

Advancing EV Equity: MAPC Projects and State Initiatives

Wednesday, September 20, 2023



MAPC's Clean Energy and Transportation Departments

Provide a range of services to municipalities, including assistance in planning and implementing climate-focused transportation programs.

Pursue innovative models to procure EV charging infrastructure

Host Regional Electric Vehicle Working Group

Assist municipalities in electrifying their school bus fleets

Freight Decarbonization Study

Encourage the incorporation of e-bikes into the Metro Boston Bluebike bikeshare system

Explore the potential for e-cargo bike deliveries

Through MetroCommon, we ground our work in inclusive community engagement and support communities in centering equity in plans, policies, and programs.





Benefits of EVs

Reduced Greenhouse Gas Emissions

Produce zero tailpipe emissions.

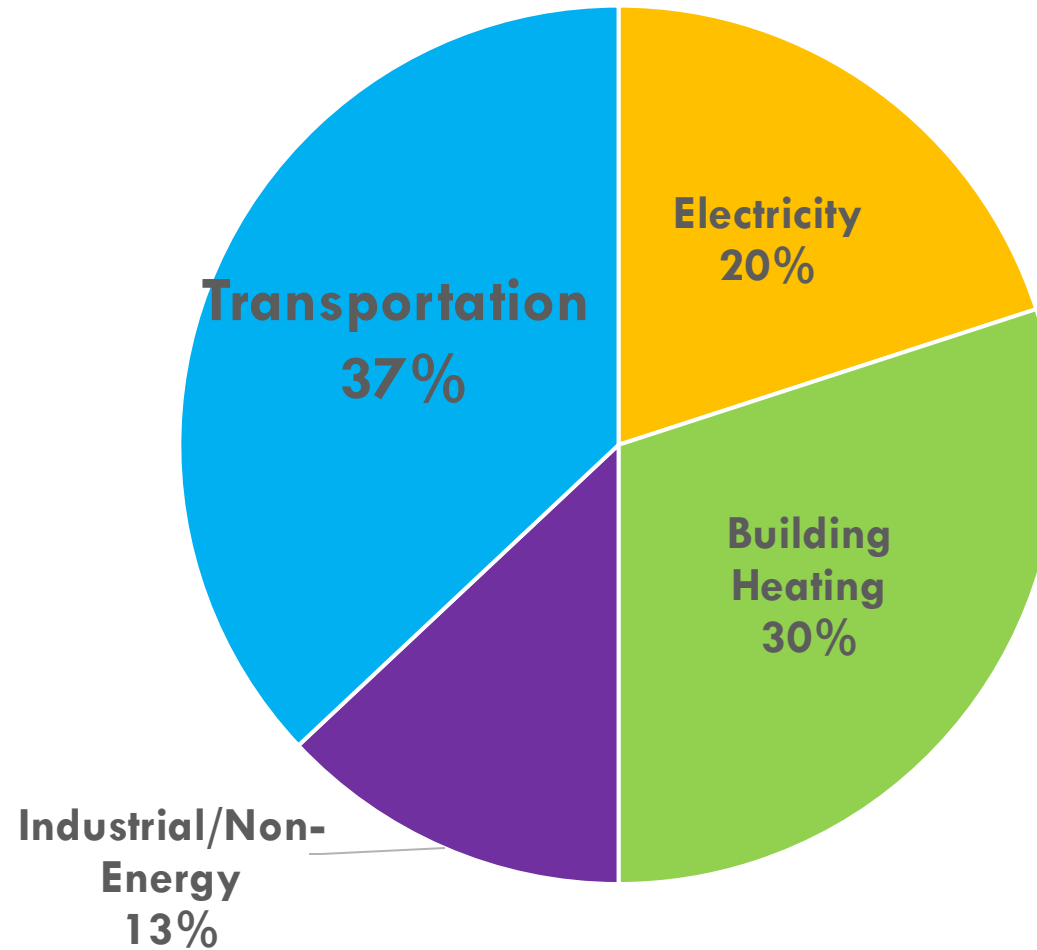
Health Benefits

Lower rates of respiratory diseases and related healthcare costs.

Lower Noise Pollution

Quieter than traditional vehicles.

