

ON THE MOVE



ATRC On the Move Presents:

# PERSPECTIVES 2022

WEBINAR SERIES

## E-bikes Furthering Active Transportation in California

FEBRUARY 16, 2022

## **Poll Question:**

How familiar are you with e-bikes?

- a) Very familiar**
- b) Somewhat familiar**
- c) Not familiar at all**

# ATRC Webinar Logistics

- Share your questions throughout the meeting by using the “Q&A” function
- Please complete post-webinar attendee survey
- The webinar will be recorded and posted to the ATRC website at <https://caatpresources.org/1621>

# Learning Objectives

- Acknowledge the increase of e-bike availability, use, and affordability.
- Understand e-bikes role in promoting health and climate goals and replacing car trips.
- Describe examples of local bicycling encouragement through e-bike usage.
- Identify existing e-bike resources on policy, research, and education.



# **Active Transportation Resource Center Non-Infrastructure (NI) Team**

## **Caltrans, Division of Local Assistance, Active Transportation Program (ATP)**

- Emily Abrahams, Senior Program Manager, ATP NI/Plans and ATRC
- Summer Lopez, Coordinator, ATP NI/Plans and ATRC

## **California Department of Public Health, Injury and Violence Prevention Branch, Active Transportation Safety Program**

- Victoria Custodio, ATRC NI Technical Assistance Team
- Judy Polakoff, ATRC NI Technical Assistance Team
- Marianne Hernandez, ATRC NI Technical Assistance Team

# Speakers

- **Dave Snyder**, Executive Director, California Bicycle Coalition (CalBike)
- **Phillip Kobernick**, Energy Programs Manager, Peninsula Clean Energy
- **José Jimenez**, Education Director, Active San Gabriel Valley
- **Summer Lopez**, Caltrans, Active Transportation Program Non-Infrastructure, Plans, and ATRC Project Coordinator

## Facilitator:

- **Marianne Hernandez**, ATRC NI Technical Assistance Team, Injury and Violence Prevention Branch, California Department of Public Health



**CALBIKE**  
CALIFORNIA BICYCLE COALITION

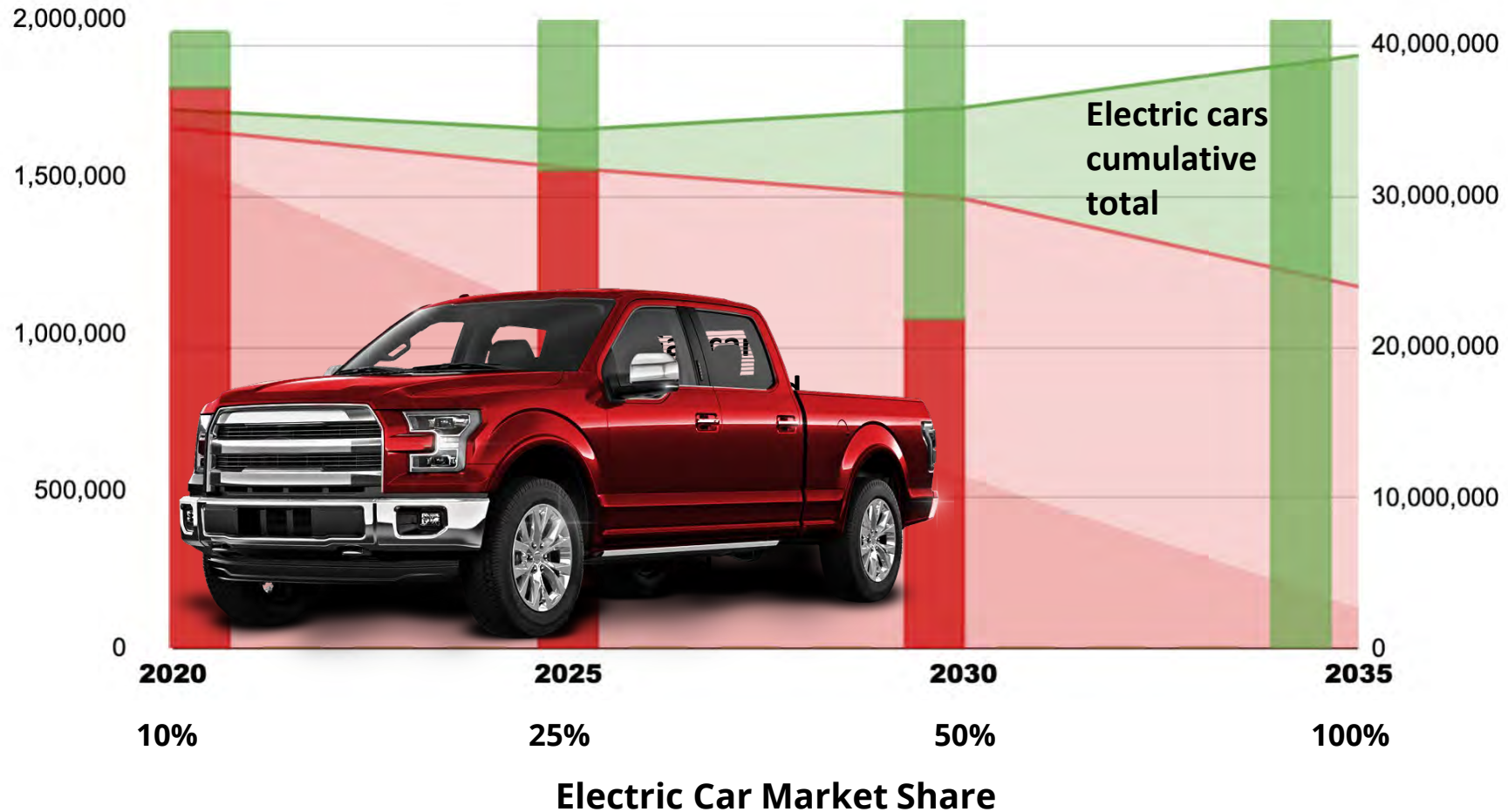


- (Electric) cars are a poor solution
- (Electric) bikes are a good solution
- What can we do to advance this solution?



