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Increasing Access to Zero-Emissions Vehicles at Dealerships Could Increase Adoption and Improve Equity Outcomes

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Issue

California has set a target of achieving 100% zero-emission vehicle (ZEV) sales by 2035. While the state has made substantial progress, with ZEVs accounting for roughly 25% of new vehicle sales in 2025, adoption remains uneven across communities. Disadvantaged communities¹ (DACs), which face disproportionate exposure to air pollution, continue to lag in ZEV uptake. Most DAC-related policy efforts to date have focused on demand-side interventions, such as consumer purchase incentives, rather than supply-side approaches that increase vehicle availability. Because more than half of ZEV sales in California occur through franchised dealerships, they are a critical gateway through which consumers access these vehicles and may represent an important leverage point for increasing adoption.

To better understand the linkage between ZEV adoption and dealerships, we examined levels of access to ZEVs at car dealerships across California and rates of ZEV adoption in surrounding areas. Each census tract was assigned a ZEV accessibility score that combined ZEV inventory at nearby dealerships and distance to dealerships. While our study can help determine whether dealership availability is associated with higher rates of nearby ZEV adoption, the results should be interpreted as correlational rather than causal.

Key Research Findings

Census tracts with higher ZEV accessibility scores had higher ZEV adoption rates. Based on our analysis, a 1% increase in ZEV accessibility at dealerships is associated with a 0.173% increase in ZEV adoption rates in DACs and 0.125% in other communities. This means that if the number of ZEVs accessible to a census tract in a DAC doubled, an associated 17.3% increase in ZEV adoption could result (relative to the current ZEV percentage in the census tract). This relationship remained significant even after controlling for income, demographics, charging infrastructure, and consumer incentives. This finding suggests that physical access to vehicles is a key factor shaping market outcomes. Limited inventory or long travel distances to dealerships may suppress adoption, even where consumer interest exists.

Limited ZEV availability at dealerships may be constraining adoption. The additional increase in ZEV adoption in DACs compared to non-DACs suggest there is unrealized (“latent”) demand, whereby current supply constraints limit adoption. Lower adoption in disadvantaged communities may therefore reflect barriers in access, not simply differences in consumer preferences or income.

Dealership-based incentive programs are associated with higher ZEV adoption. If a dealership participated in a program such as the Drive Clean Assistance Program, this was associated with a 0.016% increase in ZEV adoption. This finding suggests dealership-based incentives may help reduce cost barriers at the point of sale.

Increased ZEV access in one area boosts adoption in neighboring areas. A 1% increase in accessibility in a census tract is associated with a 0.081% increase in local adoption in neighboring census tracts. ZEV adoption itself showed a similar neighborhood effect, where a 1% increase in ZEV adoption in one tract is associated with a 0.17% increase in adoption in the adjacent tracts. This finding is consistent with other research and suggests that a single well-stocked dealership can influence adoption across multiple communities.

Persistent structural inequities remain. Even after controlling for income, demographics, and charging infrastructure, disadvantaged communities show significantly lower ZEV adoption than other communities. This may reflect broader structural barriers, including historical disinvestment, limited access to information, financing constraints, and uneven dealership engagement. The increase in ZEV adoption associated with increased access suggests that supply-side interventions targeted at dealerships in those communities may be effective at boosting adoption in these areas.

Policy Implications

Policymakers may want to consider minimum ZEV inventory requirements. To address widespread undersupply, the state could explore minimum ZEV allocation requirements for dealerships serving disadvantaged communities.

Dealership-based incentive programs could be expanded. Programs such as the Drive Clean Assistance Program could be expanded and more strategically targeted to increase participation among dealerships in and near disadvantaged communities. These programs are especially effective because they reduce barriers at the point of sale.

Incentives could be better aligned with physical access to vehicles. Dealership-based incentives may be most effective when deployed where ZEV inventory is available, but adoption remains low.

Regional dealership strategies may help address inequities. Because increased ZEV accessibility in one census tract is associated with higher adoption in adjacent areas, policymakers could consider geographically targeted dealership strategies designed to maximize regional spillover effects. For example, point-of-sale programs in established ZEV markets adjacent to low-adoption areas or disadvantaged communities may help expand adoption more effectively than programs focused solely on already high-adoption affluent areas.

More Information

This policy brief is drawn from the report “Assessing the role of dealerships in expanding equitable access to zero-emission vehicles in California” prepared by Anya Robinson, Aviv Steren, and Gil Tal with the University of California, Davis. The report can be found here: <https://ucits.org/projects/2025-40>. For more information, please contact Anya Robinson at anrobinson@ucdavis.edu.

¹DACs (Disadvantaged Communities) are communities identified by CalEPA as disproportionately burdened by pollution and environmental, public health, and socioeconomic challenges. A portion of proceeds from the state’s Cap-and-Invest Program are targeted to these communities.

²Chakraborty, D., Bunch, D. S., Brownstone, D., Xu, B., & Tal, G. (2022). Plug-in electric vehicle diffusion in California: Role of exposure to new technology at home and work. *Transportation Research Part A: Policy and Practice*, 156, 133–151. <https://doi.org/10.1016/j.tra.2021.12.005>

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