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Best Practices For Gig Drivers' Transition to Electric Vehicles

FORTH

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Executive Summary

Transportation network company (TNC) drivers, informally known as gig drivers, travel more miles each year than the average driver. They also use hybrid vehicles much more often than the average car owner. Even so, greenhouse gas emissions for rides taken with gig drivers are higher due to "deadheading," trips taken en route to or from passenger pickups/drop-offs. Transportation network companies are thus significant contributors to greenhouse gas emissions, and their drivers could be valuable ambassadors for the shift to electric vehicles (EVs).

To address issues around environmental justice and equity, however, EVs need to be more affordable and accessible to gig drivers. On average, the earnings for a full-time gig driver in Los Angeles, the second-largest market in the U.S., barely reach above California's poverty line for a family of four. Including purchase price, fuel and maintenance, EVs cost half of what internal combustion engine vehicles cost over the lifetime of the vehicle. This means that gig drivers can benefit financially from driving EVs — but only if they can get past the hurdle of high purchase prices and financing requirements.

Gig drivers disproportionately come from historically marginalized communities, which often bear many of the negative effects of air pollution and climate change. Generations of inequity and patterns of poverty mean that many people from these communities do not have the access to higher credit ratings, lower interest rates, and conventional loans that people who live in more affluent areas enjoy. Gig drivers are contract workers, complicating their ability to qualify their income for auto loans.

Forth has found that to equitably support gig drivers' transition to EVs, successful programs must remove barriers and center TNC drivers' needs. In our experience, effective elements of a program include:

- Credit counseling and support to build savings
- Access to affordable financing for the purchase of electric vehicles
- Income-based grants to help cover down-payment costs
- Education on EV operation and charging
- Vehicle vetting and help avoiding predatory sales tactics
- Assistance qualifying for local and federal EV incentives

1. Why Electric Vehicles

With transportation now the largest contributor to greenhouse gas emissions in the United States, the country must rapidly scale adoption of EVs to meet national and international climate goals. In fact, increased adoption of electric vehicles is critical to support the U.S. goal of zero carbon emissions by 2050. Without continued aggressive action, this problem will only get worse: by 2050, global demand for freight transportation will nearly triple, and demand for passenger transport is expected to double.[1] In order to curb the worst impacts of carbon pollution, improve public health and increase energy security, the rapid electrification of the transportation sector is critical.

The significant and rapid growth in EVs has the potential to bring substantial benefits to the entire country. Electric vehicles can provide clean, reliable, affordable transportation that saves families thousands of dollars — especially as more models become available, including more used electric cars. This change brings with it an opportunity to improve equitable access to clean transportation sources. All people, regardless of where they live, should have the chance to benefit from the lower operating costs, reduced maintenance needs and improved performance of EVs.

Mobility Increases Equity

The ability to access affordable transportation directly impacts an individual's access to education, professional development opportunities, childcare and healthy food choices.[2] However, to date, much of the adoption of and investment in EVs has occurred in affluent areas, resulting in low-income communities experiencing lower awareness of EVs and their benefits, and lower availability of EV charging infrastructure.[3] Electrifying and broadening the transportation sector is a key strategy to improve mobility options for historically marginalized communities.

As more governments take this issue seriously, there is increasing funding available for programs that advance the equitable transition to electrified transportation. Notable among them is the Justice40 Initiative, in which the U.S. government aims to have 40% of the overall benefits of certain federal investments flow to communities that are marginalized, underserved and overburdened by pollution.[4]

2. Why Supporting Gig Drivers in the Transition to Electric Vehicles is Important

To cut down on gasoline use quickly, efficiently and equitably, we must refocus EV policies around the biggest gasoline users. Drivers who work for TNCs, also known as "rideshare services" or "ridehailing apps," offer a compelling opportunity to do just that. Supporting gig drivers' transition to EVs is an effective way to improve equitable ownership and access to clean transportation while also reaching a large segment of the driving public that currently operates greenhouse-gas emitting vehicles.

