

Cambridge Transportation Decarbonization and Congestion Mitigation Bill

Using Platform-Based Commerce to make Cambridge a more sustainable,
more equitable and more pleasant place to live, work and visit

A TWO-PRONGED CLIMATE-FRIENDLY ZONING CHANGE THAT HELPS

- DE-CARBONIZE TRANSPORTATION
- REDUCE THE NUMBER OF CARS IN CAMBRIDGE

By harnessing the power of Platform-Based Commerce to handle awkward back-end logistics like reservations and payments, this proposal:

1. Increase EV ownership opportunities by allowing people without access to off-street parking to more easily charge their EVs
2. Allows dependable and varied automobile use people who either cannot or choose not to own a car

This zoning change gives residents the ability to address climate change, congestion and related issues as their individual situations allow.

WHY A ZONING CHANGE IS NEEDED

Because when money changes hands, the use suddenly becomes commercial and our zoning does not allow most commercial uses in residential zones. Without a zoning change allowing these uses where a commercial transaction occurs, their base status remains illegal in Cambridge.

These uses are not all that unlike allowed Home Occupations such as a studio or dentist office but are not covered by those zoning exceptions.

Because these are service transactions- purchasing electricity and car usage- this proposal would not alter the status of a parking spot and they would remain accessory parking spots.

PUTTING THE EV CHARGER DISCUSSION IN CONTEXT

- From CNET.COM: *Massachusetts says it will ban sale of new gas-powered cars by 2035*
- From MIT CLIMATE PORTAL, JAN 2021: *It's really important to provide access — reliable, predictable access — to charging for people, wherever they park for longer periods of time near home, often overnight*
- From the **Cambridge Sustainability Dashboard**: *One major challenge to widespread adoption of EVs by residents of dense urban neighborhoods like Cambridge is the lack of reliable access to electric vehicles supply equipment (EVSE). In other words, access to a charging station*
- From the **Cambridge Climate Action Plan**: *Vehicles trip that remain will need to be made by vehicles that have switched from gasoline and diesel, to electric*
- From the **Cambridge Net Zero Action Plan**: *Assess and incorporate equity as a key aspect of program implementation to ensure an equitable transition to net zero*
- From the New York Times: *The transition [to EVs] could also be limited by the lack of places to plug in electric cars, which has made the vehicles less appealing to people who drive long distances or apartment residents who can't charge at home. There are fewer than 50,000 public charging stations in the United States. The infrastructure bill that Congress passed in November includes \$7.5 billion for 500,000 new chargers, although experts say even that number is too small. February 2022*

PUTTING THE PEER-TO-PEER CAR SHARE DISCUSSION IN CONTEXT

- From ZIPCAR: *Thirteen personally owned cars are taken off the road for each Zipcar.* October, 2020.
- From the *National Equity Access: Nationwide, households headed by people of color are less likely than white households to have access to a vehicle. Black households are least likely to have access to a vehicle at 18 percent (2.62 million households).* 2020
- From the New York Times: *for many low-income and minority Americans, automobiles have been turbo-boosted engines of inequality, immobilizing their owners with debt.* December, 2022
- From Cambridge Community Development Department: *For many people, carsharing is a more affordable alternative to owning a car.*

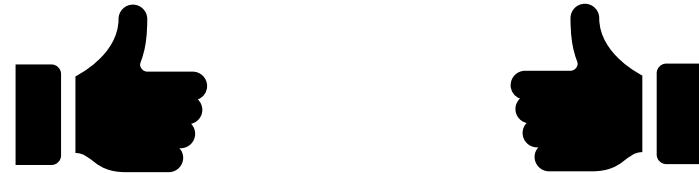
PUTTING BOTH DISCUSSIONS IN CONTEXT

- From Puget Sound Clean Air Agency: *There is a strong interest in electric car-share from the low-income communities in the study.* 2022
- From the Journal of Science Policy and Governance: *Policy makers must ensure that barriers to access for shared mobility, electric vehicles, and automated vehicles are reduced or eliminated.* 2018
- From Salon, *How to ensure electric cars aren't just for rich people: Other areas could benefit more ... from car-sharing models that allow many people to use the same electric car.* 2021

THIS ZONING CHANGE

1. Costs Cambridge nothing while expanding important EV infrastructure access
2. Expands automotive access without expanding individual ownership
3. Adds three definitions and two uses
4. Changes no dimensional or other requirements

THIRD TIME'S THE CHARM!



