ACHIEVE FOCUS:

SOLUTIONS FOR EXPANDING EQUITABLE ACCESS TO EVS AND E-MOBILITY









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EDGEMENTS

COVER: ISTOCK I ALAMY

INTRODUCTION

Over the past decade, more transportation electrification incentives have become available to encourage people to buy electric vehicles (EVs) and reduce emissions. Federal tax credits, state rebates, and utility incentives have helped lower the cost of EV ownership, making it easier for people to switch from gas-powered cars. These programs have been effective in cutting emissions by speeding up the shift to cleaner transportation, which in turn reduces air pollution and the overall carbon footprint of driving.

However, these incentives have not been widely available in lower-income communities. Many programs are not designed to meet the needs of these communities or do not offer enough financial support to cover the high upfront costs of an EV. Often, people are required to buy the vehicle first and then apply for rebates, which is a major barrier for lower-income individuals who may not have the money to make that initial purchase. This structure tends to favor wealthier buyers, leaving lower-income groups out.

Communication barriers also prevent people in lower-income communities from accessing EV incentives. A <u>GreenLatinos</u> pilot program in two majority Latino communities found that low literacy and the lack of information in Spanish made it hard for people to take advantage of these programs. Without clear, accessible information, potential EV users are unlikely to apply for benefits that could help them make the switch to clean transportation. These language and communication barriers leave lower-income communities underserved by existing programs.

The wealth and wage gap in underserved communities, especially in BIPOC and lowincome areas, creates even more challenges for EV adoption. Many people in these communities don't have enough savings, a good credit score, or access to affordable loans, even when incentives are available. Without the financial resources to afford an EV, these groups are stuck relying on older, more polluting vehicles, while wealthier communities benefit from cleaner vehicles.

There is an urgent need for transportation incentives that are designed to help lowerincome communities. These programs should focus on breaking down financial and communication barriers so that everyone can access clean, affordable transportation. By creating incentives that meet the needs of underserved communities, we can help ensure that the shift to cleaner transportation is fair and benefits all groups equally.

ACRONYMS

DCFC: DC Fast Chargers E-bike: Electric Bike EV: Electric Vehicle EVSE: Electric Vehicle Supply Equipment MOR-EV: Massachusetts Offers Rebates for Electric Vehicles MSRP: Manufacturer's Suggested Retail Price PEV: Plug-in Electric Vehicle TEEM: Towards Equitable Electric Mobility

REBATES FOR LOW-INCOME DRIVERS

While Electric Vehicle (EV) adoption is growing, low-income communities and communities of color continue to face the greatest obstacles to adopting EVs. One key issue is the limited availability of charging infrastructure, particularly for renters or those living in apartment buildings, where home charging isn't always an option. Public charging stations are often scarce in these neighborhoods, making EV ownership less convenient and practical. Another barrier is the cost, not just of buying the car but also concerns about repair and maintenance, even though EVs generally cost less to maintain than traditional cars. Additionally, many individuals in these communities may feel they lack sufficient knowledge about EVs, making them hesitant to consider buying one. This lack of information, combined with factors like discriminatory lending practices, makes it more challenging to switch to EVs. This is especially troubling because these communities often face the most severe health impacts from vehicle pollution and would benefit significantly from cleaner air if EVs were more widely adopted. Despite the lower maintenance and fuel costs, the upfront price of EVs is often higher than gas-powered cars. To address this, incentives can take many forms, some of the most popular include:

Tax credits and point-of-sale credits

EV incentives offer significant benefits to lowerincome families and underserved groups by making EVs more affordable and accessible. These incentives reduce the upfront costs of purchasing EVs, which is especially important for families with limited budgets. Lower-income households spend a larger share of their income on transportation costs, and EVs, with their lower fueling and maintenance expenses, can provide long-term savings. Additionally, programs that focus on underserved communities that are often most impacted by vehicle pollution can help address environmental justice issues. By supporting EV adoption in these areas, incentives also contribute to cleaner air and healthier living conditions for people who need it the most.

