



# Earn a Bike: Casa de la Esperanza

A project of: Chain Reaction, Boulder County Department of Transportation, Boulder County Department of Housing and Human Services

## Project Impact and Evaluation



Table of Contents

I. Key Findings ..... 2

II. Program Implementation ..... 2

III. Survey Questions ..... 3

IV. Pre-Survey Results ..... 4

V. Post-Survey Results ..... 5

IV Conclusion: ..... 5

Appendix A – Bike Related Needs..... 7

Appendix B – Trips Taken ..... 8

Appendix C– Commuting to Work ..... 9

Appendix D – Trip Planning Documentation..... 10

## I. Key Findings

- To increase bicycle use among Boulder County Housing residents, individuals need bicycles, helmets, locks, and lights, as well as secure bicycle parking at home
- Once awarded a bicycle, participants utilized their bikes more. In the post-program survey, 71% of respondents indicated that they now use their bicycle to get to work or school, compared with 9% of respondents during the pre-survey.
- In the post-survey, 85% of participants no longer had any current bicycle related needs.
- Before the program, the data showed that only 8 trips a week were made by bicycle per 13 people. Following the Earn-A-Bike program, total trips per week by bike increased to 12 trips per seven people.

## II. Program Implementation

Chain Reaction and Boulder County developed the Earn-A-Bike program in order to increase multi-modal transportation options available to low-income residents of Boulder County. By providing bicycles, along with the necessary tools to ride safely, Chain Reaction promotes healthy and active lifestyles and provides a more sustainable means of transportation. A primary goal of this program was to address crucial transportation challenges by increasing residents' access to the regional transit network. Transit networks often do not extend to an individual's home, thereby restricting access due to the inability to solve the "first mile, last mile" problem. By utilizing a bicycle, individuals are able to overcome this issue and obtain increased access to transit networks. Bicycles also offer a lower-carbon mode of transportation, a necessary factor to consider in order to reach regional, national, and global emissions reduction goals. When the complete life cycle is taken into account, CO<sub>2</sub> emissions (lbs/mile) for bicycles, busses, and cars is 0.07, 0.34, and 0.96, respectively<sup>1</sup>. By providing access to cycling through the Earn-A-Bike program, we are taking important steps towards reducing greenhouse gas emissions.

Another important aspect is that bicycles are a cost effective means of personal transportation, especially important and effective for low-income people who reside in Boulder County. The average annual cost of owning, using, and maintaining an automobile is estimated by the American Automobile Associate to be \$9,122/year for a sedan<sup>2</sup>. For County residents living at or below the poverty line (43,382 according to the 2015 report from The Community Foundation<sup>3</sup>), this is not an option. When a low-income person is given the bicycle, tools, and knowledge to continue pedaling forward safely, we provide a reliable and sustainable means of transportation.

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<sup>1</sup> Blondel, Benoit, et al. European Cyclists' Federation, "Cycle More Often 2 Cool Down the Planet! Quantifying CO2 Savings of Cycling". November 2011

<sup>2</sup> Stepp, Erin. "Cost of Owning and Operating Vehicle in U.S. Increases Nearly Two Percent." *AAA NewsRoom*. American Automobile Association, 07 Apr. 2016. Web. 19 Nov. 2016.

<sup>3</sup> Stutzman, Erika and Morgan McMillan. "Boulder County Trends: The Community Foundation's Report on Key Indicators". The Community Foundation, 2015.

In cooperation with Boulder County Department of Transportation and Boulder County Department of Housing and Human Services, Chain Reaction implemented a one-day Earn-A-Bike program on September 24, 2016. We provided a bicycle, helmet, lock, front/rear light, multi-tool, tire lever, patch kit, and lubricant to 16 participants upon completion of a full-day class on bicycle maintenance at Casa de la Esperanza, A Boulder County Housing Authority site in Longmont, CO.

The program focused on basic bicycle maintenance, providing them with the skills needed to keep their bicycles on the road and riding safe. The main areas of focus included helmet sizing, proper lubrication, adjusting brakes, adjusting saddle and seat height, and a fix-a-flat clinic. All participants were income-qualified as low-income residents through Boulder County Department of Housing and Human Services (HHS) programs.