# Our transportation challenge

## Electrification of Automobiles is not enough



## Our transportation challenge

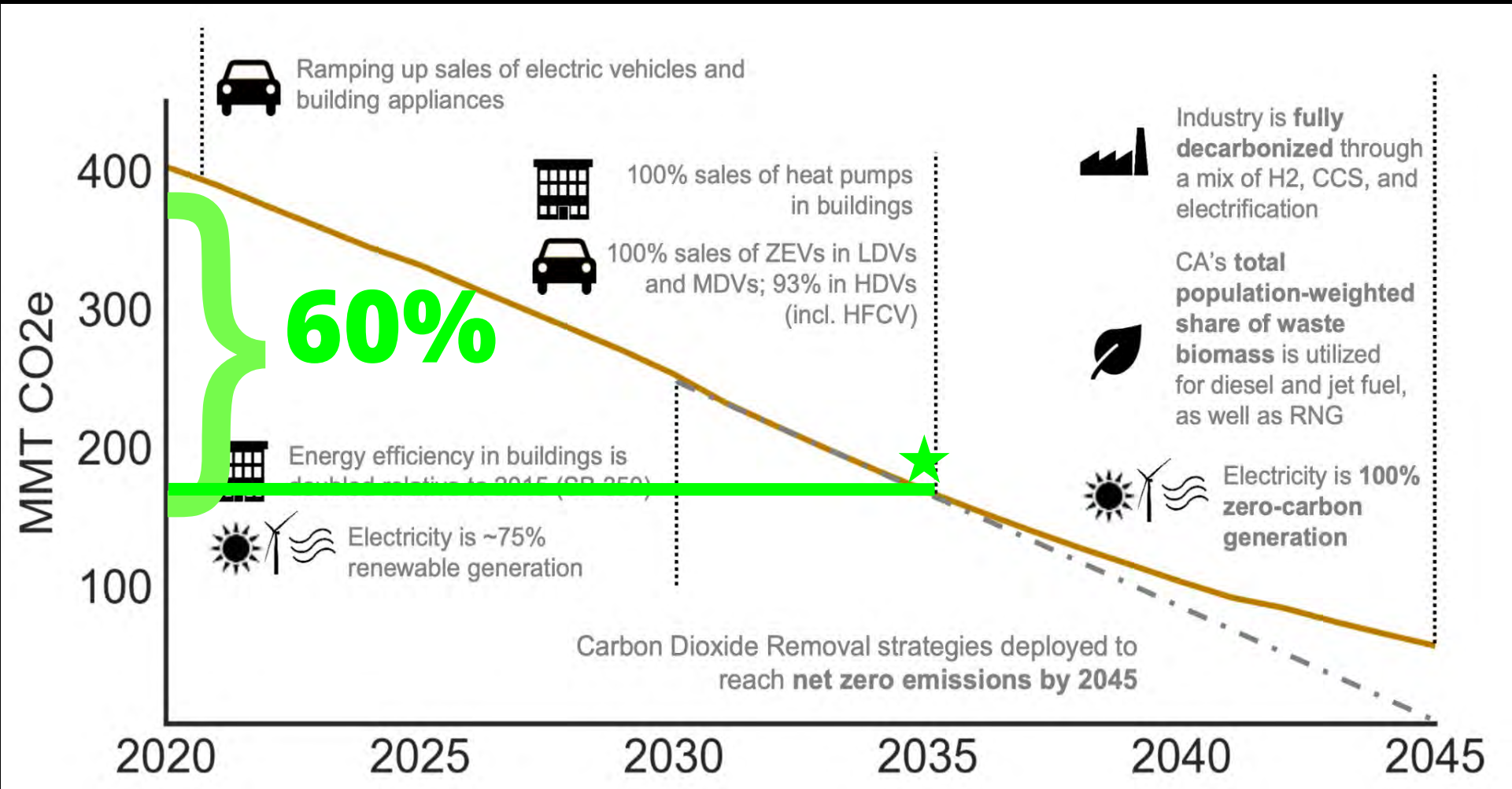
### Electrification of Automobiles is not enough



**76% of vehicles purchased in 2020 were SUVs and light trucks**

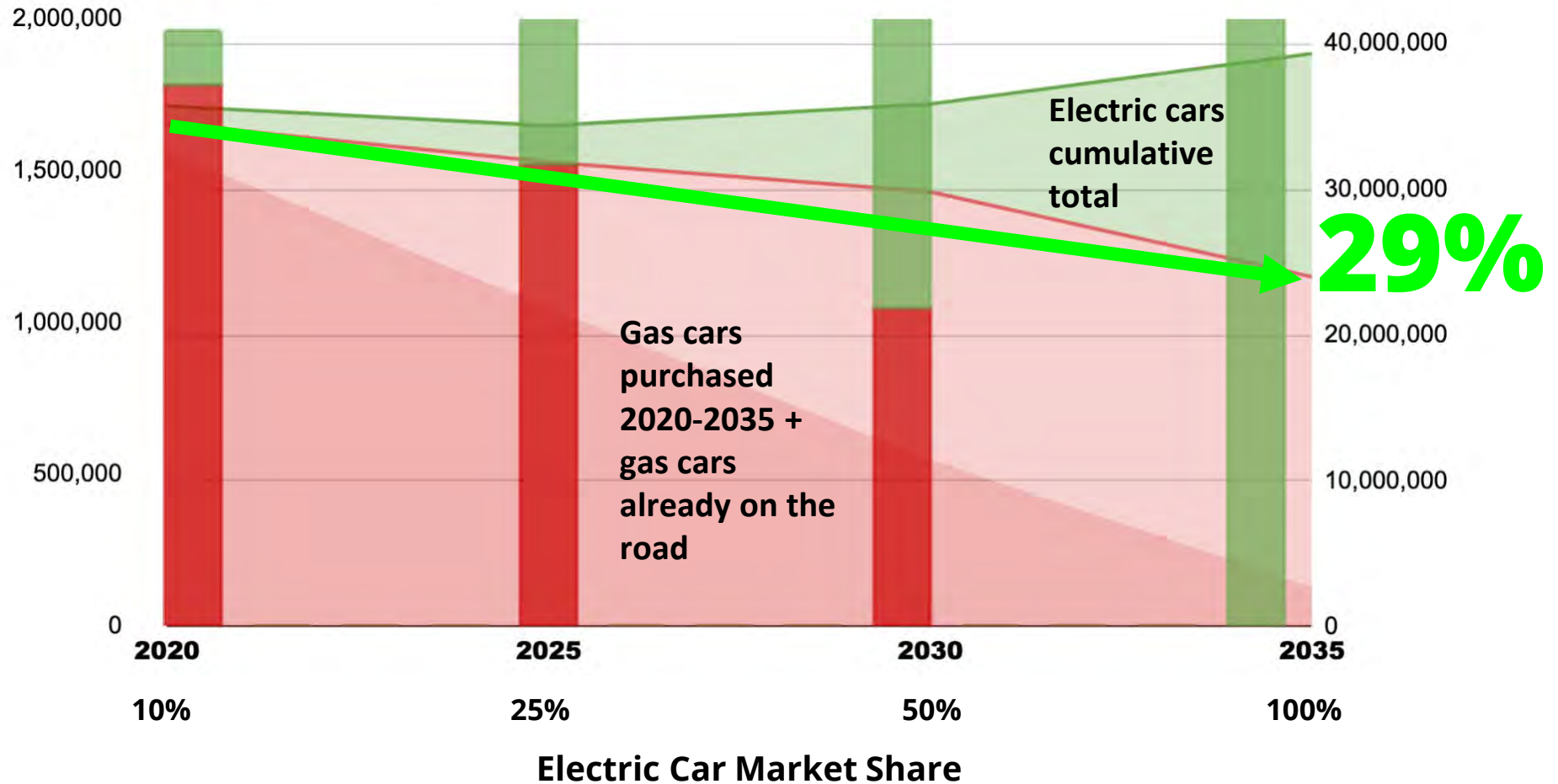
# Our transportation challenge

CA's goal in the transportation sector *already* assumes a 17% drop in per person vehicle miles traveled

