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Assess the Battery-Recharging and Hydrogen-Refueling Infrastructure Needs, Costs and Timelines Required to Support Regulatory Requirements for Light-, Medium-, and Heavy-Duty Zero-Emission Vehicles

FINAL REPORT

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COORDINATING RESEARCH COUNCIL, INC.

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List of Acronyms

Acronym	Description
AB	Assembly Bill
ACCII	Advanced Clean Cars II
ACF	Advanced Clean Fleets
ACT	Advanced Clean Trucks
AEO	Annual Energy Outlook
AFC	Alternative Fuel Corridors
AFDC	Alternative Fuel Data Center
AFLEET	Alternative Fuel Life-Cycle Environmental and Economic Transportation
BEV	Battery Electric Vehicle
BIL	Bipartisan Infrastructure Law (2021 Infrastructure Investment and Jobs Act)
BNEF	Bloomberg New Energy Finance
CARB	California Air Resources Board
CBSA	County Based Statistical Area
CCS	Carbon Capture and Sequestration
CEC	California Energy Commission
CFI	Charging and Fueling Infrastructure
CMAQ	Congestion Mitigation and Air Quality
CPUC	California Public Utilities Commission
CRT	Charge Ready Transport
DCFC	Direct Current Fast Charger
DER	Distributed Energy Resources
DOE	Department of Energy
EER	Energy Efficiency Ratio
EIA	Energy Information Administration
EMA	The Truck and Engine Manufacturers Association
EPA	Environmental Protection Agency
EPRI	Electric Power Research Institute
EVI-Pro	Electric Vehicle Infrastructure Projection Tool
EVSE	Electric Vehicle Supply Equipment (i.e., plug-in electric vehicle charger)
FCEV	Fuel Cell Electric Vehicle
GHG	Greenhouse Gas
GVWR	Gross Vehicle Weight Rating
H2Hubs	Hydrogen Hubs
H2ICE	Hydrogen Internal Combustion Engine
HD	Heavy-Duty
HEVI-LOAD	Medium- and Heavy-Duty Electric Vehicle Infrastructure Load, Operations, and Deployment Tool
HRI	Hydrogen Refueling Infrastructure
HVAC	Heating, Ventilation, and Air Conditioning
HVIP	Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project
ICT	Innovative Clean Transit
ICCT	International Council on Clean Transportation
ICEV	Internal Combustion Engine Vehicle
IOU	Investor Owned Utility
IRA	Inflation Reduction Act
Kg	Kilogram

L1	Level 1 [Charger]
L2	Level 2 [Charger]
LBNL	Lawrence Berkeley National Laboratory
LCFS	Low Carbon Fuel Standard
LD	Light-Duty
MCS	Megawatt Charging System
MD	Medium-Duty
MDHD	Medium- and Heavy-Duty
MT/MMT	Metric Tons/Million Metric Tons
MOVES	Motor Vehicle Emission Simulator Tool
MY	Model Year
NEVI	National Electric Vehicle Infrastructure
NHTS	National Household Travel Survey
NREL	National Renewable Energy Laboratory
OEM	Original Equipment Manufacturer
PEV	Plug-in Electric Vehicle
PHEV	Plug-in Hybrid Electric Vehicle
PSA	Pressure Swing Adsorption
PTC	Production Tax Credit
RMI	Rocky Mountain Institute
SAFE	Safer, Affordable, Fuel-Efficient
SB	Senate Bill
SCE	Southern California Edison
SMR	Steam Methane Reformation
TIP	Transportation Improvement Plan
TNC	Transportation Network Company (i.e., rideshare)
TPD	Tons per day
TWH	Tera Watt hours (Tera = 10^{12})
VMT	Vehicle Miles Traveled
ZEV	Zero Emission Vehicle

Executive Summary

In 2024, the U.S. Environmental Protection Agency (EPA) finalized new Multi-Pollutant and Greenhouse Gas (GHG) emissions standards for light-, medium-, and heavy-duty (LD, MD, HD) on-road vehicles and engines for model years (MY) 2027 to 2032 requiring auto and truck manufacturers to meet more stringent GHG and criteria pollutant emission standards. To comply with the stringent requirements of those regulations, vehicle manufacturers are expected to increase sales-percentages of zero-emission vehicles (ZEVs), such as battery-electric (BEV), fuel cell electric (FCEV), and plug-in hybrid electric vehicles (PHEV). Simultaneously, the California Air Resources Board (CARB) imposed several regulations mandating ZEV sales for both light- and medium/heavy-duty vehicles through 2036. The Advanced Clean Cars II (ACCII) rule extends the current regulatory standards, setting increased ZEV sales requirements for light-duty vehicles from 2026, culminating in 100% new car sales by 2035. For medium and heavy-duty trucks, the Advanced Clean Trucks (ACT) and the Advanced Clean Fleets (ACF) regulations set increasing ZEV sales requirements from 2024 to 2036. By 2036, the ACF regulation requires 100% of new MD/HD vehicles sold in California to be ZEV. The Innovative Clean Transit (ICT) regulation also sets increasing purchase requirements for transit agencies beginning 2023 and culminating in 100% of new purchases by transit agencies that must be ZEVs by 2029, with a goal for full transition of the entire fleet to ZEVs by 2040. Of these, the ACCII and ACT regulations have been adopted in several other states, reflecting the nationwide push towards greener transportation options.

The successful implementation of these regulations will heavily rely on the existence of a widespread, accessible, and efficient network of charging and refueling stations. Potential buyers frequently express range limitation as a key concern when contemplating the purchase of ZEVs. Many plug-in and fuel cell vehicle owners suffer from difficulty finding charging and refueling stations and planning trips, especially during drives not in the daily routine and over long distances. That is why the expansion of the charging infrastructure is a critical factor in accelerating the adoption rate of ZEVs. To better plan for the deployment of ZEVs and their infrastructure, it is important to fully comprehend the scope, costs, and timeframes involved in developing the ZEV infrastructure that will be needed to support the multiple state and federal ZEV regulations. This report evaluates the national demands and costs of the charging and hydrogen fueling infrastructure necessary to support the transition of LD, MD, and HD vehicles to ZEVs. To evaluate the rate and scale of ZEV adoption, the project team assumed that the adopted policies could be fully implemented at both national and state levels, and conducted extensive fleet modeling to estimate the number of various types of ZEVs (BEVs, PHEVs, FCEVs) at the state level in five-year increments from 2025 through 2050. The project team leveraged this modeling exercise to determine the number, capacity, hardware and installation costs[1], and timelines for creating the necessary charging and refueling stations to support the anticipated transition of U.S. on-road transportation sector to ZEVs. In addition, the report also evaluates the impact of fleet transition on the overall power sector and on hydrogen production.

Significant Investment Needed

$281 billion investment will be needed by 2033 to install approximately 6.8 million depot and public EVSE ports as well as 1,100 hydrogen fueling stations across the country.

[1] Cost estimates for BEV charging infrastructure include EVSE hardware and installations, while utility upgrades, land acquisition, and other soft costs are not quantified. Cost estimates for FCEV refueling infrastructure include refilling station compressors/boil off management and retail site distribution pumps, while costs associated with hydrogen production and distribution such as electrolysis unit, compression or liquefaction unit, distribution pipeline, compressed hydrogen delivery trucks or purification units are not quantified.

Assuming that the ZEV regulations at issue can be implemented as adopted, by 2035, it is anticipated that 35% of LD fleets and 17% of MDHD fleets will be ZEVs. Approximately $275 billion will need to be invested by 2033[2] to install approximately 6.8 million depot-based and public electric vehicle supply equipment (EVSE) ports across the country by 2035, as shown in Figure 1. Due to the large-scale deployment of BEVs and PHEVs, the electricity demand from the transportation sector will reach 608 TWh, accounting for over 13% of the total national electricity demand of 4,700 TWh across all sectors of the economy (
Figure 2). The number of hydrogen refueling stations must be increased to 1,100 to meet the national fueling demand of over 2,700 metric tons (MT) per day, with roughly 600 stations serving MDHD vehicles, and 500 stations serving LD vehicles by 2035. The total required investment to install the necessary hydrogen refueling infrastructure is approximately $6 billion, as illustrated in
Figure 3.

Figure 1. Total public and depot EVSE ports and cumulative investment needed for EVSE equipment and installation.

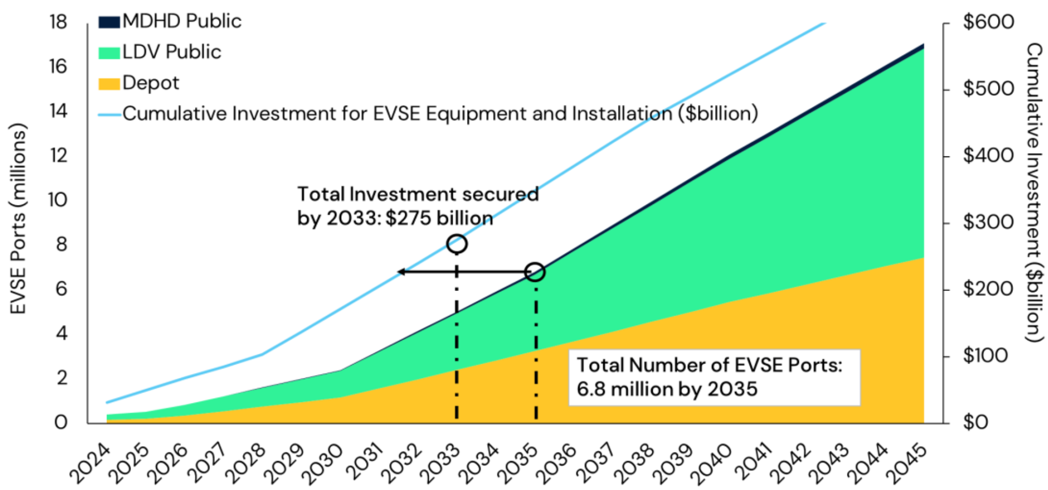
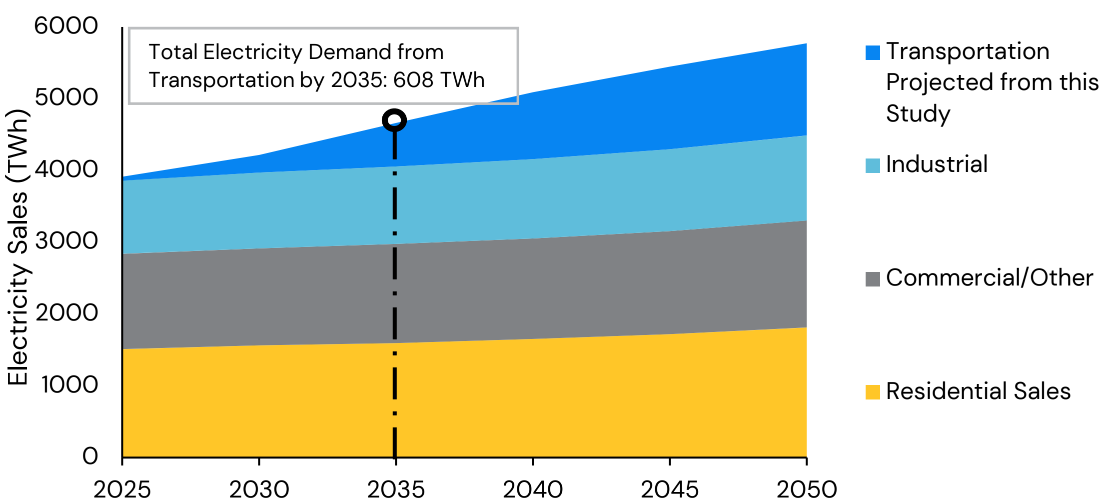
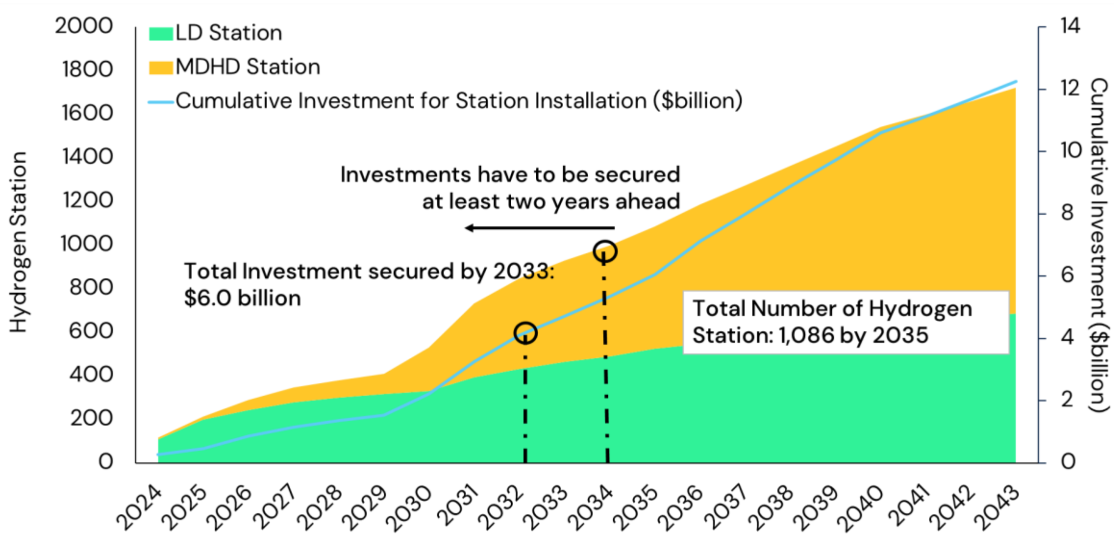


Figure 2. Forecasted economy-wide electricity demands and sales by sector.[3]



[2] Investment has to be committed at least two years ahead to account for site development lead time before deployment. The same assumption applies to hydrogen infrastructure development.
[3] Sales from non-transportation is from 2023 Annual Energy Outlook (AEO) Reference Case [87].

Figure 3. Total hydrogen fueling stations and needed investment for station installation.

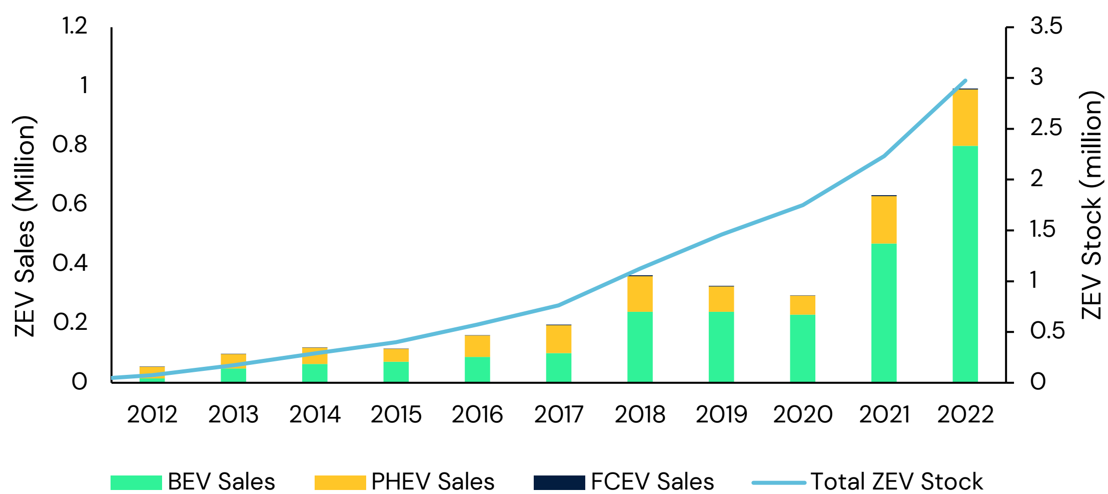


Background

Currently there are about three million zero-emission vehicles (ZEV) operating on the road in the U.S., which accounts for approximately 1% of total vehicles. Figure 4 illustrates the annual sales of battery electric vehicles (BEV), plug-in hybrid vehicles (PHEV), and fuel cell electric vehicles (FCEV), as well as the total ZEV stock, in the last decade [1, 2]. Due to the recent regulations adopted by the U.S. Environmental Protection Agency (EPA) and State Clean Air agencies, such as the California Air Resources Board (CARB), it is expected that there will be a significant increase in the number of light-duty (LD), medium-duty (MD), and heavy-duty (HD)[4] ZEVs over the next decades.

In March 2024, EPA announced finalized standards that leverage advances in clean car technology to further reduce harmful air pollutant and greenhouse gas (GHG) emissions from LD, MD, and HD vehicles, for model years (MY) 2027 through 2032 [3, 4]. CARB has also adopted several regulations setting both ZEV sales and purchase requirements for on-road vehicles, trucks, and buses, with statewide targets of 100% ZEV sales for transit buses by 2029, LD vehicles by 2035, and MDHD trucks by 2036 [5, 6, 7, 8]. Under Section 177 of the Clean Air Act, which authorizes other states to adopt California's vehicle emission standards in lieu of federal requirements, multiple states have also adopted California regulations, with more expected to follow. Furthermore, the federal government's unprecedented investment in both ZEVs and their supporting infrastructure through the Bipartisan Infrastructure Law (BIL) and the Inflation Reduction Act (IRA) is expected to expedite the adoption of these ZEVs [9, 10]. More information on these regulations can be found in Appendix I: Sales Curves.

Figure 4. U.S. ZEV sales and total stock in the last decade (2012-2022).[5]

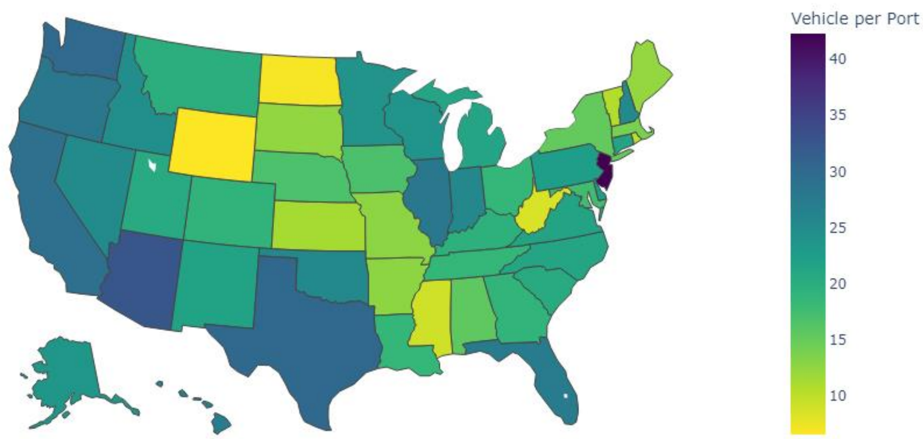


According to the U.S. Department of Energy (DOE) Alternative Fuels Data Center (AFDC), there are more than 55,000 public electric vehicle (EV) charging stations with roughly 143,000 electric vehicle supply equipment (EVSE) ports in the U.S. [11]. The vast majority of the available public chargers are Level 2 (L2), with only 20%

[4] LD vehicles refer to vehicles <=8,500 lbs. in gross vehicle weight rating (GVWR); MD: GVWR > 8,500 lbs. and <=14,000 lbs.; HD: GVWR > 14,000 lbs.
[5] BEV and PHEV data retrieved from the International Energy Agency (IEA) Global EV Data 2023 [2] and FCEV data retrieved from the Hydrogen Fuel Cell Partnership FCEV Sales Data Sheet [1].

being direct current fast charging (DCFC)[6]. The total number of public charging stations varies significantly from state to state, with California having more than 40,000 public EVSE ports and Alaska having less than 200 ports. However, a higher number of ports does not necessarily guarantee improved charging access. This is because the effectiveness of charging infrastructure is dependent on the overall number of EVs that these stations must support, as well as the availability of charging options at homes or workplaces. As illustrated in Figure 5, the average EV-per-port ratio in the U.S. is roughly 24, ranging from a high of 42.24 in New Jersey to a low in Wyoming of 6.57.[7] While fewer public chargers can suffice to cover current EV charging needs in the states that have higher shares of residential or workplace charging, the reliance on public charging is expected to increase as the EV market evolves, even in places with high shares of single-family houses.

Figure 5. Current EV-per-port ratio at the state level.



Unlike EV charging infrastructure that spans the entire country, public hydrogen retail stations only exist in California. According to the latest data published by the California Energy Commission (CEC), there are 63 LD and 6 HD open hydrogen stations in California, with more in the planning phase [12]. In response to the anticipated ZEV growth, a major expansion of the infrastructure for both electric charging and hydrogen refueling is imperative.

Successful development and implementation of national and state ZEV policies requires a full understanding of the scope, cost, and timeframes involved in developing this ZEV infrastructure to support the envisioned transition to ZEVs. This study is focused on several key areas to understand the comprehensive implications of electric charging and hydrogen expansion. Firstly, it estimates the rate and scale of ZEV adoption at the state level and the total energy demands to sustain this increase and its impact on the power grid and hydrogen refueling capacity, assuming that the various ZEV regulations at issue can be fully implemented as adopted. Secondly, and again using that same assumption, it determines the specific number, location, size, station installation and equipment costs, and timelines for creating the necessary charging and refueling stations. Although electrical utility upgrade costs, as well as hydrogen production and distribution costs are not quantified because they depend on project and site specifics, key factors that may affect such costs are discussed comprehensively. Moreover, it analyzes the aggregated impact of transportation electrification on the electricity grid, and how different methods of hydrogen delivery could impact its quality, costs, and the end-users. Lastly, it reviews the current and potential governmental regulatory and financial incentives

[6] Tesla currently owns the biggest DCFC network in the U.S., followed by Electrify America and ChargePoint.
[7] EV-per-port ratio is calculated using the total plug-in electric vehicle (BEV and PHEV) population, divided by the total number of public EVSE ports (all levels included).

regarding DCFC stations and cross-country networks of HD charging and refueling stations, and compares those available incentives against the estimated aggregate costs of transitioning to ZEVs.

Approach

Fleet Modeling

To fully assess the anticipated charging and refueling infrastructure needs, the project team first conducted vehicle fleet modeling at the state level to calculate the projected on-road ZEVs by fuel technologies. The U.S. EPA's MOtor Vehicle Emission Simulator (MOVES) model was used to assess the baseline national vehicle fleet mix [13]. While the MOVES3 model reflects the impact of EPA rulemaking efforts such as the Heavy-Duty Greenhouse Gas Phase 2 Standards and the Safer Affordable Fuel-Efficient (SAFE) Vehicles Standards[8], it does not consider any ZEV technologies penetration [14, 15]. In this study, the project team incorporated recent federal and state regulations mandating increased ZEV penetration into MOVES3[9] baseline data to project the future ZEV population.

Market Penetration and Sales Curves

As part of this task, a series of ZEV sales curves (i.e., percentage of new vehicle sales that are ZEV) by weight class for the contiguous United States have been developed. Light-duty vehicles (LDV) sales curves are categorized by three major groups: California (LD), Clean Car States, and EPA LD States. Medium- and heavy-duty vehicles (MDHD) have been combined together, also classified into three types: California (MDHD), Clean Truck States, and EPA Truck States. Each state's overall ZEV goal and regulatory strategy is mapped to one of these groupings. Additionally, each ZEV goal has a specific vehicle technology distribution (BEV, PHEV, FCEV percent share) applied to it based on state and vehicle type. Using this approach, a total of 22 sales curves (e.g., percent BEV/PHEV/FCEV new sales by state and vehicle MY) have been developed for various states and vehicle weight groups, again assuming that the multiple state and federal ZEV-forcing regulations can be fully implemented. The detailed sales curves can be found in Appendix I: Sales Curves, and the definition of each grouping is provided below:

California (LD): The State of California is the only U.S. state that has the authority[10] to set and enforce its own emission standards, which must meet or exceed federal emission regulations. For LDVs, the vehicle component of California's Advanced Clean Cars II (ACCII) regulation incrementally raises ZEV sales requirements from approximately 35% in 2026 to 100% by 2035 for passenger cars and passenger trucks [5]. Following the same assumptions as ACCII rulemaking[11], the technology mix of the projected ZEV population is primarily going to consist of BEVs with a small penetration of FCEVs, while for passenger trucks, there will be a greater market for PHEV and FCEV options as compared to passenger cars.

Clean Car States (LD): A "Clean Car State" is a State which has adopted California's ZEV regulations under Section 177 of the Clean Air Act (42 U.S.C. §7507) [16]. States that have adopted California's LD ZEV standards under Section 177 include: California, New York, Massachusetts, Vermont, Maine,

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[8] The SAFE rule was officially repealed in December 2021. More information available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions
[9] EPA has released MOVES4 in August 2023. However, since the official release was not yet available during the development of this study, the analysis was done using MOVES3 instead. More information available at: https://www.epa.gov/moves/latest-version-motor-vehicle-emission-simulator-moves
[10] Subject to EPA preemption waivers [112]
[11] Data retrieved through communication with CARB's ACCII rule making team.

Connecticut, Rhode Island, Washington, Oregon, New Jersey, Maryland, Colorado, Minnesota, Nevada, Virginia, and New Mexico.[12] While Clean Car States are assigned the same ZEV goal as California's ACCII regulation, they may still follow a different penetration of fuel technologies. The technology mix for the projected ZEV population in Clean Car States is assumed to align with the EPA's Light-Duty Multi-Pollutant Emissions Standards, which only considers BEV and PHEV technologies.

EPA LD States (LD): A "EPA LD State" is a State which does not follow California's ZEV regulations. Instead, EPA LD States are assumed to follow the U.S. EPA's Light-Duty Multi-Pollutant Emissions Standards. BEV and PHEV penetration rates were taken from Tables 75 and 77 of the finale rule-making document. Note that FCEVs are not considered in these states.

California (MDHD): The Advanced Clean Trucks (ACT) regulation, adopted in 2020, initially established MDHD ZEV sales targets in California, of 55% ZEV sales for Class 2b – 3 vehicles, 75% ZEV sales for Class 4 – 8 Vocational trucks, and 40% ZEV sales for Class 7 – 8 tractors by 2035 [7]. Subsequently, in April 2023, CARB adopted the Advanced Clean Fleets (ACF) regulation, which not only has established 100% MDHD ZEV sales mandates starting in MY 2036, but also requires fleets that are suitable for early electrification to replace their existing conventional internal combustion engine vehicles (ICEV) with comparable ZEVs over the next two decades [8]. Given that the ACF ZEV requirements are above and beyond what ACT has established, California MDHD ZEV penetrations have been estimated using the latest ACF rulemaking assumptions. A combination of BEV and FCEV technologies is considered based on vocational and vehicle weight classes, consistent with assumptions presented in the ACF rulemaking document.