Chain Reaction evaluated the program's impact with pre and post-surveys. Pre-surveys were conducted at the workshop, and post-surveys were conducted through personal contact with assistance from Casa de la Esperanza Program Coordinator, Vanessa Escarcega. Chain Reaction guaranteed that a minimum of 30% of participants would respond to the post-survey and received post-surveys from 70% of participating adults in the program. From this sample size, we feel we can adequately assess the impacts of this program.

The following data has been compiled for Boulder County per the Scope of Work:

- Total Participants: 20
- # of primary Spanish-speakers served: 11
- # of adult commuters served: 13
- Estimated total number of work-related trips supported (per week or month): 12/week or 48/month
- Total number of children served: 7
- Total number of bikes provided: 16
- Total number of pre-owned bikes repaired: 5<sup>4</sup>
- Total number of workshops held: 1 (one full-day program at Casa Esperanza)
- Average Cost per person served was \$478.28

### III. Survey Questions

**Pre- and post-surveys included the following information:**

- Name
- Primary Language – Spanish, English or both
- Current bike-related needs (bike, helmets, lights, lock)<sup>5</sup>
- Additional or future bike-related needs (bike parking at work, secure bike storage at transit locations, secure bike parking near their home)

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<sup>4</sup> This coincides with the number of bikes provided by participants and does not include the 16 pre-owned bikes Chain Reaction refurbished for participants.

<sup>5</sup> As mentioned in our "Pre-Survey Results", upon completion of the program we discovered the pre-surveys did not include "bike" as an option for this question, therefore skewing the data.

- How they currently get to work or to a job training program & how often they use each mode
  - Bike
  - Public Transit (including route and stop information)
  - A combination of biking and transit
  - Walk
  - Drive alone
  - Carpool or Vanpool
  - Telework
- How far the participant currently travels to get to work or a job training program
- Once they have a working bike, how do they expect they will get to work or to a job training program? How often will they use these modes?
  - Bike
  - Public Transit
  - A combination of biking and transit
  - Walk
  - Drive alone
  - Carpool or Vanpool
  - Telework
- Other possible obstacles they have for getting to work, such as a bus schedule that doesn't run late enough, a bus stop that isn't close enough to their job location, etc.

**Post-surveys also included:**

- Have you been denied bringing your bike on the bus due to there being too many bikes already?
  - Were the compartments under the bus full as well?
  - Which bus were you riding at the time?
  - What did you do with your bicycle?
- What would make it easier/more convenient for you to bike/use public transportation in your daily commute?

## **IV. Pre-Survey Results**

According to survey results, 82% of total participants spoke Spanish as their first language. From the pre-survey results, it was apparent the residents were in need of almost all necessary tools to begin riding bicycles properly. Of the participating residents, 80% indicated needing helmets, 60% needed lights, 70% needed bike locks, and 100% needed bicycles. Additionally, almost half of the residents were adamant that they required more secure bike parking near their homes.

With only one participant utilizing a bicycle as their main mode of transportation to commute to work, it was apparent the Earn-A-Bike program had the ability to greatly increase access to bicycling for residents. Driving and walking were the most consistently used modes of transportation among participants, with trip lengths ranging from ten minutes to two hours for a resident working in Castle Rock.

## V. Post-Survey Results

After analyzing the post-survey results from the Earn-A-Bike program, it was evident that access to and use of bicycling had increased. We conducted the post survey one month after completion of the program, to allow enough time to accurately analyze differences. 85% of individuals who participated in the post-survey were primarily Spanish speaking.

After participating in the Earn-A-Bike program, 85% of respondents indicated they no longer needed anything to begin bicycling, nor did they have any current bike related needs. The participants did, however, anticipate future bicycle related needs that we feel the County could address: Approximately 42% of respondents would like to have better places to park their bikes along with increased security lighting in these areas.

It appears participants are now taking more trips by bicycle. Of the most notable findings, 71% of participants now indicated they were utilizing their bicycle to commute to work/job training. This equates to approximately 12 trips per week or 48 per month. Unfortunately, due to the distance many participants are traveling to get to work, the most utilized form of transportation remained “driving alone”. Distance traveled to work averaged approximately 6.6 miles each way. The longest and shortest trips taken were 15 miles and 1 mile, respectively. Of the respondents, 29% do not currently work.

Other obstacles expressed by the community were concerns about not having the proper clothing to ride in colder weather, and a common unfamiliarity with the public transportation system. Participants would also like to see increased bicycle lanes. Another common theme was related to education of the bus system. Participants could benefit from additional education related to how the schedule works, where stops are located, etc.