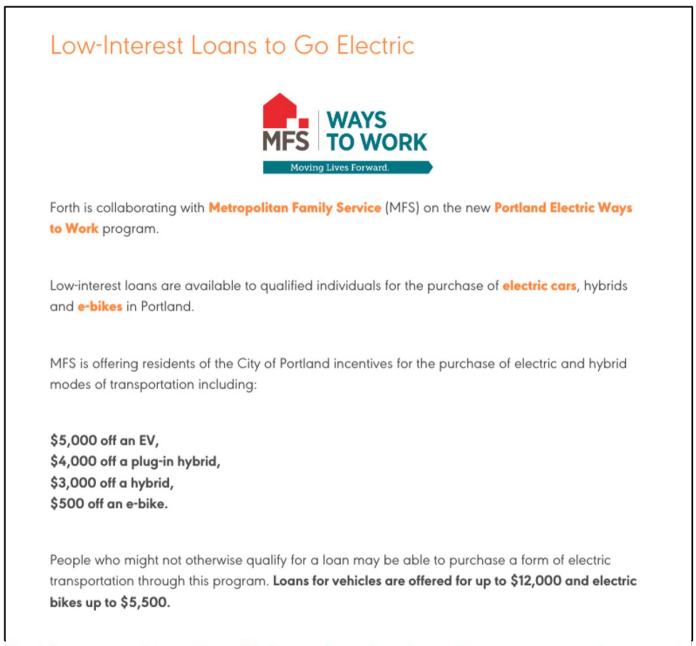
According to a study conducted by Uber in 2021, drivers on the rideshare platform use hybrid vehicles four times more than the average car owner.[5] Even so, the Union of Concerned Scientists report that carbon intensity for non-pooled rides taken on ridehailing apps is much higher than that of average-occupancy personal cars.[6] The high amount of carbon-based fuel used qualifies TNC drivers as gasoline "superusers," and thus significant contributors to greenhouse gas emissions. At the same time, industry figures put the average gross income for a full-time gig driver in Los Angeles, the second-largest market in the United States, at just under than $42,000 a year.[7] That's about $2,000 dollars above the California poverty line for a family of two adults and two children.[8]

As ridehailing giants like Uber and Lyft have grown to maturity, they have transformed America's roadways. There are now more than eight million fewer cars on the road because of rideshare, according to Lyft's 2023 Economic Impact Report.[9] Addressing the needs of TNC drivers is an important step toward further reducing the number of cars on the road. Facilitating the transition of these drivers from gasoline-powered vehicles to EV models will in turn have a significant impact on air pollution and climate change.

Currently, data shows that communities with high concentrations of EVs tend to be affluent, college-educated and overwhelmingly white.[10] Conversely, Lyft reports that 72% of gig drivers are members of BIPOC communities.[11] EVs are still extremely uncommon in these communities, however. In California, for example, the ZIP codes with the largest percentages of Latino and Black residents have among the lowest percentages of electric vehicles, averaging about 2%. In contrast, whiter, wealthier ZIP codes in the Bay Area and around Los Angeles have ownership of 10 to 15%.[12] Barriers such as financing difficulties, unfamiliarity with EV technology, long-term cost-effectiveness and limited charging access in low-income and rural areas hinder adoption.

At the same time, research shows that the experience of riding in an electric vehicle can be a valuable tool to help drive EV sales and adoption. A recent survey by Consumer Reports found that someone's willingness to buy an EV increases the more a potential buyer or someone close to them sees, rides in, or drives an electric vehicle.[13] Similarly, Lyft's Economic Impact Report found that passengers who were between cars were 38% more likely to consider purchasing an EV after having ridden in one.[14]

Rideshare drivers, then, have a key role to play in transportation electrification — that of EV ambassadors. When they are passengers in a gig driver's electric vehicle, consumers conveniently gain direct experience with an EV without having to navigate the high-pressure sales tactics of a dealership or seek out a ride-and-drive event hosted in their community. With millions of drivers worldwide, boosting the number of gig drivers who use EVs for work will effectively expose exponentially more people to clean electric transportation.