Clean Truck States (MDHD): A "Clean Truck State" is a state which has adopted the California ACT regulation [17]. States that fall under this category include Colorado, Massachusetts, New Jersey, New Mexico, New York, Oregon, Vermont, Washington, Maryland and Rhode Island. The technology mix distribution is set to be consistent with ACT as well, which ascribes a 10% market share for FCEVs in the HD tractor segmentation between 2030 and 2050 [7].

EPA Truck States (MDHD): A "EPA Truck State" is a State which does not follow California's MDHD ZEV sales requirements. Instead, it follows ZEV penetration rates projected from the EPA's Medium-Duty Multi-Pollutant Emissions Standards and Heavy-Duty Phase-3 Standards [3, 4]. Note that although the Phase-3 rule primarily includes projected market penetration of BEV technology, it assumes that FCEVs are viable technology options for certain long-haul HD applications, and they are expected to be available in the 2030 timeframe. Therefore, the ACT technology mix assumptions were adopted for EPA Truck States as well.

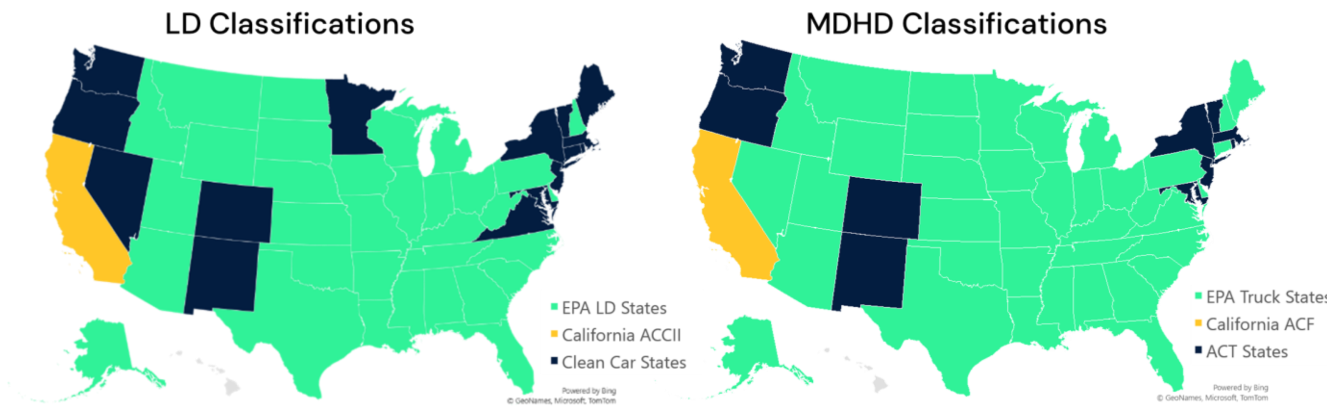
In summary, the project team has assumed that each State has a ZEV goal or strategy, informed by either the U.S. EPA finalized standards[13] or California policy. The projected ZEV population is then segmented by technology, using fuel technology assumptions from the California ACC II, ACT, and ACF regulations. The resultant sales curves are the State's ZEV goal for a given vehicle category, apportioned by regulatory

[12] While not all the abovementioned states have adopted the latest ACCII standards, it is very likely that they will choose to opt in eventually. Note that only states who have adopted the ZEV standards are considered, while states who have adopted the Low-Emission Vehicle (LEV) standards are not included in the Clean Car States and are treated as EPA LD States instead.

[13] The ZEV sales in EPA LD or Truck states may be lower than the EPA penetration rates, which already considered the offset brought by states who have exceeded the average sales through adopting California's ZEV requirements. Therefore, applying EPA goals directly to those states serves upper bound estimates of ZEV sales.

technology mix assumptions. The project team's sales curve assignments for both LDVs and MDHD vehicles are visualized in *Figure 6*. Generally speaking, transit buses should follow the same ZEV penetration schedule as stated in the Phase-3 rule for MDHD vocational trucks. However, recent data have suggested that the transition to zero-emission buses has already commenced across the country [18]. Therefore, a uniform 20% ZEV penetration between 2020 to 2026 is assumed nationwide before the Phase-3 rule comes into place. This assumption is applied to all states except California (ICT), Massachusetts, and Washington D.C., which all have established respective 100% transit targets [19, 20, 6]. FCEV penetrations are kept consistent with assumptions of long-haul tractors for the same state.

Figure 6. Statewide ZEV goals for LDV (left) and MDHD (right).



CO_2Sight Modeling

ICF's CO_2Sight On-Road Vehicle Tool was used to model vehicle miles traveled (VMT), vehicle population, and the energy consumption impacts of switching the national vehicle fleet of ICEVs to BEVs, FCEVs, and PHEVs. The tool uses the national EPA MOVES3 model as an input for current and projected ICEV populations, VMT, and energy consumption through 2050, which varies by the state, regulatory class, propulsion type, and vehicle "source type" (passenger car, passenger truck, transit bus, etc.). CO_2Sight then models national ZEV adoption driven by predetermined the BEV, FCEV, and PHEV sales curves. As outlined in the previous section, the sales curves determine the technology composition (i.e., ICEVs, BEVs, FCEVs, and PHEVs) of vehicle sales each year from 2020 to 2050 based on the assumed implementation of the latest ZEV regulatory standards and statewide targets.

For each year in the MOVES3 model, CO_2Sight converts new car sales to total fleet mix by replacing a percentage of newly purchased vehicles to BEVs, FCEVs, and PHEVs determined by the sales curves. That proportion is distributed evenly among all ICEV fuel types. The total vehicle population in any given year is the sum of the existing vehicles and new vehicles for that year, minus the vehicles at the end of their lifetime[14]. The same basic approach is used to reallocate VMT[15]. Energy consumption is reallocated by multiplying the BEV, FCEV, and PHEV VMT by their energy efficiencies (in kWh/mi or g H_2/mi) respectively, as listed in Appendix II: BEV and FCEV Vehicle Efficiency. Energy efficiencies are calculated based on data from the currently available commercial models by vehicle type and weight class, using information available through the U.S. DOE and EPA fuel economy data, California's Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) program, and information provided by the original equipment manufacturer (OEM) [21, 22]. A 15% adjustment factor was applied to transit and other buses to account for the energy consumption due to heating,

[14] ZEVs are assumed to exist in the vehicle fleet for the same length of time as ICEVs.
[15] ZEV's accrual rates are assumed to be identical to ICEV's.

ventilation, and air-conditioning (HVAC) system [23].[16] In addition, a 10% charging loss adjustment has also been applied to all BEVs and PHEVs to account for the energy lost during charging events due to heat and other causes [24]. For FCEV categories that are not currently available, the project team calculated the FCEV energy efficiencies based on their BEV counterparts, assuming the energy efficiency ratio (EER) of BEV to FCEV are constant.[17]

Infrastructure Modeling

EVI-Pro for Personal LDV Daily Charging Needs Assessment

Charging needs for the projected personal plug-in electric vehicles (PEV, e.g., BEV and PHEV) are estimated using the publicly available version of the National Renewable Energy Laboratory's (NREL) Electric Vehicle Infrastructure Projection Tool (EVI-Pro) [25]. EVI-Pro is a tool for projecting consumer demand of EV charging infrastructure, developed through a collaboration between CEC and NREL. The tool uses detailed data on personal vehicle travel patterns, EV attributes, and charging station characteristics in bottom-up simulations to estimate the quantity and type of charging ports necessary to support regional PEV adoption. Specifically, EVI-Pro estimates charging demand for daily travel based on personal vehicle travel patterns from the 2017 National Household Travel Survey (NHTS). The 2017 NHTS respondent data is most consistent with the MOVES passenger car and passenger truck vehicle categories. For this reason, only the passenger car and passenger truck PEV populations are considered in this EVI-Pro LDV charging needs assessment. Light commercial trucks are excluded due to the potential difference in vehicle travel and activity patterns to those reflected in the 2017 NHTS.

EVI-Pro estimates regional charging port distributions using two key inputs: the number of PEVs[18] to support and the percentage of PEV owners with access to home charging. The number of PEVs to support by region and calendar year is taken directly from the fleet modeling exercise described in the previous section and the resulting vehicle portfolio is dominated by BEVs due to assumed sales curves. Residential charging potential, or the percentage of PEV owners with access to home charging, is a critical variable determining the amount of residential and public charging infrastructure needed. The higher the access to home charging, the lower the need for public charging infrastructure. NREL's research, which examines the potential for residential charging according to housing type, takes into account various scenarios derived from a residential parking and electrical survey conducted by the organization. This study was designed to understand the correlation between the percentage of PEV owners with access to home charging facilities and the changes in PEV stock share [26]. The outcome of NREL's research was a set of home charging access scenarios as a function of the LD PEV stock ratio, based on different grid-readiness levels and shifts in PEV owner parking behavior[19]. These home charging access distributions are illustrated in Figure 7. The project team, after personal communication with NREL staff, developed a new home charging access scenario (solid black line) using a 50%-50%

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[16] HVAC system may consume up to 30% of the battery power at maximum. Due to seasonal and temperature variances across the country, the project team assumed that on average transit and other buses are 15% less efficient compared to their "sticker" values.

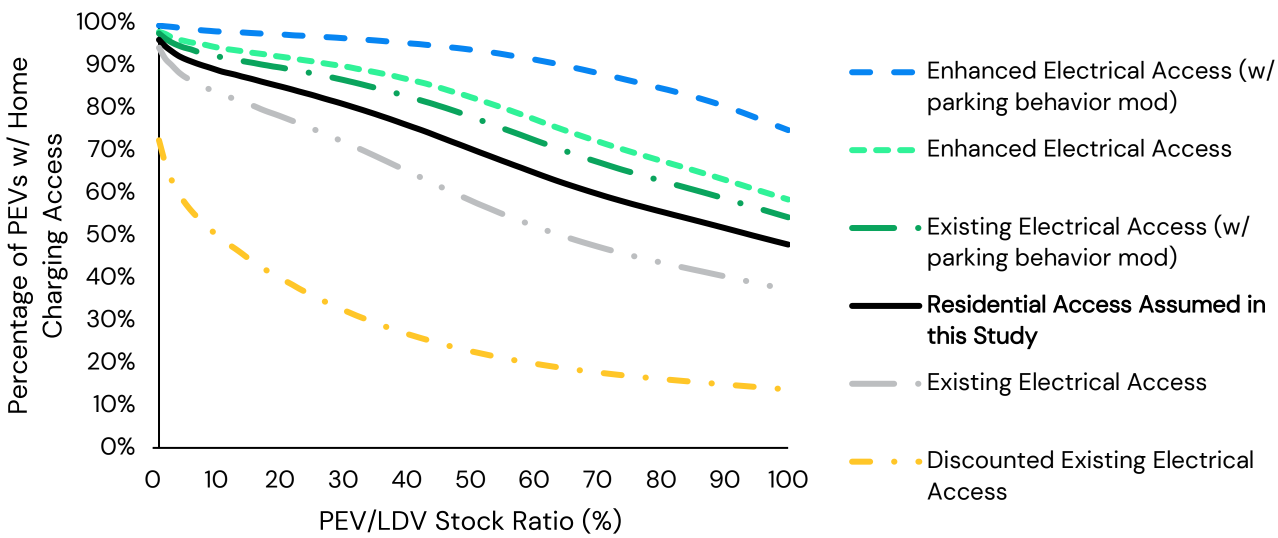
[17] Class 2b trucks are assumed to be similar as LD trucks, with a BEV/FCEV EER of 1.34; Class 3 and above vehicles are assumed to be similar as Class 8 tractors and transit buses, with a BEV/FCEV EER of 2.

[18] Note that the ratio of BEVs versus PHEVs serves as an input to EVI-Pro as it impacts the overall PEV charging needs.

[19] If a vehicle is currently not parked in an area with electrical access but can be moved to a home parking location with electrical access, then residential charging can become available with "*parking behavior modification*".

combination of the "Existing Electrical Access"[20] and the "Enhanced Electrical Access"[21]. This assumption reflects home charging access potential as some future PEV owners are able to add electrical outlets at their normal parking locations (e.g., garage, driveway, curbside outside the house).

Figure 7. Residential charging accessibility projection with the change of PEV stock share.



With the number of supported PEVs by region and calendar year, as well as the percent home charging access by region's PEV/LDV stock ratio per calendar year, detailed charging needs for personal LDVs can be queried using EVI-Pro, which is shown and discussed in the Results section.

EVI-OnDemand for Non-Personal LDV Charging Needs Assessment

EVI-OnDemand is another NREL simulation platform which estimates fast-charging infrastructure requirements necessary to support ride-hailing electrification [27]. Although the tool was designed to estimate the charging needs for transportation network companies (TNC) such as Uber and Lyft, the project team used it to estimate fast-charging infrastructure requirements necessary to support both ride-hailing services and long-distance road trips.

EVI-OnDemand estimates the DCFC infrastructure needed to electrify ride-hailing across 384 States Core Based Statistical Areas (CBSAs) using numerous inputs, most notably shift duration, total VMT in different CBSAs, and the electrified TNC market share. The project team kept most of the input variables the same as default, while modifying the electrified TNC market share to reflect the progressive DCFC needs from ride-hailing services as both EV adoption and TNC service expands. As large TNC companies have committed to reaching 100% ZEVs by 2030 [28, 29], the project team assumed that 50% of the TNC vehicles will be PEVs by 2025, and 100% starting at 2030. Based on a study conducted in 2019, the total TNC market share was around 1.5% on average in metropolitan regions [30]. While the TNC industry has experienced a significant decrease in service due to the COVID-19 pandemic, recent data suggests that trips and riders have returned to the pre-pandemic levels and the TNC market continues to expand [31, 32]. Based on the observed trends, the project

[20] Residential charging is considered available if the vehicle is parked near existing electrical access.
[21] Residential charging is considered available if a vehicle is parked at a location where there is either existing electrical access or where it is likely that new electrical access can be installed.

team assumed the TNC VMT share will continue to grow linearly and increase from 1.5% in 2020 to 16% in 2040, consistent with the 2020 BloombergNEF (BNEF) Electric Vehicle Outlook projection [33].

In order to use EVI-OnDemand to estimate DCFC infrastructure needs to enable electrified long-distance or interregional travel for LD vehicles, the project team modified the input VMT to match with the total long distance travel miles based on the 2017 NHTS data [34]. There are about 2.6 billion long distance trips conducted by Americans every year, and 90% of these trips are via personal vehicles. The average trip distance of these trips is 194 miles. Therefore, the average daily VMT for long-distance trips using personal vehicles is roughly 1.24 billion miles. Once the VMT input was adjusted, the project team assumed the EV ratio to be consistent with the overall fleet PEV/LDV ratio to proceed with the rest of the calculation.

MDHD PEV Charging Infrastructure

With respect to source types that are not considered in EVI-Pro and EVI-OnDemand, a separate model that evaluates the charging needs for light commercial trucks and MDHD BEV fleets was developed. The model takes into account the operational characteristics of vehicles across the nation by source type, including daily operation hours, dwelling time, and duty cycles, etc. These variables were also considered in the Medium- and Heavy-Duty Electric Vehicle Infrastructure Load, Operations, and Deployment Tool (HEVI-LOAD), developed by the Lawrence Berkeley National Lab (LBNL) [35].[22]

Light commercial trucks and MDHD BEVs will use two primary charging models: depot charging and public (or en-route) charging. Vehicles that regularly return to their designated home sites and park overnight often are suitable for depot charging, whereas long-haul and interstate trucking mainly relies on public or en-route opportunity charging, which requires high-power DCFCs or the ultrafast Megawatt Charging Systems (MCS) that can quickly recharge depleted batteries to meet their operational needs. It is assumed that vehicles that are regularly parked at their home base more than 8 hours each day will have access to depot charging, while the rest will need public infrastructure. For this study, the project team leveraged CARB's ACT Large Entity[23] Fleet Reporting data [36] to determine the depot vs. public charging ratios for the various vehicle categories assessed in this study. The early phase of ZEV adoption in MDHD and commercial fleets is likely to be led by large entities, hence the ACT Reporting data should provide reasonably accurate estimates regarding depot charging access. However, these assumptions could change over time as more small businesses, fleets, and individual owner-operators begin transitioning to ZEVs as well.

Daily operation hours of different source types are used to determine the optimal vehicle-to-port ratio at depots [37]. The depot vehicle-to-port ratio is assumed to be 1:1 if average daily operation time is longer than 6 hours. Otherwise, the ratio is set to 2:1. The depot charging cycle is assumed to be 8 hours every day.

For public charging, the charger power output level is consistent with typical recommendations from the OEMs[24] and the battery acceptance rate is assumed to be the same as the maximum output. For long-haul tractors, telematics data has suggested that 25% of trips are slip-seat operations, meaning the truck is driven for more than 700 miles or 16 hours without stopping for a break of 4 hours or longer [38]. Therefore, given the potential ultrafast charging demands for slip-seat operations, 25% of Combination Long-haul Trucks that

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[22] The HEVI-LOAD model is not yet publicly available and is only customized for California. It cannot be used for any other states without significant modification to the model.
[23] Had more than $50 million in revenues in the 2019 tax year from all related subsidiaries, subdivisions, or branches, and have at least one vehicle; or owned 50 or more vehicles in 2019; or dispatched 50 or more vehicles into or throughout California in 2019; or government agencies (federal, state, local, and municipalities) with at least one vehicle in 2019.
[24] Data available through ICF's proprietary EV Library.

require public charging access are assumed to use MCS (1 MW) and the rest will need DCFC 350 kW instead. Due to limited information available regarding public charging infrastructure utilization rates for commercial BEVs, a 20% constant rate is applied to all charger types [39].[25] The major assumptions for this charging assessment are listed in Table 1.

Table 1. Assumptions utilized for estimating charging requirements for light commercial vehicles and MDHD fleets.

MOVES3 Source Type	Operation Days	Daily Operation (Hours)	Depot Charging Ratio	Depot Vehicle to Port	Public Charging Ratio	Public Charger Level (kW)	Public Charger Utilization[26]
Combination Long-haul Truck	312	9.77	0.1	1 : 1	0.675	350	0.2
					0.225	1000	0.2
Combination Short-haul Truck	312	6.5	0.59	1 : 1	0.41	350	0.2
Light Commercial Truck	312	2.81	0.72	2 : 1	0.28	350	0.2
Other Buses	292	8.73	1	1 : 1	0	N/A	N/A
Refuse Truck	312	5.68	1	1 : 1	0	N/A	N/A
School Bus	327	2.45	1	2 : 1	0	N/A	N/A
Single Unit Long-haul Truck	312	5.18	0.59	1 : 1	0.41	350	0.2
Single Unit Short-haul Truck	312	3.42	0.72	1 : 1	0.28	350	0.2
Transit Bus	327	9.06	1	1 : 1	0	N/A	N/A

Hydrogen Refueling Infrastructure

Hydrogen refueling stations are in the early stage of development and deployment. As of mid- 2023, the hydrogen station market is growing, predominantly in California, with over 100 total stations as either open-retail or in development though either state co-funding or completely private funding. Within this total, 63 light-duty hydrogen stations are open to retail, and available, and 6 heavy-duty stations are operating [12]. Three of the heavy-duty refueling stations are deployed for transit buses and the other three are for trucks.

This research follows the general guidelines of the hydrogen station deployment schedule and forecast methodology under CARB's Assembly Bill (AB) 8 Hydrogen Self-Sufficiency Report [40]. The schedule for new station installations is primarily determined by the projected number of fuel cell electric cars, trucks, and buses, and the estimated hydrogen demand. Additionally, it is assumed that stations with larger capacity will phase in gradually over time, while a natural increase in stations with smaller capacities is expected earlier to ensure broader spatial coverage. These factors set the pace of hydrogen station buildout and are crucial in determining the total number of stations with varying capacity combinations. Each hydrogen refueling station is capable of supporting a far larger community of vehicles than a single EVSE, but requires significant investments, and it is essential to plan the deployment strategically. Beginning with smaller capacity stations and gradually progressing to larger capacity stations as demand increases allows for a more controlled and

[25] Based on recent LDV public DCFC data, the average utilization is about 5% [111]. While this is lower than the 20% assumed, we anticipate MDHD public charging may behave differently and as the market matures, the utilization can reach 20%.

[26] The actual charger utilization has been adjusted to account for extended charging time due to energy loss.

manageable expansion of the infrastructure. Starting with smaller capacity stations also helps gauge the demand and utilization, allowing for adjustments and optimizations before scaling up to larger stations.

For light-duty stations, while a couple of higher capacity refueling stations have already been built out or planned to be upgraded (e.g., since 2020, First Element Fuels began installing 1200 kg/day stations and Iwatani is planning to install 800 kg/day), this study assumes that average station capacity is low between 2020 through 2027, ranging from 350 to 600 kg H_2 per day. One contributing factor that drives the current development of stations with higher capacity is that they are designed for dual purposes that serve both LD and HD FCEVs. Since this study does not consider the colocation between LD and HD stations, a more conservative capacity range for early LD station buildout was assumed [41]. Between 2028 and 2031, mid station capacities from 900 to 1200 kg H_2 per day are assumed to be widely available, which allows more time and space for the low-capacity stations to phase-in to increase spatial coverage. Beginning in 2032, high station capacities (1,600 -2,000 kg H_2 per day) will be the primary stations built to meet the surging demand. The capacity phase-in schedule could evolve when more states are installing hydrogen stations.

For heavy-duty stations, due to the larger size of the truck's hydrogen tanks and higher fuel consumption, higher capacity is required, with the following detailed assumptions:

California: With the adoption of ACF and ICT, the phase-in of fuel cell electric trucks and buses, along with their hydrogen demand for refueling, will occur much earlier in California than in other states. This project assumes that heavy-duty stations will initially have an average capacity of 3,000 to 5,000 kg per day in the early years, which aligns with the capacities of California-funded heavy-duty refueling stations and is sufficient to refuel a fleet of 30-40 medium and heavy-duty vehicles [42, 43].[27] In later years between 2026 and 2029, capacities between 5,000 and 7,000 kg per day are assumed to become available. Starting in 2030, stations with capacities ranging from 7,000 to 10,000 kg per day will become dominant, capable of refueling 100-150 vehicles per station on average, which is comparable to the current average diesel fueling capabilities of 130-200 vehicles per station per day[28].

Other States: Based on the U.S. EPA Phase-3 standards, MDHD FCEVs in other states could start to phase-in as early as 2030, which reflects a six-year delay compared to California. Thus, the phase-in schedule of hydrogen station capacity is also assumed to start six years later than California's.

The current average daily utilization[29] of individual hydrogen stations is approximately 35%, while The ideal utilization for profitability is projected to be around 80% [44, 45]. Therefore, station utilization is assumed to ram up from 35% to 80% within 4 to 10 years. If multiple categories are competing for market shares, stations with higher capacity should be prioritized for installation, provided that these new stations can reach 70% utilization within four years. The expansion of low-capacity stations increases the number of smaller stations in the early stages, helping to build out the refueling network and ensure adequate spatial coverage. However, as technology matures and spatial coverage becomes saturated, stations with higher capacity will enter the market and stations with smaller capacity may also be upgraded. Due to their lower cost per kilogram of installed capacity, these larger stations will become more financially competitive.

[27] Current tank capacity of commercially available MDHD FCEVs is roughly 60-80 kg.
[28] A diesel station on a major highway has a typical capacity of 20,000-40,000 gallon, a diesel tank is in the range of 150-200 gallon, so on average a station can fully refuel 130 - 200 trucks every day.
[29] Ratio of daily usage to station capacity.

Cost Modeling

EVSE Infrastructure

The project team has used ICF's Fleet Assessment Tool and its EVSE cost assumptions to estimate the total hardware and installation costs of public (both LD and MDHD) and depot charging ports that can be expected to be deployed over the time horizon of this analysis. Residential and shared private charging costs are not evaluated in this analysis because of their distinct development processes and funding schemes from the others. The EVSE cost assumptions are composite data initially gathered for the California Energy Commission's (CEC) MD/HD vehicle choice model, which is used to project vehicle stock by technology for various MD/HD vehicle classes. Data in this literature review include equipment and installation costs from Argonne National Laboratory's Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) Tool, a tool for assessing the environmental and economic costs and benefits of alternative fuel and advanced vehicles [46]. Data from the International Council of Clean Transportation (ICCT), Rocky Mountain Institute (RMI), NREL, and other sources was also included in the literature review for hardware and installation costs by varying power levels [47, 48, 49, 50, 51]. The project team calculated the average hardware and installation costs for chargers by power level, as shown in Table 2. The hardware and installation costs are per charging port, and the project team has assumed a 10% cost reduction for dual port chargers.

Table 2. Per-port EVSE hardware and installation cost assumptions.[30]

Power Range	Average Hardware Cost - Networked	Average Installation Cost – Networked	Total Hardware & Installation Cost - Networked
L2 (19 kW Max)	$4,500	$3,500	$8,000
DCFC (50 kW)	$35,800	$28,100	$63,900
DCFC (150 kW)	$100,000	$42,200	$142,200
DCFC (250 kW)	$125,000	$51,900	$176,900
DCFC (350 kW)	$150,000	$61,600	$211,600
2 MW	$600,000	$130,000	$730,000

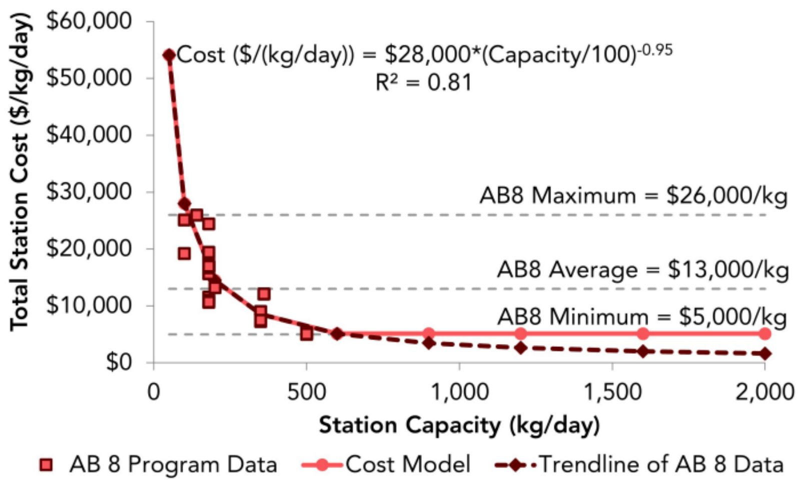
Note that Table 2 provides hardware and installation cost estimates for networked chargers. Here, networked chargers refer to a charging technology platform that is connected to the Internet, which can be used to modulate power delivery at a charging site during peak-demand and provide smart charging management strategies to optimize vehicle charging patterns. Non-networked chargers are standalone units that are not connected to the service network, so they cannot be centrally managed or adjust power delivery based on the grid's capacity. The analysis assumes charging needs will be mainly met by networked chargers for two main reasons: 1) smart charging management will play a key role in meeting increased charging needs as grid upgrades are executed to accommodate PEVs; and 2) many incentive programs for public and commercial chargers require the use of networked chargers to be eligible to receive funding, which will be crucial for accelerating charging infrastructure deployment.

