

Electrifying Ridehail in the US and Canada

Strategies for a more efficient
transportation sector

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Uber



CADMUS

About This Report

Drivers on the Uber platform have demonstrated a strong interest in transitioning to electric vehicles (EVs), positioning them as potential catalysts for broader electrification across the transportation sector. This white paper presents a multi-level policy framework—spanning local, utility, state, provincial, and federal jurisdictions—designed to accelerate EV adoption among drivers on the Uber platform in the United States and Canada. Building on the considerable [investment by Uber](#) in recent years to advance EVs among its drivers, the white paper is part of a series sponsored by Uber that examines similar topics for [Europe](#), Brazil (forthcoming), and India (forthcoming).

Contributors

Alex Beaton, **EVgo**

Alison Felix, **Metropolitan Area Planning Council**

Ben Prochazka, **Electrification Coalition**

Britt Reichborn-Kjennerud, **Con Edison**

Corey Ershow, **Rivian**

Ellen Kennedy, **RMI**

Eric Diaz-Padron, **City of West Miami**

James Di Filippo, **Atlas Public Policy**

Kate Johnson, **C40 Cities**

Katherine Garcia, **Sierra Club**

Kellen Schefter, **Edison Electric Institute**

Roland Hwang, **University of California, Davis**

Rosalie Barcinas, **Southern California Edison**

Shelley Francis, **EVNoire**

Tiya Gordon, **it's electric**

Wayne Killen, **Killen Advisory Services**

Will Coleman, **Alto**

Zifei Yang, **ICCT**

About Uber

Uber's mission is to create opportunity through movement. We started in 2010 to solve a simple problem: how do you get access to a ride at the touch of a button? More than 64 billion trips later, we're building products to get people closer to where they want to be. By changing how people, food, and things move through cities, Uber is a platform that opens the world to new possibilities.

About Cadmus

The [Cadmus Group LLC](#) (Cadmus), a technical and strategic consulting company, specializes in energy technologies, including zero emission vehicles and infrastructure, renewable electricity, energy efficiency, resiliency and renewable heating and cooling. Cadmus works with private industry, government, and utilities across the globe to rethink multi-sector public policy and advance ideas that are innovative, cost-effective, and science based. Rex Hazelton and Geoff Morrison led this work.

Executive Summary

Over the past fifteen years digital ridehail services have transformed how people travel. In Q3 2025, over 36 million Uber trips per day were taken by over 180 million monthly active platform users globally. Today, there are over 8.8 million drivers completing rides and deliveries on the Uber platform, and this number continues to grow each year.

Ridehailing is unlike other parts of our transportation system. Ridehail vehicles are newer, smaller, and more efficient than other vehicles on the road. Further, ridehail drivers rack up four times the mileage of typical motorists and prioritize vehicle affordability above all else.¹ Because ridehail vehicles turn over rapidly, the ridehail industry can serve as a gateway and accelerator for new vehicle technologies.

Enter electric vehicles (EVs). As we show below, when charged overnight, new EVs without incentives offer the lowest total-cost of ownership (TCO) option for ridehail drivers in major markets compared to new internal combustion engine (ICE) vehicles. Period. Drivers on the Uber platform are already ahead of the curve in the United States (US) and Canada— EV adoption is quadruple that of the general population. Uber is five years into an ambitious effort to transition to a zero-emission platform by 2040 and is taking strides to deliver on this goal.²

Yet, drivers in the US and Canada still face major roadblocks to electrification: higher upfront cost, limited vehicle options, and poor charging access. For example, in the US and Canada there isn't a single new model that gets over 40 miles per gallon and costs less than \$25,000. Meanwhile, Europe and China have multiple electric models fitting these criteria. Further, about 50% of cars in the US do not have a dedicated parking with access to an electrical outlet³ or lack access to off-street parking.

A public policy focus on ridehail electrification makes sense. Because of their high mileage, a dollar spent on electric ridehail vehicles has outsized benefits. Ridehail trips often serve as an introduction to EVs for passengers, helping normalize the technology through direct experience. Beyond that, ridehail drivers make up a significant share of fast-charging demand and help improve the economics of charging stations by keeping them busy and profitable. And the future? We think it's electric, shared and autonomous. Over time,

Uber is helping drivers make the switch to electric by combining financial support, driver education, and industry partnerships. To date, the company has set aside or invested more than \$539 million in incentive programs to help accelerate the adoption of ZEVs, while offering [in-app tools](#) like the **EV Charging Map** to help drivers locate stations in real time. In 2025, Uber announced the [Go Electric](#) grants program, giving drivers \$4,000 to make the switch to an EV. Uber's [EVIE tool](#) uses trip data to highlight high-demand areas for charging, helping cities plan for infrastructure build out where drivers need it most. Uber's [partnership with C40](#) is helping cities identify and address charging deserts, combining data insights and technical support to accelerate the buildout of charging infrastructure for over 55,000 drivers. Uber has [secured discounts on ZEVs with major automakers and on charging with leading CPOs](#), making the transition more accessible and affordable for drivers.

¹ As demonstrated through annual, global Uber surveys

² Learn more about Uber's sustainability commitments here: <https://www.uber.com/us/en/about/sustainability/>.

³ Comparable value is not available for Canada although approximately one-third of Canadians live in multi-unit dwellings. The U.S. number is an approximation based on a US Energy Information Administration [study](#) that uses the Residential Energy Consumption Survey of 2009 to estimate that 49% of households that own a vehicle can park within 20 feet of an outlet.

autonomous EVs could slash per-mile driving costs and deliver cleaner, safer, more efficient transportation for everyone. In short: if we want to accelerate the shift to zero emissions mobility, a focus on the ridehail sector is warranted.

This white paper provides a vision for how public policy can support ridehail electrification in the US and Canada. The paper is structured in two sections. First, we introduce fundamental concepts in the ridehail industry and illustrate how and why drivers on the Uber platform differ from the general population. Second, we present strategies at the local, state, provincial, and federal government and utility levels to help accelerate EV adoption by ridehail drivers. These strategies were identified through experience, research, and an expert roundtable in 2025 with automotive sector experts. At the local, state, provincial, and utility levels, we propose a mix of “carrot and stick” policies that directly incentivize a switch to EVs. At the federal level, we support pursuing technology-neutral strategies that contribute to energy security, economic competitiveness, and job creation.

Table 1 provides a set of objectives and corresponding strategies. Each is described in more detail in the [Strategies](#) section below.

Table 1. Objectives and Strategies in this Paper

Objective	Strategy	Implementer (L-Local; S/P-State or Province; F-Federal; U-Utility)			
		L	S/P	F	U
A. Incentivize high mileage drivers towards efficient vehicles	A.1. Create targeted vehicle incentive for high mileage drivers	▲	▲		▲
	A.2. Provide preferred access programs for EVs	▲	▲		
	A.3. Establish vehicle trade-in programs for high-mileage drivers	▲	▲		
	A.4. Establish low-interest loan and financing programs for high-mileage drivers		▲		
B. Increase access to convenient charging infrastructure	B.1. Adopt EV-ready codes for single-family, multi-family, and commercial building	▲	▲		
	B.2. Streamline and expedite permitting and zoning requirements for EV charging	▲	▲		
C. Deploy innovative charging solutions	C.1. Pilot curbside charging demonstration projects	▲	▲		▲
	C.2. Provide preferred curb access and establish EV charging hubs at airports	▲	▲		▲
D. Support high-mileage drivers with EV charging costs	D.1. Establish EV time-of-use (TOU) rates		▲		▲
	D.2. Implement or expand make-ready programs				▲
	D.3. Provide home charger rebates and public charging assistance for high-mileage drivers	▲	▲		▲
E. Accelerate energization of EV charging infrastructure	E.1. Streamline and expedite the utility energization process				▲
	E.2. Undertake proactive planning and grid upgrades				▲
F. Strengthen automotive sector competitiveness	F.1. Increase investment into US and Canadian advanced vehicle technology manufacturing			▲	
G. Strengthen electric grid readiness	G.1. Enable grid expansion and resilience			▲	

Introduction: Ridehail in the US and Canada

Creating a thriving electrified ridehail industry begins with understanding its drivers. Drivers on the Uber platform travel far more miles per day than the average driver, are concentrated in urban areas, and are assumed to be more likely to live in multi-unit dwellings (MUDs). By identifying key characteristics and needs of these drivers, we can better formulate strategies to support ridehail electrification. This Introduction summarizes key trends in the ridehail industry using a question-and-answer format, highlighting why ridehail drivers prioritize affordability and efficiency in their vehicles.

What is the daily travel of drivers on the Uber platform?

Figure 1 shows daily miles driven by drivers on the Uber platform in the US and Canada, by quintile (including deadhead and personal miles⁴), compared to the general population for light-duty vehicles. As shown, drivers on Uber put far more miles on their vehicles compared to general population drivers. **The top 20% of drivers on the Uber platform average 200 miles or more per day, or roughly 40,000 miles per year.** For comparison, the average American drives about 40 miles per day, or 12,000 miles per year,⁵ and in Canada about 15,200 km (9,400 miles).⁶ See [Appendix](#) for methodology.

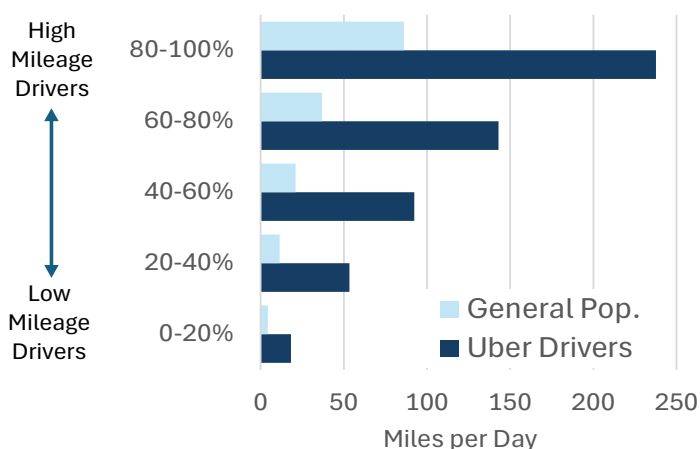


Figure 1. Quintiles of Daily Travel Distance of US&C Drivers on Uber (Bars Show Midpoint of the Quintile, e.g., 10th percentile for 0-20%)

Which vehicle models do drivers on the Uber platform prefer?