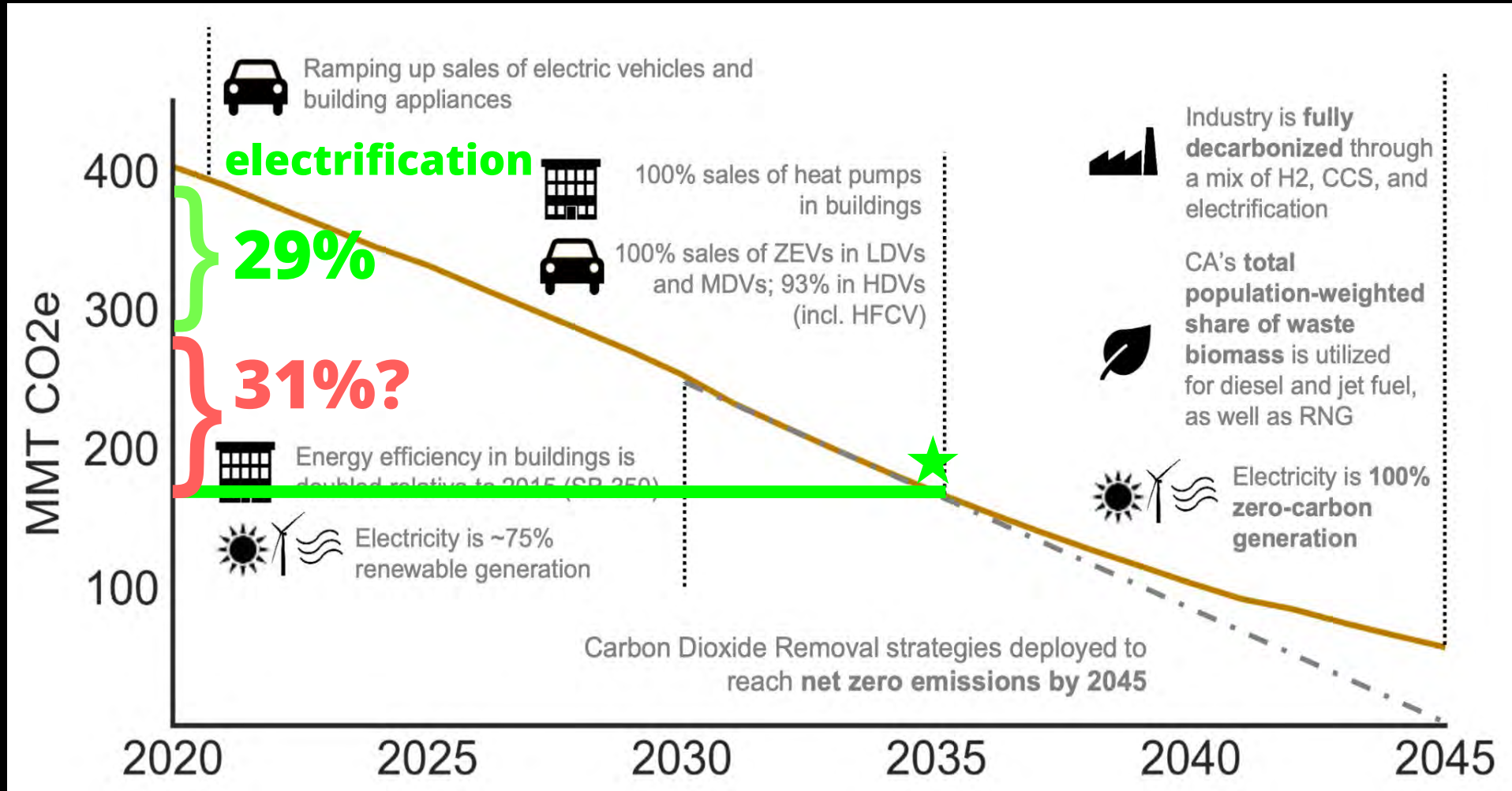


# Our transportation challenge

## Electrification of Automobiles is not enough

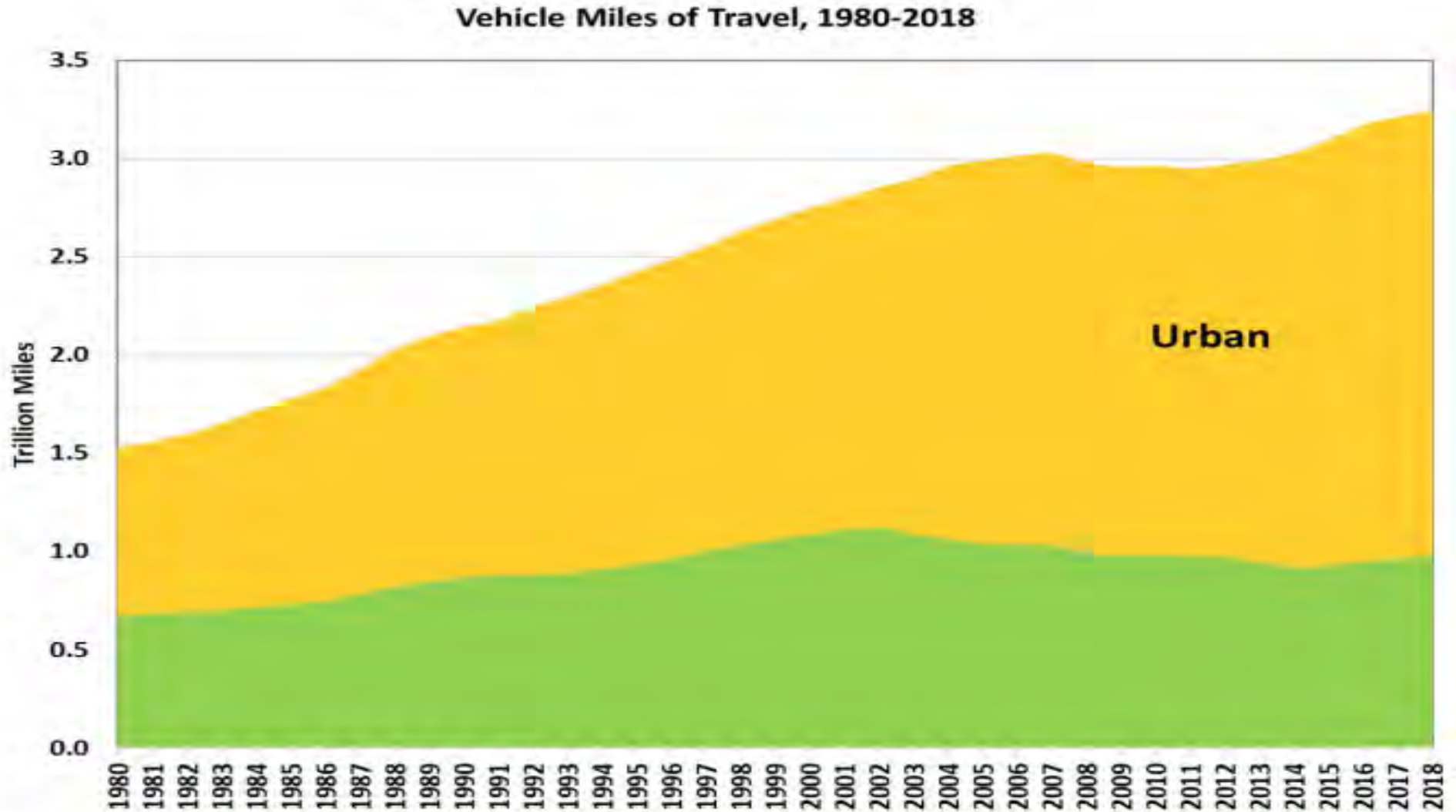


# Our transportation challenge



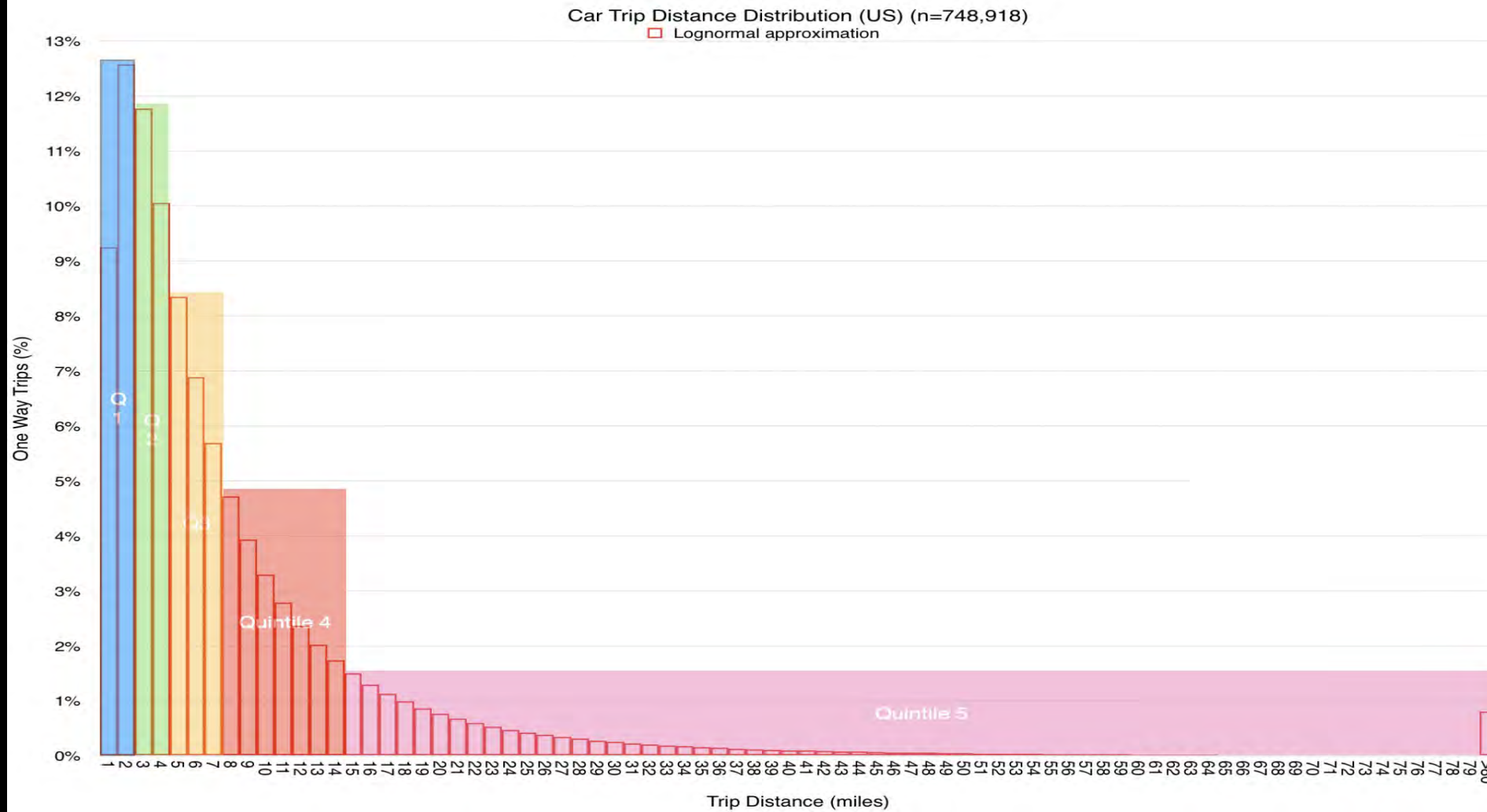
## Our transportation challenge

We have to reduce VMT per capita by *more than half*



# Our transportation challenge

**20% of trips are under 2 miles**  
**40% are under 4 miles • 60% are under 7 miles**



## E-Bikes are necessary

### E-Bikes replace car trips

	Percentage of Trips by Mode That Would Have Been Used Instead of E-Bike			
	Walk, standard bike, transit	Automobile*	Would Not Have Taken this Trip	Other**
Commute (work or school)	40	46	1	36
Entertainment	8	9	4	6
Recreation or Exercise	29	9	89	39
Personal Errands	19	30	3	12
Visit Friends or Family	3	5	1	1
Other	1	1	2	6
Number of Trips	1063	1778	987	69
Percentage of Trips	27%	46%	25%	2%
Mileage per Trip	9	9	14	11
<b>Percentage of VMT replaced</b>	<b>24%</b>	<b>46%</b>	<b>34%</b>	<b>2%</b>