[30] Composite data from Atlas Policy 2021, AFLEET 2020, RMI 2020, ICCT 2019, RMI 2014, and EPRI 2013 cost survey publications. DCFC 250 kW is interpolated using DCFC 150 kW and DCFC 350 kW. 2 MW from Atlas Policy 2021, as the only source that investigated MCS cost.

Hydrogen Refueling Infrastructure

The capital costs for installing hydrogen stations have been estimated, relying mainly on two parameters: 1) individual station capacity, and 2) cumulative network scale. Stations previously funded by the H_2 portion of the Clean Transportation Program authorized under Assembly Bill 8 (and referred to as the AB 8 program), as shown in Figure 8, have shown several key metrics and trends related to the cost of hydrogen station installation. This analysis adopts CARB's truncated cost model and assumes that cost per kg of daily capacity follows a power law function when the station capacity is 600 kg per day or smaller, and then a constant installed capital cost of $5000 per kg daily capacity is used for stations with larger capacity. Data from six hydrogen infrastructure projects funded by CEC's Clean Transportation Program suggest that on average a MDHD hydrogen fueling station with a capacity of over 1000 kg per day would cost around $4,978 per kg/day at the initial deployment [52], which is very close to what CARB has suggested.

Figure 8. Fully Installed station capital expense model.[31]



The AB 8 analysis only represents the costs of the very first hydrogen fueling stations built in California, when the supply chain was extremely limited with little cost reduction. In order to reflect potential equipment capital cost reduction due to technology progression or economies of scale, similar to what has been observed for other emerging technologies like solar and wind electricity generation and BEV battery manufacturing, Moore's Law with 12% reduction per doubling of installed capacity is applied to the initial cost model. While a 12% cost reduction rate might appear slow and conservative compared to other clean energy technologies, it aligns with trends observed for specific technologies related to fuel cells and hydrogen, such as those reported in CARB's hydrogen self-sufficiency report [40] and industry's estimate of hydrogen production cost [53]. For this analysis, a roughly 70% cost reduction from the 2020 baseline level is expected by 2035, as demonstrated in Figure 9. The figure shows that the installed capital cost would decrease from $5,000 in 2020 to $1500 per kg per day in 2035 for a mid-station with a capacity of 1,200 kg per day. Similar reduction trends apply to small and large stations. This reduction from 2020 costs is more aggressive than the 30% - 50% cost reduction estimates made by CARB. Given that CARB's hydrogen self-sufficiency report is limited to the California market, it is very likely that the expanded national network can further reduce the capital cost. The combination of the initial capital cost model and the cost reduction curve based on Moore's Law is used to estimate hydrogen refueling infrastructure cost by capacity in future years.

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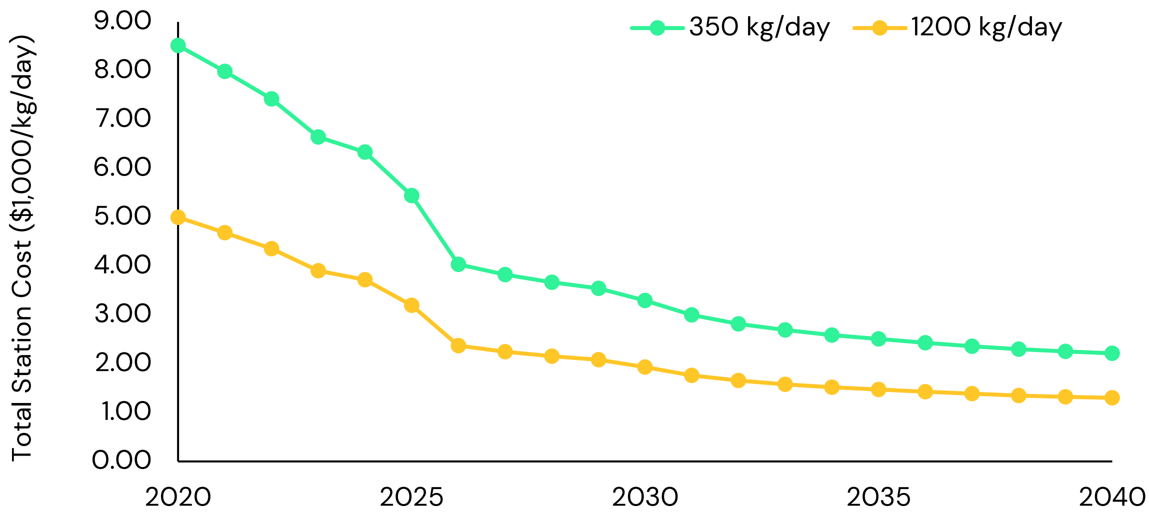
[31] Image source: CARB Hydrogen Self-Sufficiency Report

Figure 9. Hydrogen Installation Cost Reduction by Capacity and Installation Volume

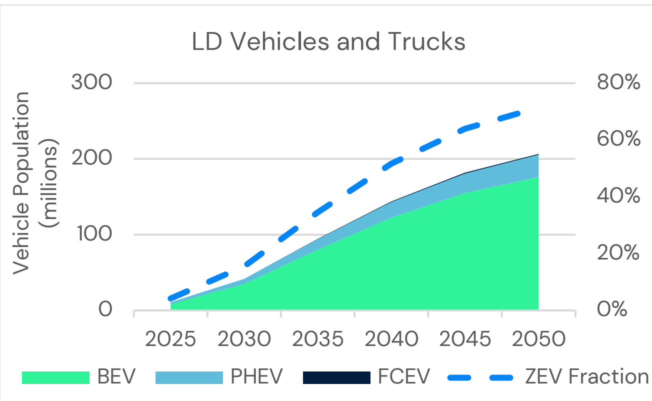


Results

Fleet Modeling Results

Incorporating state level ZEV new vehicle sales curves and technology mix assumptions into the MOVES3 baseline fleet inventory, the CO2Sight model calculated the resulting vehicle stock, as well as electricity and hydrogen demands from 2025 through 2050. As illustrated in Figure 10, the current sales and technology penetration scenarios will achieve a national average of 35% ZEV fleets in the LD sector and 17% ZEV fleets in the MDHD sector by 2035, and 71% for LD and 43% for MDHD by 2050, respectively. It is also noteworthy that although the overall FCEV penetration may seem low, FCEV plays a significant role in the HD long-haul sector (as illustrated in Appendix I: Sales Curves), accounting for 1% of the total fleet by 2035, and 6% by 2050. The projected home charging access curve is also determined using the LDV fleet composition forecast, as illustrated in Figure 11. The population of project ZEV by vehicle types is available in Appendix III.

Figure 10. Projected fleet composition for LD vehicles and trucks[32] (left) and MDHD trucks and buses (right).



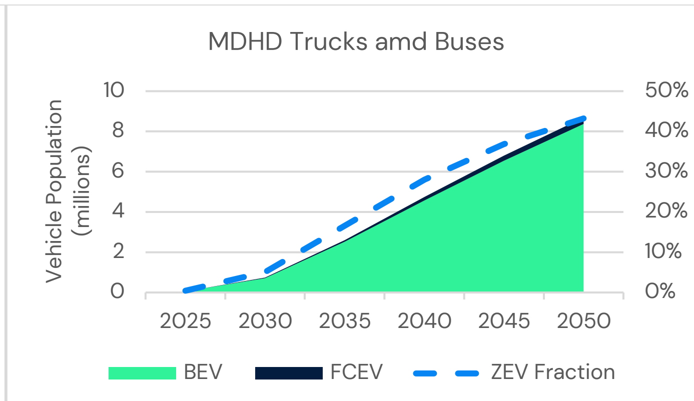


Figure 11. Change in home charging access with projected LDV[33] technology mix.

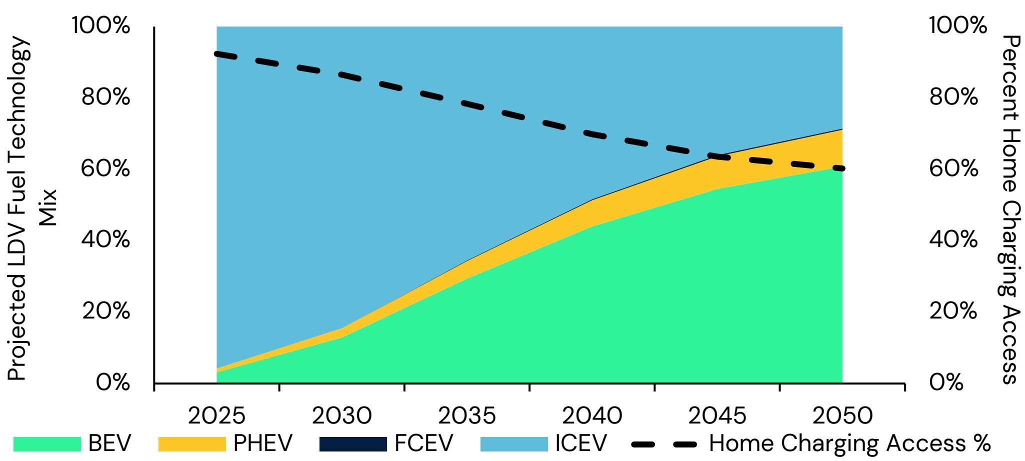
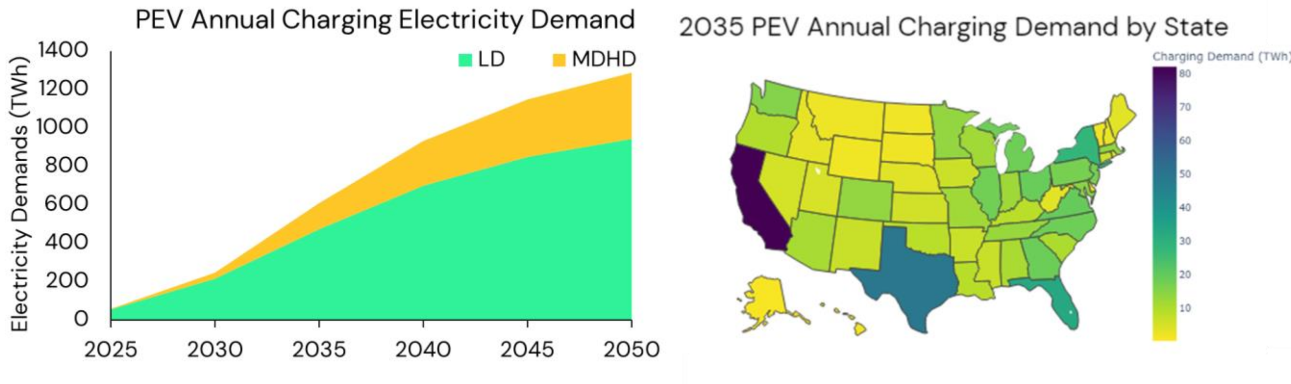


Figure 12 illustrates the electricity generation demand forecast for PEV charging. By 2035, the national electricity demand from the transportation sector will be 608 TWh, and 1,286 TWh by 2050. In 2035 the top

[32] Includes passenger cars, passenger trucks, and light commercial trucks from CO2Sight outputs.
[33] Since home charging access serves as an input to EVI-Pro that assesses personal EV charging infrastructure needs, only passenger cars and passenger trucks are considered.

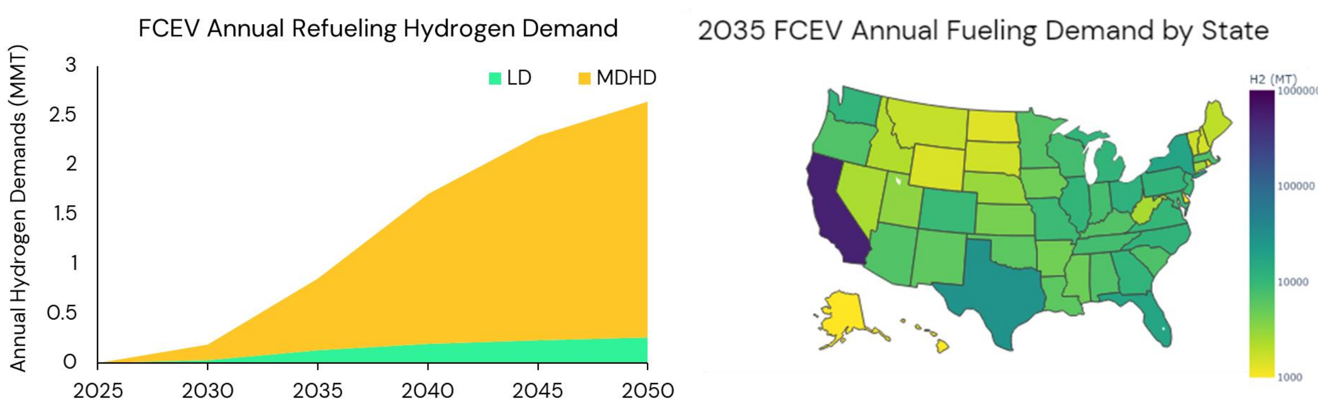
ten states with the highest charging demands are California, Texas, Florida, New York, Virginia, Ohio, Georgia, North Carolina, Michigan, and New Jersey, in descending order.

Figure 12. Projected electricity demands from PEV charging, including LD, MD, and HD vehicles.



Similarly, the hydrogen demand forecast is illustrated in Figure 13. Given the relatively conservative assumptions of FCEV penetration, the current fleet modeling results indicate the need for annual production of 0.86 million metric tons (MMT) of hydrogen for direct use in on-road transportation in 2035, and 2.64 MMT in 2050. In 2035, the top ten states with the highest hydrogen demands are California, Texas, New York, Florida, Ohio, North Carolina, Pennsylvania, Washington, Michigan, and Georgia, in descending order.

Figure 13. Projected annual hydrogen demands from FCEV refueling, including LD, MD, and HD vehicles[34].



Infrastructure Modeling Results

PEV Infrastructure

Based on the PEV charging infrastructure approach and assumptions discussed in the previous section, the project team has estimated the total number of ports by type for every state between calendar years 2024 through 2050. The results for LDVs are output from EVI-Pro and EVI-OnDemand and the results for MDHD vehicles are based on the ICF proprietary model as descrbied earlier. Estimates of the number of chargers by state, type, and power level have been interpolated to develop cumulative charger cost estimates.

[34] Statewide fueling demand result is plotted using $\log_{10}$ scale. Same scale is applied to all the hydrogen refueling and station maps throughout this study.

LD Charger Needs by Type and Power Level

Appendix IV: EVI-Pro and EVI-OnDemand Modeling Outputs summarizes the number of passenger LDV chargers (e.g., private-access, shared-private access, and public DCFCs) by state. Given the current assumptions regarding potential access to home charging, a significant portion of the forecasted LDV charging infrastructure necessary to meet charging demands is expected to be deployed within the residential sector, as illustrated in Figure 14. The total number of L1 and L2 ports across the U.S. for LDVs is shown by EVI-Pro designated use-cases. EVI-Pro projects that L1 and L2 ports will be deployed between residential, public, and private access zones. By 2035, 90% of all L1 and L2 ports are expected to be installed at residential sites, such as single-family homes with a garage and 120 V or 240 V electrical access. The proportion of residential ports slowly diminishes over time as the PEV to LDV ratio rises. This increase in the ratio is a key factor prompting the installation of more public and shared private access ports.

Figure 14: Projected L1 & L2 charger needs for passenger LDVs from EVI-Pro.

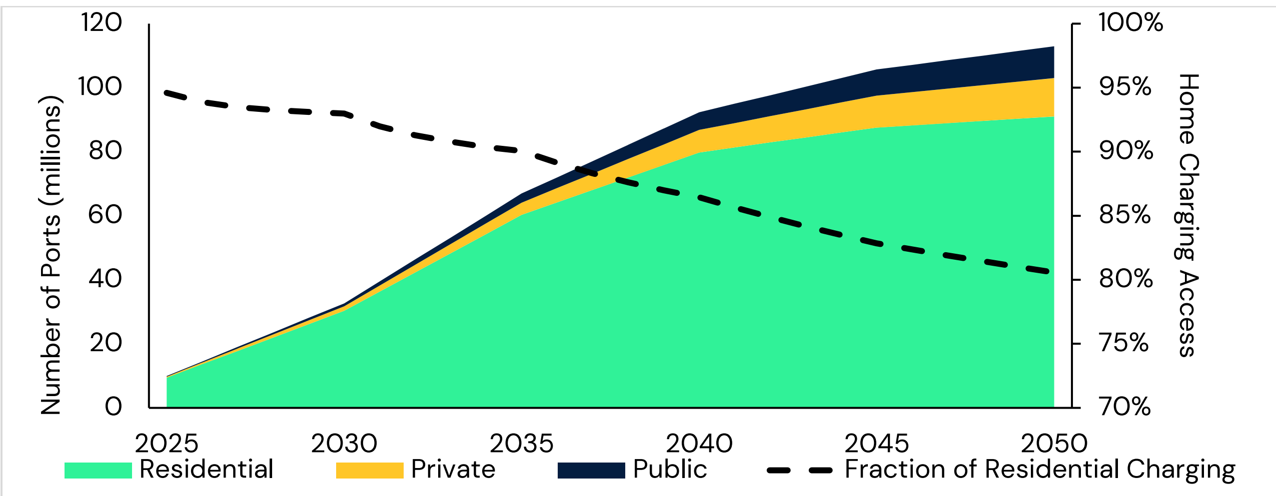
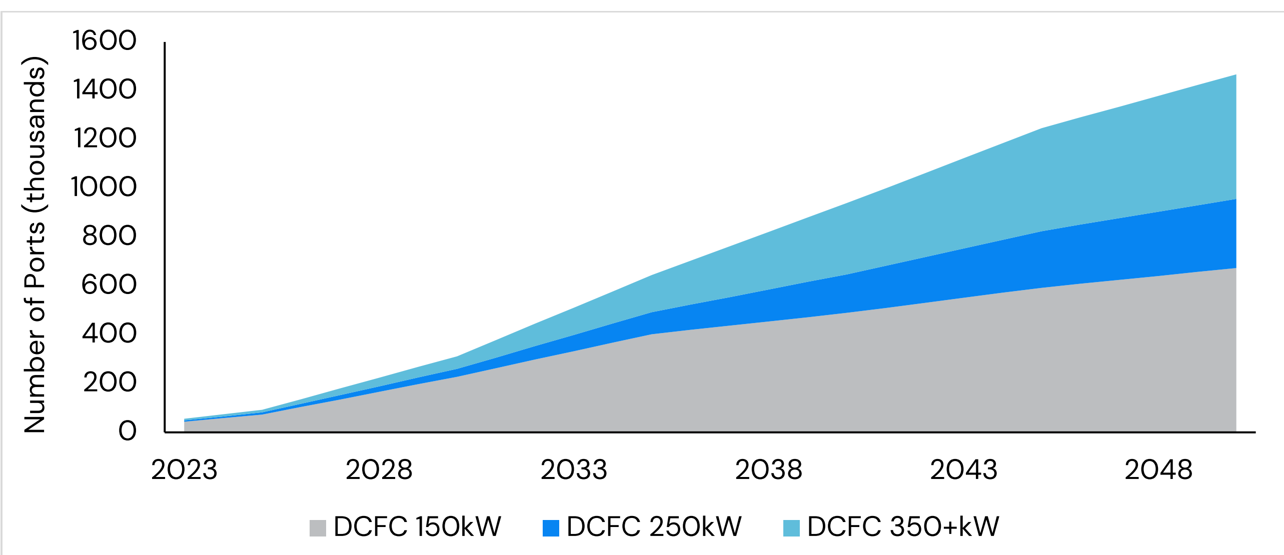
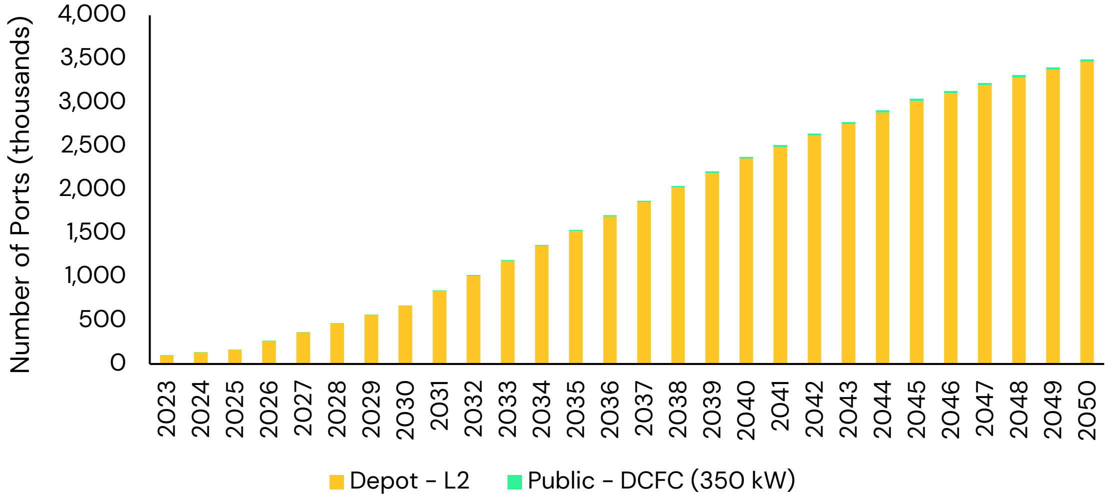


Figure 15: Projected public DCFC charger needs for passenger LDVs from EVI-Pro and EVI-OnDemand.



In Figure 15 the total number of public DCFCs across the U.S. for passenger LDVs is shown by power level. While EVI-OnDemand assumes all DCFC ports are 150 kW by default, EVI-Pro apportions public fast-charging needs for LDVs to be evenly met by 150 kW, 250 kW, and 350+ kW power levels, and access to both 250 kW and 350+ kW DCFC ports are expected to outgrow access to 150 kW ports.

Figure 16: Projected needs for light commercial truck chargers from the ICF proprietary model.



As discussed earlier, while the majority of light commercial trucks have a GVWR less than 10,000 lbs, the travel and activity patterns of these trucks are different from those included in the NREL tools. Table 3 shows the projected needs for light commercial trucks across the U.S. using the ICF proprietary model. A significant share of light commercial trucks charging needs can be met by depot-access or private-access L2 ports. Note that a portion of the depot charging needs of light commercial trucks can potentially be met using residential charging as well, especially for individual owner-operators.

Table 3. Summary of recent 2030 U.S. and California LDV charging infrastructure assessments.

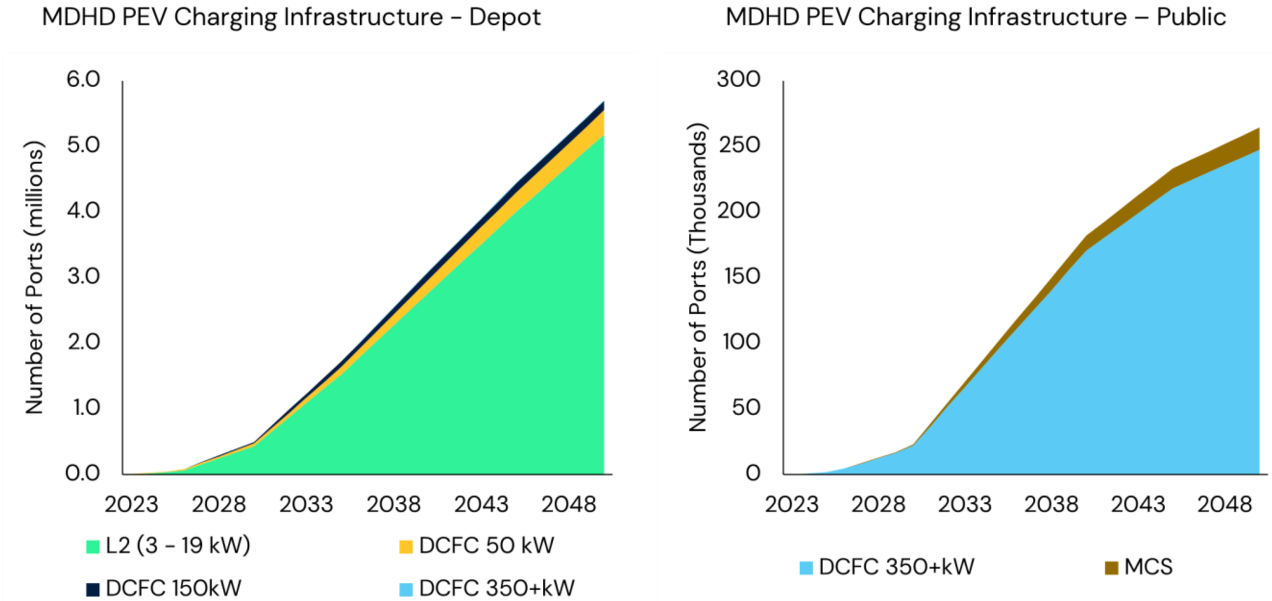
Scope of Study	Organization (reference)	LDV PEV Stock	Est. 2030 Public Ports (including DCFC)	Est. 2030 DCFC Ports
National	ICCT (Bauer et al. 2021)	26,000,000	2,400,000	180,000
	Atlas Public Policy (McKenzie and Nigro 2021)	48,000,000	600,000	300,000
	McKinsey (Kampshoff et al. 2022)	44,000,000	1,200,000	600,000
	S&P Global (S&P Global Mobility 2023)	28,000,000	2,300,000	172,000
	NREL (2023)	33,000,000	1,250,000	182,000
	ICF (current report)	**41,600,000**	**1,214,000**	**312,000**
California	CEC AB 2127 (2023)	7,100,000	408,000	39,000
	ICF (current report)	**5,600,000**	**130,000**	**25,400**

In early 2023, NREL also conducted a national charging network study that projected the amount of LDV charging infrastructure and estimated hardware and installation costs [54]. The study contains many parallels to the project team's analysis and includes a summary of other recent 2030 U.S. charging infrastructure assessments. Table 3 shows a high-level overview of 2030 U.S. charging infrastructure assessment, including the results from this analysis, with the range in the number of LD PEVs, public access ports, and DCFC ports. In addition, Table 3 also compares the 2030 PEV stock and charging needs in California with the latest California AB 2127 Assessment, recently published by CEC [55]. The LDV fleet projection in this analysis is consistent with other assessments' methodologies for determining the future national LDV PEV population. The summary table also shows that the project team's estimate for the total number of public-access LDV ports agrees reasonably well with other studies, with some variances. Factors that may lead to different PEV and EVSE port projection include various baseline vehicle inventory models (e.g., the AB 2127 Assessment relies on CEC's own vehicle forecast model while this study uses MOVES3), ZEV penetration rates, residential charging access, ride-hailing market expansion, interregional trip needs, etc.