Low-Interest Loans to Go Electric

MFS WAYS TO WORK
Moving Lives Forward.

Forth is collaborating with **Metropolitan Family Service** (MFS) on the new **Portland Electric Ways to Work** program.

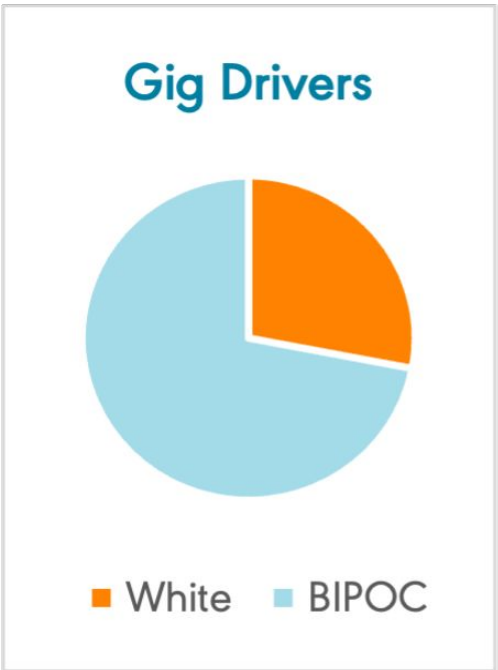
Low-interest loans are available to qualified individuals for the purchase of **electric cars**, hybrids and **e-bikes** in Portland.

MFS is offering residents of the City of Portland incentives for the purchase of electric and hybrid modes of transportation including:

$5,000 off an EV,
$4,000 off a plug-in hybrid,
$3,000 off a hybrid,
$500 off an e-bike.

People who might not otherwise qualify for a loan may be able to purchase a form of electric transportation through this program. **Loans for vehicles are offered for up to $12,000 and electric bikes up to $5,500.**

Forth's partnership with a CBO combined technical assistance and outreach to bring low-interest loans for EVs to under-resourced communities.



3. Successes and Challenges for EV Gig Drivers

As we have noted from the Union of Concerned Scientists report, if gig drivers switch to EVs we will see significant reductions in transportation-related greenhouse gas emissions. This transition is underway around the globe as clean-transportation advocates work to hasten EV adoption through policies, regulations and incentives at the city and state level.[15] Here are examples of several successful efforts to date.

- **100% EV-driven in London:** Uber now counts London as its top city for EVs worldwide, with more than 10,000 electric vehicles on its platform, accounting for 17% of its worldwide EV fleet. The company aims to operate only EVs in the city by the end of 2025.[16] It is an ambitious goal, Uber's UK general manager acknowledges, because "the availability and up-front cost of EVs can still be a barrier for many drivers."[17]

- **Equitable financing in Oregon:** In the United States, Forth created a pilot project to help low-income gig drivers access below-market-rate loans for the purchase of an EV. We also worked alongside a Portland, Oregon, community-based organization (CBO) to shift the focus of a similar program for gas-powered vehicles to focus more on helping people from historically underserved communities purchase clean vehicles.[18] The program, called Portland Electric Ways to Work, provides financial counseling, grant money and below market rate loans to clients, and exemplifies how necessary collaboration is to deliver programs that successfully meet the needs of gig drivers. The CBO, Metropolitan Family Service, had decades of experience supporting people from marginalized communities. Forth, meanwhile contributed its transportation electrification background, providing educational and technical assistance. The partnership worked because we understood the benefits of the technology, while Metropolitan Family Service had the capacity to help the project reach the people who needed it most.