\* includes drive alone, carpool, and taxi

\*\* Includes Other or Not Specified

Source: Cherry & MacArthur 2017



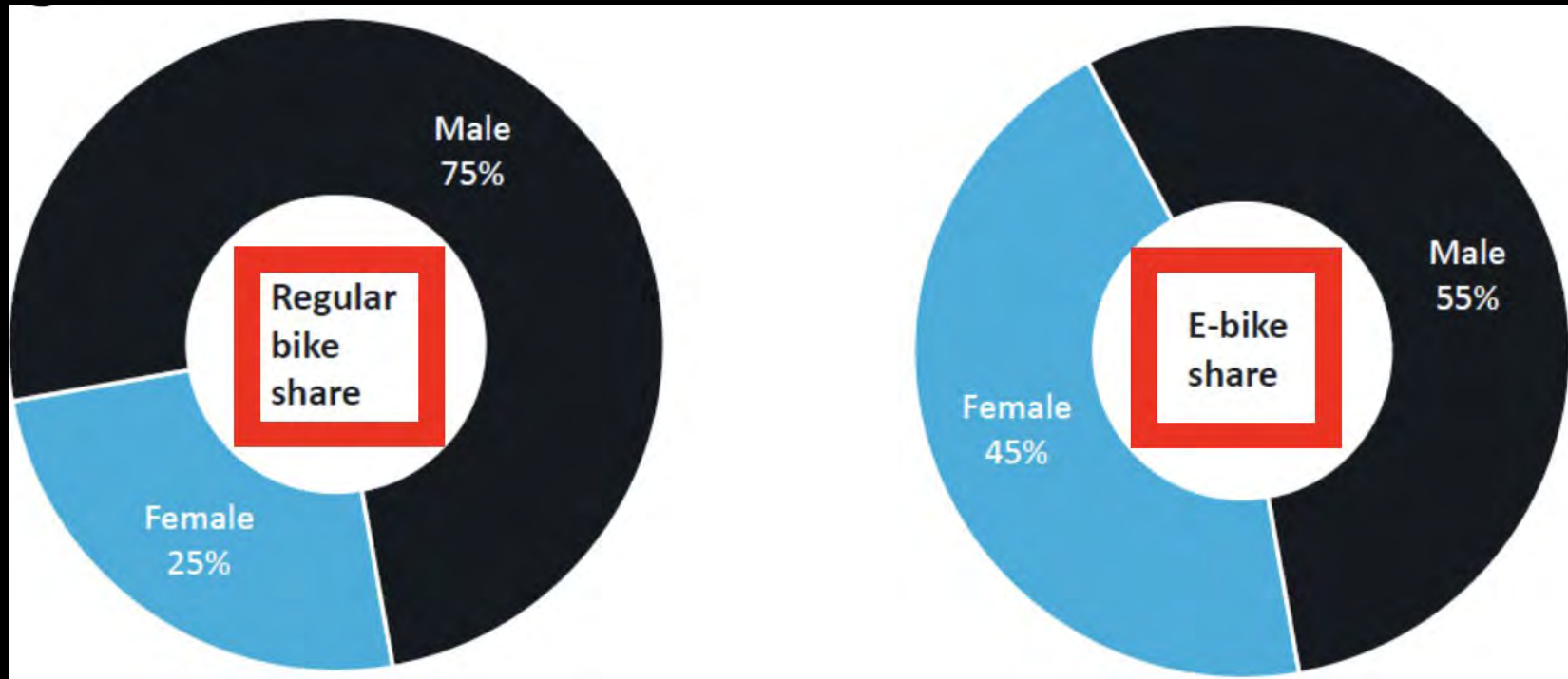
## E-Bikes are necessary

### E-bike users ride more




## E-Bikes are necessary






## E-bikes are more equitable






# What did we do?

## CALIFORNIA ELECTRIC BICYCLE POLICY



	VEHICLE		USER				BIKEWAY ACCESS			
	PEDAL OPERATED	MAXIMUM MOTOR-ASSISTED SPEED (MPH)	MINIMUM AGE (YEARS)	DRIVER'S LICENSE	LICENSE PLATE	HELMET	CLASS I BIKE PATH	CLASS II BIKE LANE	CLASS III BIKE ROUTE	CLASS IV PROTECTED LANE
<b>BICYCLE</b> 	YES	N/A	N/A	NO	NO	17 AND UNDER	YES	YES	YES	YES
<b>TYPE 1 E-BIKE*</b> 	YES	20	N/A	NO	NO	17 AND UNDER	YES	YES	YES	YES
<b>TYPE 2 E-BIKE*</b> 	NO	20	N/A	NO	NO	17 AND UNDER	YES	YES	YES	YES
<b>TYPE 3 E-BIKE*</b> 	YES	28	16	NO	NO	YES	NO	YES	YES	YES
<b>MOPED</b> 	NO	N/A	16	YES	YES	YES	NO	YES	YES	NO

\*PENDING AB-1096

## 2. Get e-bike includes in CA's scrap-and-replace program



EXPLORE

peopleforbikes

LOG-IN

September 10th, 2019

### New California Law Provides Funding for E-bike Purchases



## What did we do?

### 3. Get subsidies for e-bikes, just as for e-cars



## Victory! \$10 Million E-Bike Affordability Program Included in State Budget

July 2, 2021

*Update, 7/14/21: Governor Newsom signed the budget, ensuring that CalBike's \$10 million **e-bike affordability program** will be funded! CalBike is continuing to work with legislators and program administrators to make sure the program is implemented equitably.*



# E-Bikes for Everyone

Rebate Program Data  
February 16, 2021



# About Peninsula Clean Energy

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- Not for profit locally-led electricity provider launched in 2016 to:
  - Reduce carbon emissions
  - Expand access to sustainable and affordable energy
- Authorized unanimously by each city council and the county supervisors



# How it works

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**Peninsula Clean Energy** provides electricity from clean energy sources at lower rates than PG&E.

**PG&E** owns the power lines and delivers the power we generate. They send a consolidated bill.

As a **customer** of Peninsula Clean Energy, you are helping the environment and saving money.

# E-Bike Growth

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- 2x more e-bikes purchased in 2020 than EVs (est. 500k e-bike sales) in US
- 240% increase in e-bike sales in 2021
- 15% Americans plan to bike more, 40% if former bikers
- CA e-bike rebate, end of 2022



# E-Bikes for Everyone Overview

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- \$240K in incentives (\$800 rebate, ~300 bikes)
- Only low to moderate income customers eligible
- Bike shop partnerships
- Launched May 2021, “sold out” in less than a week

# Income-Qualifying Details

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## ▲ Option 1: participant in an eligible program

- Clipper START
- Residency in Affordable Housing, Public Housing, or Housing Choice Vouchers (Section 8)
- California Alternate Rates for Energy Program (CARE) or Family Electrical Rate Assistance Program (FERA)
- Low Income Home Energy Assistance Program (LIHEAP)
- California Unemployment Insurance (UI), Pandemic Emergency Unemployment Compensation (PEUC), or Pandemic Unemployment Assistance (PUA) for a duration of at least 9 continuous months
- CalFresh/SNAP (Food Stamps)
- Women, Infants, and Children (WIC)
- CalWORKs (TANF) or Tribal TANF
- Supplemental Security Income (SSI)
- Free or Reduced National School Lunch Program (NSLP)
- Bureau of Indian Affairs General Assistance Head Start Income Eligible (Tribal Only)