MDHD Charger Needs by Type and Power Level

The results for the total number of ports to serve MDHD PEV charging needs across the U.S. are shown in Figure 17. Illustrating the number of ports by type and power level for MDHD vehicle, reveals that MDHD PEVs are projected to have their charging needs met by a diverse portfolio of charging ports. Around 1.7 million depot charging ports and 103,000 public EVSE ports are anticipated to be needed by 2035. Approximately 6% of all MDHD PEV EVSE ports are projected to be publicly accessible DCFC facilities by 2035, including 6,200 megawatt charging systems (MCS). The MDHD infrastructure requirements for each year from 2027 to 2032 are detailed in Appendix V.

Figure 17: Projected needs for MDHD depot (left) and public (right) EV chargers across the U.S.



The project team has compared the findings from the MDHD EVSE needs assessment with other studies, as shown in Table 4 [51, 56, 55]. While the estimated number of EVSE ports is comparable to others, discrepancies still exist between both vehicle and charger forecast. Due to the different technology penetrations and fleet turnover assumed in this study, the total on-road battery-electric truck populations are slightly different from other studies. In addition, the ratio of depot versus public charging access, as well as the preferred public charger power output, also contributes to the disparities observed in different studies. For instance, since the Ricardo study applied EPA's assumptions that almost all fleets would use depot-based overnight charging, the projected needs for public en-route charging are much smaller than the results presented in this study, which does not rely on EPA's assumptions.

Table 4. Summary of recent U.S. and California MDHD charging infrastructure assessments.

Year	Organization (Reference)	Est. MDHD BEVs	Est. Depot Ports	Est. Public Ports	
				DCFC	MCS
2030	Atlas Public Policy (McKenzie et. al 2021)	N/A (No detailed information on vehicle population was reported in the Atlas study)	470,000 -564,000	53,000 – 93,000	10,000 – 19,000
	ICF (current report)	**715,000**	**498,000**	**22,000**	**1,000**
	CEC AB 2127 (2023)	155,000	109,000	5,100	421
	ICF California (current report)	**183,000**	**128,000**	**5,700**	**173**
2032	Ricardo[35] (Kuhn et.al 2023)	1,500,000	1,500,000	7,500	
	ICF (current report)	**1,045,000**	**989,000**	**52,000**	**3,100**

Stations Buildout Timeline

As noted in the previous section, the need for PEV chargers will be driven by the growing demand for EVs across the country and by new regulations requiring vehicle markets to sell higher shares of ZEVs. As a rule of thumb, EV chargers with higher capacities, including both those used by the public and by fleets, typically have longer installation timelines. For example, Level 1 and 2 chargers in single family housing typically can be installed in a day, with many not even requiring an electrician. For houses without easy access to a 240 V plug, a typical homeowner might be able to contract an electrician and have a charger installed in a matter of weeks. As such, when the need for residential L2 charging arises, it is generally satisfied within days to weeks, so long as chargers remain readily available for purchase.

However, in the case of multifamily dwellings, retail and workplace charging, construction timelines are considerably longer. Instead of simply buying an EVSE to plug into an outlet, these types of properties often require utility upgrades and new services to handle the load and proper metering for the chargers [57]. Usually this involves adding a new connection to a nearby substation and installing an on-site transformer with a utility meter, and in the case of massive charging depots could require a new substation transformer. They also are likely to require site upgrades like new panels, new conduit, trenching and repaving to bring power from existing service locations to where cars will park. This often necessitates early cooperation with the local utility and hiring of a contractor to submit necessary drawings, get permits and install needed upgrades. This process is highlighted in Figure 18 below.

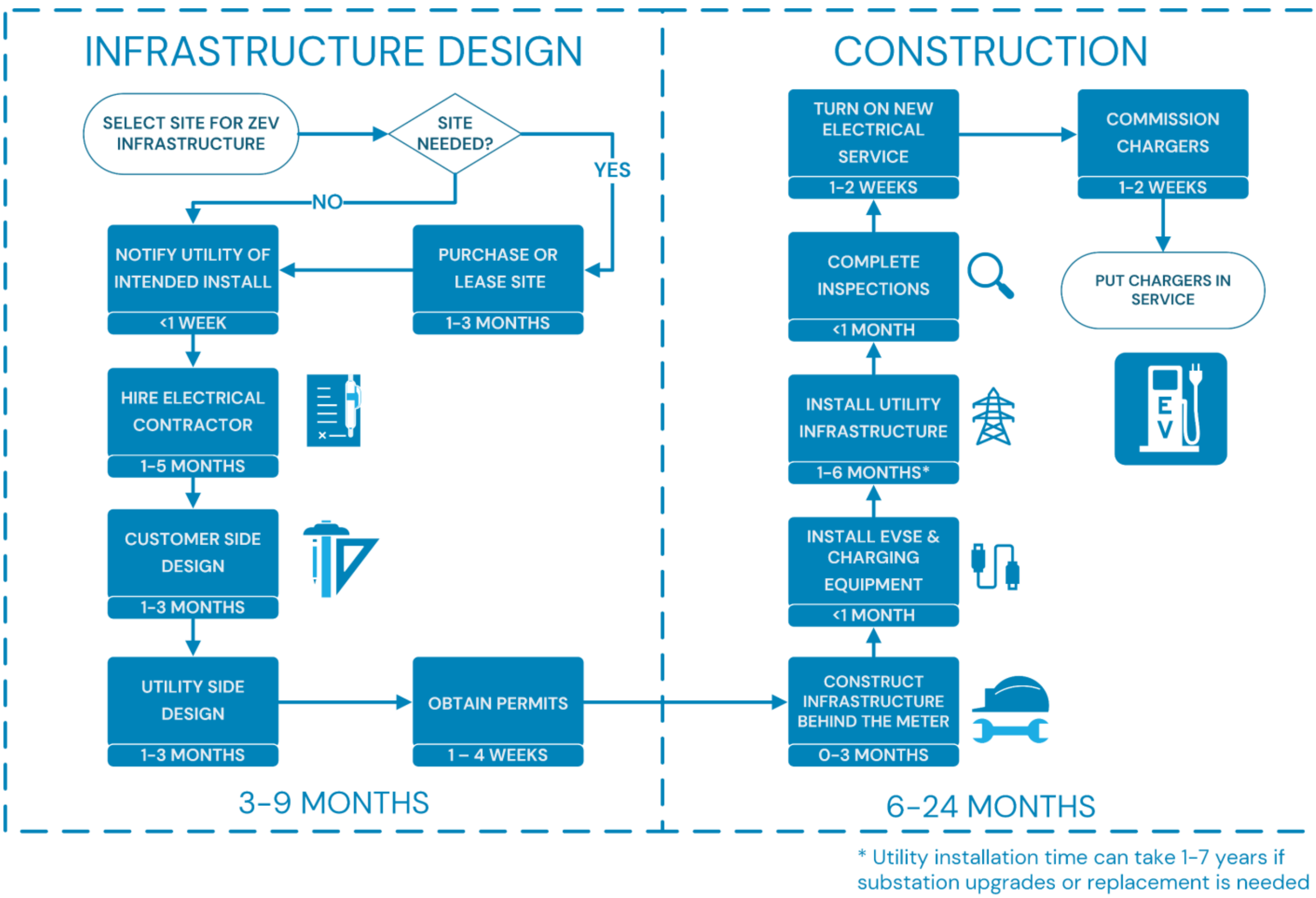
As illustrated by this timeline, large EV charger projects usually take 1-2 years from start to finish. Thus, in estimating when ZEV infrastructure projects need to start to meet increasing demand, we conservatively estimate that at least two years of lead time will be needed. As it currently stands, many fast charger projects have even longer lead times, but it is likely that improving experience from utilities and contractors will keep average lead times under a year [58, 59]. For example, Tesla cited a median time from "lease signed to open-to-public" of roughly 300 days, with significant variance to the high and low end [60].

According to existing utility programs, charger installations for HD depot and public charging will often have much longer installation times. The California investor-owned utilities (IOU) with the most experience in this

[35] The Ricardo study is not publicly available.

sector quote timelines from 11-16 months [57, 61, 62]. Locations which only require L2 chargers may still require extensive design, utility work and heavy construction but are nonetheless expected to fall on the lower end of these estimates [63]. Locations such as public chargers with large numbers of DCFCs typically have timelines extending well above one year, up to several years depending on the utility side changes needed. For example, the 3 California IOUs stated in a presentation that when distribution capacity needs to be increased, this adds anywhere from 1-5 years to the project timeline [64]. Smaller upgrades like increases to conductor size or modification of underground conduit may take only 1-3 years, however larger upgrades like new distribution feeders or increases in substation capacity can take closer to 3-5 years. Very larger projects like megawatt charging for trucks may take even longer due to needs for subtransmission or new substations. This is backed up by comments from nationwide charging network EVgo & Electrify America to the state of California for their NEVI plan [65].

Figure 18: Overview of timeline for major charger installations highlights long lead time. [57, 61]

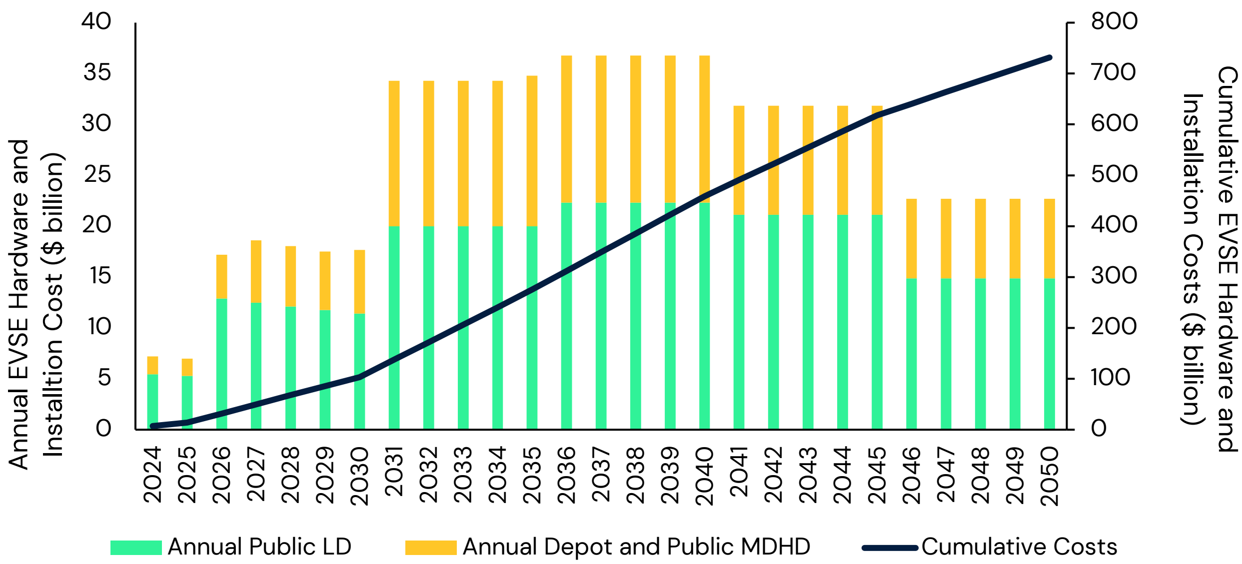


In the future, it might be expected that POUs and IOUs outside of California will gain the expertise needed to complete HD charger projects on similar timeframes. However, in the short term we estimate many projects will mirror the early experiences of California utilities – with a conservative timeline estimate of two years from conceptualization to operation. Notably, larger utilities with more staff and more experience will be best equipped to do this work, while smaller municipal utilities will impose greater costs and have longer timelines [60]. Similarly, projects in rural areas will see longer timelines because they often lack high-capacity transmission and distribution equipment [60].

PEV Infrastructure Cost

The project team has estimated the total cost per year and cumulative cost over the time horizon for the purchase and installation costs of PEV charging infrastructure. These estimates are based on the total number of ports by state, type, and power level for both LDV and MDHD PEV segments, as well as the average total cost estimates for networked chargers outlined in Table 2. The project team assumes that public-access and depot charging sites will likely install dual port chargers, in accordance with the many utility, state, and federal programs that require dual-port and networked chargers to remain in compliance with PEV program guidelines and funding eligibility. Additionally, dual port chargers benefit from economies of scale, where the unit cost per charger is approximately 10% lower than that of single-port chargers. The project team has applied this 10% discount to reflect a charging network supported by dual-port charging stations. The project team also models a 3% cost reduction per year until 2030, in alignment with research from Atlas Policy on discounted charging hardware and installation costs [51]. Significantly, costs for infrastructure upgrades to support these chargers (transmission/distribution lines, transformers, substations, new generation) are not included in this study.

Figure 19. Estimated total LDV and MDHD EVSE hardware and installation costs by year



The LDV and MDHD PEV charging hardware and installation costs have been consolidated into one cost summary. The results for the projected annual cost to support new infrastructure buildout over the time horizon of this analysis are illustrated in Figure 19. Cumulative investment is also presented in the figure. It is important to note that while the results shown in the figure represent the total costs to install the necessary chargers to meet the demand of a certain year, the actual funding or required investment have to be secured at least two years ahead to accommodate for application, survey, permitting, and construction phases discussed in the previous section. The cumulative costs of deploying the number and types of ports suggested in this analysis amount to approximately $103 billion by 2030, $275 billion by 2035, $459 billion by 2040, and $732 billion by 2050. These are unprecedented figures to consider as the number of PEVs requiring charging access continues to grow.

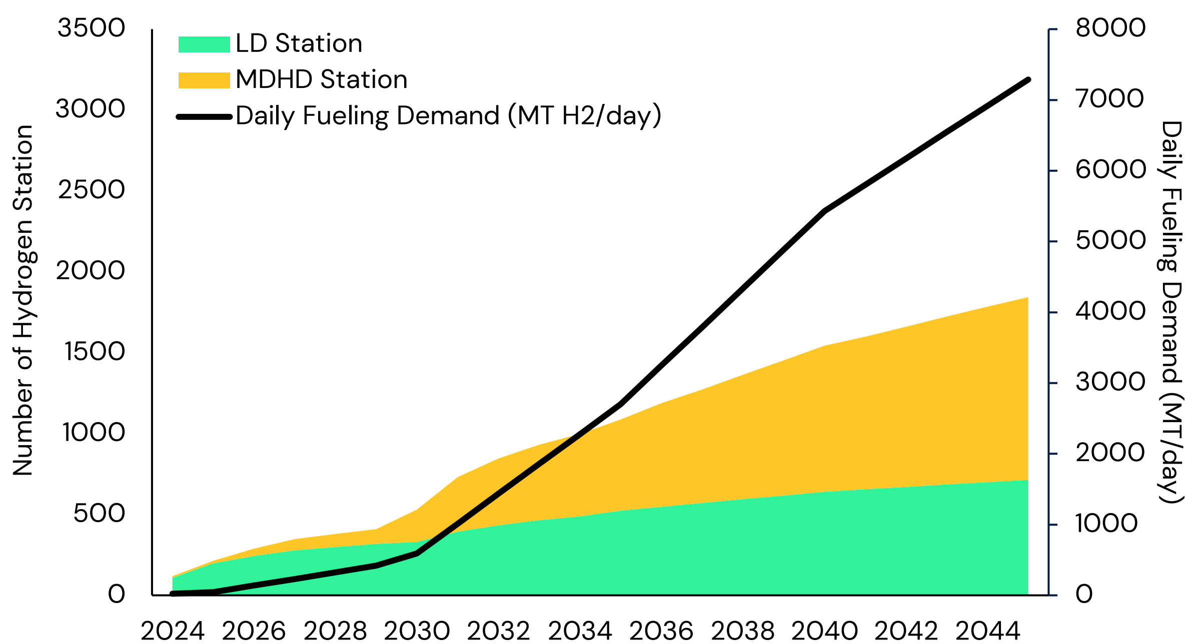
The project team has also compared the cost analysis to other studies. For instance, the NREL's No Place Like Home study estimated a $32-$55-billion cumulative national charging infrastructure investment by 2030 (not considering grid upgrade costs) [26]. For public passenger LDV charging infrastructure, the project team's analysis estimated a $71 billion cumulative investment from 2024 through 2030. Considering the differences in LDV public charging needs between the two studies as shown in Table 3, the discrepancies in costs are well expected. For MDHD charging infrastructure, the project team's analysis estimated a $142 billion cumulative investment between 2024 and 2040, which falls between the $100-$166-billion range published in the Atlas study [51].

Hydrogen Infrastructure

Stations by State, Type, Capacity

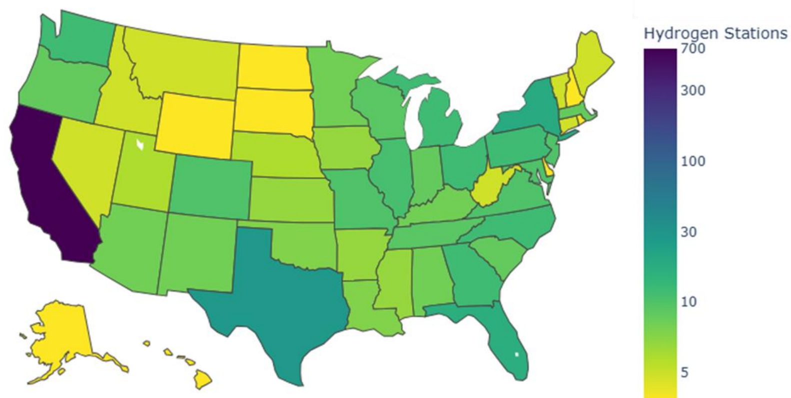
Based on the hydrogen station buildout approach and assumptions discussed in the previous section, approximately 530 stations will be needed to provide a hydrogen demand of 590 MT per day by 2030. 330 stations will be used to refuel MDHD trucks and buses, and 200 stations will be used for LD cars in California. This is further illustrated in Figure 20. By 2035, the number of stations will increase to almost 1,100 to meet the hydrogen demand of over 2,700 MT per day, with 560 stations serving MDHD, and over 520 stations dedicated to LD. By 2040, more than 1,500 hydrogen stations are expected to meet the hydrogen demand of 5,400 MT per day, with approximately 900 to refuel MDHD trucks and buses, and 640 to refuel LDVs. By 2050, a total of 1,800 hydrogen stations will be needed across the country, 1,100 of which are dedicated MDHD stations, and 700 are for LDVs.

Figure 20. Total estimated hydrogen refueling stations and demand (MT/day).



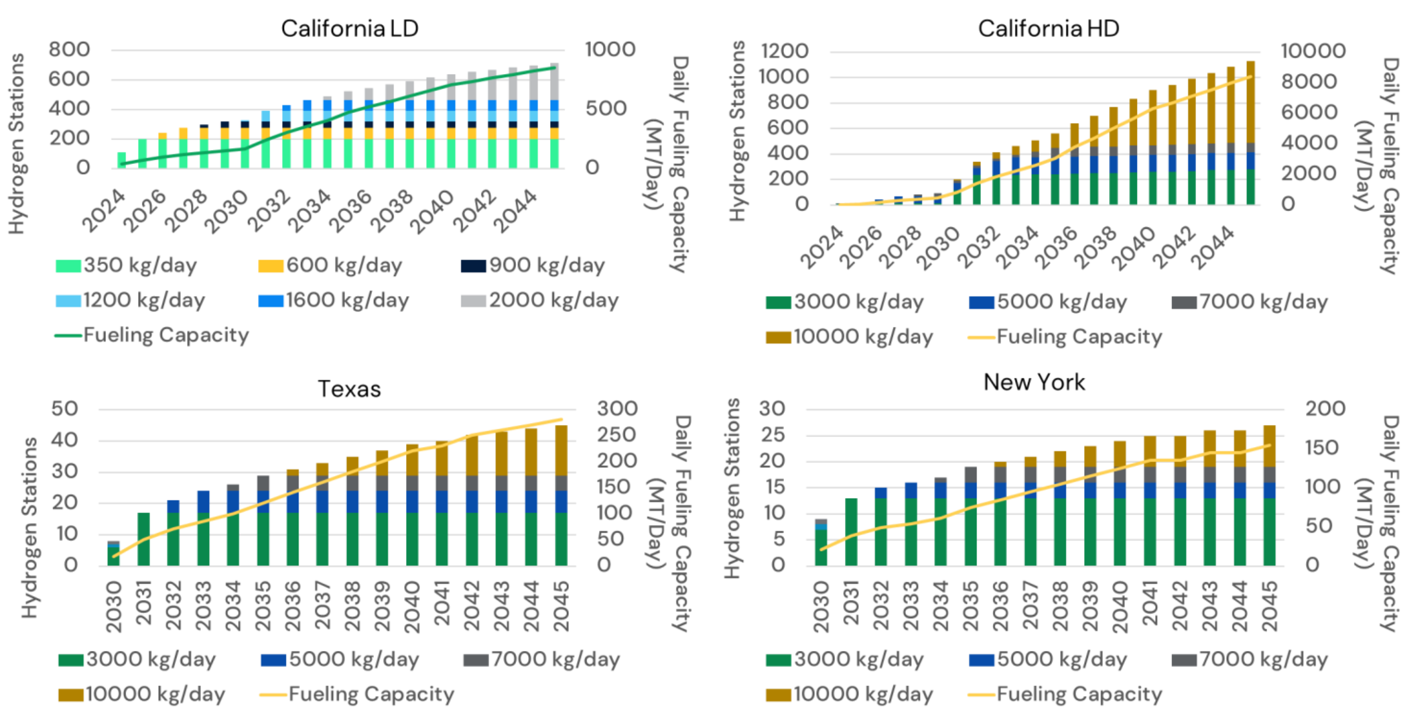
The largest demand for hydrogen on a daily basis and hydrogen infrastructure is expected in California, driven by the ACC II, ACT, ICT, and ACF regulations. Particularly in the early years, as shown in Figure 21, California will dominate hydrogen and infrastructure demand. By 2030, more than 80% of the total hydrogen stations are expected to be in California. This percentage drops to 67% by 2035 when fuel cell electric truck populations begin to surge in other states. Besides California, Texas will be the second leading state in terms of hydrogen demand and infrastructure needs, with 39 stations projected by 2040. New York, Florida, Michigan, and Georgia follow in this progression.

Figure 21. Estimated hydrogen refueling stations by state in 2035.



As shown in Figure 22, the results of hydrogen refueling station by capacity suggest that stations with lower capacity (e.g., 350 to 600 kg per day for LD and 3,000 to 5,000 kg per day for MDHD) will play significant roles in the early stages of FCEV development to achieve higher spatial coverage and station utilization. High-capacity hydrogen stations (e.g., 2,000 kg per day for LD and 10,000 kg per day for MDHD) will be commercially available in California by 2034, while other states may expect them by 2040 due to relatively lower demand.

Figure 22. Hydrogen refueling stations by capacity and demand (kg/day) in selected states (California, Texas, and New York)



Stations Buildout Timeline

A typical process of hydrogen refueling station development, assuming there are no administrative holdups and other major hiccups, takes approximately two years. This timeline is reduced from the four-year-long process when the first retail stations were built in California [66]. The 2022 joint agency staff report on AB 8

[67] shows that although the COVID-19 pandemic slowed down many station development activities, station development over time could become faster and easier as station developers have incorporated lessons learned and local authorities are more familiar with hydrogen safety and usage as a transportation fuel. This trend should continue as local authorities streamline hydrogen stations permitting, more entities enter the supply chain, and economies of scale are achieved. It should also be noted that the buildout timeline could vary widely due to permitting from municipality and local agencies, public education and general awareness of hydrogen, property owner changing of demands or backing out, construction delay, hardware supply issues and others. California is taking steps to address these issues, but they may still be inevitable. Based on the development process of more than 50 stations, NREL's analysis showed that the sum of the average days for design, permitting, construction, and commission is around 2.0 years (746 days), whereas the average timeline for the 20% most recent projects goes up to 2.6 years (942 days) [68].