- **Free airport fast chargers for gig drivers:** In Oregon, Forth consulted with Portland International Airport (PDX) when airport officials wanted to improve their services for gig drivers. Our work together resulted in the installation of a row of free Direct Current Fast Charging (DCFC) stations in the TNC staging lot for gig drivers. In the months after installation, the number of EV gig drivers at the airport increased exponentially. Forth is currently working with Seattle, Washington, on its TNC electrification and driver outreach plan to reduce greenhouse-gas emissions at the SEA airport as well.

- **Clean mileage in California:** The state with the largest number of vehicles on the road has taken a regulatory approach to hastening the electrification of TNC fleets. Its Clean Miles Standard is a first-of-its-kind effort, adopted by the California Air Resources Board in 2021. The idea behind the standard is that targeting TNCs could markedly accelerate California's clean energy transition. TNC trips in non EVs are 69% more polluting than the trips they replace, according to the Union of Concerned Scientists.[19] Changing a single full-time ride-hailing vehicle to an EV would thus have the same emissions impact as transitioning **three** private vehicles to EVs. The regulation includes gradually increasing requirements for the percentage of passenger miles a TNC's fleet must travel by EV each year. It started with 2% in 2023 and will reach 90% by 2030. Over the same time period, rideshare services must also lower overall greenhouse gas emissions per passenger mile, reaching zero grams per passenger mile by 2030.[20]

While Forth and others are finding success with these regulatory, financial and policy-driven approaches, there are currently several challenges and limitations for gig drivers to overcome. Starting in the early 2020s, Forth conducted outreach with TNC drivers in Phoenix, Arizona; Las Vegas, Nevada; Salt Lake City, Utah; and Portland, Oregon.[21] Through interviews and research surveys as part of the DOE-funded Western Smart Regional EV Adoption and Infrastructure at Scale TNC EV Subproject (WestSmart EV@Scale),[22] we learned that TNC drivers' major concerns and barriers centered around:

1. The availability, affordability, convenience and safety of using fast chargers.
2. Limited understanding of EV models, affordability and suitability for gig work.
3. Ability to get financing for an EV, since most TNC drivers are contract workers.
4. Range anxiety, i.e. not being sure an EV could drive the number of miles they needed it to on a full charge.

When designing a program to support gig drivers' transition to EVs, it is important to keep in mind these challenges and seek ways to mitigate them. Awareness of the following details will help program operators center drivers' needs and offer equitable solutions:

- **Charging:** For EVs to be a viable option for gig drivers, they need consistent, safe and affordable, sometimes subscription-based, fast charging options to fuel their vehicles. The ability to charge at or near home is important for all EV drivers, and especially for gig drivers, who need to start their shift on a full charge. However, many gig drivers live in multifamily housing. This can make the ability to charge at home challenging, if not impossible. Home chargers require several hours at minimum to fully charge a vehicle, making them practical only during the hours gig drivers aren't working.[23] To get around this, gig drivers may rely on public DC fast chargers a couple times per day. Unfortunately, they are finding that fast-charging technology is not always available in the places where they need it most, such as in or near TNC staging lots.

  The WestSmart EV@Scale study revealed that TNC drivers exhibit distinct charging behaviors compared to average drivers. TNC drivers charge nearly twice as often at corridor and public stations and less frequently at residential locations. Their charging patterns show a significant shift to overnight hours (1 AM to 7 AM), with decreased activity in the latter half of the day. This suggests that strategically placing DC fast chargers for daytime use by regular drivers and nighttime use by TNC drivers can enhance utilization rates and improve the business case for these chargers.

- **Education:** Before considering EV ownership, gig drivers need to envision themselves behind the wheel. A recent Pew Research Center survey found that about 40% of Americans overall would consider an EV for their next car purchase. However, EVs have not been widely marketed to high-mileage, moderate- and low-income drivers, resulting in many gig drivers being unaware of the feasibility and benefits of EV ownership for their work.