Tax credits have traditionally required people to have taxable income and are often paid back later, which doesn't always help low- and middleincome families when they need it most. Recent changes to federal tax credits (and some state tax credits) allow drivers to receive tax credits as an instant rebate "on the hood". For Federal tax credits, dealers must be registered with the IRS (<u>map of registered dealers</u>). Dealerships are key to accessing EV incentives in many states, so be sure to check with them.

According to research by TEEM and The Greenlining Institute, to increase the number of low-and moderate-income applicants, electric vehicle rebate programs should include:

- High rebate amounts for low-income qualified applicants
- Rebates that can be applied directly to the purchase or lease of a new or used EV
- Rebates are not treated as taxable income and can be combined with other incentive programs such as charging installation rebates to further increase cost savings
- Public education and a plan for ease of access to the program

Direct incentives

Direct incentives are simple, easy to focus on benefitting specific groups, and can be fast acting. Direct incentives usually come in the form of cash rebates. Cash rebates and vouchers help lower-income drivers by cutting the cost of electric vehicles right away, rather than making them wait for tax credits. This makes it easier for lower-income households to purchase an EV since they reduce the upfront cost. Having clear rules and transparency for direct incentive programs is important to make sure they actually help the people who need them most, for example lower-income communities. Transparency allows everyone to see how the benefits are given out, and it makes sure no group gets left behind or treated unfairly.

Community-based programs

These programs help communities reduce multiple barriers to EV adoption at once. Community-based programs might include:

- EV loan programs with a local credit union: Vehicles are an expensive purchase and having access to competitive loans is key to improving consumer access to EVs.
- Outreach and financing for gig drivers: Gig drivers are high-mileage drivers who often may have more limited resources making it important to provide education and incentives.
- Community car-sharing initiatives: Car share programs provide access to consumers who do not necessarily have to, may not want to, or be able to own a vehicle.
- Building neighborhood-accessible chargers: For Americans that do not currently have access to charging at home, well-sited public Level 2 and DCFC will offer charging opportunities that enable Americans to drive electric.

- Support renters' access to charging.
- Educational campaigns.

Low-income communities and communities of color often live near highways and freight routes where cars and large trucks contribute heavily to air pollution. Medium- and heavy-duty vehicles in particular release harmful diesel emissions, making health problems like asthma, heart disease, and cancer more common in these areas. This pollution adds to the already unequal environmental burdens caused by decades of disinvestment and discriminatory policies. To fix this, electric vehicles (EVs), including clean trucks and buses, need to be more affordable and accessible in these communities. States, cities, and utilities should create programs that focus on reducing truck emissions and ensuring everyone, no matter their race or income, can breathe cleaner air and can access clean transportation options. Without these targeted efforts, the people most impacted by vehicle pollution will continue to suffer.

Example incentive programs

Colorado: EV rebate program

Colorado taxpayers are eligible for a <u>state tax</u> <u>credit</u> of \$5,000 for the purchase or lease of a new EV on or after July 1, 2023 with a manufacturer's suggested retail price (MSRP) up to \$80,000. Lease agreements must have an initial term of at least two years. Beginning January 1, 2024, Coloradans purchasing an EV with an MSRP up to \$35,000 will be eligible for an additional \$2,500 tax credit.

Illinois: EV rebate program

The Illinois <u>Electric Vehicle Rebate Program</u> allows residents that purchase a new or used allelectric vehicle from an Illinois licensed dealer: \$4,000 rebate for the purchase of an all-electric vehicle; and, \$1,500 rebate for the purchase of an all-electric motorcycle. The <u>Incentive program for</u> <u>New Plug-in Electric Vehicles</u> is available for the purchase or lease of a new plug-in electric vehicle (PEV). Incentives are available on a first-come, first-served basis for income-qualified individuals, with greater incentives available for those with lower incomes and for those who purchase battery electric vehicles.

Maine

Efficiency Maine's EV Accelerator program offers rebates up to \$7,500 to Maine residents, businesses, and government entities for the purchase or lease of new or used electric vehicles and plug-in hybrid electric vehicles. There are enhanced incentives for qualified low- and moderate-income drivers.

New York

<u>New York's Drive Clean Rebate program offers</u> rebates of up to \$2,000 for the purchase or lease of a new electric car. The rebate amount depends on the vehicle's battery-only range, with up to \$2,000 off for vehicles with a range greater than 200 miles.