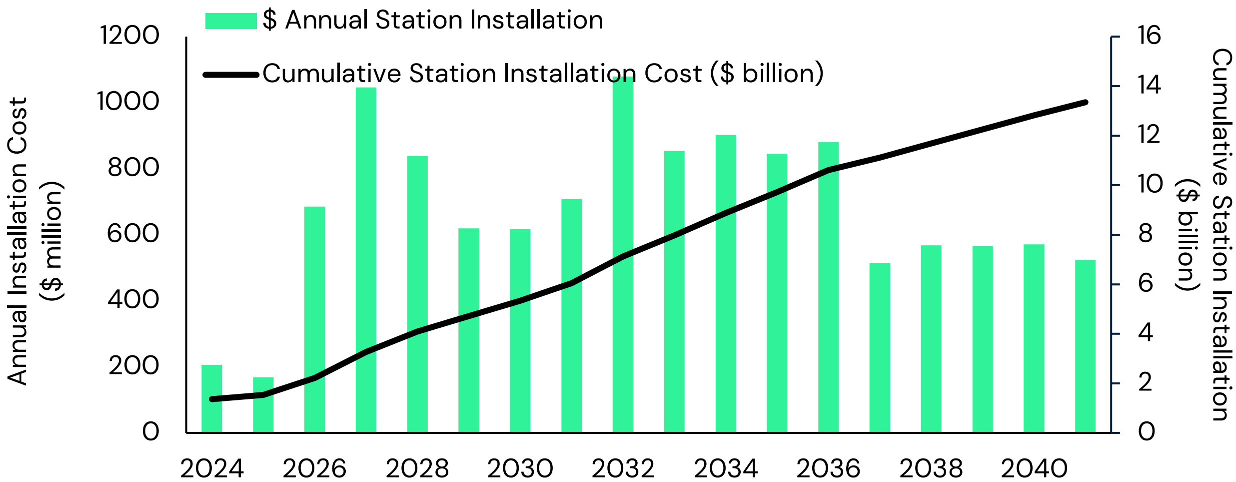
The process in general comprises five stages, as set out in California's Hydrogen Station Permitting Guidebook [66]:

1) *Pre-application outreach,* which allows developers to engage with a city or county's planning agency, understand local requirements, uncover potential issues upfront, and establish channels of communication and a permitting pathway;
2) *Planning review*, which is required by the permitting process to ensure that a proposed station fits within a community's zoning codes, General Plan, and overall aesthetics. Acquiring planning approval has been the most time-consuming step of the permitting process, which could last from one day to six months, while a much longer timeframe, such as greater than one year, could be expected based on station developers' experience;
3) *Building review*, which could occur in parallel with planning review in some jurisdictions. The review process is to ensure that the projects comply with applicable structural, mechanical, and electrical codes and local ordinances, with an estimated timeframe ranging from one day to six months;
4) *Construction,* which typically takes three to nine months to complete; and
5) *Commissioning*, which includes several steps of performance inspection and tests before official opening to the public and typically takes one to three months.

Hydrogen Infrastructure Cost

To meet the hydrogen refueling infrastructure demand outlined in the previous section, it is conservatively estimated that station development, along with its corresponding investment, needs to commence at least two years in advance or even longer. Figure 23 summarizes the capital cost estimates for hydrogen refueling station installation, which indicates that the first substantial investment peak should occur around 2024. This is primarily due to the rising hydrogen demand in LD FCEVs in California in 2026 to meet the ACC II requirements. The second, more substantial wave of investment comes after 2028, which is two years before the significant deployment of MDHD FCEVs due to the suite of CARB and EPA MDHD ZEV regulations or similar programs. To support the fueling capacity in 2035, the necessary investment in hydrogen refueling station installation is approximately $6 billion. By 2045, the total required investment increases to $13.4 billion. Of all the states, California accounts for the majority of the total capital cost, while other states individually contribute less than three percent. Note that the current model only accounts for hydrogen station installation capital costs, while costs related to the distribution and delivery of hydrogen will be discussed later.

Figure 23. Estimated hydrogen refueling station capital cost.


$ Annual Station Installation
Cumulative Station Installation Cost ($ billion)
Annual Installation Cost ($ million)
Cumulative Station Installation ($ billion)
0
200
400
600
800
1000
1200
0
2
4
6
8
10
12
14
16
2024
2026
2028
2030
2032
2034
2036
2038
2040

Discussion and Conclusion

PEV Charging Outlook

The number of ports by type needed to address both LDV and MDHD PEV charging needs have been estimated between 2024 and 2050 (Figure 14-Figure 17) . The results show that different regions across the United States will soon face significant challenges to serve the growing number of PEVs with varied electricity demand. One of the most pressing challenges different regions will be facing is addressing the gap or disparity in the projected number of charging ports needed versus the number of charging ports that are actually available in a given year. This challenge is made more complex by the time and costs required for make-readiness measures prior to the installation of EVSE ports across the United States, given that both of those attributes are dependent on specific utility, site, and electrical infrastructure (e.g., transmission) characteristics.

Home Charging Access

Studies from NREL, CEC, and the International Council on Clean Transportation (ICCT) have all examined how home charging access may decrease over time as EV adoption expands, and how electrical access and parking behaviors may alter or improve such access [69, 70, 26]. In general, three gaps are mentioned in their residential charging access projections: an education gap, an investment gap, and a parking behavior gap.

Most early EV adopters live in detached homes where it is relatively easy to install a home charger, and have relied on low-cost, overnight, at-home charging for their primary charging needs [71]. Therefore, the current projected home charging access may be potentially biased due to the overrepresentation of these early adopters in survey responses. As the EV market expands, access to home charging is likely to decrease over time. According to the latest American Community Survey data, only 61.6% of U.S. households live in single-unit detached homes, and residents of attached homes (6%) and multi-unit homes (32.4%) are less likely to have access to parking options where charging infrastructure can be easily installed [72, 69]. As more EV owners without garages and residential charging access enter the market, the dependence on public charging will also increase in the future.

Recall that this analysis also assumes new residential-level investment is likely to occur for improving residential electrical access. Currently, a normal residential electrical upgrade to add dedicated circuits and outlets can cost $300-$1,000, and upgrading a panel to standard higher electric capacity can cost $1,000 - $2,500. The costs could escalate to $30,000 if service upgrades are needed [73]. Most existing federal, state, and local utility programs focus on directing charging infrastructure investments towards public-access destinations. While federal tax credits are available up to $600 for improving electrical panels to enable home charging, out-of-pocket payment may still be required given the current cost estimates [74].

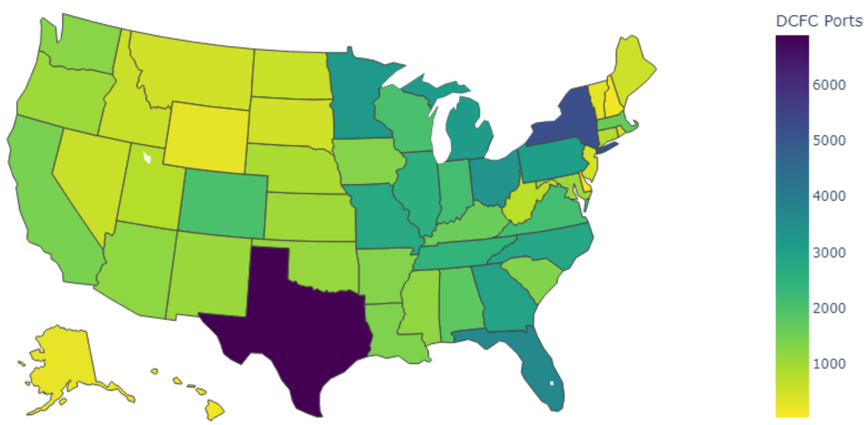
The disparity in housing conditions, investment for residential electrical access expansion, and lead time of grid upgrades and make-readiness measures significantly complicates the process to determine the support required to improve home charging access across the county. The limited residential charging access can also pose significant barriers for EV adoption in low- and moderate-income communities.

Public Charging Infrastructure

To provide some insight into the current charging needs gap, the number of DCFC ports estimated in this analysis by 2025 is compared against the AFDC's 2022 existing charger data by state. The regional gap in LDV DCFC ports by 2025 is illustrated in Figure 24. The median number of new public LDV DCFC needed before 2025 is 1,238, meaning that half of all regions across the United States will be required to install more than

1,200 LDV DCFC ports within the next two years to meet the projected charging needs. This figure serves as an illustration of potential gaps and challenges confronting near-term ZEV adoption. As emphasized throughout this analysis, improved home or workplace charging access for EV owners can also help to offset the lack of public infrastructure.

Figure 24. Number of new DCFC charging ports needed by 2025.

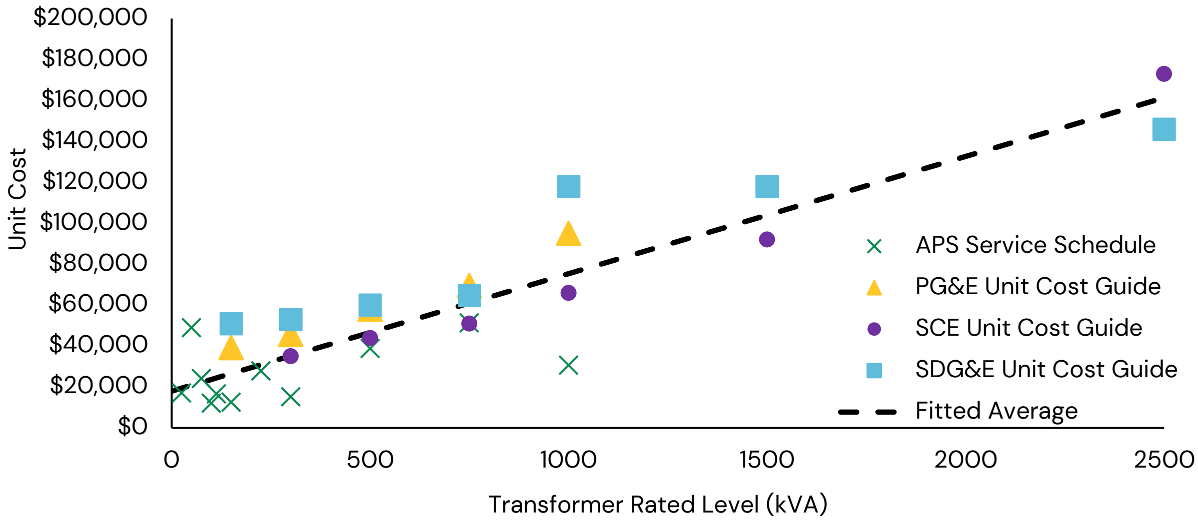


Access to public charging also remains a major concern for MDHD fleets. There are only a handful of public MDHD charging stations scattered across California, with the first public MDHD DCFC (250 kW) station commissioned in March 2023 close to a busy truck stop just north of the Otay Mesa Port of Entry [75]. The largest public MDHD station so far, developed by WattEV at the Port of Long Beach, features a total of 5 MW capacity for concurrent charging of 26 trucks at up to 360 kW each [76]. As the first state to gradually phase-in MDHD ZEVs, California will need almost 6,000 public DCFCs by 2030 to meet the charging demands with the projected fleet penetration, which is equivalent to building 100 stations every month between now and 2030, in California alone. As the rest of the country gradually starts MDHD electrification, the total public DCFCs needed nationally are 55,000 by 2032, and 103,000 by 2035. That is to say, on average, 150 new MDHD DCFC stations need to be built every week between now and 2032, and 300 new stations every week between 2032 and 2035. Considering the potential extended lead time due to transmission and submeter upgrades, planning for MDHD charging infrastructure has to start immediately. In addition, as small fleets and individual owner-operators enter the EV market, more dependence will be shifted towards public charging as compared to depot charging.

EVSE Site Development

While the analysis has examined the anticipated investment needed for EVSE hardware and installation, there are many more cost aspects that developers and planners need to consider when it comes to charging infrastructure development, including land acquisition, grid upgrades, and soft costs such as marketing, the cost of delays in permitting, etc. These costs may vary greatly given the scale and location of the development project and local utility programs and policies. The NREL's Distribution System Upgrade Unit Cost Database provides the most up-to-date unit cost information for different components that may be used for line extension, grid upgrades, and integration distributed energy resources (DER) systems onto distribution systems [77]. The data comes from a variety of utilities, photovoltaics developers, technology vendors, and published research reports, and includes components such as voltage regulators, capacitor banks, transformers, substation protection upgrades and control modifications.

Figure 25. Transformer unit cost as a function of rated kVA. [36]



As shown in Figure 25, the cost associated with utility upgrades can vary significantly with desired project capacities and the current electricity infrastructure must be evaluated before the costs of upgrades can be calculated. Depending on program policies, costs of grid upgrades and line extension sometimes can be split among site developers and utilities, while in other cases costs are entirely borne by developers alone [48]. Whether or not utilities can help to alleviate part of the financial burden, the utility-side infrastructure costs are still significant. For higher-powered MCS sites, the cost to include a dedicated customer substation and subtransmission interconnection can be up to $10 million [78].

There are federal and state government regulations and funding programs that can help address the site development cost barriers in charging infrastructure development. This collection of programs is not meant to be an exhaustive list, but can serve as a starting point for developers, site owners, and other stakeholders to consider the support available to bridge charging infrastructure disparities. At the federal level, several laws and incentives offer support for developers and alternative fuel producers in the charging infrastructure landscape.

One such is the Congestion Mitigation and Air Quality (CMAQ) Improvement Program, which has been extended by the BIL. The CMAQ program provides funding to state DOTs for projects and programs that help meet the requirements of the Clean Air Act, including electric vehicles and infrastructure. Funding for EV and charging infrastructure projects is available through CMAQ, with an average $2.6 billion per year between 2022 through 2026 expected to be dispersed. Each state has an individual CMAQ funding apportionment, calculated based on a ratio specified in the BIL. Under 23 U.S. Code § 151, the CMAQ program also prioritizes funding for projects or programs to establish electric vehicle charging stations along fuel corridors with the possibility to redesignate for rural and inter-city corridors [79, 80]. For example, the Minnesota DOT's transportation advisory board oversees the Transportation Improvement Plan (TIP), an inventory of all proposed federally-funded transportation projects within the metropolitan planning area, including highway, transit, bike and pedestrian improvements. The most recent TIP program stipulated $31 million in funding for electric bus infrastructure projects between 2023 through 2026. As of April 2021, a total of $49.1 billion use in

[36] Information based on Arizona Public Service (APS) and three California utilities: Southern California Edison (SCE), Pacific Gas and Electric (PG&E), and San Diego Gas & Electric (SDG&E).

federal grant funding has already been announced to support EV charging infrastructure deployment across a total of 15 specific programs, including the CMAQ and TIP programs [81].

Similarly, the BIL's NEVI Formula program is slated to provide $5 billion in funding to states for the development of charging infrastructure along alternative fuel corridors. The NEVI formula program prioritizes states to develop networks of EV charging infrastructure within acceptable ranges of alternative fuel corridors or other publicly accessible locations, which will likely be fulfilled by DCFC equipment. In addition to NEVI, BIL has also allocated $2.5 billion over five years for the Charging and Fueling Infrastructure (CFI) Discretionary Grant Program to strategically deploy publicly accessible EV charging infrastructure along designated Alternative Fuel Corridors (AFCs). The U.S. DOE has also awarded $7.4 million to seven projects to develop MDHD charging and hydrogen corridor infrastructure plans that will benefit millions of drivers across 23 states [82]. These projects would also help improve air quality in underserved areas of major American cities, including New York, Los Angeles, Houston, Chicago, San Francisco, Oakland, and Salt Lake City.

Other federal programs, such as the Inflation Reduction Act, have modified tax credits available for the purchase of charging infrastructure. For example, the Alternative Fuel Infrastructure Tax Credit can provide a tax credit of 30% of the cost for EV charging station. The Alternative Fuel Infrastructure Tax Credit focuses on rural and disadvantaged areas, and consumers within these regions that purchase qualified residential charging equipment between January 1, 2023, and December 31, 2032, may receive a tax credit of up to $1,000 [83]. A full list of federal programs can be found in Appendix VI.

As discussed above, federal laws and funding programs tend to take a top-down approach to support national charging and fueling infrastructure deployment, allowing states to manage allocated funds. There are also several state and utility programs that help drive investments to more localized levels. These more localized investments also provide funding opportunities for capital costs and installation of hardware. Some state and utility programs also help streamline permitting, siting, and make-readiness processes that often contribute to reduced buildout times and soft costs—these streamlined permitting process practices can be applied in other authority having jurisdictions where appropriate. For example, California's AB 1236 (Chiu, 2015)[37], also known as the California permit streamlining law, sets statewide rules that streamline local government permitting processes for charging stations. In some other states, state and public agencies have also provided guidance to local jurisdictions to accelerate such processes. For example, the Building Standards and Codes of New York State issued a technical bulletin with codes for charging stations in new and existing facilities, and the State's energy research and development authorities have also published EV Charging Station Permitting Resources to guide municipalities [84, 85]. To address the concerns of the lead time between submitting siting application to energizing chargers, the California Public Utilities Commission (CPUC) has also issued Resolution E-5247 in December 2022, which establishes an interim 125-business day average service energization timeline for projects taking service under the EV Infrastructure Rules [86]. While the Resolution excludes projects that must go through Rule 15 for distribution upgrades, projects above two MWs, and projects that require substation upgrades, it certainly serves as a starting point for public agencies to take the lead and expedite the overall site development processes.

There are also a number of utility make-ready programs that typically cover the costs associated with infrastructure development up to the point of EVSE. This includes expenses related to transformer and panel upgrades, wiring, conduit installation, and labor. The primary goal of these programs is to alleviate the financial burden of installing EV charging infrastructure and subsidizing a portion of the installation costs to make it

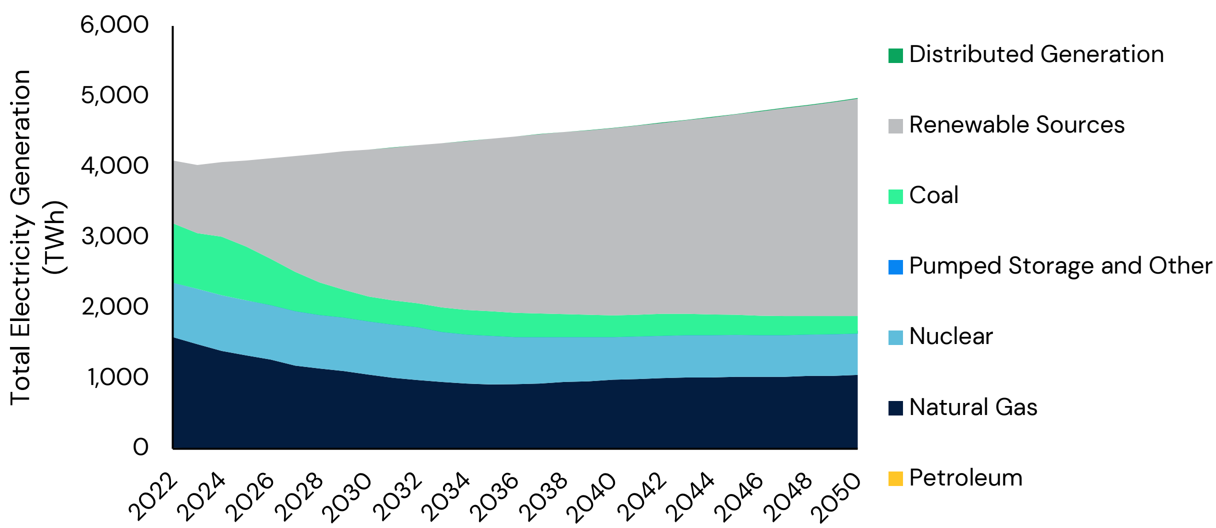
[37] CA Govt Code § 65850.7 (Chiu, 2015)

financially more feasible for property owners to host charging stations. An example of these programs is the Southern California Edison (SCE) Charge Ready Transport (CRT) program, which provides site owners and developers with better PEV time-of-use rates to reduce electricity costs within their jurisdiction. Programs such as SCE's CRT can help fleet owners by recommending specific PEV replacement recommendations and utility-approved networked charging infrastructure. Additionally, SCE expedites the site assessment and can offer different solutions based on localized zoning and codes. Other states with similar utility and make-ready programs, such as New York and its NY EV Make-Ready Program, make use of a joint-utilities commission to support charging infrastructure projects in disadvantaged communities, particularly along multi-family dwellings and destination properties. These state and utility programs have been highly successful in recent years to distribute funding and facilitate grid upgrade and make-readiness services, which creates huge cost savings opportunities for developers and site owners.

Electricity Generation and Demand

In order to more fully understand the impact of transportation electrification on energy demand, the potential electricity demand that is expected to arise from the transition to PEVs has also been compared against the projected electricity and supply from Energy Information Administration's (EIA) 2023 Annual Energy Outlook (AEO) Reference Case [87]. The EIA forecast considers the impacts of existing legislation, technological advancements, and evolving energy needs on the power grid, including some on-road transportation electrification. As shown in Figure 26, the EIA 2023 forecast estimates future power generation and consumption, considering various energy sources such as coal, natural gas, nuclear, and renewables.[38]

Figure 26. EIA 2023 AEO forecasted total power sector electricity generation by fuel type.



According to project team's assessment, the EIA's assumed transportation electrification rate is significantly lower than what is modeled in this analysis, as illustrated in Figure 27. Therefore, additional generation above the EIA forecast for total electricity generation will be needed to support the modeled rise in PEVs (represented by the Additional Transportation category). While the current transportation sector only accounts for 1% of the total electricity sales, with the upcoming PEV surge, this value can increase up to 13% by 2035, and 22% by 2050. In order to estimate the total needed generation with the projected

[38] Includes conventional hydroelectric, geothermal, wood, wood waste, biogenic municipal waste, landfill gas, other biomass, solar, and wind power in the electric power sector.

transportation demand, the project team applied a 7% adjustment factor to account for the efficiency loss in the transmission and distribution systems based on current data [88], as represented by the dotted black line. Comparing the original EIA generation forecast (Figure 26) and the new projection (Figure 27), roughly 616 TWh additional generation will be needed from the power sector by 2035 and 1,200 TWh by 2050. It is also important to keep in mind that the actual incremental need for generation will be impacted by many other factors, including electrification activities in other sectors, such as residential and commercial buildings, which could deplete any excess capacity currently in the system, while factors such as distributed generation or additional managed charging could reduce the need for additional centralized generating resources.

Figure 27. Impact of transportation electrification on overall electricity sales and generation.

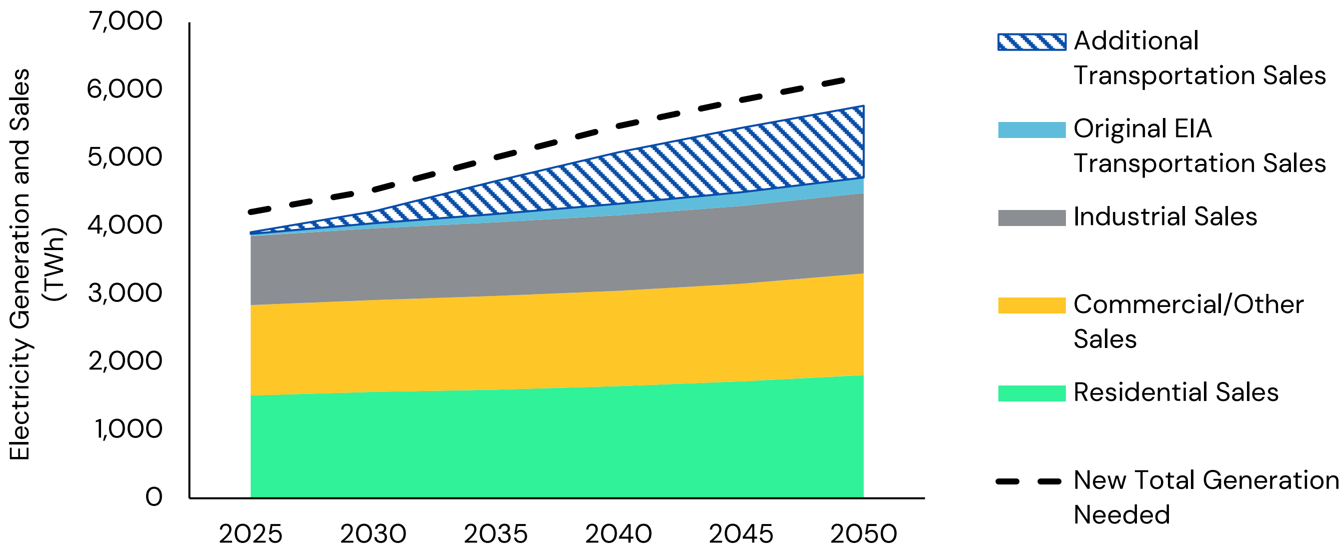
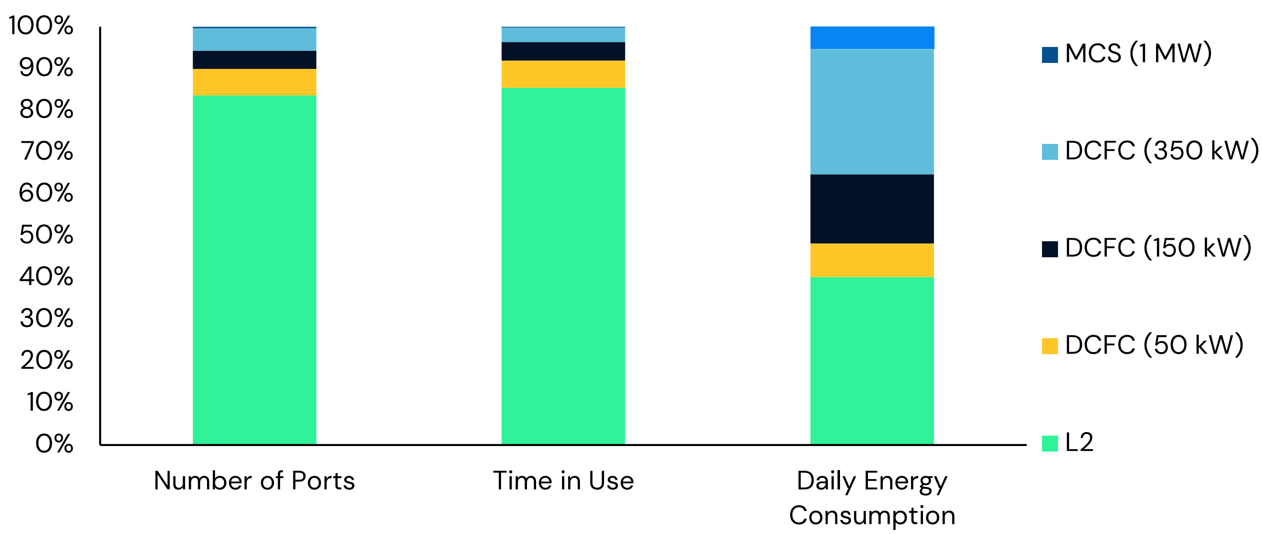


Figure 28. MDHD EVSE ports, daily charging time, and energy demands by charger type in 2035.



