



EXECUTIVE SUMMARY

This report is a close analysis of electric vehicle (EV) adoption within Worcester County's sixty municipalities.

In 2025, according to the International Energy Agency, 25% of all vehicles sold worldwide were either battery electric or plug-in hybrids. In Worcester County, **the number of battery electric and plug-in hybrid registrations (together, "zero-emissions vehicles" as defined by the Massachusetts Vehicle Census, or MVC) grew from 0.44% of all vehicles in January 2021 to 2.21% of all vehicles in January 2026.** While the number of registered zero-emissions vehicles remains low in Worcester County, it is growing.

A STATEWIDE ANALYSIS

The first part of this report, **pages 5-7**, puts Worcester County in context with the rest of the state. When adjusted for population, Worcester County ranked ninth of fourteen counties in terms of zero-emissions vehicle miles traveled in 2025.

Map 2, on **page 7**, shows where **internal combustion engine vehicles (ICEV), hybrid, and zero-emissions vehicles** are located across Worcester County.

A MUNICIPAL ANALYSIS

Pages 8-10 examine zero-emission vehicle adoption on a municipal basis. The analysis focuses on vehicle miles traveled (VMT). In 2025, more than 10% of the community of Harvard's vehicle miles traveled came from zero-emissions vehicles, the highest share among Worcester County's sixty municipalities. Indeed, this analysis shows that the share of VMT from zero-emission vehicles is much higher in the eastern third of the County. The western third of the County has much lower percentages.

The number of ICEV registered in Worcester County on January 1, 2021 and on January 1, 2026 decreased by 1,044, but hybrid and zero-emissions vehicles saw increases of 20,896 and 12,417, respectively. **While the number of overall vehicles registered in the County has increased, it has been driven by non-ICEV.** Shrewsbury saw a notable shift: hybrid and zero-emissions vehicles grew by 1,471 and 1,387, respectively, but ICEV decreased by 1,821!

Worcester County municipalities see zero-emissions vehicles being driven nearly 10 miles more a day than ICEV.

UNDERSTANDING OWNERSHIP

Starting on **page 11**, The Research Bureau looked at zero-emissions VMT at the census tract level, finding, again, that census tracts from Harvard to Grafton, and east from there, tend to have higher share of VMT from zero-emissions vehicles. Using Census Bureau demographic data (**pages**

12-15), **The Research Bureau found that tracts with a higher percentage of Bachelor's Degrees, residents working from home, and higher median household incomes tend to have higher percentages of zero-emissions VMT.**

This finding is confirmed in the academic literature, which generally finds that consumers with higher incomes have easier access to EVs. While the factors in this analysis cannot be examined in a vacuum, as they are all related, they do provide a start for understanding barriers to adoption.

Acquiring an EV can be expensive, as data on **page 15** shows. According to Kelley Blue Book, in December 2025 the average new car was \$50,326 but the average EV was more, at \$58,034. There have been some attempts to mitigate that cost, such as the financial incentive provided by the "Massachusetts Offers Rebates on Electric Vehicles" program (MOR-EV), described on **pages 15 and 16**. Since 2023, Harvard residents have received more than \$571,000 in rebates, or \$81 per person.

Charging is another barrier to EV adoption (**pages 17 to 19**). Unlike ICEV, EVs can be charged at home. However, this leaves many renters, including affluent ones, relying on public chargers. Although there are more than 1,000 charging ports in Worcester County, 78% of them are Level 2, which can take 4-10 hours to charge to 80% depending on battery size; and many are available only to employees, students, or visitors to the institutions where they are located. Gas stations, on the other hand, can move dozens if not hundreds of vehicles through an hour. As charging infrastructure becomes more ubiquitous this will become less of a barrier, but it will remain a serious consideration even among the most interested buyers until then.

RECOMMENDATIONS

Although cheaper EVs will help encourage purchases, at a state and municipal level we need a concerted effort to supercharge infrastructure to increase adoption.

- The Commonwealth **must commit to spending on EV charging stations** across the state's highways, including money that has already been granted.
- The **density of fully public charging stations locally must increase**, including more DC fast chargers.
- Getting **municipal feedback on where to put chargers, especially curb-side, is crucial**, and we must encourage all municipalities to do so.
- Municipalities should **offer zoning incentives** to encourage EV charging infrastructure construction.