Oregon: Charge ahead rebate and community charging rebate

The <u>Charge Ahead Rebate</u> provides low- to moderate-income households and low-income service providers a rebate of up to \$7,500 toward the purchase or lease of a new vehicle, and \$5,000 for a used vehicle.

Maryland: EV excise tax credit and EVSE rebate program

The Maryland Excise Tax Credit provides \$3,000 for qualifying zero-emission plug-in electric or fuel cell electric vehicles. Additionally, it offers a rebate of 50% of the cost of Electric Vehicle Charging Equipment and Installation. The rebate is up to \$700 for individuals; and \$5,000 for businesses.

Massachusetts: MOR-EV program

One aim of the <u>MOR-EV</u> program is to provide more equitable access to EVs. The program includes \$3,500 rebates for <u>new or used cars</u>. Incomequalifying drivers can receive an additional rebate of \$1,500. There is a \$1,000 additional rebate for trading-in a <u>qualifying vehicle</u>. Rebates for new and used EVs are available at the time of purchase or lease at participating dealerships as well as after an eligible purchase or lease. In addition, the MOR-



EV Trucks program provides rebates for <u>pick-up</u> <u>trucks and Class 2b vehicles</u> as well as Class 3-8 vehicles.

New Jersey

The <u>Charge Up New Jersey EV program</u> offers up to \$4,000 in rebates for the purchase of new EVs. The program also includes point-of-sale incentives, making it easier for low-income individuals to afford an EV.

Vermont

<u>The State of Vermont</u> offers \$1,500 to \$5,000 for eligible epurchases of new EVs, up to \$5,000 for used high-efficiency vehicles. They offer a program for <u>new electric vehicles</u>, <u>MileageSmart for used</u> vehicles, and a fleet electrification program.

The <u>Replace Your Ride</u> program encourages owners of older internal combustion engine vehicles to switch to cleaner transportation options by offering an incentive of up to \$5,000 to scrap the 10+ year old high-polluting vehicle. The program offers two options on how to use the incentive:

- 1. Participants may apply their voucher towards the purchase or lease of a new or used PEV;
- 2. Participants seeking a more flexible option may apply their voucher towards active or shared mobility options, including the purchase of a bicycle, electric bicycle, or fully electric motorcycle; and/or shared mobility services that reduce the need for vehicle ownership.

EV CARSHARING

Carsharing is an important way to help underserved communities by providing flexible and affordable transportation options that reduce the need for personal vehicles. By letting multiple users share one vehicle, carsharing not only decreases the number of cars on the road but also meets the specific transportation needs of rural and low-income areas. This creates a valuable opportunity to bring electric vehicles (EVs) into these communities, supporting more sustainable transportation solutions.

Equity-focused carshare programs are especially beneficial for underserved populations. They aim to close gaps in transportation access, affordability, and availability. Some key features of these programs include:

- **Affordability:** Lower fees or subsidized rates make carsharing easier for low-income individuals to access.
- **Community partnerships:** Working with local organizations helps tailor programs to meet the unique needs of marginalized communities.
- Accessible locations: Placing carshare vehicles in areas with limited public transit options ensures that residents without personal cars can access them.
- **Multiple vehicle options:** Offering a range of vehicle types, including EVs, meets the different needs and preferences of community members.
- **Inclusive policies:** Creating policies that support all community members, such as flexible payment plans and fewer age restrictions, encourages broader participation.

• **Community engagement:** Involving local residents in planning and implementing the program helps ensure it addresses their transportation challenges.

These initiatives improve mobility for people who rely on public transportation, biking, or walking, ultimately promoting fairness and sustainability in urban areas. When developing an equityfocused carshare program, it's important to consider a few key factors:

- **Diverse funding sources:** Looking for various ways to fund the program can help ensure its long-term success.
- **Careful site selection:** Choosing the right locations, technology platforms, and vehicle types helps the program meet community needs.
- Educational outreach: Providing information about EVs can help users understand and feel comfortable with these vehicles.
- **Targeted marketing:** Focusing marketing efforts on specific audiences can make the program more visible and accessible.
- **Community promotion partnerships:** Collaborating with organizations that can effectively promote carsharing within the community can boost engagement and usage.