While Figure 27 demonstrates the impact of transportation electrification on the power sector electricity generation and sales, it is also noteworthy that the transition to EV will also affect the grid capacity based on their time-of-use. For instance, if charging demands for PEVs occur alongside existing system peaks in other demands for electricity, they could significantly increase the peak demands and necessary generation capacity, which adds requirements to the type of generating resources that would need to be developed to meet that aggregate demand. To meet higher peak demand, more dispatchable resources would be needed (e.g., renewables plus storage, or natural gas). This may occur if charging is not managed across a region, but rather multiple vehicles all charge at once. For example, as shown in Figure 28, despite the number of ports and total usage time for DCFC and MCS chargers being minimal compared to slow depot chargers, they represent almost 60% of the total daily charging demands for MDHDs. If MDHD en-route charging consistently occurs during peak demand hours in the daytime, it could potentially impose a significant strain on the power grid.

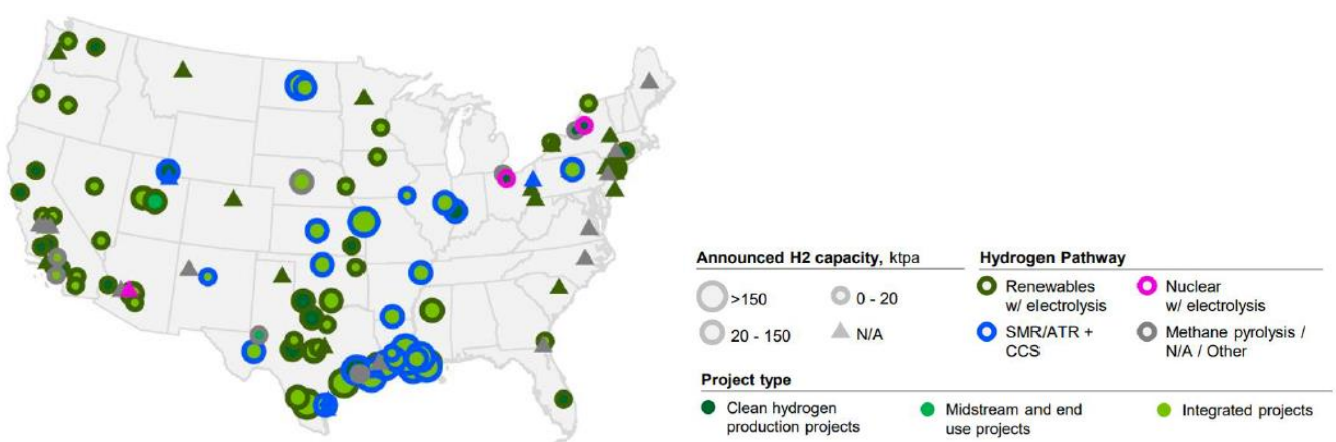
FCEV Refueling Outlook

As shown in the infrastructure modeling section, the biggest gap of hydrogen infrastructure is the refueling station installation, simply because of the development of refueling stations is still in a relatively early stage with over 100 stations –open or planned – in California. Further up the supply chain, the infrastructure to support hydrogen production and its delivery and distribution is also in a very early state. High price at the pump is another gap that needs to be bridged through economies of scale within the hydrogen supply chain, technology improvement in hydrogen production, and an increase in both hydrogen demand and hydrogen refueling station utilization.

Hydrogen Production

Funding and incentives in hydrogen production will help to bridge the gap between the increasing demand for hydrogen as a transportation fuel and currently limited clean production. The 2021 Bipartisan Infrastructure Law, or BIL, authorizes and appropriates $8.0 billion to support the development of regional clean hydrogen hubs (H2Hubs), which are networks of clean hydrogen producers and consumers and include a connective infrastructure within a region. In December 2022, the DOE decided on a shortlist of 33 public-private teams from an original list of 79 applicants for up to $7 billion to develop hydrogen hubs covering all sectors, not just transportation [89, 90]. It is largely focused on production, but funds could also be used for refueling infrastructure if decided by the hub awardee.

Figure 29. Current publicly announced clean hydrogen production projects as of December 2022 [91]



As shown in Figure 29, the U.S National Clean Hydrogen Strategy and Roadmap [91] demonstrated that over 100 clean hydrogen production projects with a total of approximately 12 MMT per year in production capacity have been announced across the U.S with more than $15 billion of potential investment. However, only around 1.5 MMT of the announced capacity has reached a final investment decision, largely owing to a lack of contracted offtake. The announced projects are also clustered in several states with rich solar and wind resources or with carbon capture and sequestration (CCS) potential. Due to limited midstream infrastructure, the announced hydrogen production projects to date have focused on offtakers that can be co-located with production. It calls for the development of midstream infrastructure for hydrogen delivery and distribution.

Refueling Station Operation - Hydrogen Delivery and Distribution

Current hydrogen delivery systems for transportation use include gaseous hydrogen delivery, liquid hydrogen delivery, and on-site hydrogen production and storage [92]. Gaseous hydrogen delivery entails compressing hydrogen prior to transport, which is then delivered by truck or pipeline to the customer. Among the California stations in operation, more than half of the hydrogen refueling stations have pursued compressed gaseous trucking, one-third use a liquid distribution network, and the rest rely on either on-site production or pipeline. [93]

- **Gaseous trucking:** H_2 gas is compressed at ambient temperature to 300 – 500 bar. Tube trailers for compressed hydrogen typically can accommodate 200-1,000 kg of hydrogen, but federal restrictions on pressure and gross weight limit the carrying capacity to about 280 kg H_2. This delivery mode is ideal for short distances (less than 150 – 200 miles) and small volumes due to lower capital costs for compressors and tube trailers as compared to liquid and pipeline transport. As distribution distances increase, the higher transportation capacities of liquefied hydrogen trailers become economically favorable. The estimated cost of gaseous trucking including compression would be expected to range from $0.9 to $1.9 per kg by 2030 [94].
- **Liquid trucking**: Liquid hydrogen delivery converts hydrogen to liquid form where it must be cooled to below -423 degrees Fahrenheit using a process called cryogenic liquefaction. It is then transported as a liquid in super-insulated, cryogenic tanker trucks to its end destination. Before dispensing the hydrogen, it is vaporized to a high-pressure gaseous product. This mode is ideal for larger volumes where pipelines are not feasible and for longer distances to minimize the number of trips and drive labor cost. It has higher capex costs than gaseous trucking, driven by the higher installation cost of a liquefier, but still lower than building hydrogen pipeline. It also suffers from boil-off that can result in losses in delivered hydrogen capacity. DOE estimated the levelized cost of liquid hydrogen trucking including liquefaction could range from $2.7 to $3.2 per kg by 2030 [94], while other studies show a reduction from $2 per kg in 2020 to $1.3 per kg in 2030 [95].
- **Dedicated Gaseous Hydrogen Pipeline:** Approximately 1,600 miles of dedicated hydrogen pipelines exist in the U.S., all of which are owned by merchant hydrogen producers. These pipelines are predominantly located in areas where substantial hydrogen consumers, such as petroleum refineries and chemical plants, are concentrated. The Gulf Coast region is a prime example. Pipeline transportation presents the lowest levelized cost at high volumes (50+ TPD) and long distances due to its minimal operational expenses. However, this method is not typically used for lower volumes. The cost could be below $1 per kg [96], with a range as low as $0.2 to $0.5 per kg [94]. Establishing a new hydrogen distribution pipeline network entails substantial investment spread across several years. Nevertheless, it can prove to be cost-effective for large volume cases. The process requires permit approval and considerable upfront capital expenditure costs, ranging from $2 to $10 million

per inch-mile for pipelines with diameters of 6 to 14 inches. It's important to note that the conversion of existing natural gas pipelines for the transportation of pure hydrogen may necessitate significant modifications [97]. But repurposing natural gas pipelines or blending hydrogen into natural gas pipelines could be a more cost-effective alternatives to pipeline hydrogen. The capital cost to repurpose natural gas pipeline could reduce by as much as 60%, comparing to building a new hydrogen pipeline [98].

- **Hydrogen/Natural Gas Blended Pipeline***:* It may be possible to blend up to ~20% hydrogen by volume into natural gas pipelines for use in the power and heating sectors, which enable end-use equipment that can take a blend fuel. A study by UC Riverside assessed the operational and safety concerns associated with hydrogen blending into the existing natural gas pipeline system at various percentages [99]. Due to high hydrogen purity requirements for FCEVs, hydrogen would need to be separated from natural gas at or near the point of end use. This delivery mode could add cost to the total cost of ownership to FCEVs, as separation of hydrogen from natural gas can be costly. The primary types of hydrogen separation technologies include pressure swing adsorption (PSA), cryogenic distillation, membranes, and electrochemical hydrogen separation. Studies have found that recovery of hydrogen at concentrations below 20% by volume are likely to be economically unviable [100]. The costs to separate hydrogen from the blends also depend on blending volume, recovery rate, and pipeline pressure. A study by the National Grid in 2020 identified minimum specific cost of hydrogen recovery for 20% by volume feed blends in the range of $1.4 – $1.8 per kg (£1.0 - £1.6 per kg) for the membrane-PSA system and $1.0 - $1.6 per kg (£0.9 - £1.4 per kg)[39] for the cryogenic process when minimum compression costs are accrued because the downstream natural gas systems operate at low pressure. When recompression is required, the cost could increase by 80% [100]. An NREL review in 2013 estimated cost of hydrogen extraction by PSA at a pressure-reduction facility could range from $0.3-$1.3 per kg for a 10% hydrogen blend, and lower for a higher hydrogen blend; when recompression of separated natural gas is considered, the extraction cost could be $3.3 - $8.3 per kg for a 10% hydrogen blend [101]. Note that PSA systems can yield high-purity hydrogen around 98%–99.999%, with hydrogen recovery rates between 60% and 90%, while cryogenic hydrogen separation is capable of producing high-purity hydrogen (98%–99%) at high pressure with recovery rates typically between 80%–90% and up to 95%.

  A Hydrogen Internal Combustion Engine (H2ICE), which has advantages in very large vehicles such as construction and agriculture applications with significant vibration and dust, could be tolerant to contaminants and make use of hydrogen from natural gas blended pipelines. Studies have predicted that FCEVs may have a total cost of ownership advantage over H2ICE, but it could be a close call [102, 103]. However, unlike FCEVs with zero tailpipe emissions, H2ICE still emits NOx, potentially N_2O, and minor GHG [102]. As part of the agreement between CARB and the Truck and Engine Manufacturers Association (EMA) released in July 2023, a public workshop will be held to discuss the appropriate role of H2ICE towards meeting the requirements of the ACT and ACF regulations [104].

- **On-site production:** On-site production can reduce transportation and distribution costs but increase production costs due to the high capital costs of constructing production facilities. On-site production can be particularly suitable for more remote locations where regular delivery of

[39] Considering an average exchange rate of 1.142 from EUR to USD in 2020.

hydrogen is not feasible, with one example being fuel cell electric buses deployed at Sunline Transit in the Coachella Valley.

Hydrogen distribution infrastructure will be essential to unlock use cases for hydrogen where production/offtake are not co-located. Pipelines could be critical anchors to this system, as they provide low-cost distribution and storage at scale. With the expected cost reduction in clean hydrogen production, the delivery and distribution cost could represent more than half of the delivered cost of hydrogen. By 2030, half of the necessary clean hydrogen investment dollars are expected to be for midstream and end-use infrastructure ($45 to $130 billion) [94].

Hydrogen Station Fueling Prices at the Pump

The interplay of the hydrogen supply chain, including production, delivery, distribution and refueling station installation, will eventually be reflected in hydrogen prices at the pump. The current price of hydrogen ranges from approximately $13 to $16 per kg, with some cases as high as $19 per kg [67]. Due to the increase in diesel prices in 2022, hydrogen delivery cost also increased, which resulted in even higher retail prices for hydrogen. In addition, due to an increase in feedstock costs and significant reduction in the value of the Low Carbon Fuel Standard (LCFS) credits, there was also a surge in retail hydrogen prices at the beginning of 2023 [105, 106].

The retail price of hydrogen is structured much like that of other transportation fuels. It encompasses the cost of hydrogen production, its delivery and transport to the refueling station, recovery of the station's capital costs, operational and maintenance expenses, marketing costs, and any relevant taxes. The retail price of hydrogen is anticipated to decrease with the expansion of economies of scale, advancements in technology, and growth in utilization and demand.

- **Economy of scale of hydrogen supply chain***:* Scaling up hydrogen production is a significant factor to reduce production costs. Expanding distribution channels and the number of fueling stations can likewise reduce retail prices of hydrogen. Provided there is an expanded network and substantial hydrogen volumes, pipelines can serve as viable and cost-effective solutions to hydrogen delivery. Economies of scale in operating hydrogen stations enhance the density of the hydrogen station network, promote higher utilization, and lower costs across the hydrogen supply chain. This, in turn, eventually drives down the unit cost of hydrogen at the pump. Therefore, expedited development of the hydrogen station network, characterized by high capacity and demand, would lead to significant cost reduction across the network.
- **Technology improvement in hydrogen production***:* Several studies have examined the costs of green hydrogen from electrolysis [53, 107]. Based on these publications, green hydrogen production costs will likely continue to decrease, because of enhanced efficiency, increased availability of cheap and renewable electricity, improved electrolysis performance in terms of both efficiency and lifetime. In addition, decreased capital costs associated with increased production scale, less expensive system components, and advanced manufacturing technologies can also contribute to cost reductions.
- **Increase of utilization and demand***:* With California leading the way, the ZEV requirements will continue expanding FCEV fleets in the U.S., especially in the application of long-haul trucks and transit buses, which have higher hydrogen demand per vehicle. For instance, a typical FCEV passenger vehicle utilizes 1 kg per day of hydrogen, while a fuel cell transit bus with a daily operation of 200 miles consumes more than 20 kg of hydrogen per day. Transit agencies, such as the AC Transit, the Sunline Transit, and the Orange County Transportation Authority, as well as trucking fleets, such as Port of Long Beach and Port of Oakland, are considering FCEV as a competitive option to meet CARB's ZEV

requirements [108, 109, 110]. More FCEVs on-road would increase end use needs, increase the utilization of stations, and thus reduce the per-unit hydrogen price.

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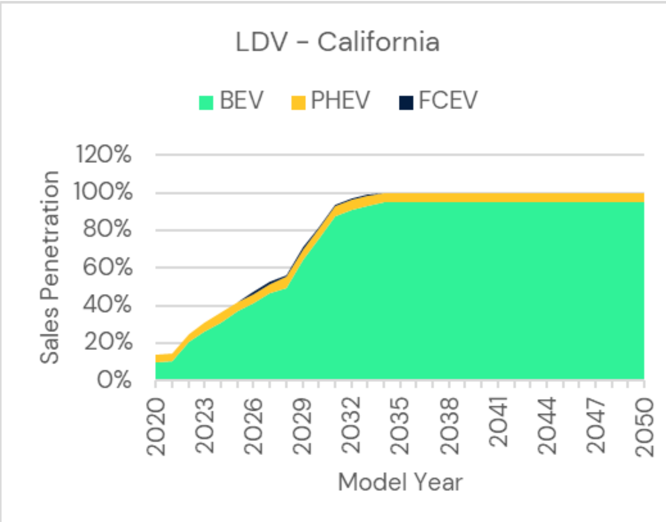
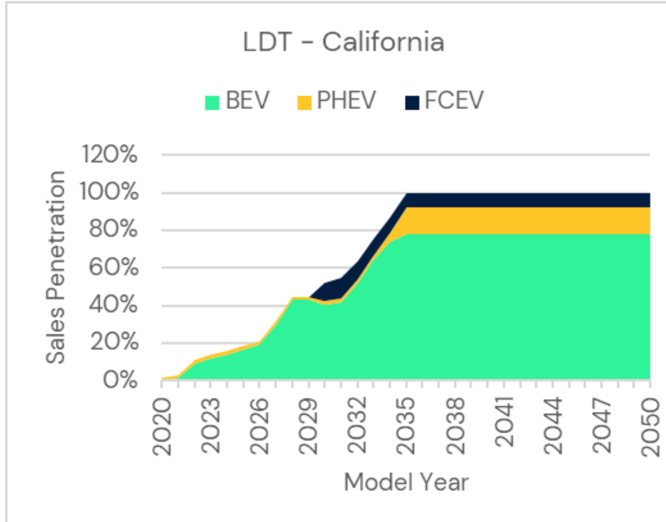
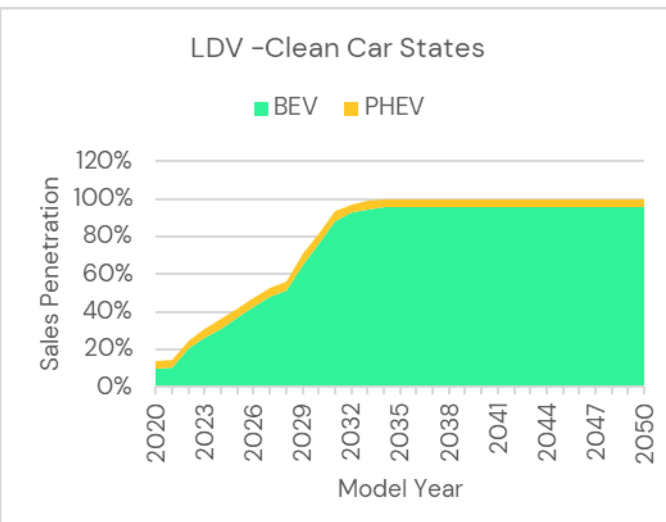
Appendix I: Sales Curves

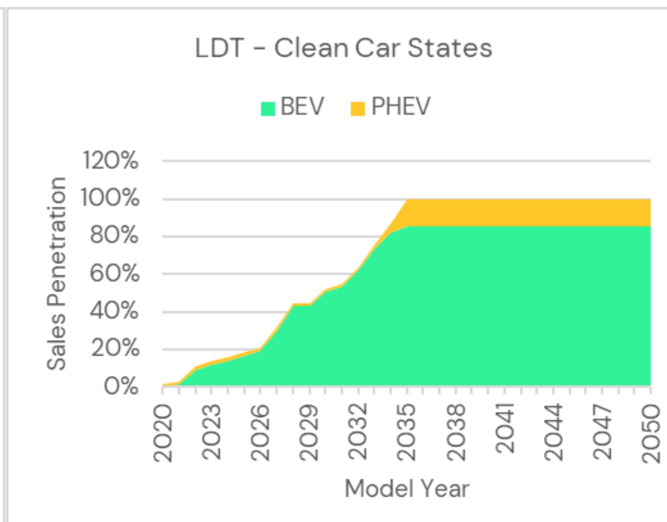
California LD sales curves are consistent with the Advanced Clean Cars II (ACCII) ZEV targets and rule-making assumptions for technology mix. Note that the sales fractions presented here are solely dependent on the regulatory requirements and have not been cross-checked with the real-world EV sales data.



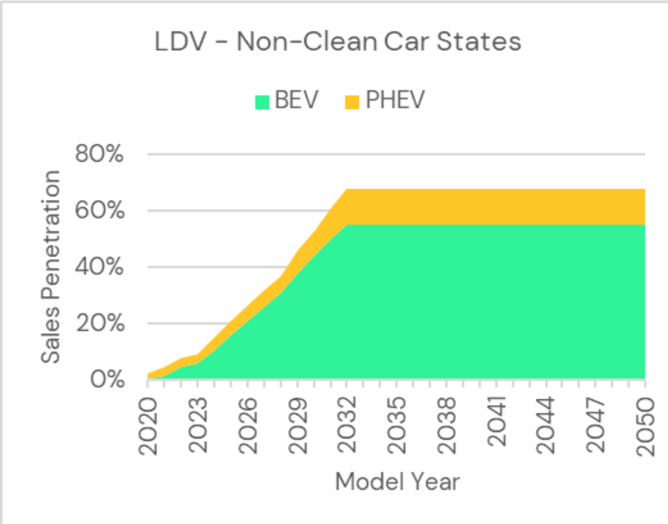


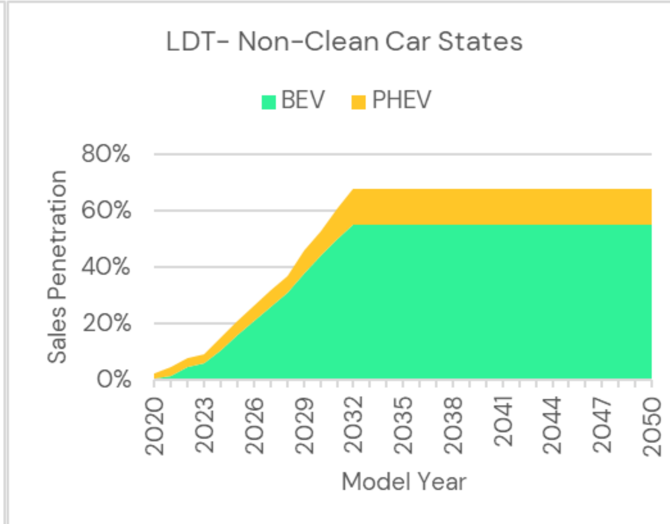
States that follow LD Scenario II: Clean Car States include CO, CT, MA, MD, ME, MN, NJ, NM, NV, NY, OR, RI, VA, VT, and WA. ZEV goals are in line with California ACCII Regulation that all new passenger cars, trucks, and SUVs sold in these states will be zero-emissions by 2035. However, no FCEV penetration was assumed for these states.



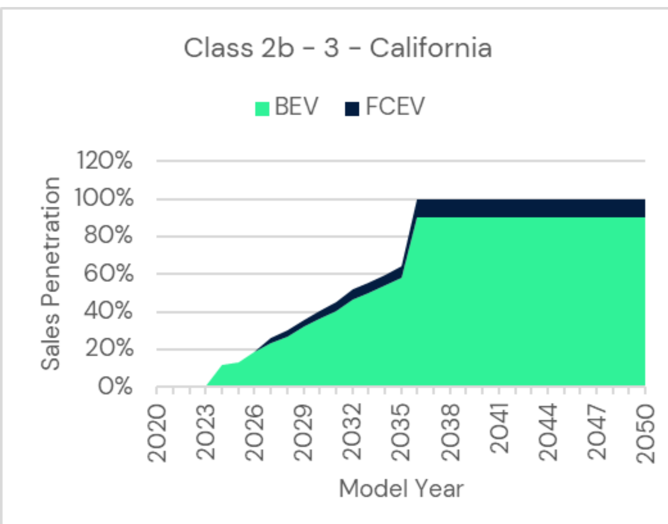


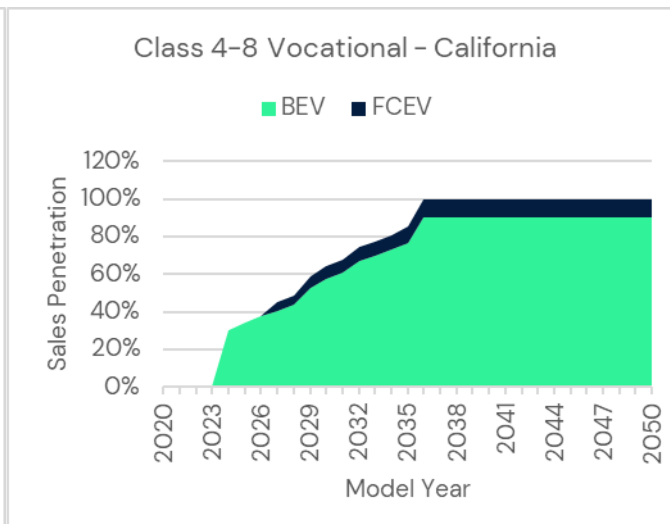
For EPA LD States, LD ZEV goals are in line with the EPA standards for MY2027 and later that fleet average ZEV penetration will reach 67% by 2032. In addition, ZEV sales might slowly ramp up between 2021 and 2026 despite no regulatory requirement until 2027.

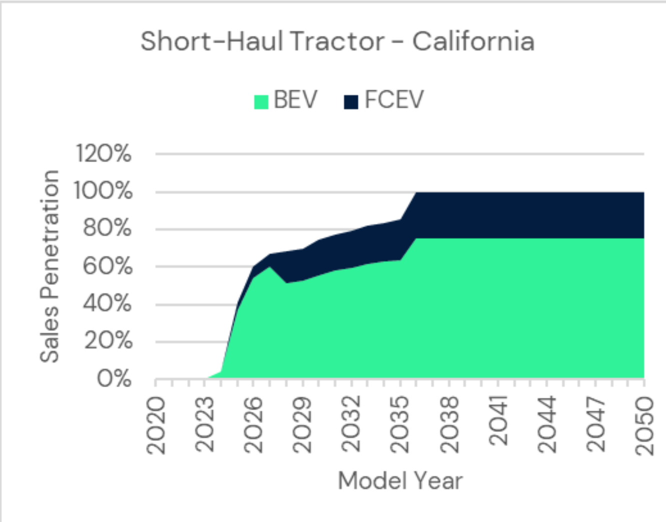


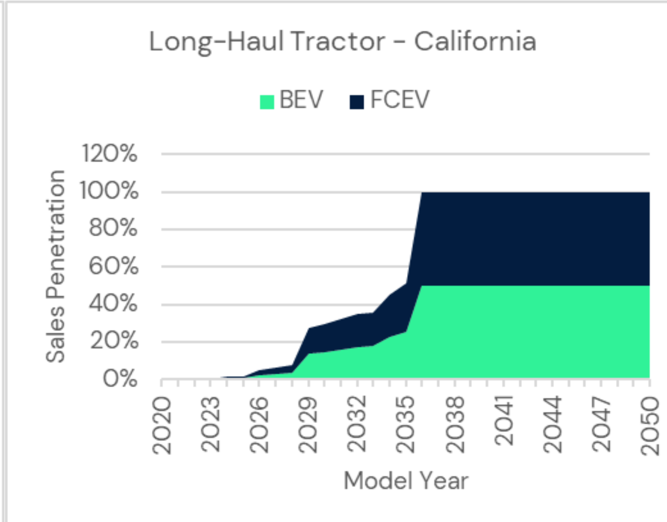


California is so far the only state that has set 100% sales target for medium- and heavy-duty truck sales through the recently adopted Advanced Clean Fleets (ACF) regulation. In addition, ACF has also established fleet purchase requirement that goes above and beyond the manufacturer sales targets that were originally set by the Advanced Clean Trucks regulation. Technology mix was kept consistent with ACF rule making assumptions as well. Note that ACF sales curves are not as smooth as others because of the non-linear fleet purchase requirements of the regulation.