Or 400% FPL

# Bike Shop Partnerships

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RidePanda



# Rebate Structure

Point of sale discount highly encouraged

Free 7 Day Shipping



**Neza HTR**

~~\$1199.00~~ \$199.00

More Info

Free 7 Day Shipping



**Neza Micro**

~~\$1199.00~~ \$199.00

More Info

Free 7 Day Shipping



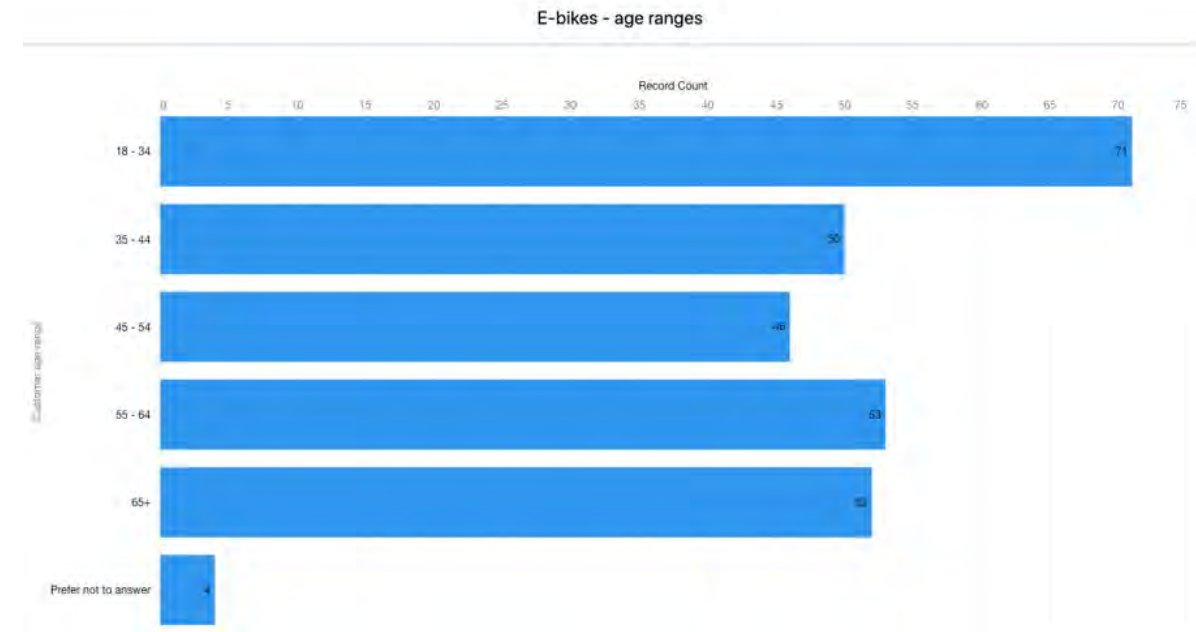
**Ride1UP Roadster v2**

~~\$1095.00~~ \$245.00

More Info

# E-Bikes Key Metrics

- 276 e-bike sold
- Customer satisfaction: 93%
- Usage: ~55% utility
- Avg. pre-rebate bike price: \$1,283
- Avg. post-rebate bike price: \$487



# Trailing Survey Data

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## Experience with e-bikes before buying one:

What was your experience with e-bikes before buying one? (Check all that apply)



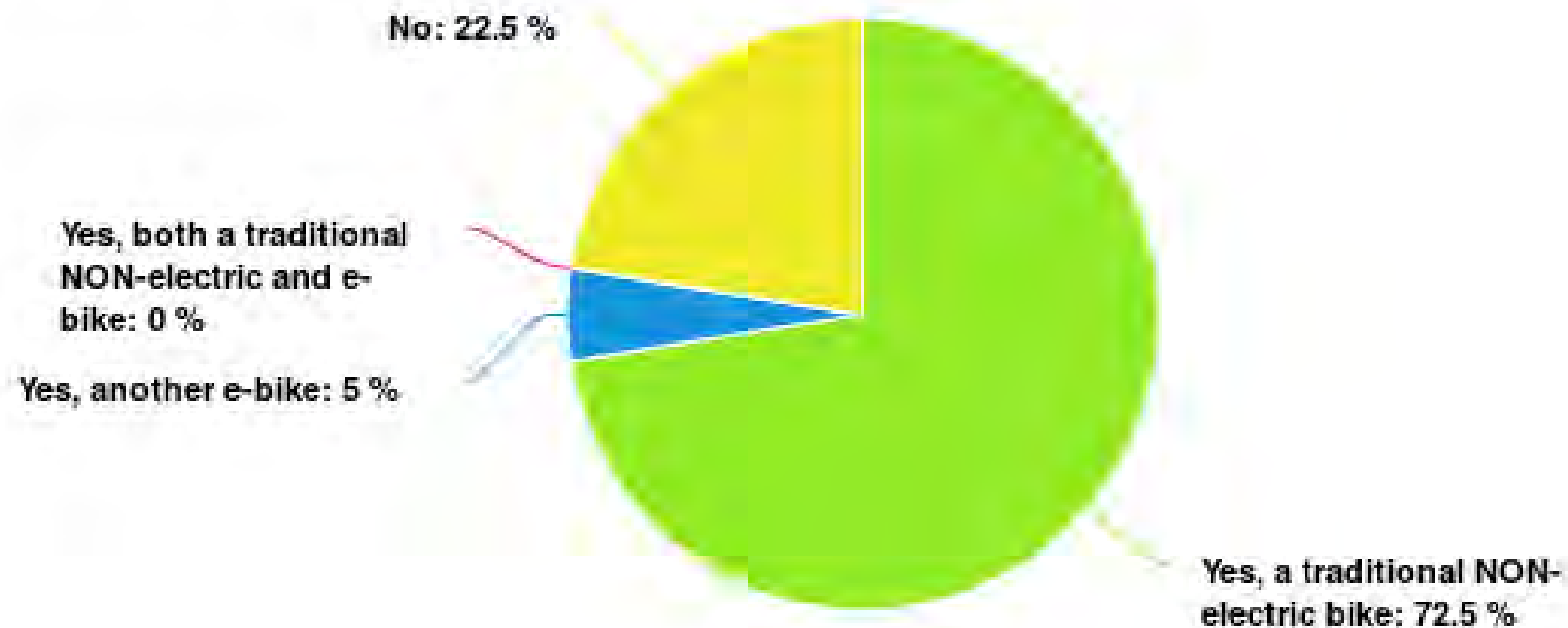


# Trailing Survey Data

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## Experience with biking before purchasing an E-Bike:

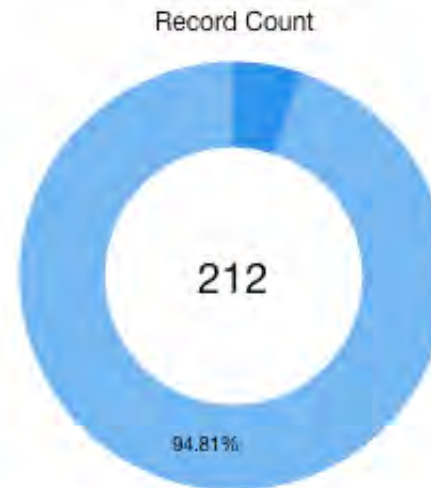
Just **before** owning your **new** e-bike, did you have access to a working bike at home?