Example EV carsharing programs

California

Miocar is a 100% EV car sharing service available in Richmond, Stockton, Escalon, and Tulare/Kern County. The service is available to anyone over 21 years of age with a valid driver's license, relatively clean driving record and a valid credit, debit or bank card. BlueLA is tailored for low-income residents. Members are not required to return the vehicle to the same place they picked it up. This means working families can pick up an EV from near their home and drop it off near a public transportation hub, making the program more flexible and convenient. It's an excellent example that demonstrates how a community-invested car-sharing program can increase the mobility of underserved communities in a successful and sustainable way. Gig Car Share works in partnership with the city of Sacramento and Electrify America to provide hundreds of freefloating Chevy Bolts in the city. Through an app, users can find a car near them, unlock it, use it, and park it in any approved parking space that is listed.

Colorado

<u>Colorado Carshare</u> aims to empower a car-free lifestyle with a positive impact on health, wealth, and shared environment. The program is designed to provide carsharing as a service rather than a business, and is focused on user needs. Lowincome residents registered in a qualified affordable housing program such as Denver Housing Authority or Boulder Housing Partners can contact the program for reduced rates.

Minnesota

Multifamily EV Carshare Pilot Project by Rideshare provider HOURCAR. The pilot will add 50 all-electric CEV pilot and rural CRuSE vehicles. The program places new EV charger hubs at multi-family complexes around the Twin Cities metropolitan area, especially at affordable housing sites. The project aims to increase electric mobility options for residents at income levels that have been traditionally underserved while also decreasing barriers to building out electric vehicle charging stations at multifamily dwellings. Any member will be able to use the cars placed at these sites by reserving a car in advance for a trip length of up to three days. When finished using the vehicle, car can simply be returned to original location and plugged back into the Level 2 charger provided on site.

Multi-state

<u>GoForth carshare</u> aims to provide access to affordable shared EVs at affordable housing locations across the country. A Pacific Northwest pilot has expanded to Detroit, Kalamazoo, Albuquerque and Seattle, with plans for expansion to Idaho, North Carolina, Nevada, Missouri and Illinois. This project builds on the successes of the <u>CEV pilot</u> and rural <u>CRuSE</u> project, both in Oregon. A focus on accessibility includes apps published in multiple languages, intentional customer service to reduce technology barriers, and rates as low as \$4 per hour.

ADDITIONAL RESOURCES

- NRDC and GeenLatinos making EVs accesible to all
- Forth EV carsharing best practices
- Realizing carshare benefits in priority populations
- Clean cities EV carshare lessons

CHARGING ACCESS IN UNDERSERVED COMMUNITIES

For EVs to be a viable option in any community, vehicle charging needs to be consistent, safe and affordable. Being able to charge at, or near home is important for all EV drivers. While it can be relatively easy to install a charger at a single family home, it is more complex, and sometimes impossible for renters or anyone with shared parking. Incentives may supply a variety of infrastructure to meet EV drivers' needs, but most focus on Level 2 or DC fast charging. In addition, charging incentives often will set aside funds specifically for underserved communities or for federally designated Justice40 communities.

Example charging access programs

Colorado

<u>Charge Ahead Colorado</u> provides grant funding for community-based Level 2 and DC fast-charging stations. The program aims to improve air quality, reduce transportation emissions, and increase adoption of electric vehicles across Colorado with incentives between \$4,500 and \$70,000 depending on the project, and additional incentives for disproportionately affected communities.

New York

The <u>Charge NY</u> initiative focuses on increasing EV charging stations and promoting EVs in disadvantaged communities as part of the state's broader efforts to reduce greenhouse gas emissions and promote environmental justice.

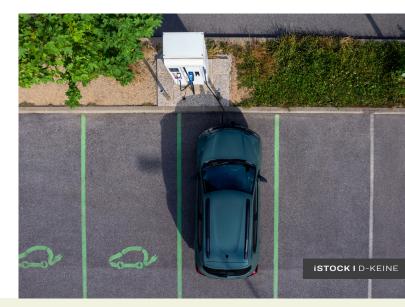
The <u>Bronx is Breathing</u> project aims to catalyze the adoption of electric trucks in the Hunts Point neighborhood and will launch a supportive ecosystem for zero-emission freight in the state's busiest trucking destination. The project's keystone is a new public, multi-user freight charging hub on a former brownfield site, which will also host a worker-owned electric freight start-up and provide charging for new refrigerated EVs for a food rescue organization.