Transportation is the Largest Source of GHGs in Massachusetts



Source: Massachusetts Clean Energy and Climate Plan for 2025/2030





Clean Energy and Climate Plan 2025/2040

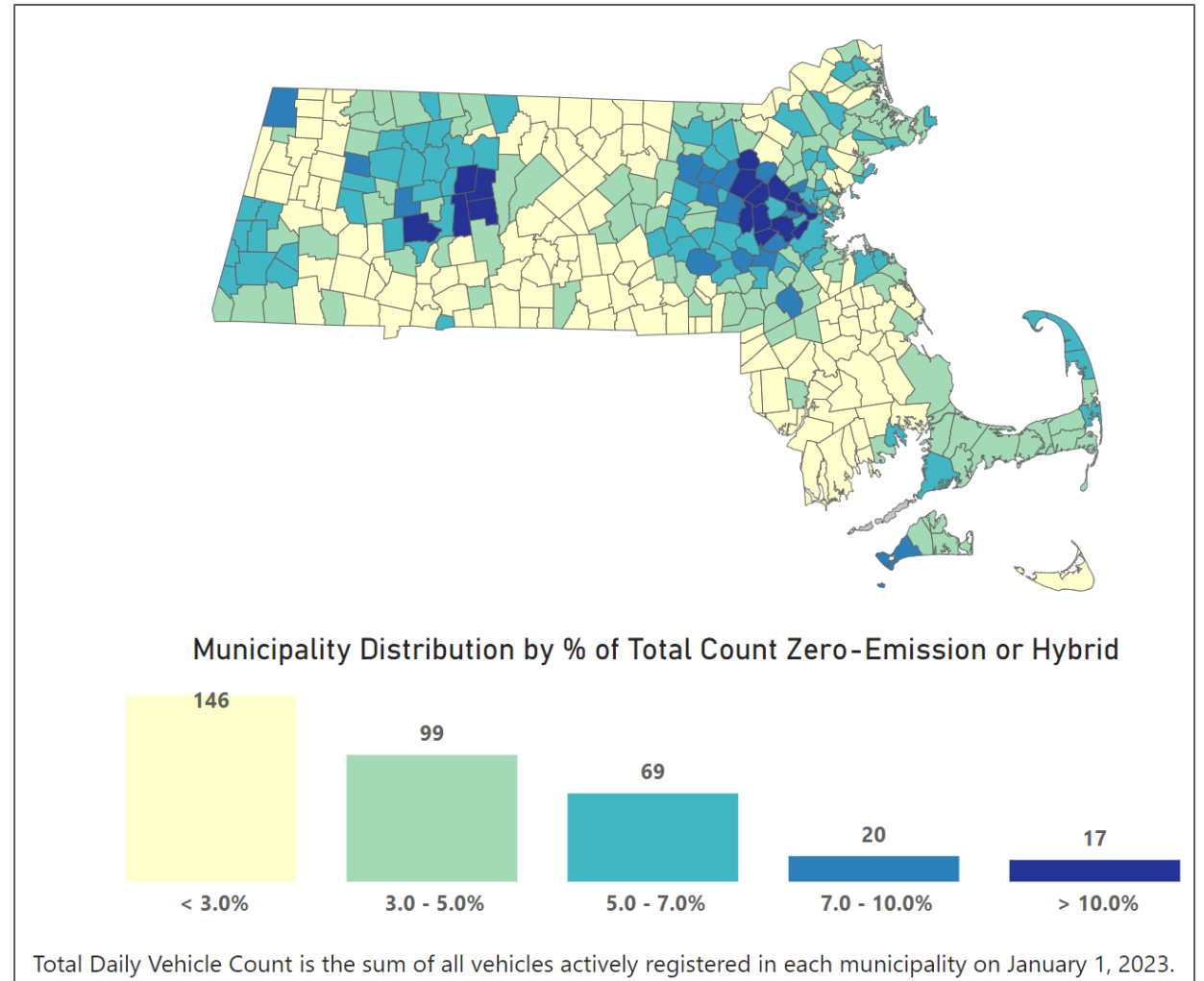
Proposes 900,000 EVs – fifteen times today's number by 2030.

An Act Driving Clean Energy and Offshore Wind (adopted August 2022)

Mandates all new cars sold in the state to be zero-emission starting 2035.

Electric Vehicles and Charging Stations in Massachusetts

- Approx 70,000 zero-emission vehicles registered in Massachusetts
- 4,600 EV public charging stations deployed statewide



Source: Massachusetts Vehicle Census

Proposed Program for EV Charging in Greater Boston

Federal Highway Administration (FHWA)

Charging and Fueling Infrastructure Discretionary Grant Program



MAPC applied on behalf of ten municipalities with Justice 40 Communities

Participating Municipalities	
Cambridge	Malden
Chelsea	Revere
Everett	Quincy
Framingham	Somerville
Lynn	Winthrop

- Plan for and deploy EV charging infrastructure located in publicly accessible parking lots and curbside, in close proximity to dense areas of multi-family housing with limited off-street parking.
- Develop a strategy to support EV carsharing.



Proposed Program for EV Charging in Greater Boston



EV Infrastructure

Install, operate, and maintain approximately:

- 295 Level 2 charging stations (off-street and curbside); and
- 25 Level 3 charging stations (off-street)
- Targeted deployment and equitable distribution within the ten municipalities.