Figure 2 shows the manufacturer's suggested retail price (MSRP), without incentives or discounts, and fuel economy of the top light-duty vehicles on the Uber app and in the general population. The figure

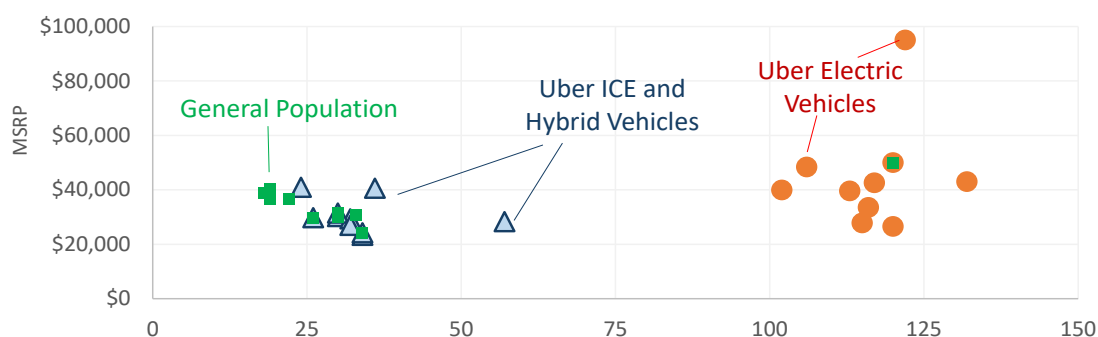


Figure 2. Top 10 Models: General Population (green), Hybrids and ICE Vehicles on Uber (blue), BEVs on Uber (orange)

⁴ Deadhead miles are those driven to pick up a passenger after accepting a ride request. Personal miles are those driven for personal trips.

⁵ National Household Travel Survey (2022) [Link](#).

⁶ Surex Insurance (2024). [Link](#).

highlights how the top vehicles preferred by drivers on the Uber platform are more efficient but not necessarily less expensive than those used by typical motorists.

How are drivers on the Uber platform different?

Compared to the general population, drivers on the Uber platform have a stronger preference for efficient and low-cost-per-mile vehicles (**Figure 3**).⁷ Therefore, it is no surprise that vehicles on the Uber app are more likely to be hybrids or EVs, and more often a smaller size class than the general light-duty vehicle population. While the US and Canadian markets are dominated by pickup trucks, crossovers, and sports utility vehicles (SUVs), vehicles on the Uber platform are far more likely to be smaller sedans, wagons, or compact SUVs. These smaller, more efficient vehicles reduce fueling costs in comparison to typical vehicles in the US, which improves driver economics and increases take-home pay. EVs also reduce maintenance costs by 40% in comparison to ICE vehicles, while decreasing fueling costs by over 50%,⁸ increasing appeal to cost-conscious ridehail drivers.

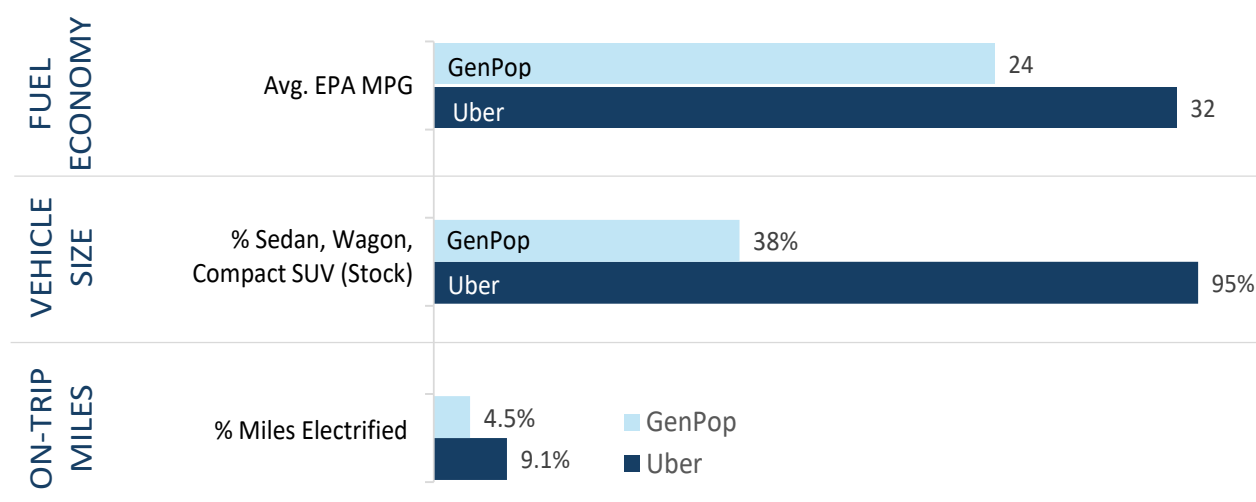


Figure 3. Comparison of LDV General Population and Uber Across Three Metrics

To what extent are drivers on the Uber platform choosing EVs?

In the US and Canada, EVs account for **over 9% vehicle miles traveled (VMT) on the platform, more than four times higher** than the 2.1% share⁹ of EVs among all registered light-duty vehicles (**Figure 4**). Since 2023, electric VMT (eVMT) by drivers on the Uber platform has increased by over 80% and over the past four years it has grown by an average of 2.2% per year. In Q1 2025, over 105 million zero-emission trips were completed by drivers on the Uber platform, an increase of over 60% in comparison to Q1 2024.

⁷ US EPA (2024) "Automotive Trends Report." [Link](#).

⁸ Atlas Public Policy (2025). "Comparing the cost of owning the most popular vehicles in the US: 2025 update." [Link](#).

⁹ IEA (2025). Global EV Data Explorer. [Link](#).

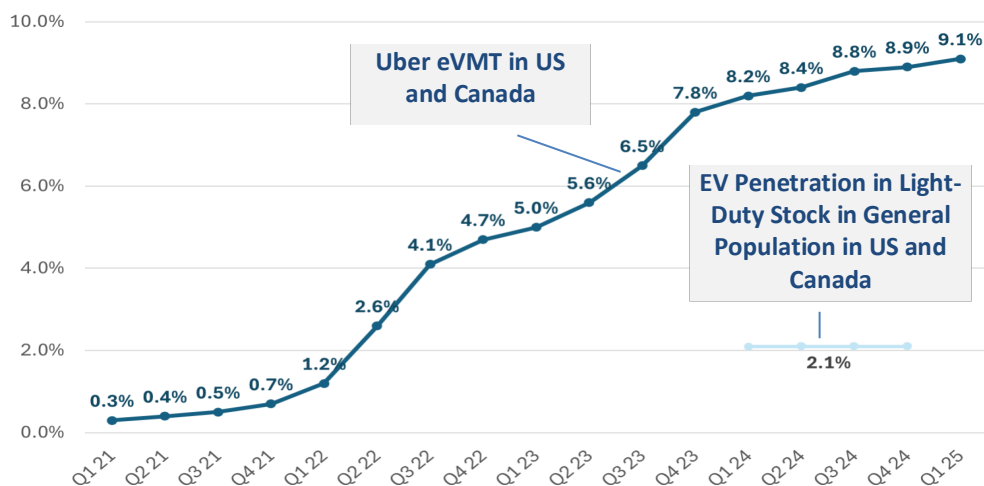


Figure 4. Share of eVMT on Uber (dark line) and in General Population (light line)

Where are drivers on the Uber platform going electric?

Drivers on the Uber platform are going electric at different rates across the US (**Figure 5**), with the highest electrification rates in the West and the lowest in the Midwest. Yet, high eVMT shares on Uber do not always match states with historically strong EV policies. For example, four of the top 10 highest eVMT states on Uber—NV, AZ, PA, and HI—have not adopted the Advanced Clean Cars II (ACC II) regulation as of 2025,¹⁰ which sets an annual zero-emission vehicle sales requirement and is a major driver of EV adoption. Further, the eVMT share on Uber does not always correspond to the share of EV adoption among the general population (**Figure 6**). For example, the 10 states that have the highest eVMT on Uber compared to the EV adoption rate in the general population (measured as a percentage) are LA, WI, NM, AL, KS, IA, AR, MO, PA, and WA—mostly rural states in the center of the US. Nine of these states have residential and commercial electricity rates below the national average while eight

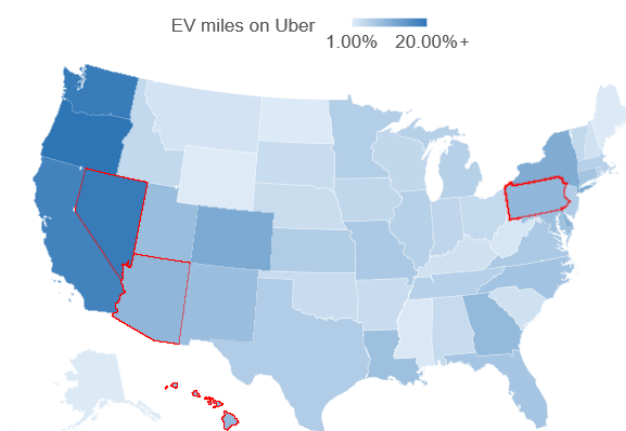


Figure 5. Fraction of Uber Miles Electrified by State (Q1 2025)
(Four states outlined in red are in 10 highest eVMT states but have not adopted ACC II)

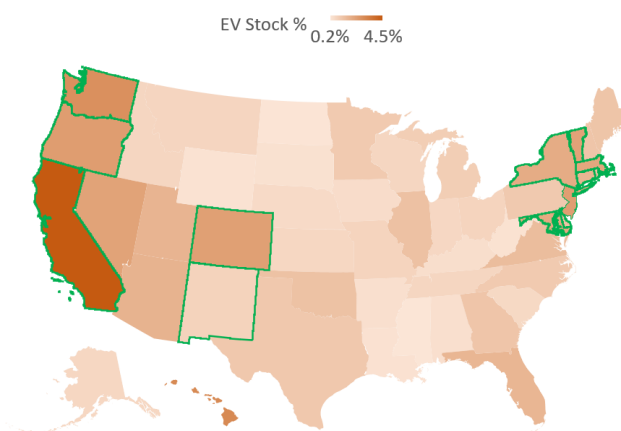


Figure 6. EVs as Portion of Total Vehicle Stock by State (2024)
(ACC II states outlined in green)

¹⁰ California Air Resources Board (2025). "Advanced Clean Cars Program." [Link](#). Note that EPA has withdrawn a waiver to allowed California to set vehicle standards. There is uncertainty with the future of this regulation.

have population density below the national average. This may indicate that ridehail drivers in these states are more cost conscious and travel farther and therefore are more likely to adopt EVs that offer lower fueling costs and an overall lower TCO.