Oregon

The <u>Community Charging Rebate Program</u> offered by Oregon Department of Transportation, centers equity by reserving 70% of funds for projects in disadvantaged and rural communities. The Oregon Department of Transportation partnered with nonprofit Forth to provide education, outreach and technical assistance to increase awareness and reduce barriers to access. The program also provides technical assistance and seeks to expand charging in multi-family housing, workplaces, and publicly accessible parking lots.

Texas

The <u>Austin Energy Multifamily Charging Program</u> helps underserved communities by targeting owners of multi-unit dwellings, which house more than 40 percent of the city's population. Under this program, Austin Energy provides a rebate of up to \$4,000, or 50 percent of the cost, to install approved Level 2 (240V) charging stations and/ or Level 1 (120V) outlets. The utility also provides rebates up to \$15,000 to hosts who want to install a DC fast charger.



ELECTRIC MICROMOBILITY

Electric micromobility offers numerous benefits, particularly for individuals who are too young to drive, cannot drive due to health issues, cannot afford a car, prefer not to drive, or are undocumented. E-micromobility provides an accessible and environmentally friendly alternative for getting around through lightweight electricpowered vehicles like e-bikes and electric scooters. These vehicles can be used through rental programs offered by cities or companies for short-term use, or they can be self-purchased for individual ownership. The flexibility of micromobility helps bridge transportation gaps, allowing people to reach essential services, schools, and jobs more easily. Additionally, regional governments promote e-micromobility by offering various incentives, such as subsidies or discounts for using electric vehicles, to encourage adoption. By expanding access to electric and micromobility options, we can create more inclusive transportation solutions that empower everyone while contributing to cleaner air and healthier communities. Several examples of micromobility incentives include:

E-bike / e-micromobility incentives

Rebates for electric bicycles are popular in regions across the United States. E-bikes and

e-scooters are less expensive to operate than cars, and incentive programs can help lower the cost even further. As with other forms of electric transportation, e-micromobility offers lower cost, lower environmental impact, and various health benefits. E-bikes, e-scooters, and other forms of micromobility play an important role in meeting the transportation needs in underserved areas. For example, people who cannot or choose not to drive can still benefit from electric micromobility. Furthermore, electric power helps make it easier for riders to bike further and climb hills, increasing access to the physical world beyond what is possible with conventional micromobility.

Shared e-micromobility fleets

Providing shared micromobility is effective, especially in densely populated areas, and locations with a dedicated user base. Shared e-micromobility is a less expensive and more convenient way for users to access low-carbon transportation than individual e-bike ownership. Shared e-micromobility can replace vehicle use, reduce congestion, provide health and environmental benefits, and improve urban mobility/connectivity.



Example e-micromobility programs

Colorado

An e-bike tax credit is available to all Coloradans, who can get a \$450 discount off of a qualifying e-bike purchase (at the point-of-sale) from a participating retailer across the state. Not all retailers are participating; please check with retailers to see if they are participating and offering the \$450 discount. City and County of Denver e-bike rebates are available a few times per year. The standard rebates is currently \$300, with equity-focused rebates as high as \$1,400. The rebate voucher is a point-of-sale rebate applied to the price of an e-bike or e-cargo bike from a participating bike shop. This means the rebate amount is deducted from the price of the bike at the time of sale. Denver issues vouchers on a firstcome, first-served basis. They cannot be stacked with the State of Colorado tax credit.

Illinois

Chicago's <u>DIVVY</u> Bike and e-scooter share offers users a variety of e-bikes and e-scooters to travel the region. Local governments are partnering with the service providers to offer reduced fares for qualifying residents.

Massachusetts

<u>Bluebikes Boston</u> is working to expand access to bikeshare and offers unlimited rides and reduced fares to income qualified users. The service offers both electric and conventional bikes, and provides basic education to new users.