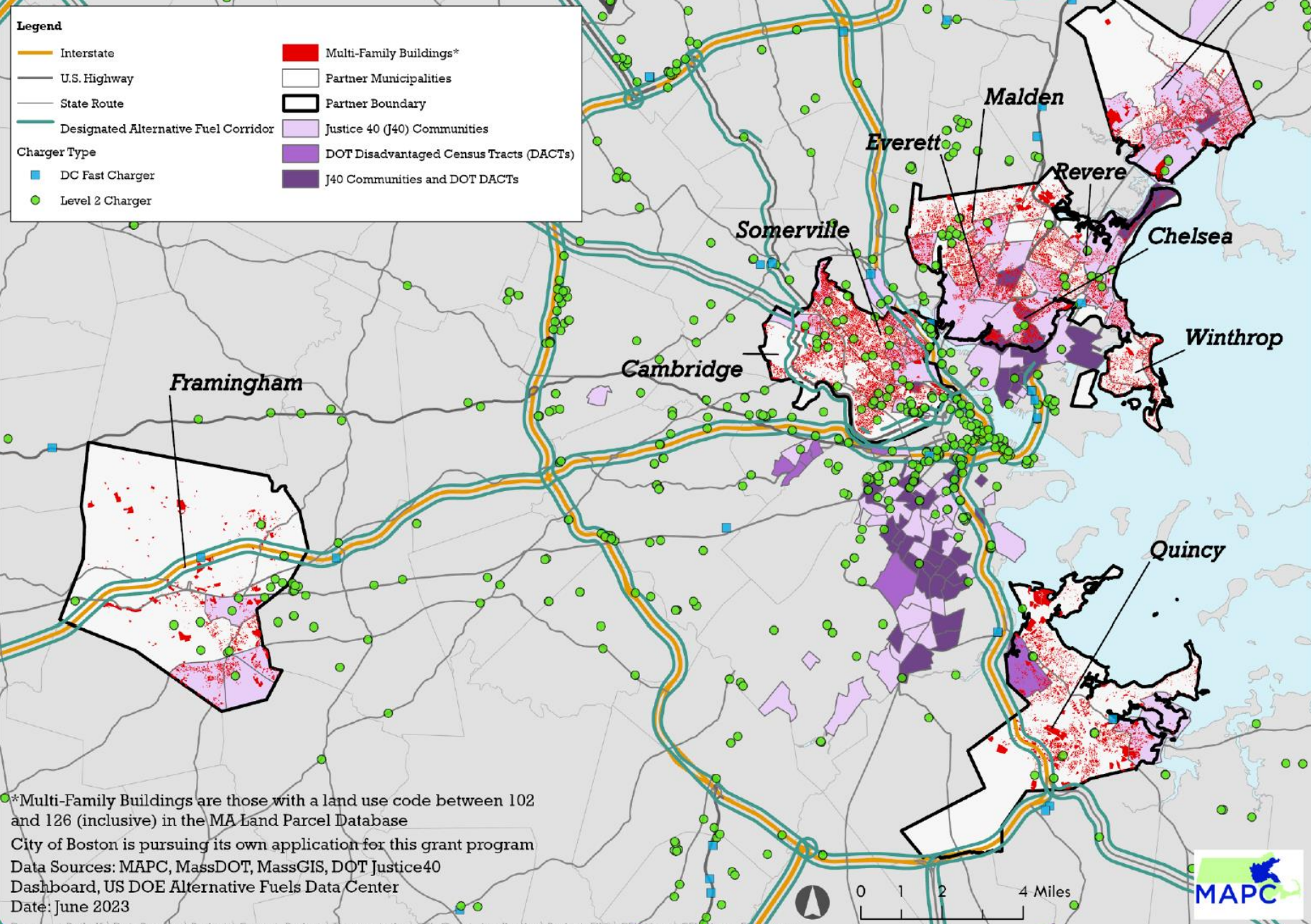
Community Engagement and Education

- Gather public input as sites are refined from the neighborhood level to specific streets and addresses.
- Educate residents on the operation of EV charging stations after they are installed.



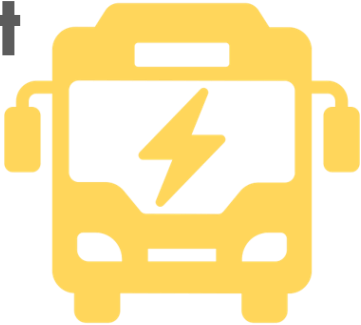
Existing Charging Network with Multi-Family Buildings

Map C



Regional School Fleet Electrification in Metro-West

Study pathways to electrification of school transportation for 21 school districts in Metro-West.



Will provide equal access to clean and safe transportation for all students.

- Determine methods to advance equitable access:
 - Focus on EJ communities.
 - Explore involvement of the METCO program (Metropolitan Council for Educational Opportunity).
- Consider opportunities for funding and regional collaboration:
 - US EPA Clean School Bus Program – multi-year grant centered on EJ and equity considerations.