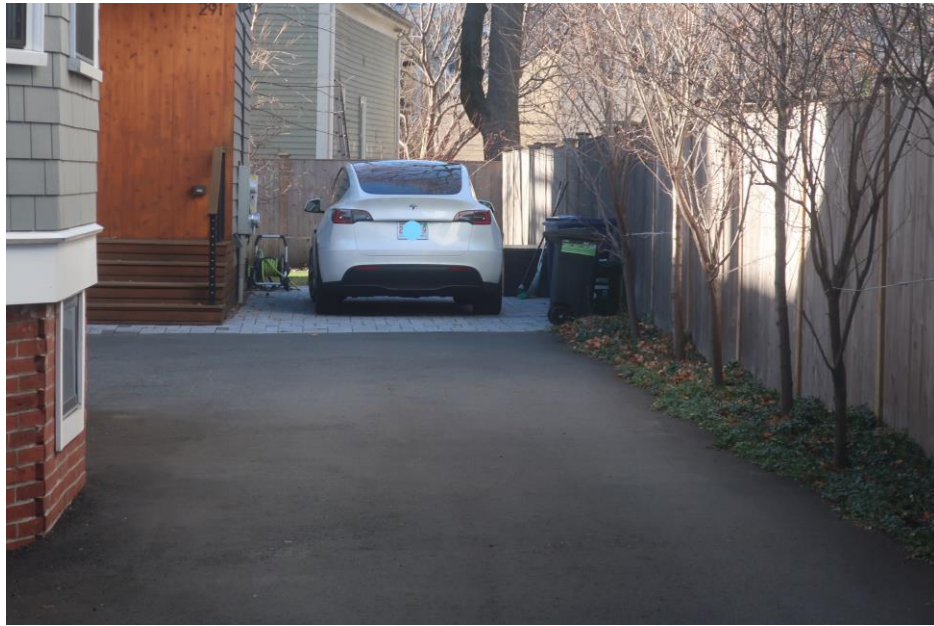
Ordinance Committee favorably voted on
these two prongs in 2022

WHAT EV CHARGING IN CAMBRIDGE LOOKS LIKE NOW



Inconvenient, abused, rarely used and costing (@\$62,500 per charge point via 2021 and 2022 Participatory Budgeting). There are only 35 spots for the *entire* city, 8 of which have very limited availability at the DPW yard

WHAT EV CHARGING IN CAMBRIDGE *COULD* LOOK LIKE



Exactly as driveway and garage owners are doing it now,
but with more access for people who do not have off-street parking.

WHAT CAR RENTAL IN CAMBRIDGE LOOKS LIKE NOW




Lots of asphalt, inconvenient access, inhospitable store front, suburban, challenging traffic patterns

WHAT CAR RENTAL IN CAMBRIDGE COULD LOOK LIKE



Maserati Ghibli 2017
5.0★ (18 trips) 🚫 All-Star Host
Save \$171 \$229 ~~\$172/day~~
\$515 est. total 3.3 mi