- **Cost:** Operating costs for electric vehicles are far lower than those of gas-powered vehicles. EV owners can save more than $10,000 over the life of an electric vehicle, a benefit that adds up more quickly for gig drivers.[24, 25] The up-front cost to purchase an EV remains a barrier, but federal and local EV incentive programs can greatly lower the cost of buying and fueling an EV. Unfortunately, gig drivers report that incentives can be challenging to find out about and to apply for. Drivers who want to use an EV for gig work often rely on renting one.

  While using a rental vehicle opens a door to employment that might otherwise not be available, gig drivers may need to work more than 40 hours a week to earn little more than minimum wage. Creating an equitable path to EV ownership could alleviate some of this financial strain, making sustainable transportation more accessible.

- **Lending:** Many gig drivers face hurdles in borrowing money to purchase a vehicle, and one of the most persistent barriers in the communities where gig drivers live is the lack of affordable financing for EVs. The current market for auto lending is rife with predatory lending practices, including discrimination. Research shows that race and ethnicity can result in high prices for cars and higher costs for financing, add-ons and insurance. Drivers for TNCs like Uber and Lyft face additional challenges since gig income is often classified as self-employment. Lenders may be reluctant to consider loans to gig workers, seeing it as higher risk to make a loan to an independent contractor when compared to a salaried employee.[26]

Cars with faster charging capabilities, as well as long-range models like those in the Kia EV6 line, mean less downtime charging.

- **Range:** The concept of range anxiety — the concern that a drivers' battery charge won't last long enough for them to complete their driving needs — is a very real issue for gig drivers in spite of improvements in EV range.[27] Many TNC drivers will cover more than 250 miles in a single shift and need to feel secure in their ability to do so safely and efficiently. There are now dozens of EV models in the U.S. that exceed 300 miles in range.[28] Many of these longer-range models recently came on the market, with moderate prices ranging from $35,000 to $45,000 for vehicles from well-known automakers such as Tesla, Kia and Hyundai. More importantly, newer EVs with a range of at least 250 miles can be fully charged in around 20 minutes, compared with older models of the same range that take upwards of an hour. TNC companies like Uber and Lyft can alleviate range anxiety for their BEV drivers by providing detailed trip information (destination, distance, time) before trip acceptance. This allows drivers to determine if their vehicle has sufficient charge for the journey without impacting their acceptance rates.

