



CITY OF CAMBRIDGE

Community Development Department

To: Planning Board
From: Community Development Department (CDD) Staff
Date: May 17, 2022
Re: **Craig Kelley, et al., Zoning Petition**

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Overview

Petitioner: Craig Kelley, et al., (group of at least 10 registered voters)

Zoning Articles: 4.000 (Use Regulations), 6.000 (Parking and Loading Requirements)

Petition Summary: To amend Article 4.000 of the Zoning Ordinance by adding the following new use categories: "M. Shared Vehicle," "N. Publicly-accessible, Privately-owned Electric Vehicle Charging System," and "O. Shared Mobility Device," with definitions included for "Shared Vehicle", "Publicly-accessible, Privately-owned Electric Vehicle Charging System", "Shared Mobility Device", "Electric vehicle", and "Shared Mobility Platform"; and to insert "Yes" next to all such uses in all zoning districts except Open Space, with the added provision that in Residence Districts, "Properties of less than 10,000 SF are limited to 4 Shared Mobility Devices on the property at a time;" and to amend Section 6.20 "Offstreet Parking Regulations" to add as follows: "6.21 (a). Publicly-accessible, Privately-owned Electric Vehicle Charging Systems may be installed in any parking space conforming to the dimensional and other requirements of Article 6.000, or, if not, are lawfully nonconforming."

Planning Board Action: Recommendation to City Council

Memo Contents: Summary of the proposed zoning, background information on the topic of the Petition, and considerations and comments from staff.

Summary of Petition

The Petition proposes to create three new land use categories in Article 4, all of which would be permitted by-right in all zoning districts except for Open Space districts:

- a. Shared Vehicle
- b. Publicly-accessible, Privately-owned Electric Vehicle Charging System
- c. Shared Mobility Device

In Residence districts, properties of less than 10,000 square feet would be limited to four (4) Shared Mobility Devices on the property at a time.

In addition, the Petition proposes to amend Section 6.20 *Off Street Parking Regulations* by inserting a new Section 6.21(a) which states that “Electric Vehicle Charging Systems may be installed in any parking space conforming to the dimensional and other requirements of Article 6.000, or if not, are lawfully non-conforming.”

Definitions for the proposed use categories as well as “Electric vehicle” and “Shared Mobility Platform” are included in the Petition.

Planning for Mobility

Envision Cambridge (2019)

The City’s comprehensive plan, *Envision Cambridge*, establishes several policy goals related to transportation, mobility, and sustainability:

- Reduce transportation-related greenhouse gas emissions
- Expand access to sustainable transportation choices and the physical reach of sustainable transportation infrastructure
- Enhance existing sustainable transportation infrastructure to be more convenient, reliable and resilient
- Adjust land use policy to support sustainable transportation choices
- Establish new regulatory frameworks to prepare for tech-driven disruptions in mobility systems

New Mobility Planning

As an outgrowth of the Envision Cambridge process, the City began a technical research effort intended to learn about and plan for New Mobility options in a way that aligns with and advances existing values and policies. A technical advisory group was appointed to guide the New Mobility planning and to help the City understand New Mobility from a market, technical, and policy perspective. The New Mobility planning process did not change existing transportation plans or current priorities for active mobility, except to strengthen sustainable transportation and shape strategies to support diverse transportation options, including micromobility devices, electric vehicles, autonomous vehicles, ride-hail, microtransit, Mobility as a Service, delivery, and more.

The New Mobility planning process completed a transportation trend analysis to understand conditions leading up to the pandemic and performed projections of future mobility trends based on 2019 trends. The process also included implementing a pilot to provide electric vehicle charging options for residents who own electric vehicles, but do not have a private garage or driveway in which to charge their vehicle. The Technical Advisory Group discussed desired outcomes for new mobility, and five potential strategies related to curb management, mobility data, prioritization of space-efficient high-occupancy modes, automated vehicle deployment, and transportation electrification.

The City will conduct additional community engagement before further advancing this planning effort.