## IV Conclusion:

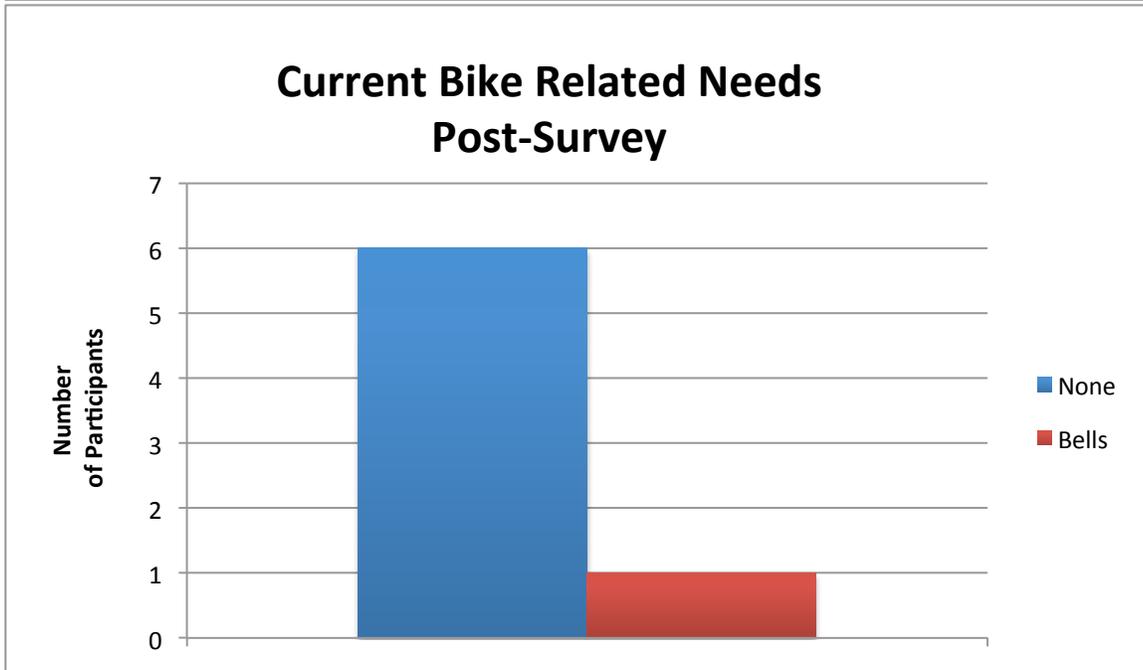
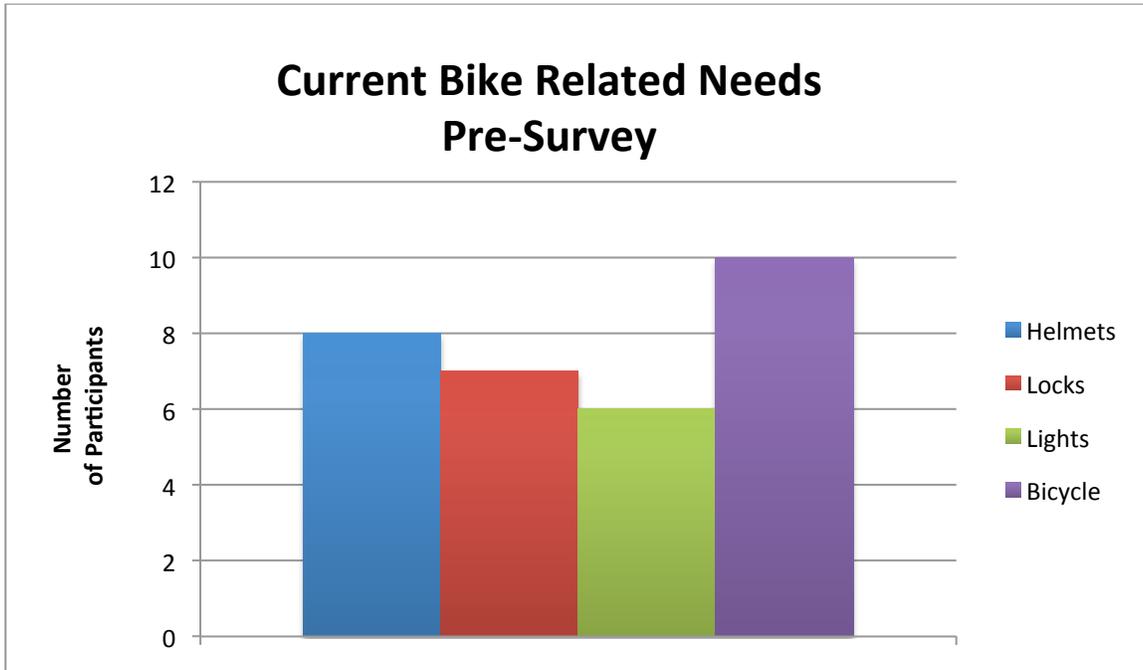
In conclusion, we believe the Earn-A-Bike program achieved its goal of increasing residents’ access to the regional transit network. Upon completion, 71% of participants reported using their bicycles to commute, up from 9% prior to the program. We also succeeded in removing a common barrier faced by low-income residents of the cycling community, but often overlooked: lack of resources. Aside from just a bicycle, cyclists also received helmets, locks, lights, flat repair kits, multi-tools, and tire levers. This ensured participants had all of the tools necessary to take their new knowledge and continue pedaling forward, safely and effectively.