4. Recommendations for a Successful Program

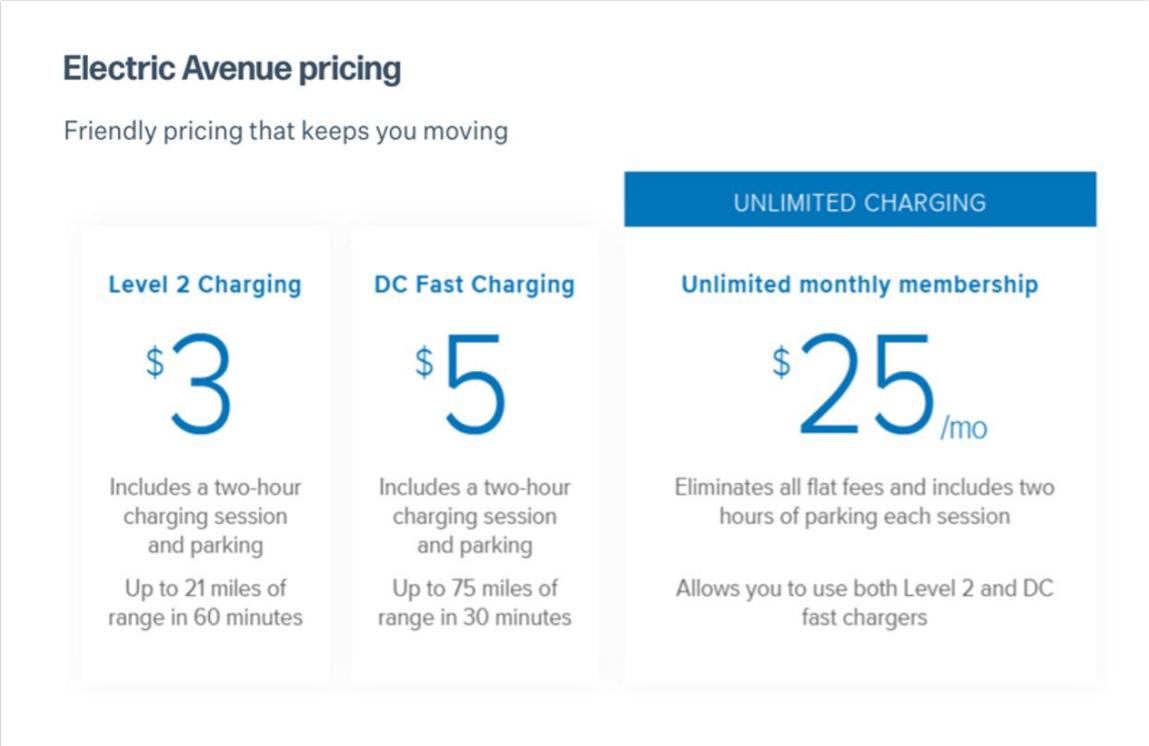
Forth's extensive work with gig drivers has provided not just insights into the barriers they face, but also best practices for success. We continue to advocate for solutions that make EV ownership equitably viable for TNC drivers by collaborating with electric utilities, CBOs, individual gig drivers and public, private, and governmental agencies. While there is still much to discover, our findings to date can help guide EV adoption programs throughout the United States. We recommend taking the following steps to ensure equitable program design.

Prioritize access to fast charging

Forth advocates for an increase in access to overnight, near- or at-home level 2 charging. However, robust Level 3 charging networks, also known as DC fast charging (DCFC), are necessary for drivers trying to earn a living wage. Forth has found that convenient public charging networks with DCFC coverage near the routes gig drivers most often travel is a key factor in facilitating the switch to electric vehicles. Successful programs will prioritize this need when it comes to installing DC fast charging infrastructure.

Making more fast-charging stations available in city centers and at airport TNC staging lots is also vital to enticing gig drivers into EVs. In addition to ensuring that fast chargers are near high-traffic routes, they should be at or near places where gig drivers wait for fares. Cities and ports may identify high-use staging areas, such as taxi and TNC lots at airports, casinos and other entertainment venues. They can then prioritize the installation of DCFC stations in these and other areas that depend on rideshare traffic. This would reduce the number of “deadheads,” or drives without passengers, when drivers might be forced to drive away from high-demand areas and sacrifice fares to recharge.

Forward-thinking cities also will find funding to strengthen the built environment around charging in TNC lots. If not installing chargers around pre-existing infrastructure, this may include installing pavement, lighting, temperature-controlled restrooms and covered areas that offer security cameras, trash receptacles and access to food and water while drivers are using a charging station.



Portland General Electric and Shell Recharge's Electric Avenue partnership offers affordable EV charging rates for use of its DCFCs.

DC fast charging can be made more affordable to gig drivers through solutions such as low-cost subscription services and income-based charging discount programs. One example is Portland General Electric's collaboration with Shell Recharge, called Electric Avenue. This subscription service allows drivers to pay $25 a month for unlimited charging during off-peak hours. During peak hours, there is a small per-use fee and the cost to charge is only 19 cents/kWh.[29]

Reach out to drivers in equitable ways

Without representation in advertising campaigns or marketing outreach tailored to them, many gig drivers may miss out on chances to learn about the benefits of EV ownership. EV education should be targeted to members of historically underserved communities. For example, to extend the reach of our messages, Forth designs and translates our "EV 101" education and outreach materials into nine languages. We make these materials widely available to the public and to our program partners. More importantly, we need an affordable line of EVs that have the necessary range and speed of charging that TNC drivers require for their work.