Drivers on the Uber platform are also electrifying at different rates across Canadian Provinces and Territories (**Figure 7**), with the highest rates in British Columbia, Quebec, and Ontario. Though currently under review,¹¹ Canada's Electric Vehicle Availability Standard¹² requires all Provinces and Territories to have an increasing percentage of light-duty ZEV sales annually, reaching 60% by 2030 and 100% by 2035. British Columbia has adopted a more progressive sales requirement, reaching 90% by 2030; Quebec recently revised their target to 90% of new vehicle sales be EV or hybrid by 2035.¹³ Five provinces and territories have additional EV purchase incentives, which correlates in trends in EV adoption (**Figure 8**). Amongst Canadian provinces, higher eVMT on Uber correlates with trends in overall EV adoption and local government incentives.¹⁴ Notably, the provinces with highest EV adoption, British Columbia and Quebec, have nearly five times higher eVMT than the general population EV adoption rate. For example,

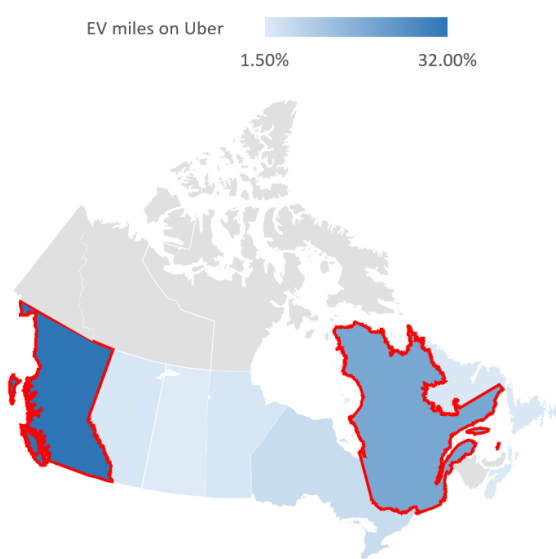


Figure 7. Fraction of Uber Miles Electrified by Province and Territory (Q1 2025)
(Provinces with additional sales target outlined in red)

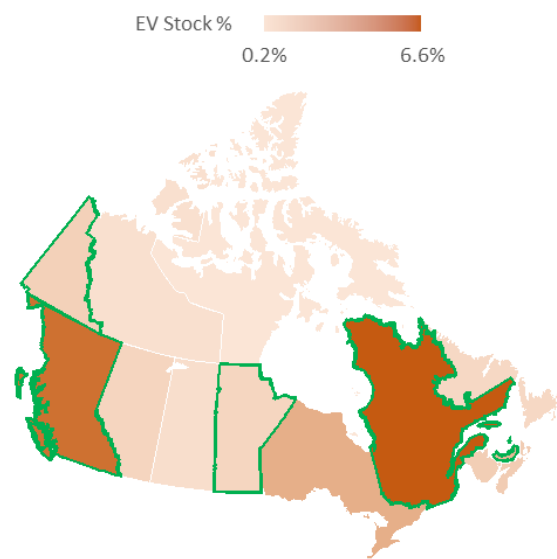


Figure 8. EVs as Portion of Total Vehicle Stock by Province and Territory (2024)
(Provinces with EV purchase incentives outlined in green)

Where do EV Drivers on the Uber Platform Charge?

In a 2024 survey of more than 10,000 drivers on the Uber platform, just 44% of EV drivers in the US have access to either dedicated or shared home charging, while in Canada it is 57%. Drivers have a wide range of charging behaviors, from 100% home to 100% public charging, though most use a mix of both. Additionally, the survey shows that 62% of Uber EV drivers in the US and 50% of EV drivers in Canada must stop to charge at least once while providing rides.

¹¹ In September 2025, the Government of Canada paused the EV sales target for 2026; revisions in development.

¹² Government of Canada (2024). [Link](#).

¹³ CBC (2025). Quebec government lifts planned 2035 ban on gas-powered vehicle sales. [Link](#).

¹⁴ Uber does not operate in Prince Edward Island, New Brunswick, or the Canadian Territories.

in British Columbia almost 1/3 (32%) of miles traveled on the Uber platform were zero emission in Q1 2025, while only 6.6% of all vehicles registered in the province are EVs.

What is the cost of EVs to drivers on the Uber platform?

Drivers on the Uber platform tend to be price sensitive and maintain a keen understanding of the total cost of ownership (TCO) of their vehicles—including the full costs of ownership and operation. **Figure 9** below gives a TCO analysis across four US and Canadian cities, comparing a popular ICE, hybrid, and EVs available *Uber X*, the most affordable option on the Uber platform, including an ICE Toyota Corolla, Toyota Prius hybrid, and Hyundai Kona BEV. The analysis includes vehicle depreciation, fuel, insurance, maintenance, and the opportunity cost of charging (i.e., foregone wages due to time spent charging) over a four-year ownership period (a typical vehicle ownership period for drivers on the Uber platform). Federal, state, and local incentives are not included in the TCO calculation.

The dashed black line in **Figure 9** is the reference vehicle (ICE Toyota Corolla). The red lines are the relative TCO of the Toyota Prius hybrid. The large blue bands in **Figure 9** are the relative TCO of the Hyundai Kona BEV. At the top of the blue band, the vehicle gets 100% of its energy from public Direct Current Fast Charging (DCFC) ports, which is assumed to cost \$0.40-\$0.50 per kWh depending on the

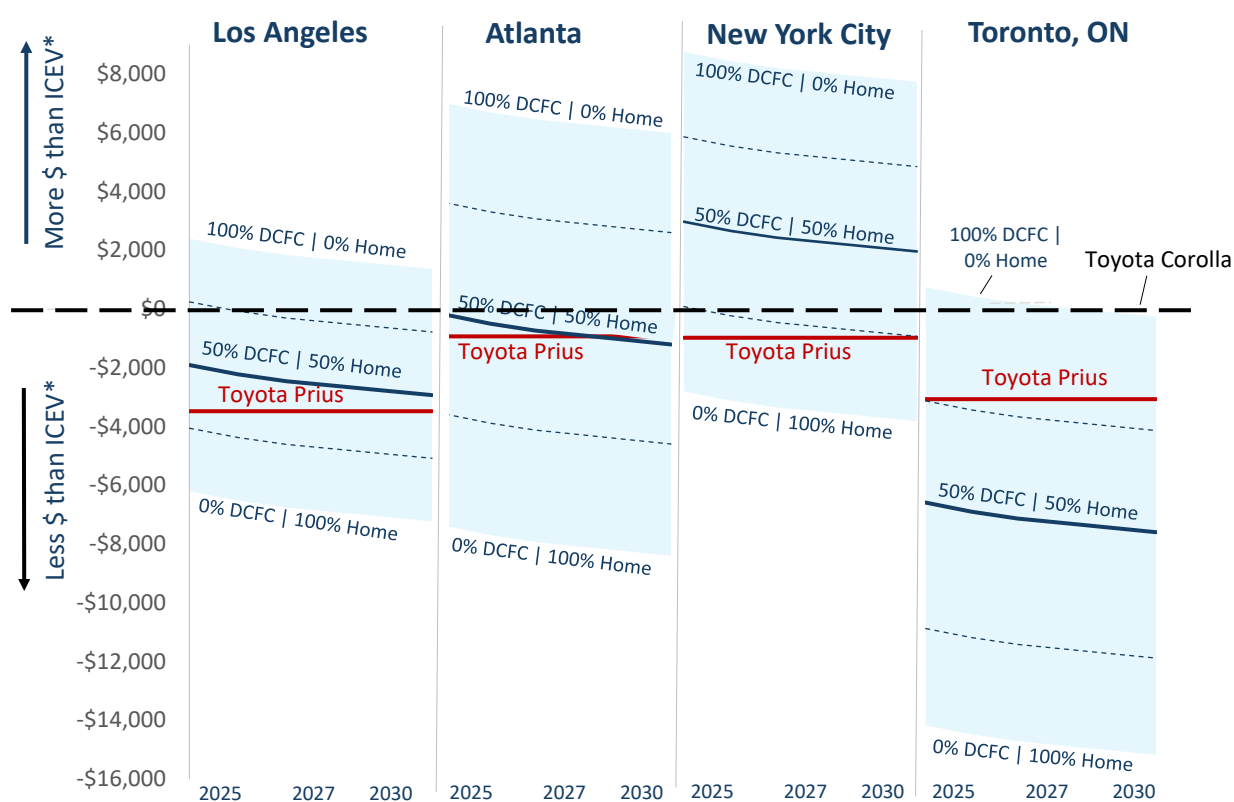


Figure 9. Relative Total Cost of Ownership over Four Years of Ownership for Hybrid, BEV, and ICEVs Across Four Cities
 (*Analysis assumes vehicles are purchased new and held four years. This aligns with ownership patterns of a typical Uber driver)

state.¹⁵ At the bottom of the blue band, the vehicle gets 100% of its energy at home, which costs the average residential overnight rate for the given utility. Thus, differences in the blue bands between cities reflect the differences in residential tariffs and average DCFC fees. In between the two end points, the EV driver pays for charging using a mix of public DCFC and at-home charging. The upper dashed line is a 75% DCFC-25% at-home mix and the bottom dashed line is a 25% DCFC-75% at home mix. The blue bands decline over time with the assumed reductions in battery costs. The analysis includes drivers on the Uber platform with the top 20% highest VMT, or those who average 40,000 miles of driving per year. A full methodology for the TCO is in the [Appendix](#).