Shared Mobility Zoning Petition (2019)

The Planning Board previously discussed a [zoning petition](#) related to shared mobility in 2019. This petition, similar in scope, proposed adding definitions and regulations for a new land use category called “Shared Mobility.” At that time, the Planning Board made no recommendation on the petition to City Council and expressed concern that the language in the Petition would create conflicts with existing provisions for Public Bicycle-Sharing. The Council did not take action on that petition.

Electric Vehicle Charging

CDD has devoted attention to how the city will need to adapt in order to adequately accommodate increasing demand for electric vehicle (EV) charging. Unlike fueling stations for automobiles that run on petroleum, EV charging stations or “EVSE” (Electric Vehicle Supply Equipment) tend to be installed as ancillary fixtures in parking lots and garages or on public property along the curb. EV charging is less noxious or hazardous than petroleum fueling, and it tends to take a longer amount of time to recharge than to refuel.

The City is currently taking steps to expand the EV charging network within the City. Beyond increasing the number of [City-owned public charging station locations](#), the City has worked with developers of parking facilities subject to Planning Board Project Review Special Permits to provide a minimum of 25% of new spaces to have EVSE, with infrastructure in place to make 100% of spaces ready for future EV charging capabilities. The City also convened a [working group](#) which established a goal of significantly increasing the number of publicly-available EV charging stations within the City.

Current Zoning for Shared Transportation Systems

Public Bicycle-Sharing

“Public Bicycle-Sharing Service” and “Public Bicycle-Sharing Station” are approved uses in all zoning districts, as a result of zoning amendments adopted by the City Council in 2011. The current regional bicycle-sharing system is Bluebikes, which is owned by the respective municipalities in which it operates (including Cambridge, Somerville, Boston, Brookline, and multiple others) and operated through separate contractual arrangements with a private vendor. It is a publicly-owned system. The City’s

contract with the Bluebikes operator prohibits other, privately-owned bicycle-sharing services from operating within the City.

Carsharing

The City Council adopted zoning amendments to enable carsharing services in 2016 (Section 6.24 of the Zoning Ordinance). Carsharing programs – not to be confused with “ridesharing,” which means carpooling or “ride-hailing,” which refers to services such as Uber and Lyft – offer members access to a fleet of automobiles that can be reserved for short periods of time using an online or app-based system. These programs offer an alternative to car ownership for people who only need to use them occasionally. Carsharing programs are typically operated as private ventures, unlike bikeshares such as Bluebikes where the system is owned by the City.

Carsharing programs can generally fall into one of four categories:

- 1) Round-trip carsharing: payment for the hour, mile or both where users begin and end a trip in the same location.
- 2) One-way/free-floating carsharing: users begin and end trips at different locations, and is more often used for shorter trips/periods of time and rental fees are charged on a time-basis (e.g., \$/minute).
- 3) Peer-to-peer carsharing: privately-owned vehicles are made available for rent by others for a certain period of time, and the vehicle fleet is a virtual fleet made up of vehicles from participating owners. This is not currently permitted in Cambridge because per Cambridge zoning, all vehicles must be owned by the Carsharing Organization.
- 4) Fractional ownership: users co-own a vehicle and share its cost and use (this is not currently regulated by zoning in Cambridge).

State law permits vehicles that are part of a carsharing fleet to display plates issued by the RMV and to operate on public streets. The provisions in Section 6.24 of the Cambridge Zoning Ordinance allow properly registered carsharing vehicles to be parked within different types of off-street parking facilities, with limitations.