# Financing



E-Bikes: Customers using Financing



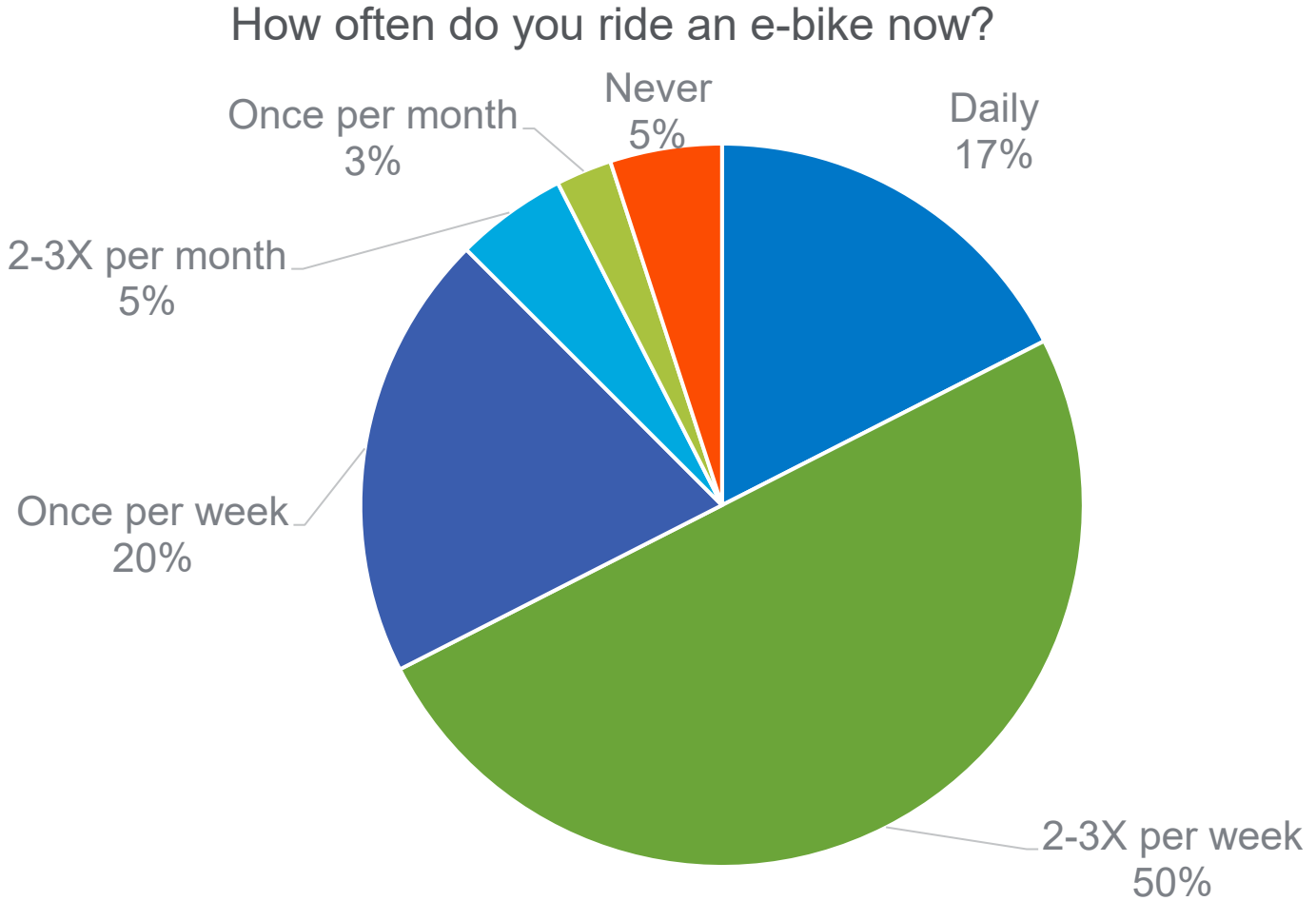
Did customer finance purchase?

- Yes
- No

# Trailing Survey Data

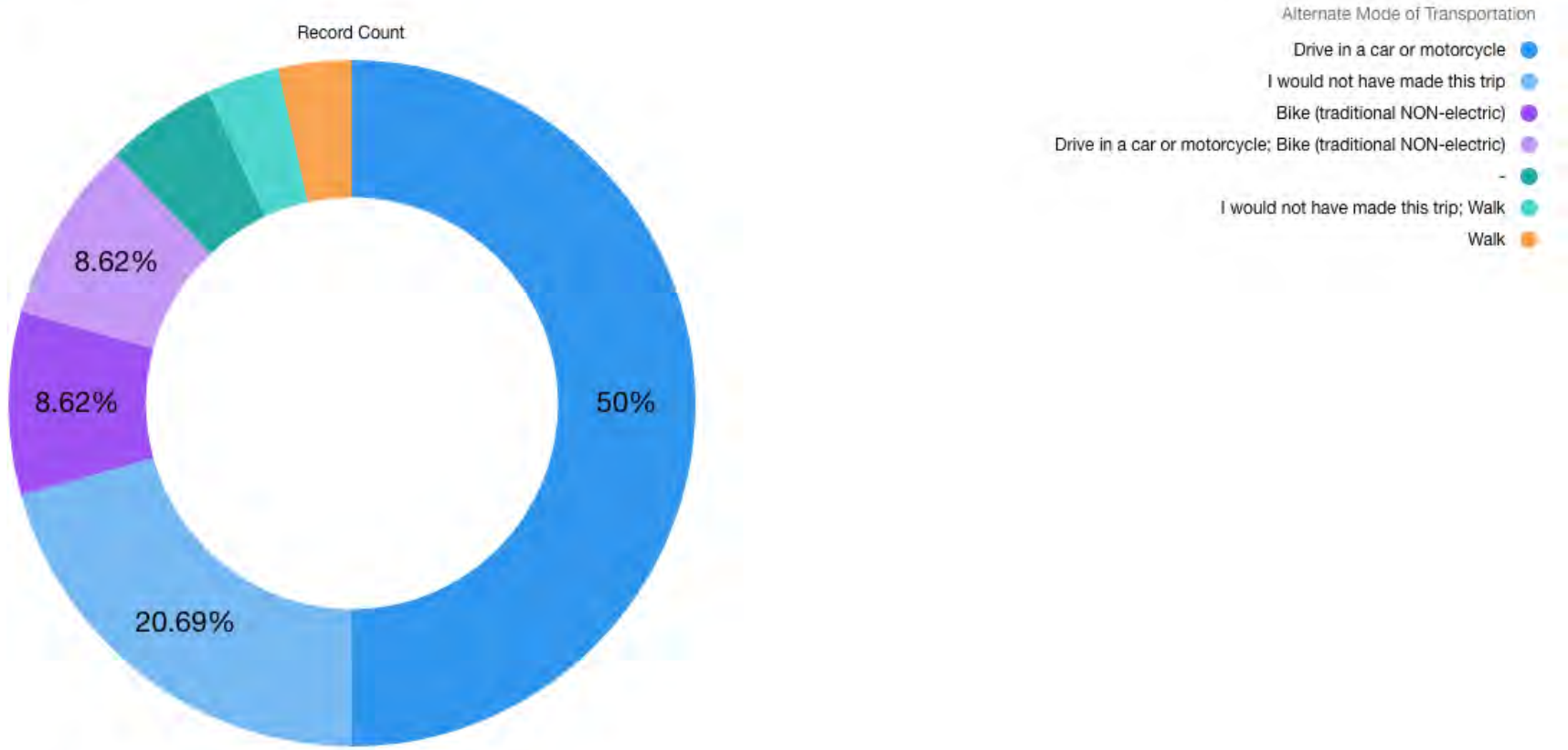
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## E-Bike owners use them regularly



# E-Bikes Replace Car Trips

E-bikes - last trip mode, if no e-bike



from trailing survey  
Dec 1, 2021 7:44 PM - Viewing as Phillip Kobernick

# Trailing Survey Data

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E-Bikes are replacing car trips:

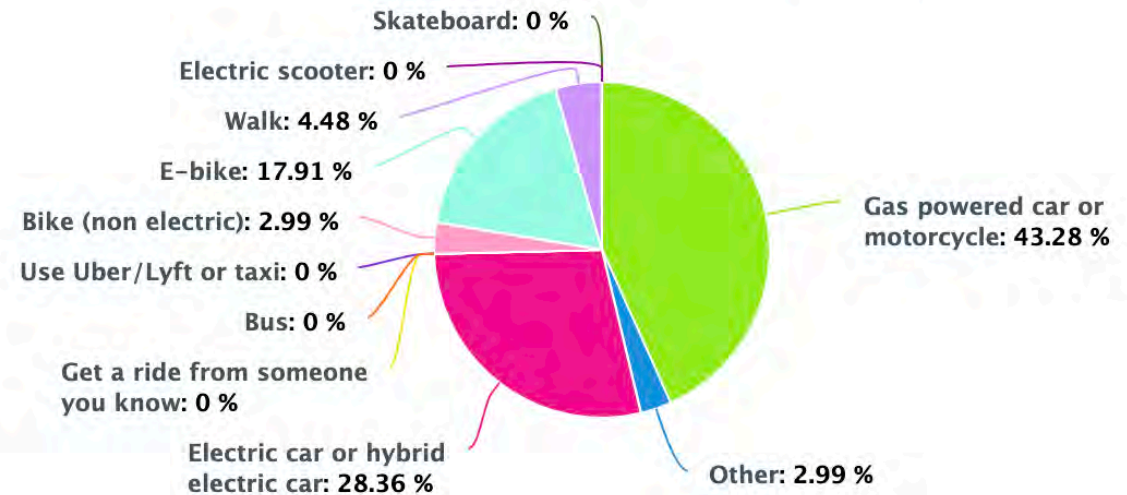
“How frequently do you ride your e-bike in place of...”

	Never	Less than once per month	Once per month	Once per week	2-3+ times per week
Any car or motorcycle	6%	3%	13%	<b>26%</b>	<b>52%</b>
Any bus	<b>75%</b>	9%	0%	3%	13%
BART	<b>90%</b>	6%	0%	3%	0%
Caltrain	<b>90%</b>	7%	3%	0%	0%

# PCE E-bike Users Est. GHG Impact

- **Car trips reduced by 38%**
- E-bike now primary mode of travel for 1 in 6
- Avg trip when replacing car: 11 mi.
- Replaces car trip: ~3x/week
- Each e-bike displaces: 83 gallons of gas, .74 MT GHG per year

What mode of transport do you use for the majority of your daily trips?



# Results Recap

- 451 applications received
- 276 e-bikes purchased
- 92% pre-purchase customer satisfaction
- Confirmed GHG reduction through avoided car trips



# Thanks!

[pkobernick@peninsulacleanenergy.com](mailto:pkobernick@peninsulacleanenergy.com)





# E-Bikes in the San Gabriel Valley



Jose Jimenez  
Education Director

# Our Mission

ActiveSGV's mission is to support a more sustainable, equitable, and livable San Gabriel Valley.



# E-Bikes in the San Gabriel Valley

- 2016 E-Bike Rebate Program
  - Challenges
  - Steps taken
- What's Next for E-Bikes in the SGV



# 2016 E-Bike Rebate Program

- Comprehensive approach
- 100 Rebates for the purchase of Electric bicycles
- Each rebate was for \$700



**ELECTRIC BIKE REBATE**

**\$700 VOUCHER FOR E-BIKES**  
Complete a 3-hour city cycling class to be eligible to receive a \$700\* voucher after the purchase of an electric bicycle.

\*To qualify you must reside within 3 miles of the Metro ExpressLanes along the I-10 freeway. Some restrictions apply.

**BIKESGV.ORG/BICYCLEEDUCATIONCENTER**  
CONTACT JOSE@BIKESGV.ORG (626) 566-8302

Metro  



# Challenges



Unfamiliar



Cost



Infrastructure  
& Safety



# Steps Taken

- Education
- Outreach
- Tools to continue



# Education

- 100+ bicycle education classes
- 1,000+ participants of all ages





# **BICYCLE EDUCATION CENTER**



**FREE BICYCLING & REPAIR CLASSES!**



[www.BikeSGV.org](http://www.BikeSGV.org)

f t i @BikeSGV

(626) 566 - 8302



## **Outreach**

- 50 community outreach events to promote and demo E-bikes
- Social/traditional media campaign





# Tools to Continue

- Bicycle Education Center
- Repair Stations



# What's Next?

- E-bike educational classes
- E-bike community rides
- Longer-term e-bike share for San Gabriel Valley residents
- Standard e-bikes
- Cargo E-Bikes
- 50% will serve disadvantaged communities



# Contact Info

Jose@activesgv.org

(323) 566-8302



## STAY ACTIVE

FOLLOW @ACTIVESGV



WWW.ACTIVESGV.ORG

A woman with long brown hair, wearing sunglasses and a white top, is riding a white e-bike on a city street. The background shows green trees and a brick building. A dark purple semi-transparent box is overlaid on the image, containing white text.

- **Purpose of Webinar:** Benefits of E-Bikes

- **What we learned:**

- Who is using them, how often, and for what type of trips
- How e-bikes further active transportation, health, and climate goals
- How e-bikes are helping people overcome known barriers to cycling and are attracting those who previously might not have considered cycling



# Active Transportation Program

- **E-Bikes and Infrastructure**

- If designing biking facilities, they should benefit all users (not just facilities for E-Bikes)

- **Bike Share with E-Bikes**

- Eligible as infrastructure project types
- Considerations for Bike Share Programs
  - How will it be sustained beyond the grant?
  - Ongoing maintenance of the Bike Share Program
  - Who manages the third-party and who pays for what?



# Active Transportation Program

- **E-Bikes and Non-infrastructure**

- Education and Encouragement on E-Bikes and how to use them safely
- Pre-approval items: E-bikes could be pre-approved with proper justification, purchased as equipment (not given away), and tied to education and/or encouragement programs



**Summer Lopez**

**Caltrans, Active Transportation Program Non-Infrastructure, Plans, and ATRC Project Coordinator**

**[atp-ni@dot.ca.gov](mailto:atp-ni@dot.ca.gov)**

# Additional Resources on E-bikes



- **California Bicycle Coalition**

[calbike.org/our\\_initiatives/healthy\\_climate\\_and\\_communities/e-bike-campaign](http://calbike.org/our_initiatives/healthy_climate_and_communities/e-bike-campaign)

Latest e-bike news, campaigns, research, advocacy in CA and worldwide.

- **People for Bikes** [peopleforbikes.org/topics/electric-bikes](http://peopleforbikes.org/topics/electric-bikes)

E-bike legislation state by state, research, advocacy, and promotional tools





# Questions and Answers

Please type your question in the “Q&A” function



# CDPH ATRC NI-Technical Assistance Team

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# Please Complete a 3-minute Survey

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Immediately following the webinar please complete our evaluation survey to help guide us in future webinars.

The webinar recording, slides, and resources will be posted to the ATRC website:

**<https://caatpresources.org/1621>**



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**ATRC** Active Transportation Resource Center

ATRC On the Move Presents:

# PERSPECTIVES 2022

# Thank you!