The analysis shows several key insights:

- As the share of at-home charging increases, EVs become cheaper and reach cost parity with ICE and hybrid vehicles in all markets—although the point at which this occurs differs.
- Access to home charging versus public charging has significant impacts on driver economics. In every market, the EV option can provide the lowest TCO, saving \$3,000 to \$15,000 compared to the ICE vehicle option when charging only at home.
- Hybrid vehicles offer savings, but in almost every market, drivers can save as much or more (depending on home charging) going fully electric.

Toronto has the most favorable economics for an EV of the four cities, with relatively low electricity costs and relatively high gasoline costs. Assuming charging infrastructure is available, when drivers charge at least 75% at home in Toronto, the TCO is lower for an EV than a comparable ICE or hybrid vehicle today. On the other hand, New York City has the least favorable TCO for EVs of the four. EVs must be charged primarily at home to have a lower TCO than the ICE and hybrid equivalent. This presents a challenge given that 53% of New York homes are multi-unit dwellings and over two-thirds of residents are renters, meaning they have limited access to home charging.¹⁶ The TCO of a Toyota Prius hybrid was universally lower than the Toyota Corolla ICE vehicle. Although not shown in **Figure 9**, as the annual mileage of drivers declines (e.g., to 20,000), the TCO shifts in favor away from EVs and towards hybrids.

“EVs are more cost effective, and I don’t have to worry about gas prices.”

- US Uber EV driver participating in roundtable, Washington DC, Apr 2025.

Why are drivers on the Uber platform switching to EVs?

In a 2024 survey of more than 10,000 drivers on the Uber platform across the US and Canada, approximately half of respondents either already own an EV or are open to owning one in the future. Among non-EV drivers considering an EV, lower fuel and maintenance costs, along with incentives available at the federal and state level, and incentives on the Uber platform are the primary attractions of EVs (**Figure 11**). Among those who own EVs, lower fuel and maintenance costs, environmental benefits, and incentives from Uber to drivers remain the primary motivators for why drivers switched to an EV from an ICE vehicle (**Figure 10**). Satisfaction remains high (70%+) for EV drivers on the Uber app,

¹⁵ Stable Auto Data (2025) [Link](#).

¹⁶ According to the 2023 American Housing Survey

with over two-thirds reporting lower operating costs since switching to an EV, and over one-third reporting higher earnings. Home charging is a key factor; drivers with access to lower cost home charging tend to be more satisfied than those without and are more likely to report higher earnings.

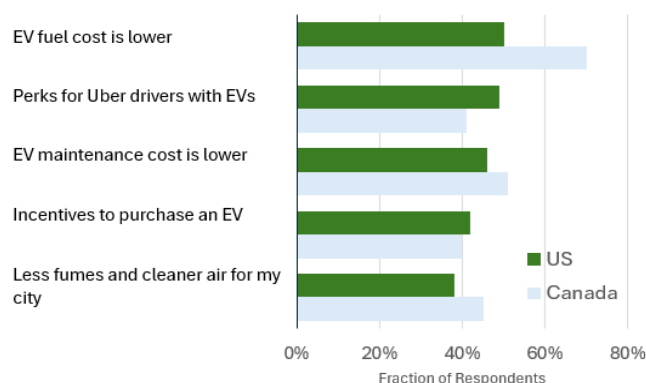


Figure 11. Top Five Reasons Non-EV Drivers on Uber Platform Might Switch from an ICE Vehicle to an EV

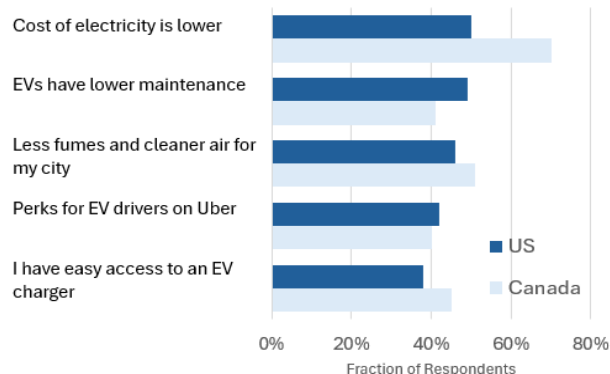


Figure 10. Top Five Reasons Non-EV Drivers on Uber Platform Switched to an EV

What are the largest barriers to more EVs for drivers on Uber?

Non-EV drivers on the Uber platform noted several factors that created hesitancy for adopting an EV. Results differed for the US and Canada. **Figure 12** shows the top five reasons drivers on the Uber platform are hesitant to adopt an EV.

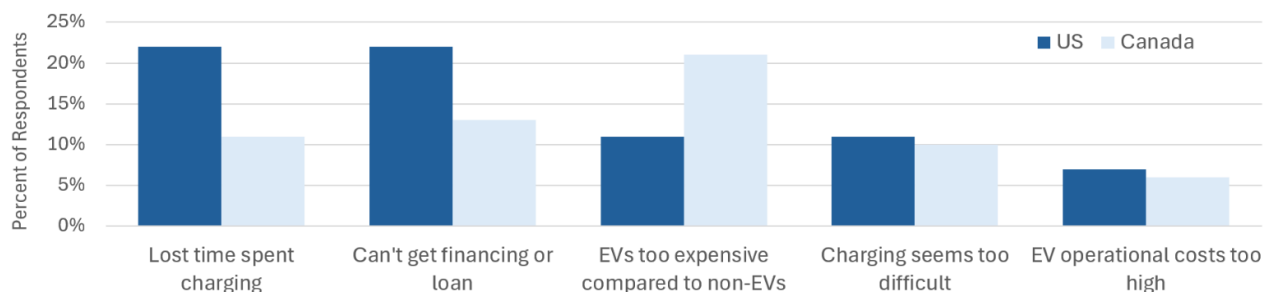


Figure 12. Top Five Perceived Barriers to Adopting an EV for Uber Drivers

The opportunity cost of charging is the most important barrier among drivers on the Uber platform in the US and the third most crucial factor in Canada in adopting an EV (see text box). Drivers on the Uber platform who own EVs recharge on average once per day while working, which is time they could otherwise be driving and earning on the platform. Expansion of Level 2 and DCFC availability and accessibility is critical to enabling drivers to make the shift to EVs when they are ready.

Opportunity Cost of Charging

Today, EV charging is more time consuming for drivers compared to ICE fueling. In the US and Canada, 52% to 60% of drivers on the Uber platform with an EV charge during the middle of the day. This creates an inconvenience relative to ICE vehicles because of the lost time and lost earnings.

Affordability and access to financing account for three of the other top five barriers to electrifying more miles on Uber. By and large, EVs within the US and Canada are marketed towards people wanting premium vehicles, whereas (as noted above) drivers on the Uber platform are heavily influenced by TCO. This disparity between what drivers on the Uber platform want (low-cost vehicles) versus what is available is illustrated in **Figure 13**. When considering other requirements for Uber driver operations—like having four doors, seating for four passengers and a 250-mile range, there are **only eight BEV models offered** in the US and Canadian markets that are available to ride hail drivers today (**Figure 14**). The top 10 most popular vehicles on the Uber platform (both ICE and EV) include: six sedans, three SUVs, and one minivan. However, today there are only two EV sedan models with an MSRP under \$40,000, the Tesla Model 3 and Hyundai Ioniq 6.