Considerations for Proposed Zoning

Shared Vehicles

The Petition defines a “Shared Vehicle” as a “privately-owned vehicle that is licensed and registered for operation on public and private highways, roads, and streets that is available, for free or through a financial transaction, to members of the general public through a shared mobility platform.” It is distinct from the proposed definition of “Shared Mobility Device,” which only includes transportation devices that are not legal to operate on public highways. However, the definition suggests that a “Shared Mobility Platform,” defined as “An entity with a distributed fleet of Shared Mobility Devices, either owned by or made available through the Platform, that charges a use-based fee related to a specific device or for which the Platform provides services based on membership,” would apply to both “Shared Vehicles” and “Shared Mobility Devices.” The following are some issues raised by this approach:

- Differentiation from Carsharing – The proposed definition specifies that a Shared Vehicle would not include a Carsharing Vehicle as regulated in Section 6.24 of the Zoning Ordinance. However, the definitions of Shared Vehicle and Carsharing Vehicle are very similar, as are the definitions of Shared Mobility Platform and Carsharing Organization. In many real-life cases, it could be difficult to distinguish between the two. Also, it would be difficult to identify, regulate and enforce the use of Carsharing Vehicles.
- Regulation of Vehicles as a Land Use – While “Shared Vehicle” is a defined term, its inclusion as an allowed use in all zoning districts except Open Space districts is not specific as to what exactly is allowed. The existing Carsharing regulations in Section 6.24 clarify how parking facilities (as a principal or accessory use) can be used for Carsharing, but no such regulations are proposed for Shared Vehicles. Also, it is not clear if there would be dimensional requirements for the use of Shared Vehicles. Instead, the proposed zoning treats a Shared Vehicle as a principal land use, which is conceptually difficult to regulate and enforce because vehicles are not “attached” to land in the same the way as buildings or parking lots. Because no process of registering Shared Vehicles is proposed, there would be no way to enforce where Shared Vehicles are located at any given time or how they are used, by whom, and whether there are any restrictions or regulations related to such use.

Understanding the intent of the proposed zoning relative to the existing zoning for Carsharing would help to determine whether it would be better to create a new defined activity in the Zoning Ordinance and/or whether the current regulations should be amended.

Publicly-accessible, Privately-owned Electric Vehicle Charging Systems

The Petition suggests that both an EVSE system and “its attendant parking spot located on privately owned property” would be allowed to be made available, “for free or through a financial transaction, to members of the general public for the sole purpose of charging an electric vehicle.” Allowing privately-owned EV charging to be made available for use by others raises some important issues:

- Parking Regulations – Because the Petition proposes to allow both EVSE and parking to be made more broadly available, it may conflict with other parking regulations in the Zoning Ordinance, the Parking and Transportation Demand Management (PTDM) Ordinance, and the Commercial Parking Ordinance and associated “parking freeze” which sets an EPA-mandated cap on the total number of commercial parking spaces in the City. CDD is undertaking a [study](#) of these regulations to consider changes to meet current transportation goals, including EV charging and other mobility issues. This study is focusing on issues such as social equity and accessibility.
- Transportation Impacts – Even if it is permissible, making EVSE and parking spaces available to the general public could have transportation impacts. For example, if residential property owners have the ability to lease parking spaces to commuters with EVs, it could increase traffic in residential neighborhoods and throughout the City in general if it encourages more EV-owning commuters to drive. Though the Petition specifies that it could only be available “for the sole purpose of charging an electric vehicle,” it is not clear how that standard would be monitored and enforced, especially since there is no proposed requirement to register the use with the City.

- Utility Franchise Laws – [Chapter 164](#) of Massachusetts General Laws establishes regulations for the provision of electric distribution and services to retail customers by qualifying companies, and generally prohibits the resale of electricity from private individuals to others. There could be a potential impediment if property owners wish to impose a fee for EV charging.

Shared Mobility Devices

The Petition would allow a “Shared Mobility Device,” defined to include a “scooter, bicycle, or other transportation device that is not legal to operate on public highways,” to be made available in a manner similar to current rules for Carsharing. A “member or customer” would use a “self-service automated registration system” to use a device, but not enter into a separate agreement for each use (as would be the case with, for example, a more traditional bicycle rental). The devices would need to be “owned, maintained or operated by, and made available through, a Shared Mobility Platform.”