While the program was a success, there is still a great deal of work that should be done to further increase access to multiple modes of transportation for low-income County residents. The most crucial would be to provide additional education on the RTD service. While personal trip plans were provided to each participant, a common consensus among participants was a lack of understanding on various aspects of the RTD system. We recommend the County host additional classes on bus travel, specifically, incorporating use of the bicycle to solve the “first mile, last mile” problem. Also, while Boulder County is a model County for cycling infrastructure, all communities are not provided with the same resources, a sentiment we felt from the respondents to the surveys. We recommend the County research common routes utilized by members of these communities (ex: Casa de la Esperanza) and work

towards installing bike lanes, bike paths, and other safe guards to ensure the safety of all riders. Fear of contact with cars is often the leading cause many people do not commute by bicycle.

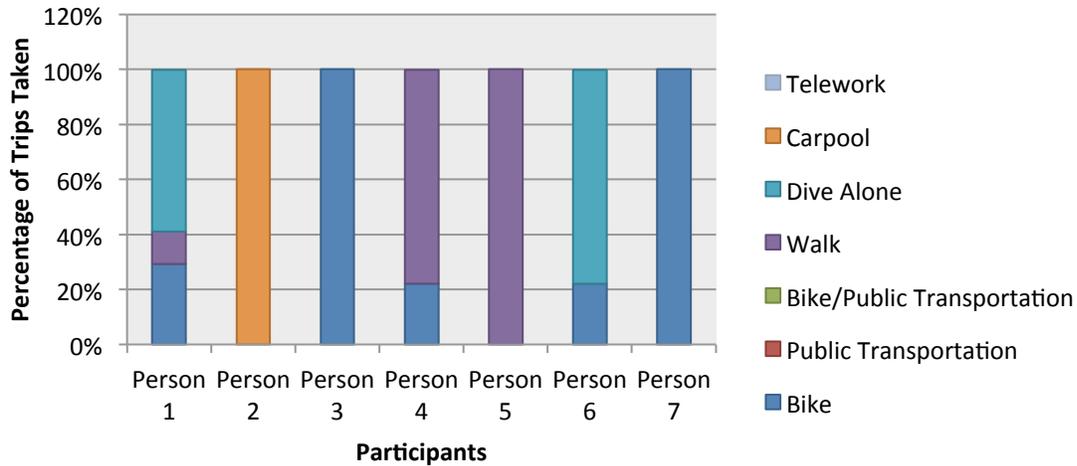
Overall, Chain Reaction believes this Earn-A-Bike program was successful in satisfying the needs of the County and most importantly, the residents. Bicycle usage increased, providing greater access to transportation, additional means to maintain health and wellbeing, and reduced greenhouse gas emissions in Boulder County.