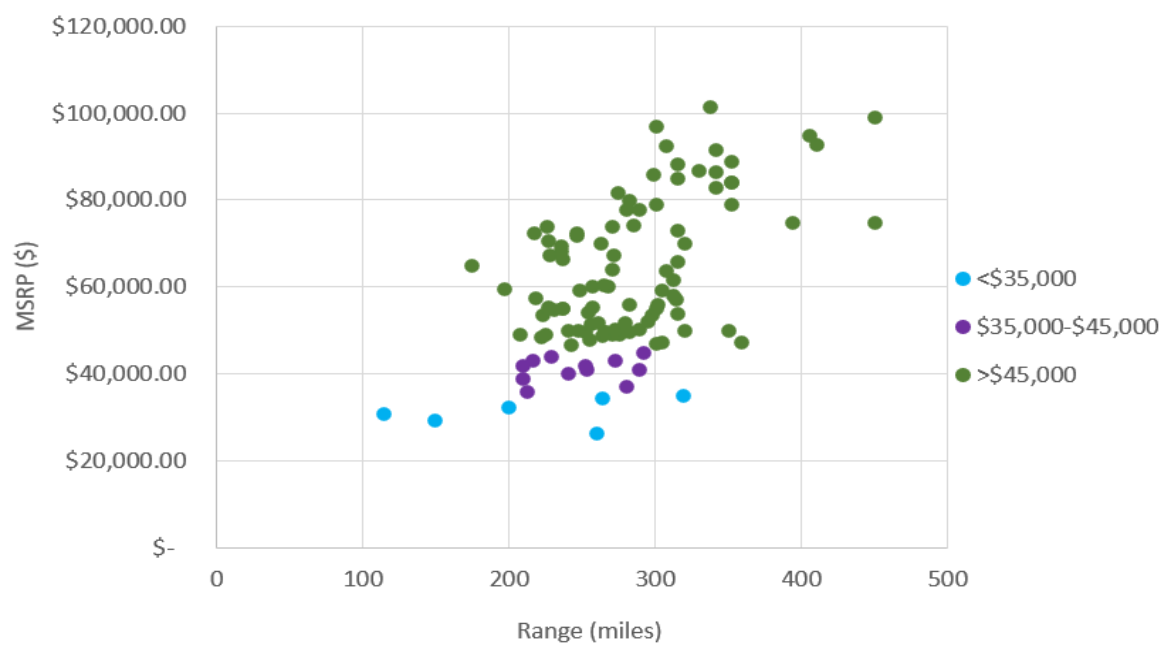
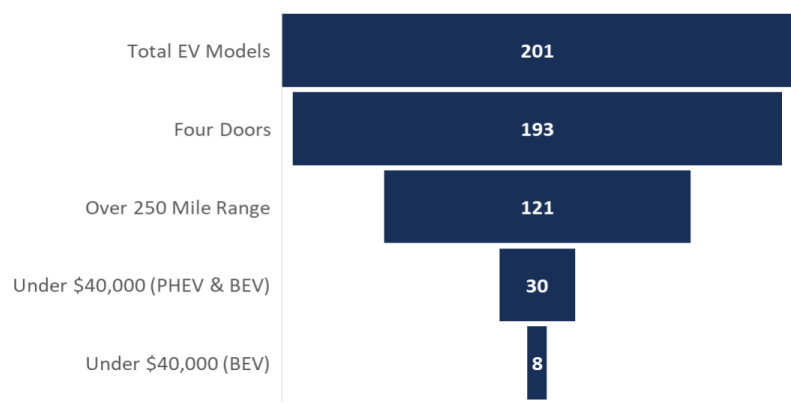


Figure 13. MSRP and Range of BEVs in the US and Canada



“Sometimes I must wait in line to charge my car, which means I am not driving for an hour or more during my day. More places to charge would help reduce wasted time while working.”

US Uber EV Driver on driver panel, April 2025

Figure 14. Limited Options for EVs and PHEVs in US and Canadian Market

Strategies: Ways to Accelerate Efficient and Electric Vehicles among Ridehail Drivers

Considerable progress has been made in transitioning ridehail to zero emissions vehicles. Drivers who can access low-cost residential charging are already achieving significant cost savings, highlighted by the higher rates of EV adoption by ridehail drivers compared to the general public. However, many ridehail drivers are unable to economically electrify today, both to financial and operational constraints.

Getting to 100% electrification will require a comprehensive approach which includes strategies to overcome the three primary challenges facing ridehail drivers today **1) vehicle affordability, 2) vehicle availability and 3) access to charging**. This section describes a set of strategies that can accelerate ridehail drivers towards EV adoption, while also improving transportation affordability and convenience for the general population. The strategies highlighted below will require action by multiple decisionmakers, including federal, state, provincial and local governments, and utilities, operating in coordination with the private sector, including charging providers, automotive OEMs and transportation network companies (TNCs) to support EV adoption and implement effective vehicle and charging infrastructure solutions. Strategies are organized into seven key objectives (see [Executive Summary](#)), with information on the implementing entity, the rationale for implementation, and examples of successful programs at the national, state and local level that can be used as a model for future action.

“Passengers are always asking me how I like driving my EV. I tell them I love it - and they love how quiet and smooth the ride is.”

-US-based EV driver on the Uber platform in panel discussion on April 3, 2025.

Objective A: Incentivize high mileage drivers towards efficient vehicles

A.1. Create targeted vehicle incentives for high mileage drivers

Implementer: State, provincial or local government, utilities.

How: Provide simple financial incentives, such as grants or rebates, specifically for ridehail drivers to purchase or lease new or used EVs.

Why: High-mileage drivers disproportionately contribute to petroleum consumption and emissions. For example, one study found the top 10% highest mileage drivers in the US

consume **35% of the gasoline** of all private light-duty vehicles.¹⁷ Another shows drivers with the top 20% most miles per year in the US contribute **four times** as much criteria pollutant emissions than the bottom 20%.¹⁸

There is evidence that shifting ridehail vehicles to efficient vehicles drives other social benefits. For example, zero emission vehicle drivers on Uber are distributed evenly across income groups, unlike ZEV drivers in the general population which are much more likely to be wealthy.² This provides exposure for EV technology that may not have occurred otherwise. Similar exposure occurs for riders. Uber surveys of riders globally show **that one in four riders say their first ever EV ride was on Uber**. EV ridehail drivers are also supporting the economics of fast charging. According to EVgo, the average rideshare driver charged approximately **five times more than the average retail customer during 2023**.¹⁹

The **upfront cost is the single most important factor** when drivers make vehicle purchase decisions.^{20,21} As described [above](#), upfront cost is especially important for ridehail drivers. Upfront incentives are a valuable tool, especially for state governments. A prime example is Colorado, which offers \$5,000 per vehicle for eligible participants and had a nation-leading 25% sales share in 2024. Tax credits are less impactful than on-the-hood rebates as they depend on an individual's taxable income.²² Additionally, incentives below \$1,000 are ineffective at influencing vehicle purchase decisions.²³ Tailored incentives for specific sub-populations have been shown to spur adoption of EVs at a lower total cost to taxpayers,²⁴ and incentives which can be combined (stacked) with other state incentives increase impact for EV adoption.

Examples: The Colorado Department of Public Health & Environment (CDPHE), in partnership with Uber, recently announced the [Clean Fleet Enterprises Program](#). Drivers can earn \$100 for every 100 trips they complete in an EV, up to a total of \$2,000, which stack with state new and used EV purchase and used vehicle trade-in incentives. The [Massachusetts Ride Clean Mass](#) program offers ridehail drivers a \$6,500 rebate for a new EV, \$2,500 off a used EV and up to \$100 per week for renting an EV, which can be combined with additional state and federal

¹⁷ Metz, London, Rosler, Dietrich, and Barzilay (2024) "Cracking the Gasoline Code: Using new gasoline consumption data to lift the most gasoline-burdened Americans and cut gasoline use faster and more efficiently." Coltura Report. [Link](#).

¹⁸ Aemmer, Zack, Daniel Malarkey, and Don MacKenzie (2023). "Emissions Reductions from Electrifying High-Mileage Vehicles." [Link](#).

¹⁹ EVgo (2023). "EVgo Recognizes Massive Rideshare Growth as Commercial Throughput More Than Tripled Year over Year in Q1." [Link](#).

²⁰ National Academies of Sciences (2015). "Overcoming Barriers to Deployment of Plug-in Electric Vehicles." [Link](#).

²¹ Gallagher and Muehlegger (2011). "Giving green to get green? Incentives and consumer adoption of hybrid vehicle technology." [Link](#).

²² Sierzchula et al. (2014). "The influence of financial incentives and other socio-economic factors on electric vehicle adoption." [Link](#).

²³ Jenn et al. (2018), "Effectiveness of electric vehicle incentives in the United States." [Link](#).

²⁴ DeShazo et al. (2017) Designing policy incentives for cleaner technologies: Lessons from California's plug-in electric vehicle rebate program. [Link](#); Jenn (2020). An in-depth examination of electric vehicle incentives: Consumer heterogeneity and changing response over time. [Link](#).

incentives. Burlington Electric in Vermont offers a [\\$500 incentive](#) for low and median income [gasoline superusers](#) who switch to an EV.

A.2. Provide preferred access programs for EVs

Implementer: State, provincial and local governments.

How: Provide exclusive access for parking and urban cores for high-efficiency vehicles.

Why: Research shows that preferred access programs are context-specific and their effectiveness is driven by local factors.²⁵ For example, parking studies in Europe show that **free parking for EV drivers is a statistically significant predictor of EV adoption**.²⁶ In particular, travelers in areas with limited parking supply or high parking tariffs can gain much from being allowed to park for free or to park in designated parking places. Other research shows that free parking is attractive for some consumers, though financial incentives and freeway charging stations are more effective in promoting EV adoption.²⁷ Other research shows that gaining access to restricted lanes (such as high occupancy vehicle (HOV) or bus lanes) and reduction in tolls are important incentives for EVs.²⁸

Example: In London, EVs are currently given a discount or exemption for [Congestion Charges](#). In Germany, the [Electric Mobility Act](#) grants municipalities the ability to provide preferential treatment of EVs, such as access to bus lanes and preferred parking. In [China](#) and [Mexico](#) EVs are exempted from vehicle use restrictions which limit what days motorists are able to drive based on license plate type.

²⁵ Hardman (2019) Understanding the impact of reoccurring and non-financial incentives on plug-in electric vehicle adoption. [Link](#).

²⁶ Bjerkan et al. (2016). "Incentives for promoting Battery Electric Vehicle (BEV) adoption in Norway." [Link](#); Aasness and Odeck (2015). "The increase of electric vehicle usage in Norway—incentives and adverse effects." [Link](#).

²⁷ Lieven (2015). Policy measures to promote electric mobility – A global perspective. [Link](#).

²⁸ Langbroek et al. (2016). The effect of policy incentives on electric vehicle adoption. [Link](#) and Bjerkan et al. (2016). Incentives for promoting Battery Electric Vehicle (BEV) adoption in Norway. [Link](#).

A.3. Establish vehicle trade-in programs for high-mileage drivers

Implementer: State, provincial, and local governments.

How: Provide a rebate or tax credit for high-mileage drivers who trade in a high-polluting, older ICE vehicles for a new or used EV. The incentive could be tiered, with larger rebates for older, less fuel-efficient vehicles.