The only proposed limitations are that in Residence districts, up to four Shared Mobility Devices would be allowed on a “Property” (i.e., a lot) of less than 10,000 square feet at a time, and in Open Space districts, they would not be permitted. The Petition does not propose any dimensional or operational standards or address issues that may arise by not defining appropriate standards. As a matter of zoning, this would only permit a Shared Mobility Device on an off-street lot, because the operation of vehicles on the street is not regulated by zoning.

This proposal would raise some similar issues to those raised for Shared Vehicles above, as well as the issues raised during review of the 2019 Shared Mobility zoning petition. The following is a summary of key issues:

- First, it is not clear that all Shared Mobility Devices would be “not legal to operate on public highways; e.g., bicycles and motorized scooters could be legal on public highways during daylight hours. This should be researched before inserting into the Zoning Ordinance.
- Potential for Conflict – Similar to “Shared Vehicle,” it may be difficult to distinguish a “Shared Mobility Device” from the Public Bicycle-Sharing definitions currently in the Zoning Ordinance. Also, as noted further above, the City’s current Public Bicycle Sharing System (Bluebikes) contractually prohibits the City from allowing private bicycle sharing services to operate on City streets.
- State Law – Currently, the State does not have any statutes specifically in place for electric scooters. Instead, Chapter 90 [Section 1E](#) of the General Laws of MA apply to “motorized scooters,” under which today’s electric scooters are regulated in the absence of regulations that explicitly authorize them. Requirements for motorized scooters include turn signals, brake lights, daytime-only operation, and operation by a licensed driver.
- Cambridge Traffic Regulations – Once the state law is changed to authorize the use of electric micromobility devices, the City will also need to update its traffic regulations to address these devices. If the proposed zoning change made them permissible on off-street lots, City resources may still be required in enforcement to ensure that Shared Mobility Devices are not operated or left on sidewalks or in prohibited areas of the public way.

- Policy Framework for Micromobility – As discussed earlier in this memo, the City is engaged in ongoing planning efforts (both locally and regionally) to introduce or expand the permitted use of micromobility devices, such as electric scooters, on public streets. By simply allowing “Shared Mobility Devices” in zoning, with few restrictions, the Petition proposes a “hands-off” policy approach by allowing any businesses to make Shared Mobility Devices available from wherever in the City they are able to secure land. This approach could make it difficult to pursue other policy options, such as licensing one or more operators through a procurement process to operate under a more well-defined regulatory system, or instituting a publicly-owned system with a single provider, as with Bluebikes. City staff are continuing to explore different options in coordination with other regional entities, which is crucial because any micromobility system will need to operate across municipalities to be effective.

Conclusions

As articulated in the Envision Cambridge report, it will be important to support innovations in transportation that will advance the City’s climate goals.

A common issue among the three different parts of the Petition is the limited effectiveness of zoning in regulating transportation systems. As a land use regulation, the Zoning Ordinance does not say what types of vehicles may use public streets or how they can be fueled. Zoning requirements for new mobility systems will have a limited effect without a larger policy framework for how those systems will operate, both at the state and local level.

With regard to transportation, the primary effect of zoning is to regulate where and how different types of vehicles may be parked in off-street lots. It might seem reasonable to be more permissive in order to promote more climate-friendly technologies, but there could be broader land use implications related to traffic and congestion, which can have climate impacts as well.

In the case of Public Bicycle Sharing, the City adopted zoning only after the policy framework was established for what is now the Bluebikes system. The effect of the zoning was simply to allow stations to be sited in off-street locations as a supplement to on-street locations. In the case of carsharing, the City adopted zoning that used terminology defined in state law, and only after studying the topic and conducting community outreach to weigh the pros and cons of carsharing systems. The effect of that zoning was to permit carsharing vehicles to be parked in a range of different off-street facilities across the city, but with limitations in response to community concerns.

Similarly, staff believes that the best way to enable innovative transportation solutions is to begin with a holistic view of the issue, understanding all of the policy considerations, and then determine what zoning interventions (along with other policies) are necessary to advance the desired outcomes.