## Appendix A – Bike Related Needs

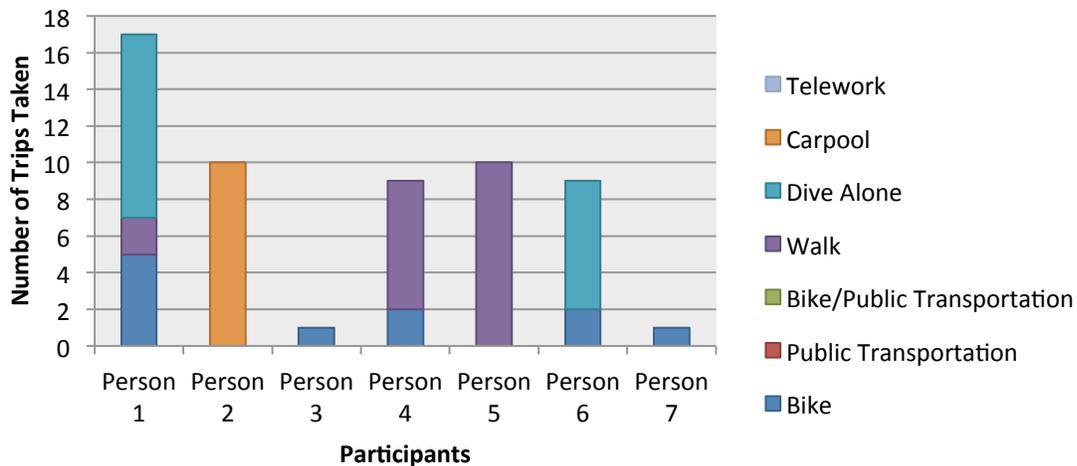


## Appendix B – Trips Taken

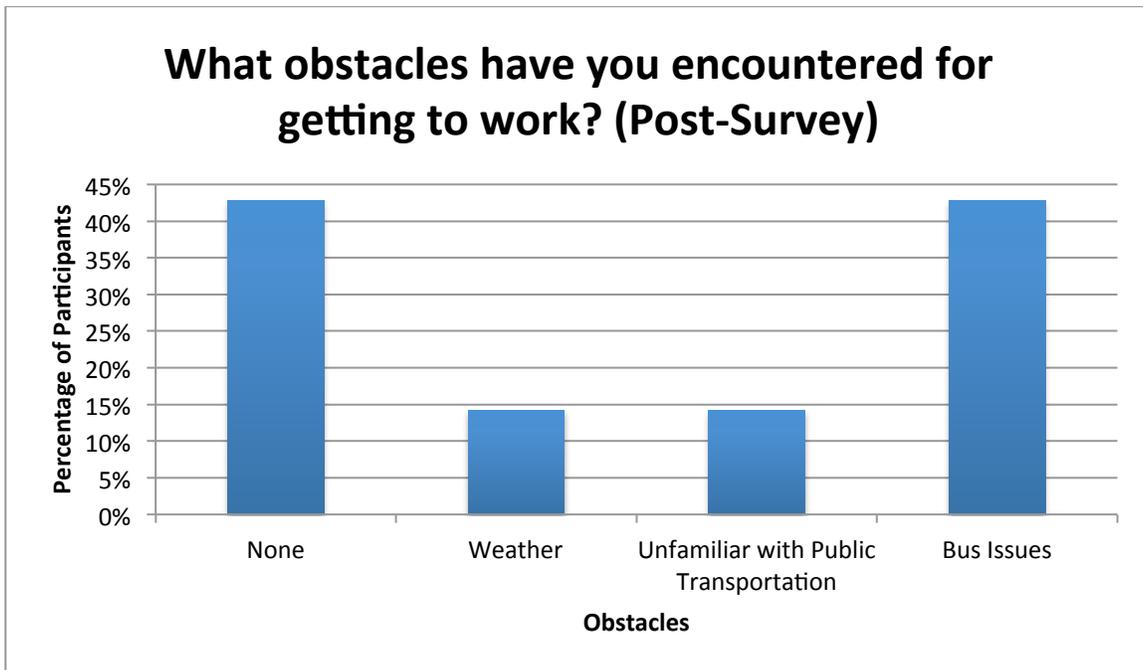
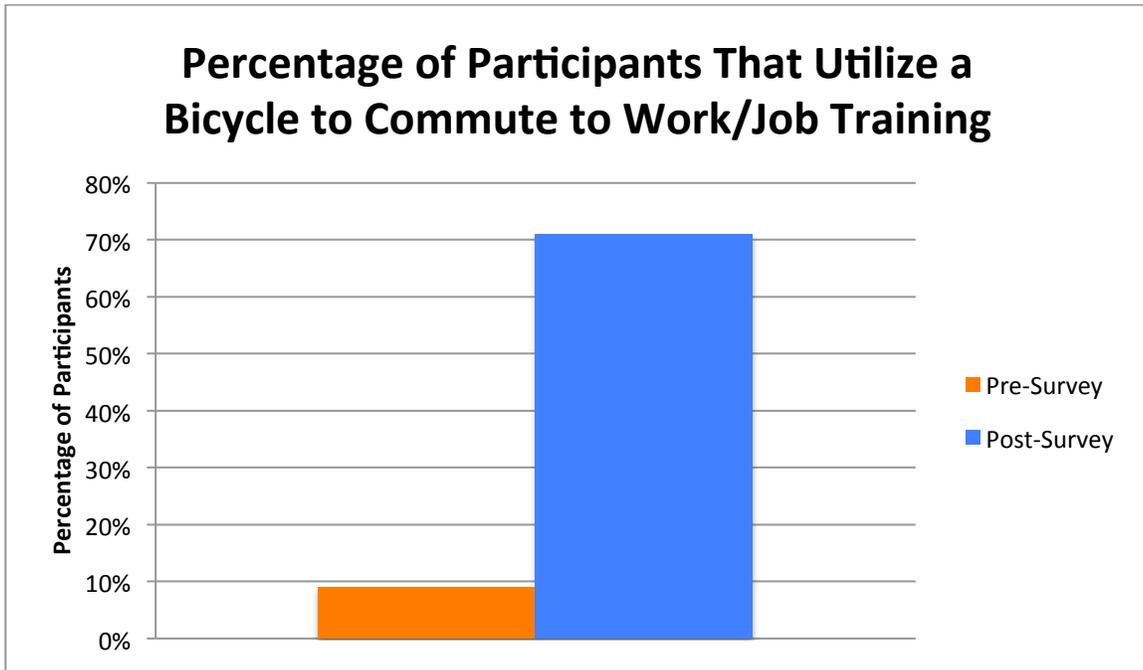
### % of Trips Taken for each Mode of Travel (1 week) Post-Survey