Why: Increasing the vehicle turnover rate through early vehicle retirement shifts the vehicle pool to a younger average age and enables quicker uptake of EVs. Further, older vehicles account for a disproportionate fraction of transportation-related air pollution and health impacts compared to younger vehicles.²⁹ Most existing trade-in policies use an age-based minimum (e.g., vehicles must newer than a given model year).³⁰ To be beneficial to ridehail drivers, a new trade-in program should align with requirements of ridehail platforms. For example, Uber requires drivers in most states to use vehicles that are 15 years or newer. Targeting vehicles that are already beyond the age limit for ridehail use, such as those 15+ years old, would have limited impact on accelerating electrification within the sector.

Example: Although no program in the US or Canada is exactly like this, some come close. British Columbia's SCRAP-IT program provides \$2,000 per vehicle to scrap a gas-powered vehicle and replace it with an EV (although no high-mileage requirement exists). Burlington, Vermont's program subsidizes EV purchases for drivers who burn more than 1,000 gallons of gasoline per year. [California's Clean Cars 4 All](#) program offers incentives for income-qualified residents to replace older vehicles with an EV. The Massachusetts [MOR-EV Trade-In](#) program offers a \$1,000 rebate for replacement of vehicles that are at least twelve years old with an EV.

A.4. Establish low-interest loan and financing programs for high-mileage drivers

Implementer: State and provincial governments.

²⁹ For example, see Guenther, P.L., G.A Bishop, J.E. Peterson, and D.H. Stedman (1994). "Emissions from 200,000 vehicles: a remote sensing study." [Link](#); S. Garber (2001). "Fighting air pollution in Southern California by scrapping old vehicles." 2001. [Link](#).

³⁰ GM Morrison, A Allan, R Carpenter (2009). "Abating greenhouse gas emissions through cash-for-clunker programs" [Link](#).

How: Establish a state-funded program to offer low-interest loans or grants to high-mileage drivers to help them overcome the initial upfront cost of purchasing an EV. Alternatively, create financing programs aimed at high-mileage drivers.

Why: As with upfront rebates, low-interest loans and financing programs reduce financial barriers, especially for low- and moderate-income households. These programs are particularly important for EVs which take multiple years in some cases to break even with ICE vehicles.

Example: California's [Driving Clean Assistance Program](#) has a network of vetted, community-based lenders who offer loans capped at 8% interest rate to income-qualified drivers. There is no such program aimed specifically at high-mileage drivers.

Objective B: Increase access to convenient charging infrastructure

B.1. Adopt EV-ready codes for single-family, multi-family, and commercial buildings

Implementer: State, provincial and local governments.

How: Pass statewide or local-level EV-ready codes to help solve charging access issues, particularly for drivers who live in multi-unit dwellings. This ensures that new construction includes the electrical infrastructure needed for future EV charging installations.

Why: EV-ready building codes ensure new construction and renovations include infrastructure, like panel capacity, conduit, and wiring, to support future charging needs. For single-family homes, this means homeowners can easily install chargers without costly retrofits. In multi-family and commercial buildings, EV-ready codes help overcome one of the biggest barriers to adoption: access to convenient charging for renters, employees, and customers.

Including EV-ready infrastructure during construction is four to six times less expensive than retrofitting after the fact.³¹ Retrofitting often requires trenching, electrical upgrades, and structural modifications—all of which add significant complexity and cost. By requiring EV-

³¹ DOE (2025). Building Codes, Parking Ordinances, and Zoning Ordinances for Electric Vehicle Charging Infrastructure. [Link](#).

readiness upfront, policymakers can avoid locking in future costs and ensure that new buildings are prepared for growing demand.

States like California, Colorado, and Washington, as well as cities including Atlanta and Denver, have already adopted EV-ready requirements. Policymakers can draw from model codes such as CALGreen and the International Energy Conservation Code (IECC), and tailor provisions based on building type and regional needs.

Example: The 2024 International Energy Conservation Code (IECC), which states and local governments can adopt, includes an appendix with optional EV-ready requirements for residential and commercial buildings, which has been adopted by the [City of Phoenix, AZ](#) and the [City of Austin, TX](#).

B.2. Streamline and expedite permitting and zoning requirements for EV charging installations

Implementer: State, provincial and local governments.

How: Simplify the permitting and zoning processes for installing EV chargers to reduce delays and costs, making it faster to deploy new charging infrastructure.

Why: Permitting delays and burdensome permitting fees remain one of the most significant barriers to scaling EV charging infrastructure. In many jurisdictions, it can take months or even years to obtain permits for the installation of charging stations, particularly DC fast chargers, due to inconsistent, outdated, or overly complex permitting and zoning processes. As the EV market grows rapidly, resolving this bottleneck presents a high-leverage, low-cost opportunity for governments to accelerate infrastructure deployment.

State and local governments are increasingly standardizing, streamlining, and expediting charging infrastructure development. California leads with Assembly Bill 1236, requiring cities and counties to adopt streamlined permitting processes, including checklists and expedited approvals.³² Building on this, Assembly Bill 970 set enforceable timelines—charging station applications must be approved within 20 business days unless specific health or safety concerns arise.³³ California also uses tools like the EVCS Streamlining Map and a Permitting

³² California Assembly Bill 1236 (2015). [Link](#).

³³ California Assembly Bill 970 (2021). [Link](#).

Scorecard to track local compliance and target assistance.³⁴ In Florida, SB 1084 placed regulation of EV charging stations under state control, rather than left to municipal governments.³⁵ This provides a uniform approach to building codes, permitting, zoning and safety standards in the state. Defining fast charging as a primary use in all zoning ordinances allows faster installation of standalone charging stations, while defining Level 2 charging as an accessory use with flexibility to permit Level 2 as a primary use, can reduce delays by simplifying permitting requirements.

Streamlining permitting and zoning processes is one of the most cost-effective strategies available to state and local governments. It accelerates infrastructure deployment without requiring direct public investment, supports private market development, and ensures that communities are ready to meet growing EV charging demand.

Example: [California, New Jersey, Delaware, and Colorado](#) have passed laws that require cities and counties to develop an expedited, streamlined permitting process for EV charging stations.

Objective C: Deploy innovative charging solutions

C.1. Pilot curbside charging demonstration projects

Implementer: State, provincial and local governments, utilities.

How: Pilot projects to subsidize the installation of curbside charging infrastructure installed along streets, including options such as streetlights, parking meters, chargers powered by buildings, or on street facing building exteriors with readily accessible power supply in commercial districts, to provide convenient charging for TNC drivers

Why: Curbside charging is a valuable tool for expanding EV ownership, especially in urban areas where many residents lack access to private driveways or garages. Without home charging, renters and apartment dwellers face significant barriers to owning EVs, relying instead on limited public charging. Curbside charging —installed along streets and integrated into existing infrastructure such as lampposts or that connect to existing grid capacity—bring convenient, accessible power directly to neighborhoods. This not only democratizes EV access but supports broader adoption by making charging as routine as parking.

³⁴ California Governor's Office of Business and Economic Development (2025). [Link](#).

³⁵ Florida Senate Bill 1084 (2024). [Link](#).

To implement curbside charging effectively, cities should review and update zoning codes to explicitly permit curbside chargers and address parking space designation and curb management policies. Cross-department coordination is essential, involving transportation and public works for curb and street management, planning, and zoning for regulatory compliance, permitting offices for installation approvals, and sustainability departments for climate alignment. Cities also need to assess existing electrical infrastructure to determine capacity and the need for upgrades, often requiring close collaboration with utilities. Transparent communication and thoughtful siting can also help address equity concerns and minimize conflicts. According to the US Department of Energy's Clean Cities Coalition Network, understanding these factors and learning from established projects is key to successful curbside charging deployment that supports broader EV adoption and equitable access.³⁶

Example: San Francisco's [Curbside EV Charging Pilot Program](#) is testing various solutions, including Level 2 chargers that are powered via connection to a nearby building and retrofitting lampposts with chargers. New York City has also implemented [curbside](#) pilots, providing access to charging for parking constrained customers in urban environments, such as through a current [pilot operated by ConEd](#) and NYCDOT. In July 2025, [Massachusetts](#) announced 36 municipalities that were selected to plan and implement curbside, pole-mounted, and streetlight charging projects through the [On Street Charging Program](#).

C.2. Provide preferred curb access and establish EV charging hubs

Implementer: State, provincial, and local governments, utilities.

How: Deploy dedicated fast-charging hubs in strategic locations like airports, universities, stadiums and other high-volume destinations which are high-traffic areas for TNC drivers and provide preferred curb access for EVs and provide discounted trips for riders selecting EVs.

Why: Locations such as airports, stadiums and universities are key locations for supporting rideshare drivers, who often spend extended periods waiting for passengers and require convenient, reliable charging to maintain their high-mileage operations. Providing robust EV charging infrastructure, especially fast chargers, at airports reduces range anxiety and downtime, making EV adoption more feasible and attractive for rideshare drivers.

³⁶ DOE (2025). "Project Lessons: Curbside EV Charging." [Link](#)

Beyond infrastructure, specific policies can significantly accelerate EV adoption among rideshare drivers by reducing operational costs and creating visible incentives. For example, Vancouver International Airport offers discounted fees for electric rideshare trips, while Portland International Airport combines free fast charging with a dedicated green curb pickup zone for electric rideshare vehicles.

Airports and other sites often control critical assets like curb space, permitting authority, and fee structures, making their active involvement essential to successful electrification efforts. Coordinated collaboration between airport authorities, local governments, utilities, and rideshare companies enables the prioritization of fast charging infrastructure, the implementation of preferred access policies such as dedicated parking and discounted fees, and the streamlining of permitting processes within airport boundaries.

Example: Portland International Airport (PDX) has [free EV charging services](#) and has rolled out a [dedicated pickup area for passengers using sustainable ride options](#) as part of its new Transportation Plaza. Vancouver International Airport (YVR) offers a direct financial incentive by significantly [reducing airport per-trip fees for electric and hybrid rideshare vehicles](#).