5 school districts in MA were awarded 76 rebates totaling \$29.57 million in 2022.

School Districts	
Fall River	Lower Pioneer Valley Educational Collaborative
Lawrence	Upper Cape Cod Vocational Technical
New Bedford	

Right-to-Charge Legislation



Since most current EV owners are single-family homeowners who charge at home, providing access to home charging for those in multi-unit dwellings is crucial to wider EV adoption.

- Right-to-Charge legislation prevents property owners, landlords, and homeowner associations from unreasonably limiting residents' ability to install EV chargers.
- To date, 11 states have passed Right to Charge legislation.
- Giving homeowners and renters the right to install charging stations is likely to incentivize building chargers into new or existing infrastructure and remove barriers that individuals may experience when considering switching to an EV.

H.1303 An Act to Ensure the Right to Install Electric Vehicle Charging Stations was recently filed in Massachusetts.

MAPC will work with the legislative sponsors to extend this right to renters in addition to homeowners.



Advancing EV Equity: State Initiatives



Utility Electric Vehicle Infrastructure Programs

- Starting in 2023, Eversource and National Grid are offering extensive Make-Ready programs and rebates for charging installation over the next several years for public, workplace, and residential customers.
- Additional funding is provided for locations that meet EJ criteria.

EVERSOURCE

nationalgrid

Source: <https://blog.greenenergyconsumers.org/blog/400-million-for-electric-car-charging-in-massachusetts>



Massachusetts Rebate Program



Changes from 2022 Climate Bill now in effect which prioritize equitable access to EV adoption.

New MOR-EV program elements include:

- Launch of rebates at the point-of-sale.
- \$3,500 rebate for used EVs for income-qualifying residents.
- \$1,500 rebate adder for income-qualifying residents called MOR-EV+ (in addition to the standard rebate for new or used EVs).

MOR-EV Trucks

- Rebate adder by 10% for trucks registered in a zip code which contains an EJ criteria block or can demonstrate greater than 50% of operations occur within one.

Source: <https://mor-ev.org/>

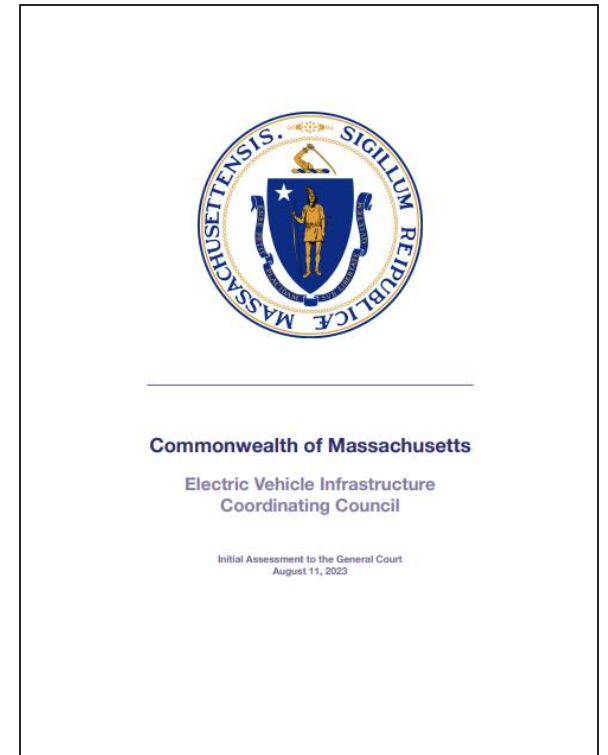


Electric Vehicle Infrastructure Coordinating Council

The Climate Bill requires that the EVICC assess and report on strategies and plans necessary to deploy electric vehicle charging infrastructure to establish an equitable, interconnected, accessible and reliable electric vehicle charging network.

Initial Assessment Report and Recommendations to the Legislature

- Executive branch agencies will focus the deployment of publicly available funds for environmental justice populations and into rural areas, with a particular focus on reaching low-income residents, to ensure that the transition to electric vehicles is equitable.
- MAPC is a Council Member.



Source:

<https://www.mass.gov/info-details/electric-vehicle-infrastructure-coordinating-council-evicc>

Resources

MAPC's Electric Vehicle Website

<https://www.mapc.org/our-work/expertise/clean-energy/clean-vehicle-projects/>

Electric Vehicle Infrastructure Coordinating Council

<https://www.mass.gov/info-details/electric-vehicle-infrastructure-coordinating-council-evicc>

US EPA's Clean School Bus Program

<https://www.epa.gov/cleanschoolbus>

Federal Programs

<https://www.mapc.org/resource-library/infrastructure-opportunity/>



Thank You!

Alison Felix
Principal Planner and
Emerging Technologies
Specialist

afelix@mapc.org

