videos covering most aspects of their bikes that they could access at any time.

- [English Training Videos](#)
- [Spanish Training Videos](#)
- [English Handouts](#)
- [Spanish Handouts](#)

Finally, participants were also encouraged to attend a City Confidence and Rules of the Road training, which was recorded with continuous interpretation with the Community Language Collaborative.

- [English and Spanish Training](#)
- [Training Slides](#)

# FOR FURTHER INFORMATION

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## PARTICIPANT SUPPORT

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# CAN DO COLORADO EBIKE PROGRAM

FINAL REPORT