Objective D: Support drivers with EV charging costs

D.1. Establish EV time-of-use (TOU) rates, managed charging and demand charge waivers for new EV charging projects

Implementer: State and provincial governments, utilities.

How: Establish Time-of-Use (TOU) rates that make charging cheaper during off-peak hours significantly reducing fuel costs for high-mileage drivers who can charge overnight. Managed charging programs which provide customers a financial credit can help incentivize drivers to charge during lower cost periods. Utilities can also provide alternative rate structures for new EV charging stations that reduce, waive or cap demand charges to reduce cost burden until stations achieve higher utilization to spread demand charges across charging sessions.

Why: Time-of-Use (TOU) rates are a proven tool for making EV charging more affordable while supporting grid reliability and renewable energy integration. By offering lower electricity prices during off-peak hours, typically overnight, TOU rates encourage drivers to charge when

demand is low and generation is cleaner. This not only reduces the cost of vehicle ownership, particularly for high-mileage drivers, but also helps utilities avoid costly peak demand spikes.

Public utility commissions can support this by directing utilities to develop EV-specific TOU rate structures, ensure they are well-publicized and easy to enroll in, and consider equity implications—such as enabling access for renters or drivers without home charging by applying TOU benefits to public charging networks as well.

In some instances, customers are hesitant to enroll in TOU rate programs due to the potential for higher electric bills if not effectively managed. Utilities can incentivize drivers to participate in TOU tariff schemes by offering fixed financial incentives for ratepayers, reducing potential for higher electricity bills.

Demand charges pose a significant challenge for public DCFC stations, particularly in those areas with low EV adoption. Demand charges are applied based upon peak demand, rather than overall consumption. This means that DCFC sites will have the same demand charge regardless of the number of charging sessions, which can represent 50% or more of the sites monthly electric bill.³⁷ New EV charging sites that have not achieved consistent customer uptake, or those sites with low EV adoption rates, must spread costs over a smaller customer base, leading to more costly charging fees or jeopardizing station viability.

Example: Southern California Edison (SCE) offers a [TOU-D-PRIME rate](#) plan for EV drivers. The New York City Department of Transportation, in partnership with Con Ed, [operates Level 2 chargers with a time-of-day pricing](#) structure, and currently serves thousands of registered drivers on the Uber platform in NYC. Xcel Energy offers customers in Colorado and Minnesota a \$50 bill credit for enrollment in its Optimize Your Charge program.³⁸ Utilities have enacted programs to abate demand charges, including the ConEd [Smart Charge Commercial Incentive Program](#), which offers a 50% demand charge credit to commercial EV charging sites and a [Minnesota Power pilot program](#) that prohibits demand charges from exceeding 30% of DCFC site electricity bills.

³⁷ Plug in America (2024). Understanding Demand Charges. [Link](#).

³⁸ Excel Energy (2025). Optimize Your Charge. [Link](#).

D.2. Implement or expand make-ready programs

Implementer: Utilities.

How: State PUCs should direct utilities to implement make-ready programs to assist customers in paying for some or all of site upgrades and infrastructure improvements needed to install EV charging.

Why: Infrastructure upgrades, such as transformers, switchgear and trenching for conduit are often the most expensive part of an EV charging project, particularly for DCFC installations. Investor-Owned Utilities (IOUs), Co-ops and municipal utilities across the US have adopted programs financed through cost recovery mechanisms that pay for To-the-Meter (TTB) and in some cases Behind-the-

Meter (BTM) infrastructure necessary for site hosts to install charging.³⁹ These programs reduce the financial burden to the consumer, increasing the likelihood of installation. Over \$1 billion has been made available in states such as New York and California, and utilities throughout the Southeast, Midwest and West coast have established similar programs.

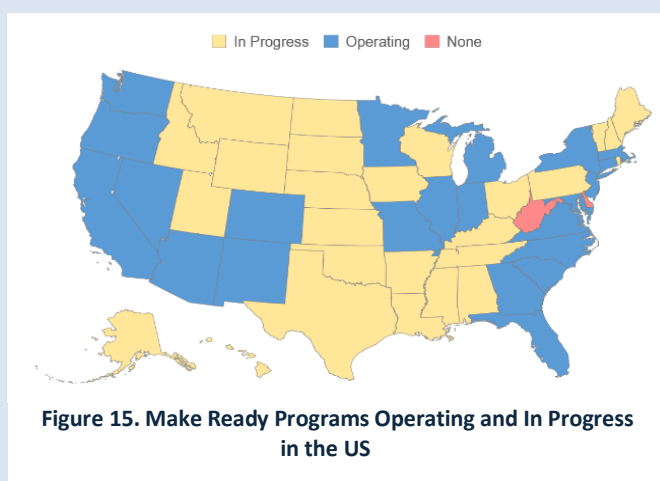


Figure 15. Make Ready Programs Operating and In Progress in the US

Example: The New York [EV Make-Ready Program](#) provides over \$1 billion to reduce the upfront costs of building charging stations for EVs, including Level 2 and DCFC infrastructure. The Georgia Power [Make Ready Infrastructure Program](#) provides up to \$300,000 in funding per project for installation of at least six charging ports, including one DCFC port.

³⁹ WRI (2024). Electric Vehicle Make-Ready Programs. [Link](#).

D.3. Provide home charger rebates and public charging assistance for ridehail drivers and residents of MUDs.

Implementer: State, provincial, and local governments, utilities.

How: Establish programs that provides financial assistance for EV charging costs, which may come in the form of rebates or incentives to help reduce the cost of installing a home charger or to offset some of the costs of public charging.

Why: Installing a home charger allows ridehail drivers to charge overnight (sometimes at lower electricity rates), saving time and potentially money compared to relying on public charging stations. However, the upfront cost of charger installation—including equipment and electrical upgrades—can be a barrier, particularly for drivers from lower-income households. By offering rebates, tax credits, or free installation programs, governments and utilities can empower ridehail drivers to adopt EVs more confidently, and reduce operating costs.

However, ridehail drivers are also less likely than the general population to have access to reliable home charging. Electricity prices at public Level 2 and DCFC stations can increase charging costs by 50% or more, negatively affecting TCO. This is felt more acutely by high mileage drivers that require charging on a daily basis and creates an adoption barrier for ridehail operators for whom fueling costs directly impacts take-home pay. Providing assistance for public charging can alleviate some of the cost premium associated with public charging and reduce overall driver operational costs.

Example: Southern California Edison offers a [Charge Ready Home Rebate Program](#). The Sacramento Municipal Utility District (SMUD) offers up to a \$1,000 rebate on home EV charger installation through its Charge@Home program. The Bay Area Air District [Clean Cars for All program](#) offers up to \$2,000 for a level 2 home charger installation and up to \$1,000 for level 2 portable charger. The [Driving Clean Assistance Program](#) offers a \$2,000 prepaid charge card to pay for public charging for residents with a household income $\leq$ 300% of the Federal Poverty Level.

Objective E: Accelerate energization of EV charging infrastructure

E.1. Streamline and expedite the utility energization process

Implementer: Utilities.

How: Public utility commissions should require utilities to meet clear new service connection and energization timelines for EV charging projects, with enforceable performance standards and transparent reporting. Utilities should also establish dedicated teams to fast-track EV infrastructure and prioritize projects aligned with state electrification goals.

Why: Delays in energizing high-powered EV charging sites can leave users without access to functional chargers for extended periods. In practice, some end-to-end energization timelines have ballooned from around 12 months to nearly 18 months, largely due to utility-side backlogs, transformer shortages, and grid upgrade constraints.⁴⁰

Recognizing the urgency of these barriers, California's Public Utilities Commission has taken a bold step forward and established new policies aimed at reducing energization timelines by up to 49%, bringing down maximum wait times for EV charger new service connection to six months on average while also introducing requirements for utilities to report delays and their causes biannually.⁴¹

Such measures not only increase transparency but also inject momentum into utility operations through enforceable standards. Utilities that streamline processes, prioritize EV projects, and improve internal capacity are better positioned to support the fast-growing need for electrification infrastructure.

Example: The California Public Utilities Commission (CPUC) has established [energization timelines](#) for California's three large investor-owned utilities to expedite the process for new and upgraded electrical services, and requires biannual reports from utilities detailing completion times, analysis of any factors affecting energization, and reasons for any delays.

⁴⁰ Utility Dive (2023). Electric vehicles near 'tipping point' in 2023, but tax credit questions, utility interconnection challenges lie ahead. [Link](#).

⁴¹ NRDC (2024). California Adopts Nation's First Deadlines for Utilities to Connect EV Chargers to the Grid. [Link](#).

E.2. Undertake proactive planning and grid upgrades

Implementer: Utilities.

How: Public utility commissions should require utilities to incorporate EV growth scenarios into long-term distribution planning and invest in upgrades ahead of projected demand. Regulatory mechanisms should enable timely cost recovery for prudent, forward-looking investments that accelerate electrification.

Why: As EV adoption accelerates, grid constraints are a major barrier to deploying charging infrastructure. In many regions, utilities are already encountering delays in connecting high-powered charging infrastructure due to transmission and distribution (T&D) bottlenecks, transformer shortages, and limited substation capacity. These delays can halt or cancel projects, especially in urban areas where the need is highest and space for expansion is limited.

Traditional utility planning processes often rely on historical load trends and reactive project-by-project upgrades, which are not suited to meet the scale or urgency of transportation electrification. Without long-term, scenario-based planning that incorporates EV growth projections, utilities risk underinvesting in key areas, leading to unreliable service, rising costs, and inequitable access to charging. By shifting toward proactive, integrated grid planning, utilities can reduce infrastructure deployment delays, optimize system efficiency, and ensure that communities and drivers are not left behind in the energy transition.

Example: [Colorado SB24 - 218](#) requires investor-owned electric utilities serving 500,000 or more customers to upgrade their systems to meet beneficial and transportation electrification demand and achieve decarbonization targets. [New York PSC proactive grid planning proceeding](#) directs New York State's utilities to develop a framework for considering and planning infrastructure projects designed to meet new loads anticipated from the adoption of EVs and electrification of buildings.