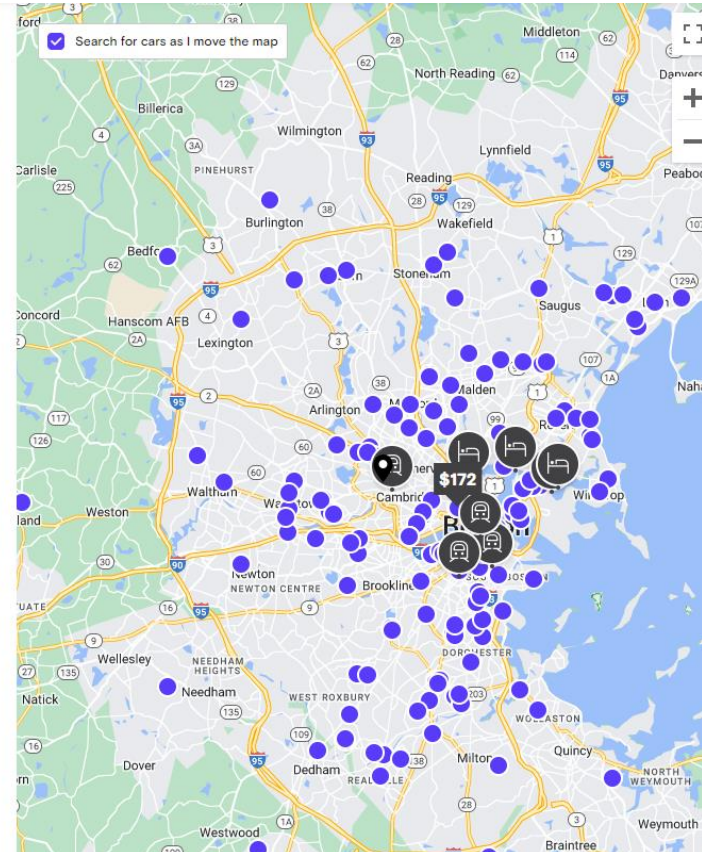
Tesla Model 3 2022
4.94★ (21 trips) 🚫 All-Star Host
Save \$21 \$105 ~~\$98/day~~
\$293 est. total 1.2 mi



Tesla Model Y 2022
4.84★ (20 trips) 🚫 All-Star Host
App unlock < 0.5 mi



Tesla Model S 2017
5.0★ (1 trip)
Unlimited miles 4.5 mi



EXISTING BOSTON AREA PLATFORM-BASED CAR RENTALS (TURO.COM)

THIS PROPOSAL IS NARROWLY TAILORED

- Only full EVs would be allowed to charge to minimize parking scams. And they must be charging
 - The 10 hour limit reflects a rough estimate of full charging time for many electric vehicles as of today. Few people go to a “gas station” and only partially fill the tank.
- Only one car per dwelling unit could be shared to eliminate the threat of rental fleets
- The actual use does not change, nor do parking requirements or dimensional requirements or anything else.
- It is not mandatory. The proposed zoning is not tied to any financial incentives nor waivers.

YES, THERE ARE DOWNSIDES

People may not know the person using (or charging) the car parked in their neighbor's driveway.



But the users won't be anonymous, and the actual use will be exactly as it is now.

CAMBRIDGE HAS ITS OWN “RIGHT TO CHARGE” RULE

- Right to Charge Home Rule signed by Governor 12/22/23
- Generally forces condo associations to allow appropriate EV installation by individual unit owners

CAMBRIDGE REMOVED MANY MINIMUM PARKING REQUIREMENTS

- But people still find it necessary to drive at times. Increased peer-to-peer car share options makes it easier to find a car when you need one but don't own one.
- More personally-owned cars offered for share will provide a wider range of options to users, such as bike racks, cargo space and pet carriers.

CAMBRIDGE HAS CHANGED RESIDENTIAL ZONING BEFORE TO MEET CHANGING NEEDS AND DESIRES

- Post Operative Animal Care 9/27/21
- Home Occupation Amendments 6/7/2021
- Beekeeping Zoning Petition 12/18/2017
- Short Term Rentals 08/07/2017
- Carsharing 1/11/2016
- Bicycle Sharing 09/19/2011

THERE MAY BE OTHER HURDLES FOR THESE USES TO JUMP

- Utility Franchise Laws – Chapter 164 (but MassEVIP specifically says “**Yes**” to the question “Can a MassEVIP participant charge a fee to use the EV charging station?”)
- Insurance Coverage
- Consumer Desires

But outdated zoning laws should not be one of them

THE WORLD IS NOT A STATIC PLACE.
OUR ZONING CANNOT BE STATIC EITHER.



What is a PowerPoint without a cat picture?
But seriously, sometimes the world changes and we have to change with it.