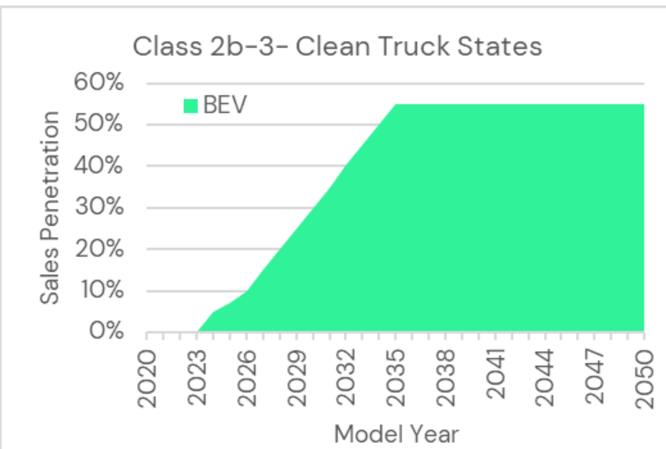


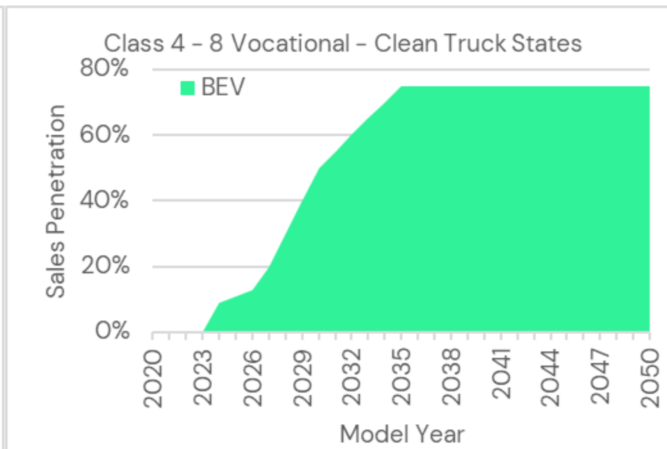


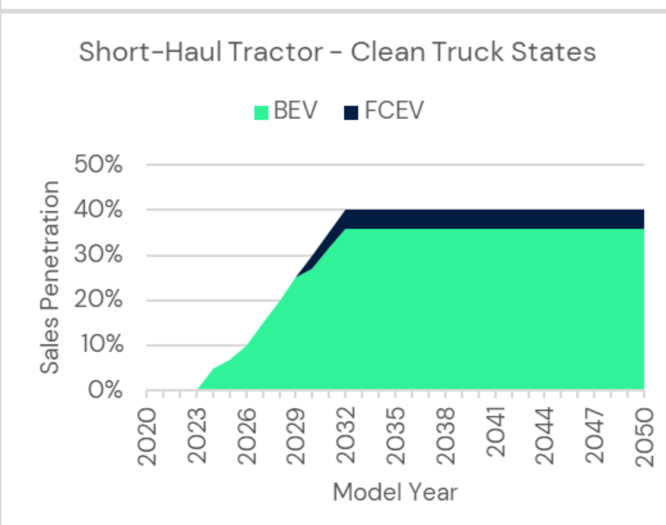


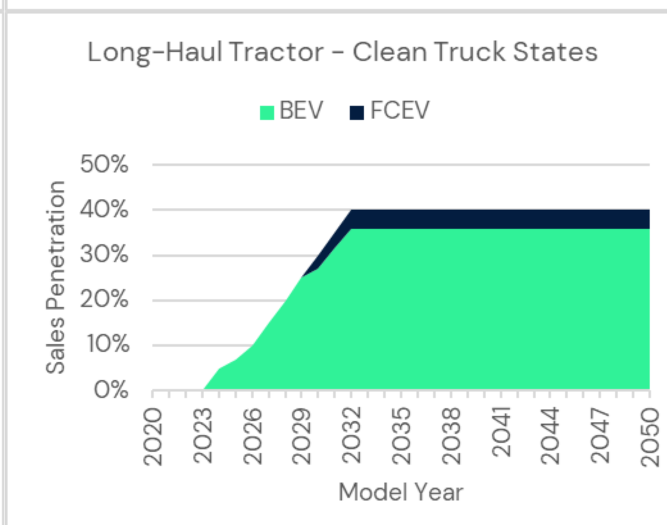


MHD ZEV targets for Clean Truck States were assumed to follow California's Advanced Clean Trucks regulation while technology mix assumptions were kept consistent with ACT (10% FCEV – 2030 phase in timeframe as stated in the EPA latest heavy-duty rule making document).

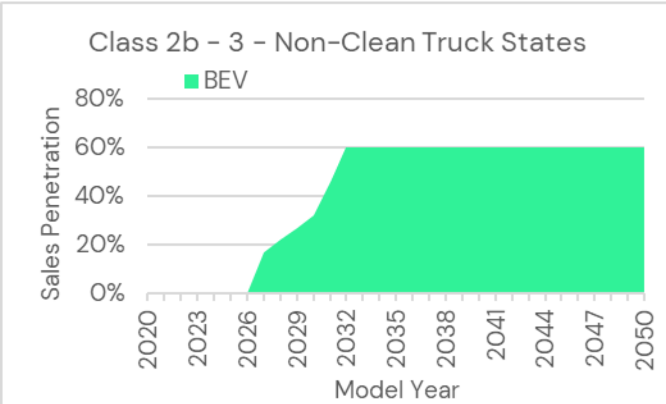


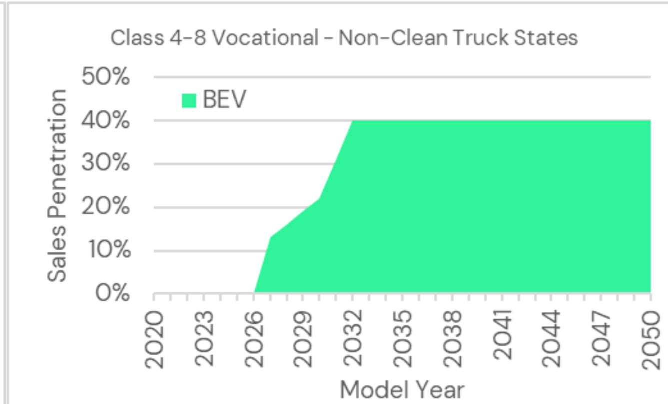


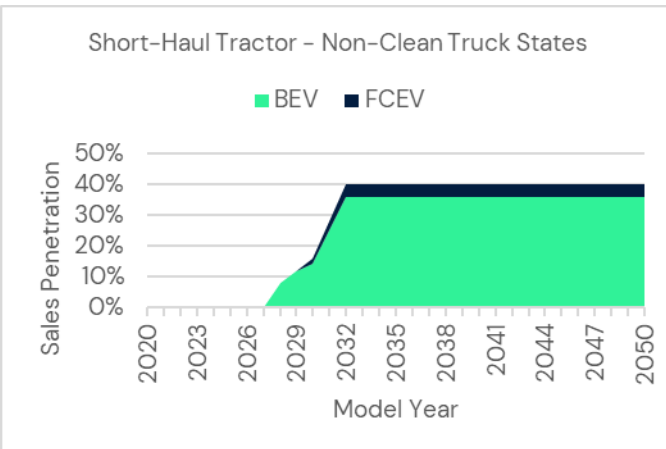


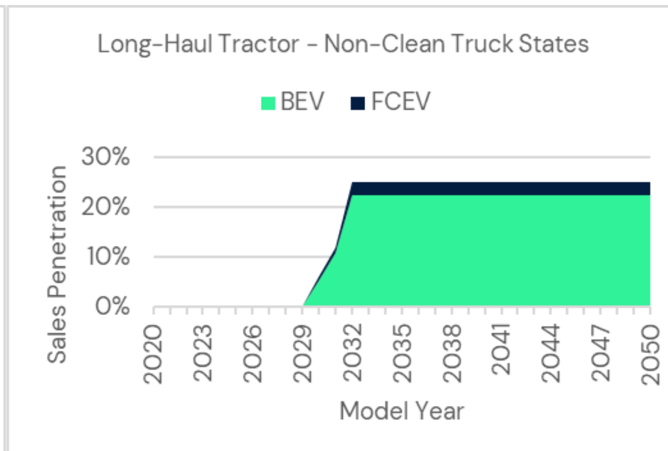


Class 2b-3 for non-ZEV states will follow the EPA Multi-Pollutant Emissions Standards while Class 4 – 8 trucks will follow the EV penetration rates as shown in the Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles—Phase 3. Technology mix assumptions were kept consistent with the ACT states.

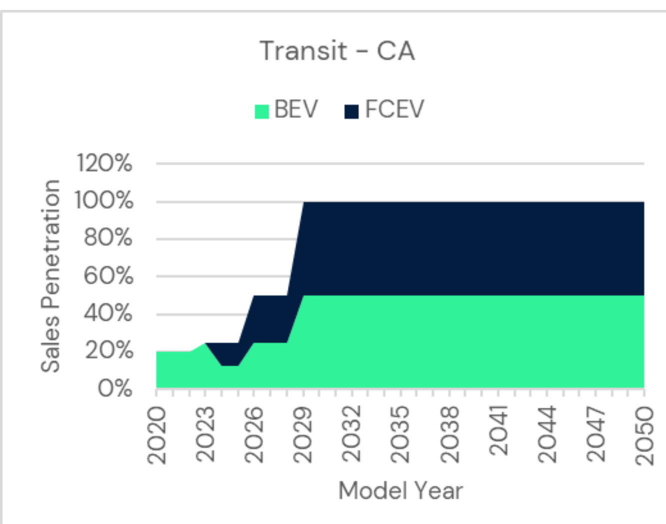


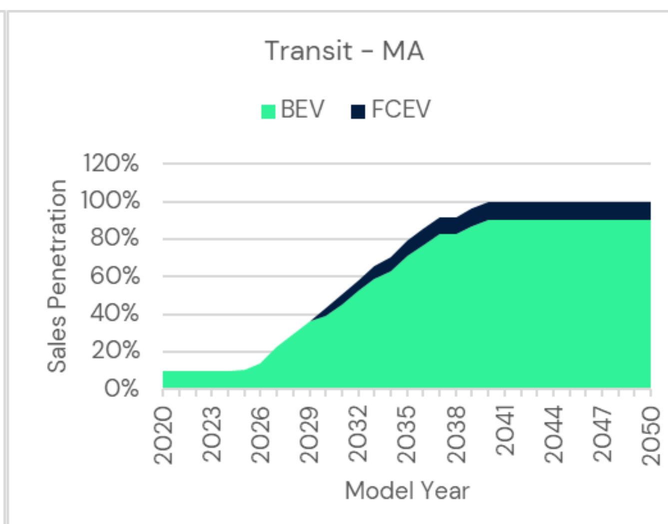


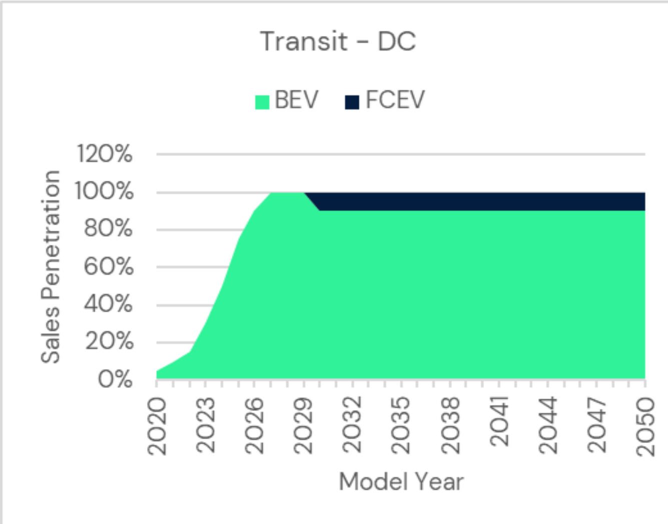


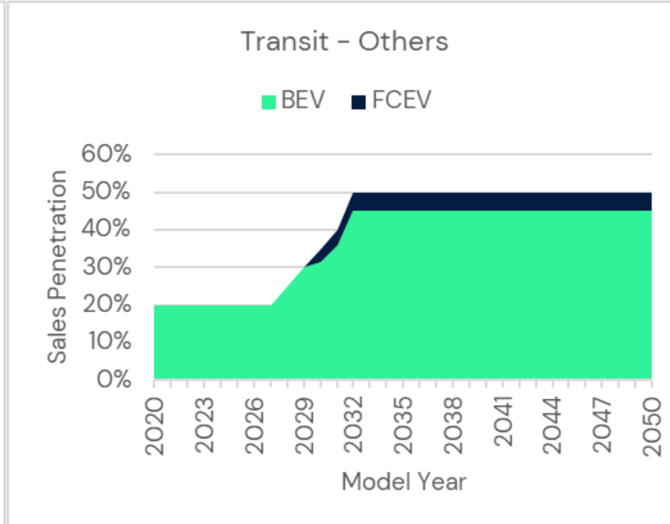


Technology mix assumptions for transit bus were kept consistent with ACF long-haul tractors for California and with ACT tractors for other states.






Transit - DC
BEV
FCEV
120%
100%
80%
60%
40%
20%
0%
Sales Penetration
2020
2023
2026
2029
2032
2035
2038
2041
2044
2047
2050
Model Year


Transit - Others
BEV
FCEV
60%
50%
40%
30%
20%
10%
0%
Sales Penetration
2020
2023
2026
2029
2032
2035
2038
2041
2044
2047
2050
Model Year

Appendix II: BEV and FCEV Vehicle Efficiency

Regulatory Class	Source Type	BEV (kWh/mile)	FCEV (g H2/mile)
Light Duty Vehicles	Passenger Car	0.28	14.4
Light Duty Trucks	Passenger Truck	0.42	17.2
Class 2b and 3 Trucks (8,500 lbs < GVWR <= 14,000 lbs)	Passenger Truck	0.64	26.3
Light Duty Trucks	Light Commercial Truck	0.42	17.2
Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	Transit Bus	1.14	68.3
Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	Transit Bus	1.40	84.2
Class 8a and 8b Trucks (GVWR > 33,000 lbs)	Transit Bus	2.24	144.9
Urban Bus (see CFR Sec 86.091_2)	Transit Bus	2.24	144.9
Class 2b and 3 Trucks (8,500 lbs < GVWR <= 14,000 lbs)	Light Commercial Truck	0.64	26.3
Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	Other Buses	1.14	68.3
Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	Other Buses	1.50	89.7
Class 8a and 8b Trucks (GVWR > 33,000 lbs)	Other Buses	2.82	169.1
Class 2b and 3 Trucks (8,500 lbs < GVWR <= 14,000 lbs)	School Bus	0.64	26.3
Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	School Bus	0.94	56.4
Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	School Bus	1.36	81.6
Class 8a and 8b Trucks (GVWR > 33,000 lbs)	School Bus	1.40	84.0
Class 2b and 3 Trucks (8,500 lbs < GVWR <= 14,000 lbs)	Refuse Truck	0.64	26.3
Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	Refuse Truck	0.96	57.6
Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	Refuse Truck	2.60	156.0
Class 8a and 8b Trucks (GVWR > 33,000 lbs)	Refuse Truck	3.18	200.0
Class 2b and 3 Trucks (8,500 lbs < GVWR <= 14,000 lbs)	Single Unit Short-haul Truck	0.64	26.3
Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	Single Unit Short-haul Truck	0.91	54.6
Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	Single Unit Short-haul Truck	1.33	79.8
Class 8a and 8b Trucks (GVWR > 33,000 lbs)	Single Unit Short-haul Truck	1.80	108.0
Class 2b and 3 Trucks (8,500 lbs < GVWR <= 14,000 lbs)	Single Unit Long-haul Truck	0.64	26.3
Class 4 and 5 Trucks (14,000 lbs < GVWR <= 19,500 lbs)	Single Unit Long-haul Truck	0.91	54.6
Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	Single Unit Long-haul Truck	1.33	79.8
Class 8a and 8b Trucks (GVWR > 33,000 lbs)	Single Unit Long-haul Truck	1.80	108.0
Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	Combination Short-haul Truck	1.33	79.8
Class 8a and 8b Trucks (GVWR > 33,000 lbs)	Combination Short-haul Truck	2.35	137.0
Glider Vehicles (see EPA-420-F-15-904)	Combination Short-haul Truck	2.35	137.0
Class 6 and 7 Trucks (19,500 lbs < GVWR <= 33,000 lbs)	Combination Long-haul Truck	1.33	79.8
Class 8a and 8b Trucks (GVWR > 33,000 lbs)	Combination Long-haul Truck	2.35	137.0
Glider Vehicles (see EPA-420-F-15-904)	Combination Long-haul Truck	2.35	137.0

Appendix III: ZEV Population Projection Modeling Outputs

State-level LD ZEV Populations Summary by Model Year

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
AK	2027	Light Commercial Truck	309	0	65	375
AK	2027	Passenger Car	2859	0	660	3519
AK	2027	Passenger Truck	2819	0	630	3449
AK	2028	Light Commercial Truck	370	0	65	435
AK	2028	Passenger Car	3490	0	676	4166
AK	2028	Passenger Truck	3346	0	625	3971
AK	2029	Light Commercial Truck	449	0	86	536
AK	2029	Passenger Car	4379	0	922	5301
AK	2029	Passenger Truck	4048	0	823	4871
AK	2030	Light Commercial Truck	522	0	97	619
AK	2030	Passenger Car	5210	0	1066	6275
AK	2030	Passenger Truck	4680	0	924	5604
AK	2031	Light Commercial Truck	589	0	115	704
AK	2031	Passenger Car	5935	0	1306	7240
AK	2031	Passenger Truck	5270	0	1109	6379
AK	2032	Light Commercial Truck	662	0	136	798
AK	2032	Passenger Car	6680	0	1579	8259
AK	2032	Passenger Truck	5829	0	1307	7136
AL	2027	Light Commercial Truck	3903	0	826	4729
AL	2027	Passenger Car	35882	0	8281	44163
AL	2027	Passenger Truck	36008	0	8044	44052
AL	2028	Light Commercial Truck	4670	0	823	5493
AL	2028	Passenger Car	43801	0	8478	52279
AL	2028	Passenger Truck	42728	0	7986	50714
AL	2029	Light Commercial Truck	5673	0	1088	6761
AL	2029	Passenger Car	54957	0	11570	66527
AL	2029	Passenger Truck	51703	0	10510	62214
AL	2030	Light Commercial Truck	6591	0	1226	7817
AL	2030	Passenger Car	65379	0	13373	78752
AL	2030	Passenger Truck	59769	0	11798	71566
AL	2031	Light Commercial Truck	7434	0	1453	8887
AL	2031	Passenger Car	74478	0	16385	90863
AL	2031	Passenger Truck	67308	0	14158	81466
AL	2032	Light Commercial Truck	8355	0	1720	10075
AL	2032	Passenger Car	83832	0	19815	103647
AL	2032	Passenger Truck	74440	0	16691	91131
AR	2027	Light Commercial Truck	2353	0	498	2850
AR	2027	Passenger Car	21472	0	4955	26427
AR	2027	Passenger Truck	22026	0	4921	26947
AR	2028	Light Commercial Truck	2815	0	496	3311
AR	2028	Passenger Car	26210	0	5073	31283
AR	2028	Passenger Truck	26138	0	4885	31023
AR	2029	Light Commercial Truck	3419	0	656	4075
AR	2029	Passenger Car	32886	0	6923	39809
AR	2029	Passenger Truck	31628	0	6429	38057
AR	2030	Light Commercial Truck	3973	0	739	4712
AR	2030	Passenger Car	39122	0	8002	47124

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
AR	2030	Passenger Truck	36561	0	7217	43778
AR	2031	Light Commercial Truck	4481	0	876	5357
AR	2031	Passenger Car	44567	0	9805	54372
AR	2031	Passenger Truck	41173	0	8661	49834
AR	2032	Light Commercial Truck	5036	0	1037	6073
AR	2032	Passenger Car	50164	0	11857	62021
AR	2032	Passenger Truck	45536	0	10210	55746
AZ	2027	Light Commercial Truck	4096	0	866	4963
AZ	2027	Passenger Car	38124	0	8798	46922
AZ	2027	Passenger Truck	35852	0	8010	43862
AZ	2028	Light Commercial Truck	4901	0	864	5764
AZ	2028	Passenger Car	46538	0	9007	55545
AZ	2028	Passenger Truck	42544	0	7952	50496
AZ	2029	Light Commercial Truck	5953	0	1142	7094
AZ	2029	Passenger Car	58391	0	12293	70684
AZ	2029	Passenger Truck	51481	0	10465	61946
AZ	2030	Light Commercial Truck	6917	0	1287	8203
AZ	2030	Passenger Car	69464	0	14208	83672
AZ	2030	Passenger Truck	59511	0	11747	71258
AZ	2031	Light Commercial Truck	7801	0	1525	9326
AZ	2031	Passenger Car	79132	0	17409	96541
AZ	2031	Passenger Truck	67018	0	14097	81115
AZ	2032	Light Commercial Truck	8768	0	1805	10573
AZ	2032	Passenger Car	89070	0	21053	110123
AZ	2032	Passenger Truck	74119	0	16619	90738
CA	2027	Light Commercial Truck	25765	280	1365	27411
CA	2027	Passenger Car	371719	8935	36943	417597
CA	2027	Passenger Truck	214934	902	12146	227982
CA	2028	Light Commercial Truck	36425	322	1361	38108
CA	2028	Passenger Car	401817	8685	45691	456193
CA	2028	Passenger Truck	306349	1033	12060	319441
CA	2029	Light Commercial Truck	36654	380	1349	38384
CA	2029	Passenger Car	535650	6885	46769	589303
CA	2029	Passenger Truck	304189	1223	11904	317317
CA	2030	Light Commercial Truck	35043	8137	1352	44533
CA	2030	Passenger Car	640755	6139	48050	694944
CA	2030	Passenger Truck	286388	69100	11879	367367
CA	2031	Light Commercial Truck	35639	8799	1311	45750
CA	2031	Passenger Car	749130	5308	48170	802608
CA	2031	Passenger Truck	293581	75673	11664	380917
CA	2032	Light Commercial Truck	43782	8146	1313	53240
CA	2032	Passenger Car	796874	5227	49290	851392
CA	2032	Passenger Truck	361293	69214	11635	442142
CO	2027	Light Commercial Truck	3845	0	211	4056
CO	2027	Passenger Car	58394	0	5667	64061
CO	2027	Passenger Truck	34373	0	1969	36342
CO	2028	Light Commercial Truck	5514	0	210	5725
CO	2028	Passenger Car	64109	0	5872	69982
CO	2028	Passenger Truck	49267	0	1955	51222
CO	2029	Light Commercial Truck	5546	0	209	5755
CO	2029	Passenger Car	83227	0	7174	90401

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
CO	2029	Passenger Truck	48905	0	1930	50835
CO	2030	Light Commercial Truck	6503	0	209	6712
CO	2030	Passenger Car	99236	0	7371	106607
CO	2030	Passenger Truck	57045	0	1925	58970
CO	2031	Light Commercial Truck	6706	0	203	6909
CO	2031	Passenger Car	115734	0	7389	123123
CO	2031	Passenger Truck	59298	0	1890	61189
CO	2032	Light Commercial Truck	7842	0	203	8044
CO	2032	Passenger Car	124525	0	6082	130607
CO	2032	Passenger Truck	69154	0	1886	71040
CT	2027	Light Commercial Truck	2254	0	123	2376
CT	2027	Passenger Car	34259	0	3325	37584
CT	2027	Passenger Truck	18716	0	1068	19785
CT	2028	Light Commercial Truck	3224	0	122	3346
CT	2028	Passenger Car	37612	0	3445	41057
CT	2028	Passenger Truck	26798	0	1061	27859
CT	2029	Light Commercial Truck	3242	0	121	3363
CT	2029	Passenger Car	48828	0	4209	53037
CT	2029	Passenger Truck	26601	0	1047	27648
CT	2030	Light Commercial Truck	3798	0	121	3919
CT	2030	Passenger Car	58220	0	4325	62545
CT	2030	Passenger Truck	31018	0	1045	32063
CT	2031	Light Commercial Truck	3998	0	118	4116
CT	2031	Passenger Car	67899	0	4335	72234
CT	2031	Passenger Truck	32503	0	1026	33529
CT	2032	Light Commercial Truck	4740	0	118	4858
CT	2032	Passenger Car	73057	0	3568	76625
CT	2032	Passenger Truck	38111	0	1023	39135
DC	2027	Light Commercial Truck	86	0	18	105
DC	2027	Passenger Car	829	0	191	1021
DC	2027	Passenger Truck	727	0	162	890
DC	2028	Light Commercial Truck	103	0	18	121
DC	2028	Passenger Car	1012	0	196	1208
DC	2028	Passenger Truck	863	0	161	1024
DC	2029	Light Commercial Truck	125	0	24	149
DC	2029	Passenger Car	1270	0	267	1538
DC	2029	Passenger Truck	1044	0	212	1256
DC	2030	Light Commercial Truck	146	0	27	173
DC	2030	Passenger Car	1511	0	309	1820
DC	2030	Passenger Truck	1207	0	238	1445
DC	2031	Light Commercial Truck	164	0	32	196
DC	2031	Passenger Car	1721	0	379	2100
DC	2031	Passenger Truck	1359	0	286	1645
DC	2032	Light Commercial Truck	185	0	38	223
DC	2032	Passenger Car	1937	0	458	2395
DC	2032	Passenger Truck	1503	0	337	1841
DE	2027	Light Commercial Truck	657	0	139	796
DE	2027	Passenger Car	6118	0	1412	7529
DE	2027	Passenger Truck	5783	0	1292	7075
DE	2028	Light Commercial Truck	786	0	139	925
DE	2028	Passenger Car	7468	0	1445	8913