Objective F: Strengthen automotive sector competitiveness

F.1. Increase investment into US and Canadian advanced vehicle technology manufacturing

Implementer: Federal governments.

How: Expand low interest loans and tax credit programs for advanced vehicle manufacturing.

Why: The automotive industry is a vital component of the American economy and accounts for about half of all domestic manufacturing. It employs over **one million** people, generates over **\$1 trillion** in annual revenue,⁴² accounts for **5% of GDP**,⁴³ and is critical to industrial and national security. The domestic vehicle market is about **17 million** vehicles per year, about **half of which** are produced in the US.⁴⁴ Although American innovators have worked hard to enhance US production capacity of efficient, affordable vehicles, decades of underinvestment has left the industry at a disadvantage compared to global competitors. Research illustrates that providing [loans](#) and [grants](#) to innovative businesses results in innovation in subsequent years.

The US automotive industry risks falling behind other countries if it does not prioritize investment in efficient vehicles. For example, in 2023, China accounted for 60% of global EV sales, with 8.1 million new electric car registrations, while the US only represented 10% of global EV sales. Chinese automakers, such as BYD, have set new standards for efficiency and affordability while the US has struggled with supply chain limitations, lagging infrastructure, and consumer reluctance to transition away from gas-powered vehicles. China's EV exports **reached 1.6 million EVs in 2023**, with a total export value of \$36.7 billion.

Efficient vehicles create value for households, state economies, and ratepayers. For households, savings accrue because of lower fuel costs. For example, in a Union of Concerned Scientists study, EVs charged with the best rate plans save \$750-\$1,200 per year compared to an ICE vehicle averaging 27 miles per gallon.⁴⁵

Local economic benefits accrue because of a redistribution of spending. Job growth and other positive economic outcomes occur in construction, automotive manufacturing, and—in particular—automotive suppliers.⁴⁶

EVs provide an average value to the electricity grid of an estimated \$3,500 over the lifetime of the vehicle—created by more efficient use of the *existing* transmission and distribution grid. Today's distribution system operates with a capacity utilization of less than 50 percent, because it must handle the [highest peak demands each year that last only a few hours](#). That leaves plenty of capacity for EV charging. And with over 80 percent of EV charging occurring at home or workplaces ("long-dwell sites"), EVs have the flexibility to avoid the peak.

⁴² 1 trillion in annual revenue for domestic vehicle manufacturing.

⁴³ 5% of GDP for domestic vehicle manufacturing.

⁴⁴ 50% of cars made in US.

⁴⁵ Union of Concerned Scientists (2022). "State of Charge: Electric Vehicles' Global Warming Emissions and Fuel-Cost Savings across the United States. [Link](#).

⁴⁶ BW Research (20212). Building an Electric Transportation Supply Chain in the United States. [Link](#).

Examples: US Department of Energy [Advanced Technology Vehicles Manufacturing Loan Program](#) and Internal Revenue Service [Advanced Manufacturing Production Tax Credit](#) (45X).

Objective G: Strengthen electric grid readiness

G.1. Enable grid expansion and resilience

Implementer: Federal governments.

How: Develop national framework for proactive grid planning. Utilities in California, New York, Colorado, and elsewhere are instituting an innovative approach to get ahead of load growth by making “no regrets” investments in substations and distribution system expansion. Expedite federal permitting for new transmission infrastructure to ensure that electricity is available as generation is added.

Why: Aging infrastructure, extreme weather events, and the transition to renewable energy sources all require forward-thinking strategies to prevent disruptions and costly emergencies. Without proactive upgrades and smart investments in technology, the grid risks being overloaded or failing during peak demand, leaving communities vulnerable to blackouts. Modernizing the system with advanced storage solutions, enhanced cybersecurity, and decentralized energy generation can safeguard against instability while promoting sustainability. As demand grows from AI, EVs and other new technologies, a well-planned grid not only secures energy access but also supports economic growth and environmental goals, making it essential for a thriving future.

Example: The Executive Order “[Accelerating Federal Permitting of Data Center Infrastructure](#)” outlines strategies for expedited permitting for data center development, including for the build out of generation, transmission and distribution infrastructure. The [Grid Resilience and Innovation Partnerships Program](#) (GRIP) provides \$10.5 billion to enhance grid flexibility and improve the resilience of the power system against extreme weather.

Conclusion

Ridehailing could act as a powerful potential catalyst for EV adoption in the US and Canada. Vehicles on ridehail platforms have high vehicle turnover rates, high VMT and provide a unique opportunity to showcase EVs to dozens of riders per day—often for the first time. Ridehail drivers are increasingly making the switch to EVs; they already drive smaller and more efficient vehicles and have electrification rates four times that of the general population. Under the right conditions, EVs are the cheapest vehicle on the road—lower cost than hybrids and internal combustion engine vehicles.

Strategic investment of taxpayer and ratepayer resources in ridehail electrification yields outsized returns, amplifying the impact of each dollar spent. These vehicles drive more, turn over faster, and offer a daily EV experience to millions of riders, helping to normalize the technology and accelerate public adoption. With the right policies, EVs can be the most cost-effective choice for high-mileage drivers, while also reducing emissions and improving public health.

This white paper identifies seven key policy objectives and presents fifteen strategies for action, tailored to all levels of government and utilities. From modernizing infrastructure to supporting drivers directly, these strategies chart a clear path forward. Prioritizing ridehail electrification is a practical, high-impact step toward advancing energy innovation, modernizing transportation systems, and strengthening North America's economic competitiveness.



Appendix

Daily Miles Calculation

This section describes the calculation of daily VMT shown in Figure 1. All statistics in the graph are the midpoint of the quintile (e.g., 0-20 percent reflects the 10th percentile). The Uber statistics come from compiled internal Uber data. The general population statistics are derived from the Trip file in the 2022 National Household Travel Survey.⁴⁷ The data was aggregated by vehicle ID, by day, and weighted.

Total Cost of Ownership

The Total Cost of Ownership (TCO) analysis calculates net present value (NPVs) of BEVs, HEVs, and ICE vehicles. The TCO analysis includes both capital expenditure and operational expenditure. The vehicle purchase price, which is the main capital expenditure, is assumed to decrease over time due to forecast decreases in battery pack prices. For this analysis, the vehicle purchase price is projected to decrease proportionally to the vehicle's battery capacity and Goldman Sachs' [per-kWh price forecasts](#). The operational expenditures, such as fuel and maintenance costs, are calculated in a scenario in which the driver drives 40,000 miles annually for four years on the Uber platform.

Table 1 outlines the parameters used to model this scenario. Table 2 lists the energy prices for each city analyzed. Table 3 includes the vehicle characteristics used to calculate each cost associated with owning and operating an EV, hybrid vehicle, or ICE vehicle. All costs are represented in US dollars.

Table 1. TCO Analysis, Scenario Parameters

Parameter	Value	Parameter	Value
Discount Rate	6%	ICE Maintenance Cost	\$0.13 per mile
Depreciation, First Year of Ownership	36%	Insurance Rate	5%
Depreciation, Second+ Year of Ownership	21%	Inflation Rate	2.5%
EV Maintenance Cost	\$0.07 per mile		

Table 2. TCO Analysis, Energy Prices by City

	Los Angeles, CA	New York City, NY	Atlanta, GA	Toronto, ON
Residential Electricity (\$/kWh)	\$0.31	\$0.24	\$0.13	\$0.08
Public DCFC Station (\$/kWh)	\$0.51	\$0.48	\$0.47	\$0.43
Gasoline (\$/gal)	\$4.37	\$2.88	\$2.89	\$4.01

Table 3. TCO Analysis, Vehicle Parameters

	Hyundai Kona EV	Toyota Corolla	Toyota Prius
2025 MSRP	\$33,550	\$23,310	\$28,350
Miles per Gallon (MPG or MPGe)	116	34	57

⁴⁷ Federal Highway Administration. (2022). 2022 NextGen National Household Travel Survey Core Data, US Department of Transportation, Washington, DC. [Link](#).

Selection of Strategies

This section describes the selection process for proposed strategies to address the opportunities and barriers enumerated above. The consultant team facilitated a one-day workshop with nearly two dozen experts in policy, government, and vehicle technology on April 3, 2025. The participants discussed and debated a wide set of strategies to advance efficient, low-cost mobility. Broadly, the strategies included carrots, sticks, and enabling policies (see text box). Using that discussion as starting place, as well as follow-on discussions with experts, the consultant team identified strategies that can be implemented by local, state/provincial, and federal government, or electric utilities.

For strategies aimed at local, state/provincial, and utility decision makers, we selected strategies based on these tenets:

- Has a proven track record for boosting EV sales.
- Addresses a recognized barrier relevant to ridehail drivers.
- Minimizes taxpayer burden.

To identify federal strategies, we sought instruments that support the following tenets:

- Strengthens the domestic economy over the long term.
- Maintains consumer choice for vehicles and fuels.
- Benefits multiple sectors of the economy, not just the automotive sector.
- Has broad public appeal and minimizes delays from legal action.
- Minimizes direct money transfers to private individuals and organizations.

After identifying a wide set of candidate strategies, we narrowed the list to those in the [Strategies](#) section.

Strategy Categories

Carrots are financial and non-financial rewards, such as rebates, tax exemptions, and preferred access programs. Carrots are effective at driving technology adoption, but can have downsides, such as high administrative costs, high incidence of incentives going to individuals who would have acted anyway, and policy uncertainty.

Sticks include instruments like vehicle sales requirements, fuel economy standards, and air quality standards. Sticks also have potential downsides, including perceived government overreach and misalignments between policy objectives and market realities.

Enabling policies are defined in this paper as one that drives knowledge creation, jobs, and economic competitiveness while being technology neutral.