### # of Trips Taken for each Mode of Travel (1 week) Post-Survey



## Appendix C- Commuting to Work



## Appendix D – Trip Planning Documentation

### A: Casa Esperanza a B: Children's Hospital



Paseo en bicicleta  
.2 millas a

**Nombre Ruta:** L  
**Parada del locacion:** Hwy.  
287 y Pike Rd.  
**Precio:** \$4.50  
**Tiempo para llegar a destino:** 1 hr. 6 min.



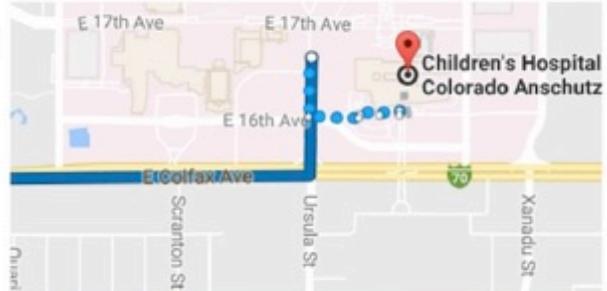
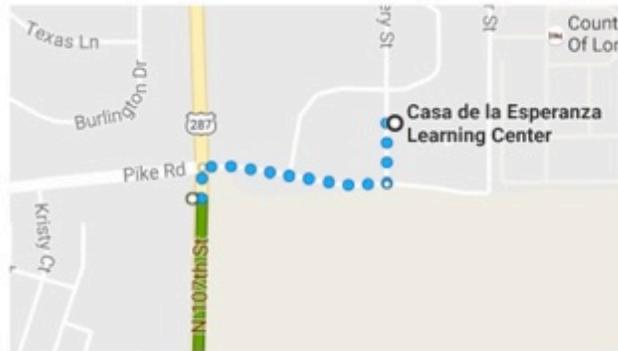
a  
**UNION STATION**



**Nombre Ruta:** 15  
**Parada del locacion:** Miller  
Dr. y Park Rd.  
**Precio:** Gratis con transferir  
**Tiempo para llegar a destino:** 59 min



a Aurora ct. y 16th ave.  
Paseo en bicicleta .3  
millas a  
Children's Hospital