Help drivers lower EV up-front costs

While EV prices are declining, the high up-front cost to purchase one is still a significant barrier. State and federal incentives, in the form of "cash on the hood" discounts at the point of sale, are an essential way to make EVs more affordable. These can be combined with local offers to help make an EV purchase possible. For example, the Portland Electric Ways to Work Program, run by the community-based organization Metropolitan Family Service and funded by the Portland Clean Energy Community Benefits Fund, provides income-based grants to help low-income earners with a down payment for an EV.

Educate drivers about the economics of switching to an EV

It is too easy, when confronted with the high upfront cost of a vehicle, to not recognize a winning scenario that may exist with fuel and maintenance savings. Tools such as the one offered by the U.S. Department of Energy (https://afdc.energy.gov/calc/) that break down the total cost of ownership of a vehicle can help high-mileage gig drivers recognize how much more of their earnings will end up in their pocket. Including purchase price, fuel and maintenance, EVs cost **half** of what ICE vehicles cost over the lifetime of the vehicle, and in the first 7 years of ownership, EV drivers will have already gained more than $10,000 in savings.[30] Those savings will be much greater in places that subsidize charging to incentivize gasoline superusers.

Educate drivers about TNC incentives for purchasing an EV

Support from TNCs is another crucial element in making EV ownership easier for gig drivers. Both Uber and Lyft offer ride bonuses when drivers use an EV for work. They also have steep discounts on public DCFCs, and home charging units.[31] In addition, Uber incentivizes drivers by offering $1,000 toward the purchase of an EV.[32]

Collaborate with lenders

Some lending institutions offer reduced interest rates for EV purchases. For example, the Portland Electric Ways to Work program partners with Point West Credit Union, which provides flexibility in verifying income and risk assessment. Point West has a fund set aside for guaranteeing loans to gig drivers as they transition to EVs.

Given that EVs are expected to last 1.5 times longer than ICE vehicles over their lifetime, lenders might reconsider their underwriting approaches. This increased longevity could result in a flatter depreciation curve, thereby lowering the per-mile cost of EV ownership.

Forth is investigating what a scalable financing program can look like that addresses the needs of historically underserved communities across the country. With partners from urban and rural areas across the United States, we are assessing the varying needs of different populations and compiling our data. The goal is to create an online toolkit that organizations can use to shape their own programs geared toward equitable access to EV financing.

Partner with community-based organizations

CBOs can provide outreach and education to members of historically underserved communities, many of whom rely on gig work as their primary source of income. Forth has found CBOs to be valuable partners who can offer culturally competent assistance that pairs well with EV advocates' technical knowledge. These partnerships can help gig drivers:

- Weigh the different EV options on the market.
- Learn about the pros and cons of EVs, including total cost of ownership.
- See whether the purchase of an EV can fit within a driver's budget, including an overview of affordable EVs that have at least a 250-mile range and/or the ability to charge quickly.
- Understand and apply for local and federal incentives.
- Find affordable charging solutions, such as through low-cost subscription services and income-based charging discount programs.
- Get credit counseling and build financial savings.
- Access affordable financing programs.
- Vet vehicles and avoid predatory sales tactics.

Legislate

Municipalities and states can implement policies mandating that a growing proportion of total miles driven by transportation network company platforms be electric, motivating TNC companies to support their drivers in transitioning to electric vehicles. One such initiative is the Clean Miles Standard Program (CMS), a regulatory framework developed by the California Air Resources Board (CARB) and enforced by the California Public Utilities Commission (CPUC). CMS offers a variety of pathways TNC companies may use to meet the zero-emission and GHG emission reduction targets. These targets can be met through using cleaner vehicles, increasing vehicle occupancy, decreasing deadheading, investing in active transportation infrastructure such as sidewalks and bikeways, and facilitating connections to transit.