Minnesota

The <u>Minneapolis bicycle and scooter share</u> program maintains resources to help access the local bike-share, search for low-cost mobility programs for those seeking reduced fares, and offers helpful education for new users to safely use shared e-micromobility.

The <u>e-bike rebate program</u> is designed to reduce the cost for residents in Minnesota to buy a new e-bike at eligible retailers. The e-Bike Rebate provides a discount of up to \$1,500 on a qualifying e-bike. The discount is 50-75% of a buyer's qualifying expenses, depending on their income. The rebate value cannot exceed the price of the e-bike.

Texas

Austin's <u>CapMetro Bikeshare</u> offers e-bikes to reduce environmental impact, increase connectivity across the city, and while providing options for last-mile travel. This program helps residents get around without having to purchase their own e-bike. CapMetro offers lower fares for income-verified riders.

Vermont

The <u>Replace Your Ride</u> program encourages owners of older internal combustion engine vehicles to switch to cleaner transportation options by offering an incentive of up to \$5,000 to scrap the 10+ year old high-polluting vehicle. In addition to providing incentives for EVs, the program is unique in that it allows participants to apply their voucher towards active or shared mobility options, including the purchase of a bicycle, electric bicycle, fully electric motorcycle; and/or shared mobility services that reduce the need for vehicle ownership.

Washington

The Seattle Department of Transportation

<u>Scooter Share and Bike Share webpage maintains</u> helpful information on local e-bikes and e-scooter programs. This page provides information on reduced fares, instructions for using the system, and contact information to request support. Free educational events are sponsored weekly to encourage new users.

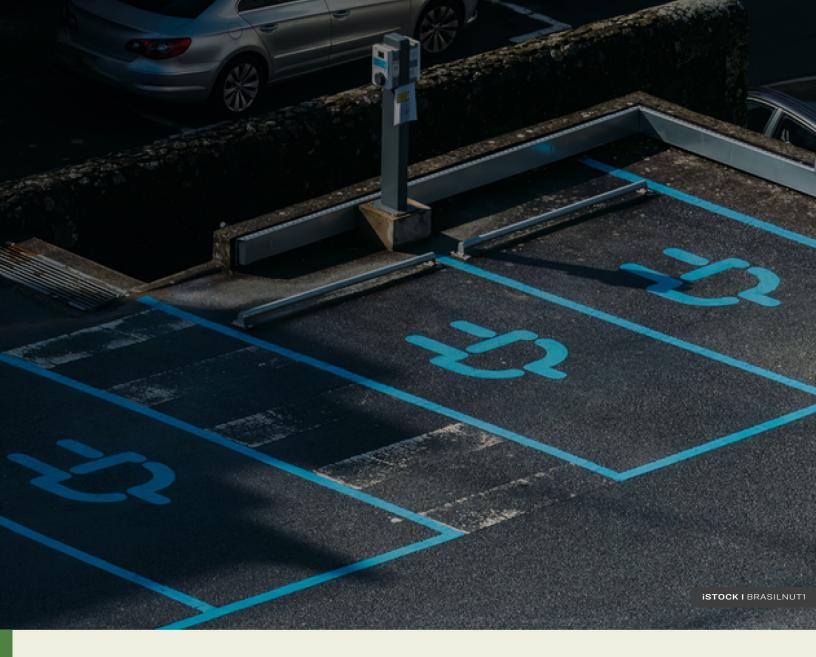
CONCLUSION

To expand equitable access to electric vehicles and e-mobility, we must implement several key solutions. Targeted financial incentives are essential, especially rebate programs that can lower the upfront costs for low-income customers. Making rebates available directly at the point-of-sale can alleviate barriers faced by those who cannot afford to wait for tax credits.

Additionally, expanding charging infrastructure in underserved areas is crucial, especially in multifamily housing and urban areas with limited public transit options.

Community-based programs, such as EV carsharing and affordable loan programs, can further support those without access to traditional financing or private vehicles. Public outreach and education campaigns are also necessary to increase awareness and understanding of EV benefits among underserved communities. Finally, ensuring that these programs are inclusive, transparent, and community-driven will help close the transportation equity gap and create a cleaner, more sustainable future for all.

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