#### GO DENVER (TAMBIÉN DISPONIBLE EN EL CONDADO DE BOULDER)

Busque las opciones de transporte más baratas, rápidas y ecológicas para cada viaje usando información en tiempo real. [GoDenverApp.com](http://GoDenverApp.com)

#### MAPAS GOOGLE

Proporciona direcciones en tiempo real y opciones de viaje independientes (en coche, autobús, bicicleta o a pie) desde un punto A a un punto B. [maps.google.com](http://maps.google.com)

#### SERVICIOS DE MOVILIDAD 'VIA'

Especialistas en servicios de movilidad ofrecen información sobre y cómo acceder las opciones de transporte, incluso enseñándole cómo hacer uso del transporte público.  
303-447-2848, [viacolorado.org](http://viacolorado.org)

#### OPCIONES DE TRANSPORTE ESPECIALIZADAS (DRMAC)

ayuda para encontrar opciones de transporte especializadas a fin de acomodar sus necesidades a lo largo del área metropolitana de Denver. 303.243.3113, [www.drmac-co.org](http://www.drmac-co.org)



# Earn-A-Bike



**NEED A BIKE?**



**Sign up to learn bike repair  
and receive a FREE bicycle!**

**JOIN US TO:**

**Receive a FREE "Re-furbished" bike**

**Learn bicycle repair**

**Get safe riding tips & custom travel  
plan that shows you how to use your  
new bike to get to work!**

**ENJOY A PIZZA LUNCH!**

**WHEN:**

**Saturday September 24, 9:30am-3pm**

**WHERE:**

**Casa de la Esperanza**

**1520 S Emory St, Longmont CO 80501**

**Space is limited, Sign Up Now!**

**Contact your Property Manager to Sign Up!**

★ ★ Enrollment open to working adults, ages 16 and up ★ ★  
Childcare will be provided for the children of registered participants



**Vanessa Escarcega,**  
Property Manager, Boulder County Housing Authority  
303.678.6220

[vescarcega@bouldercounty.org](mailto:vescarcega@bouldercounty.org)



# Gana Una Bicicleta!



¿NECESITA BICI?



Regístrese para aprender  
reparación de bicicletas y  
recibir una bicicleta GRATIS!

**VENGA SI QUIERE:**

**Recibir** una bicicleta "reformado" gratis

**Aprende** reparación de bicicletas

**Obtén** consejos de conducción segura y  
plan de viaje personalizado que le muestra  
cómo utilizar su nueva moto para ir a  
trabajar!



**¡ALMUERZO DE PIZZA!**

**CUANDO:**

Sábado 24 de **septiembre**, 9:30am-3pm

**DONDE:**

Casa de la Esperanza

1520 S Emory St, Longmont CO 80501

**El espacio es limitado. ¡Regístrate ahora!**

**¡Contacte a su Gerente de Propiedad para inscribirse!**

★ ★ Inscripciones abiertas para los adultos que trabajan, 16 años y mayores ★ ★  
Habrá cuidado de niños para los hijos de los participantes registrados

**Vanessa Escarcega,**

Gerente de Propiedad, Boulder County Housing Authority

303.678.6220

[vescarcega@bouldercounty.org](mailto:vescarcega@bouldercounty.org)





# Earn-a-Bike Sign-up Form!

Get a FREE "Re-furbished" bike or repair your current bike!

Today's date: \_\_/\_\_/\_\_

In this class you will learn bicycle maintenance and bike safety, and enjoy a pizza lunch!

Please register by September 1. Mail in your registration form using the provided envelope or register with your property manager,

Enrollment is open to working adults, ages 16 and up. Childcare for participants' children will be available for children over 3, which must be potty-trained.

**Vanessa Escarcega**  
Property Manager  
Boulder County Housing Authority  
303.678.6220  
vescarcega@bouldercounty.org

Due to limited space, enrollment is first come, first served!