5. Key Stakeholders

Over the years, Forth has built strong partnerships across the transportation electrification ecosystem. We have found that to build capacity for EV ownership among gig drivers, advocates must develop relationships with many types of stakeholders. Along with TNC companies and drivers, people and groups involved in these efforts may come from government agencies, electric utilities, local businesses or civic organizations and CBOs.

Stakeholder	Role
TNC service operators, such as Uber, Lyft, DoorDash, InstaCart, etc.	For-profit (or occasionally nonprofit) entities that employ gig drivers and their vehicles, provide software platforms that power ridehailing and food delivery services, and market their services to customers. Operators may offer cash incentives, discounts at public chargers or help with buying home-chargers when TNC drivers use an EV for work.
TNC drivers	Contract workers hired by TNC service operators. They use their personal vehicles to provide transportation services requested and paid for through the service operator's app.
Local government/public agencies	May serve as regulators requiring electrification. May also serve as partners to promote and support an equitable transition to EVs.
Regional, state or federal government agencies	May serve as regulators requiring electrification. May also provide financial support/incentives for EV and charging purchases.
Community-based organizations (including faith-based institutions)	May help with outreach and engagement to promote EV technology. May also advocate for clear community benefits and strategies to bring EV ownership within reach.
Lenders/credit counselors	Partners in financial education and preparation for drivers to secure and manage an auto loan.
Employers/business owners	May act as host sites for EV charging stations and/or outreach events.
Electric utilities	May provide funding and incentives, technical assistance or discounts on public charging stations. May serve as partners for EV education and outreach events.
Ridehailing passengers	Experience riding in an EV during a ridehailing engagement may convert riders to EV owners in the future.

6. Budget and Funding Strategies

Because of their complexity, programs that advocate for equitable EV ownership can be a significant investment. As noted in Section 3, designing a program requires EV education and outreach that goes beyond the needs of traditional auto-buying programs for lower-income buyers. Programs that focus on EVs and charging stations have a strategic advantage, however. This is because programs designed around electric vehicles can draw on funding opportunities that do not exist with gas-powered vehicle ownership efforts.

In Forth's experience, programs that are able to sustain their efforts choose to rely on a diverse mix of funding sources, including government programs, utility investment and philanthropy. While grants or tax credits may be available to help with EV technology or up-front costs, different funding mechanisms will often be necessary to support program operations, community engagement and other efforts.

Effectively making use of subsidies, grants and clean-energy funds can increase the likelihood of a program's scalable success. Funding streams to consider when building a program's budget may include:

- Federal tax credits
- State tax credits
- Utilities' clean-energy programs
- City or state grants
- Philanthropic foundations
- Programs such as the Greenhouse Gas Reduction Fund, Climate Pollution Reduction Grants and National Electric Vehicle Infrastructure (NEVI) funding

It's important to remember that funders will want to see evidence that a program's work meets their stated aims and qualifies for support under their funding criteria. With each mechanism, it's therefore important to understand how the funding will shape program design, goals, reporting and metrics.

Additional Resources

Advocates for equitable EV adoption may find the following resources helpful in making the case for programs that support gig drivers:

- Accelerating EV Adoption for Gig Drivers, Forth
- EV Rideshare Driver Testimonials, Forth
- Portland Electric Ways to Work, Forth
- Electrifying Ride-Hailing in the United States, Europe, and Canada: How to Enable Ride-Hailing Drivers to Switch to Electric Vehicles, World Resources Institute
- Characteristics and Experiences of Ride-Hailing Drivers with Electric Vehicles, World Electric Vehicle Journal
- 2023 Economic Impact Report, Lyft
- 2024 Environmental Social and Governance Report, Uber
- Not all subsidies are equal: measuring preferences for electric vehicle financial incentives, Environmental Research Letters

Forth also has compiled the findings from across its research and pilot program into a series of white papers that can help make the case for investments in EV programs. See forthmobility.org/reports-studies-papers to download these resources.

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