## Section I: Date and Location

\_\_\_\_\_ Saturday, **September 24**  
9:30am-3pm

Casa de la Esperanza  
1520 S Emory Street  
Longmont, CO 80501

## Section II: Tell Us About You

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_  
Email: : \_\_\_\_\_  
Preferred Language: \_\_\_ English \_\_\_ Spanish

## Section III: Your Bicycle

Do you need a bicycle? Yes \_\_\_ No \_\_\_

Do you ride mainly on bike lanes, trails, or roads? \_\_\_\_\_

If yes, we will give you a bike to commute to work. To help us pick the right bike for you, please answer the following:

Will any of the commute be by bus? Yes \_\_\_ No \_\_\_

Height \_\_\_\_\_ Weight \_\_\_\_\_

Do you need a trailer or bike seat for your children?  
\_\_\_\_\_

Total miles of your commute by bike per day? \_\_\_\_\_

Custom Trip Plan: To help you find the quickest bike and/or bus route to work and another key destination, please provide two addresses:

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_

## Section IV: Children

Do you have any children who will need childcare while you are at the bike class? Yes \_\_\_ No \_\_\_

The children are invited to join their parents at the pizza lunch!

If yes, please tell us their name and age below:

Name: \_\_\_\_\_ Age \_\_\_\_\_  
Name: \_\_\_\_\_ Age \_\_\_\_\_  
Name: \_\_\_\_\_ Age \_\_\_\_\_

Questions? Contact Meghan from Chain Reaction 561-706-8955 or maltman@chainreactionco.org or Andrew from Boulder County: 303-441-1367 anrasmussen@bouldercounty.org



## Formulario inscripción de ganar una bicicleta !

¡Conseguir una bicicleta gratis "Remodelada" o reparar tu bicicleta actual!

En esta clase aprenderás la bicicleta mantenimiento y seguridad de la bicicleta y disfrutar de un almuerzo de pizza!

La inscripción está abierta a adultos que trabajan, 16 años y más. Cuidado de niños para los niños participantes estarán disponible para los niños mayores de 3 (debe ser insignificante entrenado).

Debido al espacio limitado, la inscripción es primero llegada, primero servido!

La fecha de hoy: \_\_/\_\_/\_\_

Por favor registre el 1 de septiembre. Envíe por correo su formulario de registro usando el sobre provisto o registrar con el administrador de la propiedad.

**Vanessa Escarcega**  
Property Manager  
Boulder County Housing Authority  
303.678.6220  
vescarcega@bouldercounty.org

### Sección 1. Fecha y lugar

\_\_\_\_\_ Sábado, **September 24**  
9:30am-3pm

Casa de la Esperanza  
1520 S Emory Street  
Longmont, CO 80501

### Sección 2. Su información

Nombre: \_\_\_\_\_  
Dirección: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Número de teléfono: (\_\_\_\_) \_\_\_\_\_  
Email: \_\_\_\_\_  
Idioma preferido: \_\_\_ Inglés \_\_\_ Español

### Sección 3. Su bicicleta

Necesita de una bicicleta? Si \_\_\_ No \_\_\_

Si es así, le daremos una bicicleta para conmutar para trabajar. Parabrnos ayudan a escoger la bicicleta correcta para ti, por favor, conteste lo siguiente:

Altura \_\_\_\_\_ Peso \_\_\_\_\_

¿Cuál es el total de millas de su viaje en bicicleta por día? \_\_\_\_\_

¿Viajas principalmente en carriles bici, senderos o caminos? \_\_\_\_\_

¿Cualquiera del viaje será en autobús? Si \_\_\_ No \_\_\_

¿Necesita un asiento de bicicleta o robots para sus hijos? \_\_\_\_\_

Plan de viaje personalizado: Para ayudarle a encontrar la ruta más rápida, bicicleta o autobús al trabajo y otro destino clave, por favor proporcionar dos direcciones:

1. \_\_\_\_\_  
2. \_\_\_\_\_

### Sección 4: Niños

Tiene ud niños que necesitan cuidado durante la clase? Yes \_\_\_ No \_\_\_

Si es así, por favor diganos el nombre(s) y la edad(s) de la siguiente manera:

Nombre: \_\_\_\_\_ Edad: \_\_\_\_\_  
Nombre: \_\_\_\_\_ Edad: \_\_\_\_\_  
Nombre: \_\_\_\_\_ Edad: \_\_\_\_\_

Los niños son invitados a reunirse con sus padres en el almuerzo de pizza!

¿Preguntas? Llame a Meghan en Chain Reaction 561-706-8955 o email maltman@chainreactionco.org o Andrew del Condado de Boulder: 303-441-1367 anrmussen@bouldercounty.org