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
DE	2028	Passenger Truck	6862	0	1283	8145
DE	2029	Light Commercial Truck	955	0	183	1138
DE	2029	Passenger Car	9370	0	1973	11342
DE	2029	Passenger Truck	8304	0	1688	9991
DE	2030	Light Commercial Truck	1110	0	207	1316
DE	2030	Passenger Car	11146	0	2280	13426
DE	2030	Passenger Truck	9599	0	1895	11493
DE	2031	Light Commercial Truck	1252	0	245	1497
DE	2031	Passenger Car	12698	0	2794	15491
DE	2031	Passenger Truck	10810	0	2274	13083
DE	2032	Light Commercial Truck	1407	0	290	1697
DE	2032	Passenger Car	14293	0	3378	17671
DE	2032	Passenger Truck	11955	0	2681	14636
FL	2027	Light Commercial Truck	12589	0	2663	15251
FL	2027	Passenger Car	118078	0	27249	145327
FL	2027	Passenger Truck	108283	0	24191	132474
FL	2028	Light Commercial Truck	15061	0	2655	17715
FL	2028	Passenger Car	144135	0	27897	172033
FL	2028	Passenger Truck	128493	0	24016	152510
FL	2029	Light Commercial Truck	18295	0	3508	21803
FL	2029	Passenger Car	180848	0	38073	218921
FL	2029	Passenger Truck	155484	0	31607	187091
FL	2030	Light Commercial Truck	21256	0	3955	25211
FL	2030	Passenger Car	215142	0	44006	259148
FL	2030	Passenger Truck	179737	0	35478	215216
FL	2031	Light Commercial Truck	23975	0	4687	28662
FL	2031	Passenger Car	245085	0	53919	299004
FL	2031	Passenger Truck	202410	0	42576	244986
FL	2032	Light Commercial Truck	26945	0	5548	32493
FL	2032	Passenger Car	275866	0	65205	341071
FL	2032	Passenger Truck	223858	0	50193	274051
GA	2027	Light Commercial Truck	6981	0	1477	8458
GA	2027	Passenger Car	64735	0	14939	79674
GA	2027	Passenger Truck	61420	0	13721	75141
GA	2028	Light Commercial Truck	8352	0	1472	9824
GA	2028	Passenger Car	79021	0	15294	94316
GA	2028	Passenger Truck	72883	0	13622	86505
GA	2029	Light Commercial Truck	10145	0	1945	12091
GA	2029	Passenger Car	99149	0	20873	120022
GA	2029	Passenger Truck	88193	0	17928	106120
GA	2030	Light Commercial Truck	11788	0	2193	13981
GA	2030	Passenger Car	117950	0	24126	142076
GA	2030	Passenger Truck	101949	0	20124	122073
GA	2031	Light Commercial Truck	13296	0	2599	15895
GA	2031	Passenger Car	134366	0	29561	163927
GA	2031	Passenger Truck	114810	0	24150	138959
GA	2032	Light Commercial Truck	14943	0	3076	18019
GA	2032	Passenger Car	151242	0	35748	186990
GA	2032	Passenger Truck	126975	0	28470	155445
HI	2027	Light Commercial Truck	575	0	122	697
HI	2027	Passenger Car	5372	0	1240	6612

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
HI	2027	Passenger Truck	4939	0	1103	6042
HI	2028	Light Commercial Truck	688	0	121	809
HI	2028	Passenger Car	6558	0	1269	7827
HI	2028	Passenger Truck	5860	0	1095	6956
HI	2029	Light Commercial Truck	836	0	160	996
HI	2029	Passenger Car	8228	0	1732	9961
HI	2029	Passenger Truck	7091	0	1442	8533
HI	2030	Light Commercial Truck	971	0	181	1152
HI	2030	Passenger Car	9789	0	2002	11791
HI	2030	Passenger Truck	8198	0	1618	9816
HI	2031	Light Commercial Truck	1095	0	214	1310
HI	2031	Passenger Car	11151	0	2453	13605
HI	2031	Passenger Truck	9232	0	1942	11174
HI	2032	Light Commercial Truck	1231	0	253	1485
HI	2032	Passenger Car	12552	0	2967	15519
HI	2032	Passenger Truck	10210	0	2289	12499
IA	2027	Light Commercial Truck	2235	0	473	2708
IA	2027	Passenger Car	20240	0	4671	24911
IA	2027	Passenger Truck	21735	0	4856	26591
IA	2028	Light Commercial Truck	2674	0	471	3146
IA	2028	Passenger Car	24707	0	4782	29488
IA	2028	Passenger Truck	25792	0	4821	30612
IA	2029	Light Commercial Truck	3248	0	623	3871
IA	2029	Passenger Car	30999	0	6526	37526
IA	2029	Passenger Truck	31209	0	6344	37553
IA	2030	Light Commercial Truck	3774	0	702	4477
IA	2030	Passenger Car	36878	0	7543	44421
IA	2030	Passenger Truck	36077	0	7121	43199
IA	2031	Light Commercial Truck	4257	0	832	5089
IA	2031	Passenger Car	42011	0	9242	51253
IA	2031	Passenger Truck	40628	0	8546	49174
IA	2032	Light Commercial Truck	4785	0	985	5770
IA	2032	Passenger Car	47287	0	11177	58464
IA	2032	Passenger Truck	44934	0	10075	55008
ID	2027	Light Commercial Truck	1026	0	217	1244
ID	2027	Passenger Car	9361	0	2160	11521
ID	2027	Passenger Truck	9764	0	2181	11946
ID	2028	Light Commercial Truck	1228	0	216	1444
ID	2028	Passenger Car	11427	0	2212	13638
ID	2028	Passenger Truck	11587	0	2166	13752
ID	2029	Light Commercial Truck	1492	0	286	1778
ID	2029	Passenger Car	14337	0	3018	17356
ID	2029	Passenger Truck	14020	0	2850	16871
ID	2030	Light Commercial Truck	1733	0	322	2056
ID	2030	Passenger Car	17056	0	3489	20545
ID	2030	Passenger Truck	16207	0	3199	19407
ID	2031	Light Commercial Truck	1955	0	382	2337
ID	2031	Passenger Car	19430	0	4275	23704
ID	2031	Passenger Truck	18252	0	3839	22091
ID	2032	Light Commercial Truck	2197	0	452	2649
ID	2032	Passenger Car	21870	0	5169	27039

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
ID	2032	Passenger Truck	20186	0	4526	24712
IL	2027	Light Commercial Truck	6725	0	1422	8147
IL	2027	Passenger Car	62586	0	14443	77029
IL	2027	Passenger Truck	58734	0	13121	71855
IL	2028	Light Commercial Truck	8045	0	1418	9463
IL	2028	Passenger Car	76398	0	14787	91184
IL	2028	Passenger Truck	69696	0	13027	82722
IL	2029	Light Commercial Truck	9773	0	1874	11647
IL	2029	Passenger Car	95856	0	20180	116037
IL	2029	Passenger Truck	84336	0	17144	101480
IL	2030	Light Commercial Truck	11355	0	2113	13467
IL	2030	Passenger Car	114034	0	23325	137359
IL	2030	Passenger Truck	97491	0	19244	116735
IL	2031	Light Commercial Truck	12807	0	2504	15311
IL	2031	Passenger Car	129905	0	28579	158484
IL	2031	Passenger Truck	109789	0	23094	132883
IL	2032	Light Commercial Truck	14394	0	2963	17357
IL	2032	Passenger Car	146220	0	34561	180781
IL	2032	Passenger Truck	121423	0	27225	148649
IN	2027	Light Commercial Truck	4431	0	937	5368
IN	2027	Passenger Car	40854	0	9428	50282
IN	2027	Passenger Truck	40321	0	9008	49328
IN	2028	Light Commercial Truck	5301	0	934	6235
IN	2028	Passenger Car	49870	0	9652	59522
IN	2028	Passenger Truck	47846	0	8943	56789
IN	2029	Light Commercial Truck	6439	0	1235	7674
IN	2029	Passenger Car	62572	0	13173	75745
IN	2029	Passenger Truck	57896	0	11769	69665
IN	2030	Light Commercial Truck	7481	0	1392	8874
IN	2030	Passenger Car	74437	0	15226	89663
IN	2030	Passenger Truck	66927	0	13211	80138
IN	2031	Light Commercial Truck	8439	0	1650	10088
IN	2031	Passenger Car	84798	0	18655	103453
IN	2031	Passenger Truck	75370	0	15854	91224
IN	2032	Light Commercial Truck	9484	0	1953	11437
IN	2032	Passenger Car	95448	0	22560	118008
IN	2032	Passenger Truck	83357	0	18690	102047
KS	2027	Light Commercial Truck	2036	0	431	2466
KS	2027	Passenger Car	18574	0	4286	22860
KS	2027	Passenger Truck	18992	0	4243	23235
KS	2028	Light Commercial Truck	2436	0	429	2865
KS	2028	Passenger Car	22673	0	4388	27061
KS	2028	Passenger Truck	22536	0	4212	26749
KS	2029	Light Commercial Truck	2959	0	567	3526
KS	2029	Passenger Car	28448	0	5989	34437
KS	2029	Passenger Truck	27270	0	5543	32814
KS	2030	Light Commercial Truck	3437	0	640	4077
KS	2030	Passenger Car	33843	0	6922	40765
KS	2030	Passenger Truck	31524	0	6223	37747
KS	2031	Light Commercial Truck	3877	0	758	4635
KS	2031	Passenger Car	38553	0	8482	47034

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
KS	2031	Passenger Truck	35501	0	7467	42968
KS	2032	Light Commercial Truck	4358	0	897	5255
KS	2032	Passenger Car	43395	0	10257	53652
KS	2032	Passenger Truck	39262	0	8803	48066
KY	2027	Light Commercial Truck	3016	0	638	3653
KY	2027	Passenger Car	27550	0	6358	33908
KY	2027	Passenger Truck	28265	0	6315	34580
KY	2028	Light Commercial Truck	3608	0	636	4244
KY	2028	Passenger Car	33630	0	6509	40139
KY	2028	Passenger Truck	33541	0	6269	39810
KY	2029	Light Commercial Truck	4382	0	840	5223
KY	2029	Passenger Car	42196	0	8883	51079
KY	2029	Passenger Truck	40586	0	8250	48837
KY	2030	Light Commercial Truck	5092	0	947	6039
KY	2030	Passenger Car	50197	0	10268	60465
KY	2030	Passenger Truck	46917	0	9261	56178
KY	2031	Light Commercial Truck	5743	0	1123	6866
KY	2031	Passenger Car	57184	0	12580	69765
KY	2031	Passenger Truck	52836	0	11114	63949
KY	2032	Light Commercial Truck	6455	0	1329	7783
KY	2032	Passenger Car	64365	0	15214	79579
KY	2032	Passenger Truck	58434	0	13102	71536
LA	2027	Light Commercial Truck	3241	0	685	3926
LA	2027	Passenger Car	29891	0	6898	36789
LA	2027	Passenger Truck	29301	0	6546	35847
LA	2028	Light Commercial Truck	3877	0	683	4560
LA	2028	Passenger Car	36487	0	7062	43549
LA	2028	Passenger Truck	34770	0	6499	41269
LA	2029	Light Commercial Truck	4710	0	903	5613
LA	2029	Passenger Car	45780	0	9638	55418
LA	2029	Passenger Truck	42074	0	8553	50626
LA	2030	Light Commercial Truck	5472	0	1018	6490
LA	2030	Passenger Car	54462	0	11140	65602
LA	2030	Passenger Truck	48637	0	9600	58237
LA	2031	Light Commercial Truck	6172	0	1206	7378
LA	2031	Passenger Car	62042	0	13649	75691
LA	2031	Passenger Truck	54772	0	11521	66293
LA	2032	Light Commercial Truck	6937	0	1428	8365
LA	2032	Passenger Car	69834	0	16506	86340
LA	2032	Passenger Truck	60576	0	13582	74158
MA	2027	Light Commercial Truck	4274	0	235	4509
MA	2027	Passenger Car	66015	0	6407	72421
MA	2027	Passenger Truck	35467	0	2031	37499
MA	2028	Light Commercial Truck	6131	0	234	6365
MA	2028	Passenger Car	72476	0	6639	79115
MA	2028	Passenger Truck	50835	0	2017	52852
MA	2029	Light Commercial Truck	6166	0	232	6398
MA	2029	Passenger Car	94088	0	8111	102199
MA	2029	Passenger Truck	50462	0	1991	52453
MA	2030	Light Commercial Truck	7229	0	232	7462
MA	2030	Passenger Car	112187	0	8333	120520

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
MA	2030	Passenger Truck	58861	0	1987	60847
MA	2031	Light Commercial Truck	7456	0	225	7681
MA	2031	Passenger Car	130837	0	8354	139191
MA	2031	Passenger Truck	61186	0	1951	63136
MA	2032	Light Commercial Truck	8718	0	226	8943
MA	2032	Passenger Car	140776	0	6876	147651
MA	2032	Passenger Truck	71355	0	1946	73301
MD	2027	Light Commercial Truck	4352	0	239	4591
MD	2027	Passenger Car	66591	0	6463	73054
MD	2027	Passenger Truck	37282	0	2135	39417
MD	2028	Light Commercial Truck	6242	0	238	6480
MD	2028	Passenger Car	73109	0	6697	79806
MD	2028	Passenger Truck	53436	0	2120	55557
MD	2029	Light Commercial Truck	6278	0	236	6514
MD	2029	Passenger Car	94911	0	8182	103093
MD	2029	Passenger Truck	53044	0	2093	55136
MD	2030	Light Commercial Truck	7361	0	237	7597
MD	2030	Passenger Car	113168	0	8406	121574
MD	2030	Passenger Truck	61872	0	2088	63961
MD	2031	Light Commercial Truck	7591	0	229	7820
MD	2031	Passenger Car	131981	0	8427	140408
MD	2031	Passenger Truck	64316	0	2050	66367
MD	2032	Light Commercial Truck	8876	0	230	9106
MD	2032	Passenger Car	142006	0	6936	148942
MD	2032	Passenger Truck	75007	0	2045	77052
ME	2027	Light Commercial Truck	1045	0	57	1102
ME	2027	Passenger Car	15330	0	1488	16818
ME	2027	Passenger Truck	10361	0	591	10952
ME	2028	Light Commercial Truck	1496	0	57	1552
ME	2028	Passenger Car	16831	0	1542	18373
ME	2028	Passenger Truck	14835	0	587	15422
ME	2029	Light Commercial Truck	1504	0	56	1560
ME	2029	Passenger Car	21850	0	1884	23733
ME	2029	Passenger Truck	14725	0	580	15305
ME	2030	Light Commercial Truck	1762	0	56	1818
ME	2030	Passenger Car	26053	0	1935	27988
ME	2030	Passenger Truck	17170	0	578	17749
ME	2031	Light Commercial Truck	1855	0	55	1909
ME	2031	Passenger Car	30384	0	1940	32324
ME	2031	Passenger Truck	17993	0	568	18561
ME	2032	Light Commercial Truck	2199	0	55	2254
ME	2032	Passenger Car	32692	0	1597	34289
ME	2032	Passenger Truck	21097	0	567	21664
MI	2027	Light Commercial Truck	6740	0	1426	8166
MI	2027	Passenger Car	62280	0	14372	76652
MI	2027	Passenger Truck	60330	0	13478	73808
MI	2028	Light Commercial Truck	8064	0	1421	9485
MI	2028	Passenger Car	76024	0	14714	90738
MI	2028	Passenger Truck	71590	0	13381	84970
MI	2029	Light Commercial Truck	9795	0	1878	11674
MI	2029	Passenger Car	95388	0	20082	115469

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
MI	2029	Passenger Truck	86628	0	17610	104237
MI	2030	Light Commercial Truck	11381	0	2118	13499
MI	2030	Passenger Car	113476	0	23211	136687
MI	2030	Passenger Truck	100141	0	19767	119907
MI	2031	Light Commercial Truck	12837	0	2509	15346
MI	2031	Passenger Car	129269	0	28439	157709
MI	2031	Passenger Truck	112773	0	23721	136494
MI	2032	Light Commercial Truck	14427	0	2970	17398
MI	2032	Passenger Car	145505	0	34392	179897
MI	2032	Passenger Truck	124722	0	27965	152687
MN	2027	Light Commercial Truck	4353	0	237	4590
MN	2027	Passenger Car	64816	0	6290	71106
MN	2027	Passenger Truck	40341	0	2303	42644
MN	2028	Light Commercial Truck	6227	0	236	6463
MN	2028	Passenger Car	71160	0	6518	77678
MN	2028	Passenger Truck	57762	0	2287	60048
MN	2029	Light Commercial Truck	6262	0	234	6496
MN	2029	Passenger Car	92380	0	7964	100343
MN	2029	Passenger Truck	57337	0	2257	59594
MN	2030	Light Commercial Truck	7335	0	235	7570
MN	2030	Passenger Car	110150	0	8182	118332
MN	2030	Passenger Truck	66857	0	2252	69109
MN	2031	Light Commercial Truck	7722	0	227	7949
MN	2031	Passenger Car	128461	0	8202	136664
MN	2031	Passenger Truck	70059	0	2211	72270
MN	2032	Light Commercial Truck	9155	0	228	9382
MN	2032	Passenger Car	138220	0	6751	144970
MN	2032	Passenger Truck	82146	0	2206	84352
MO	2027	Light Commercial Truck	4241	0	897	5138
MO	2027	Passenger Car	38811	0	8956	47768
MO	2027	Passenger Truck	38297	0	8556	46853
MO	2028	Light Commercial Truck	5073	0	894	5968
MO	2028	Passenger Car	47376	0	9170	56546
MO	2028	Passenger Truck	45445	0	8494	53939
MO	2029	Light Commercial Truck	6163	0	1182	7345
MO	2029	Passenger Car	59443	0	12514	71958
MO	2029	Passenger Truck	54991	0	11178	66169
MO	2030	Light Commercial Truck	7160	0	1332	8493
MO	2030	Passenger Car	70716	0	14465	85180
MO	2030	Passenger Truck	63568	0	12548	76116
MO	2031	Light Commercial Truck	8076	0	1579	9655
MO	2031	Passenger Car	80558	0	17723	98281
MO	2031	Passenger Truck	71588	0	15058	86646
MO	2032	Light Commercial Truck	9077	0	1869	10946
MO	2032	Passenger Car	90676	0	21432	112108
MO	2032	Passenger Truck	79173	0	17752	96925
MS	2027	Light Commercial Truck	2396	0	507	2903
MS	2027	Passenger Car	21733	0	5015	26749
MS	2027	Passenger Truck	23030	0	5145	28174
MS	2028	Light Commercial Truck	2866	0	505	3372
MS	2028	Passenger Car	26529	0	5135	31664

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
MS	2028	Passenger Truck	27328	0	5108	32436
MS	2029	Light Commercial Truck	3482	0	668	4149
MS	2029	Passenger Car	33286	0	7008	40294
MS	2029	Passenger Truck	33068	0	6722	39790
MS	2030	Light Commercial Truck	4045	0	753	4798
MS	2030	Passenger Car	39599	0	8100	47698
MS	2030	Passenger Truck	38226	0	7545	45772
MS	2031	Light Commercial Truck	4563	0	892	5455
MS	2031	Passenger Car	45110	0	9924	55034
MS	2031	Passenger Truck	43048	0	9055	52103
MS	2032	Light Commercial Truck	5128	0	1056	6184
MS	2032	Passenger Car	50775	0	12001	62777
MS	2032	Passenger Truck	47610	0	10675	58285
MT	2027	Light Commercial Truck	761	0	161	922
MT	2027	Passenger Car	6852	0	1581	8433
MT	2027	Passenger Truck	7564	0	1690	9254
MT	2028	Light Commercial Truck	910	0	160	1071
MT	2028	Passenger Car	8364	0	1619	9983
MT	2028	Passenger Truck	8976	0	1678	10654
MT	2029	Light Commercial Truck	1106	0	212	1318
MT	2029	Passenger Car	10494	0	2209	12703
MT	2029	Passenger Truck	10862	0	2208	13069
MT	2030	Light Commercial Truck	1285	0	239	1524
MT	2030	Passenger Car	12484	0	2554	15038
MT	2030	Passenger Truck	12556	0	2478	15034
MT	2031	Light Commercial Truck	1449	0	283	1733
MT	2031	Passenger Car	14222	0	3129	17350
MT	2031	Passenger Truck	14140	0	2974	17114
MT	2032	Light Commercial Truck	1629	0	335	1964
MT	2032	Passenger Car	16008	0	3784	19791
MT	2032	Passenger Truck	15638	0	3506	19144
NC	2027	Light Commercial Truck	6761	0	1430	8191
NC	2027	Passenger Car	62421	0	14405	76825
NC	2027	Passenger Truck	60426	0	13499	73925
NC	2028	Light Commercial Truck	8089	0	1426	9514
NC	2028	Passenger Car	76196	0	14748	90943
NC	2028	Passenger Truck	71704	0	13402	85106
NC	2029	Light Commercial Truck	9825	0	1884	11710
NC	2029	Passenger Car	95603	0	20127	115730
NC	2029	Passenger Truck	86766	0	17638	104404
NC	2030	Light Commercial Truck	11416	0	2124	13540
NC	2030	Passenger Car	113732	0	23263	136996
NC	2030	Passenger Truck	100300	0	19798	120099
NC	2031	Light Commercial Truck	12876	0	2517	15393
NC	2031	Passenger Car	129562	0	28504	158066
NC	2031	Passenger Truck	112953	0	23759	136712
NC	2032	Light Commercial Truck	14472	0	2979	17451
NC	2032	Passenger Car	145834	0	34470	180303
NC	2032	Passenger Truck	124922	0	28010	152932
ND	2027	Light Commercial Truck	624	0	132	756
ND	2027	Passenger Car	5602	0	1293	6895

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
ND	2027	Passenger Truck	6231	0	1392	7623
ND	2028	Light Commercial Truck	746	0	132	878
ND	2028	Passenger Car	6838	0	1324	8162
ND	2028	Passenger Truck	7394	0	1382	8776
ND	2029	Light Commercial Truck	906	0	174	1080
ND	2029	Passenger Car	8580	0	1806	10387
ND	2029	Passenger Truck	8947	0	1819	10766
ND	2030	Light Commercial Truck	1053	0	196	1249
ND	2030	Passenger Car	10207	0	2088	12295
ND	2030	Passenger Truck	10343	0	2042	12384
ND	2031	Light Commercial Truck	1188	0	232	1420
ND	2031	Passenger Car	11628	0	2558	14186
ND	2031	Passenger Truck	11647	0	2450	14097
ND	2032	Light Commercial Truck	1335	0	275	1610
ND	2032	Passenger Car	13088	0	3094	16182
ND	2032	Passenger Truck	12881	0	2888	15770
NE	2027	Light Commercial Truck	1337	0	283	1620
NE	2027	Passenger Car	12148	0	2803	14952
NE	2027	Passenger Truck	12766	0	2852	15618
NE	2028	Light Commercial Truck	1600	0	282	1881
NE	2028	Passenger Car	14829	0	2870	17699
NE	2028	Passenger Truck	15149	0	2831	17980
NE	2029	Light Commercial Truck	1943	0	373	2316
NE	2029	Passenger Car	18606	0	3917	22523
NE	2029	Passenger Truck	18331	0	3726	22057
NE	2030	Light Commercial Truck	2258	0	420	2678
NE	2030	Passenger Car	22134	0	4527	26662
NE	2030	Passenger Truck	21191	0	4183	25373
NE	2031	Light Commercial Truck	2546	0	498	3044
NE	2031	Passenger Car	25215	0	5547	30762
NE	2031	Passenger Truck	23864	0	5020	28883
NE	2032	Light Commercial Truck	2862	0	589	3451
NE	2032	Passenger Car	28382	0	6708	35090
NE	2032	Passenger Truck	26392	0	5918	32310
NH	2027	Light Commercial Truck	885	0	187	1072
NH	2027	Passenger Car	8107	0	1871	9977
NH	2027	Passenger Truck	8077	0	1804	9882
NH	2028	Light Commercial Truck	1059	0	187	1246
NH	2028	Passenger Car	9895	0	1915	11811
NH	2028	Passenger Truck	9585	0	1791	11376
NH	2029	Light Commercial Truck	1286	0	247	1533
NH	2029	Passenger Car	12416	0	2614	15030
NH	2029	Passenger Truck	11598	0	2358	13956
NH	2030	Light Commercial Truck	1494	0	278	1772
NH	2030	Passenger Car	14770	0	3021	17792
NH	2030	Passenger Truck	13407	0	2646	16054
NH	2031	Light Commercial Truck	1686	0	330	2015
NH	2031	Passenger Car	16826	0	3702	20528
NH	2031	Passenger Truck	15098	0	3176	18274
NH	2032	Light Commercial Truck	1894	0	390	2284
NH	2032	Passenger Car	18939	0	4477	23416

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
NH	2032	Passenger Truck	16698	0	3744	20442
NJ	2027	Light Commercial Truck	5193	0	285	5478
NJ	2027	Passenger Car	80093	0	7773	87866
NJ	2027	Passenger Truck	43228	0	2476	45704
NJ	2028	Light Commercial Truck	7448	0	284	7732
NJ	2028	Passenger Car	87932	0	8055	95987
NJ	2028	Passenger Truck	61958	0	2458	64416
NJ	2029	Light Commercial Truck	7491	0	282	7773
NJ	2029	Passenger Car	114154	0	9841	123994
NJ	2029	Passenger Truck	61503	0	2427	63929
NJ	2030	Light Commercial Truck	8783	0	282	9065
NJ	2030	Passenger Car	136113	0	10110	146223
NJ	2030	Passenger Truck	71739	0	2421	74161
NJ	2031	Light Commercial Truck	9058	0	274	9331
NJ	2031	Passenger Car	158741	0	10135	168876
NJ	2031	Passenger Truck	74573	0	2377	76951
NJ	2032	Light Commercial Truck	10591	0	274	10865
NJ	2032	Passenger Car	170798	0	8342	179140
NJ	2032	Passenger Truck	86968	0	2372	89339
NM	2027	Light Commercial Truck	1812	0	99	1912
NM	2027	Passenger Car	27161	0	2636	29797
NM	2027	Passenger Truck	17453	0	1000	18453
NM	2028	Light Commercial Truck	2599	0	99	2698
NM	2028	Passenger Car	29819	0	2731	32551
NM	2028	Passenger Truck	25016	0	993	26009
NM	2029	Light Commercial Truck	2614	0	98	2713
NM	2029	Passenger Car	38712	0	3337	42049
NM	2029	Passenger Truck	24832	0	980	25812
NM	2030	Light Commercial Truck	3065	0	99	3164
NM	2030	Passenger Car	46158	0	3429	49587
NM	2030	Passenger Truck	28965	0	978	29943
NM	2031	Light Commercial Truck	3161	0	96	3257
NM	2031	Passenger Car	53832	0	3437	57269
NM	2031	Passenger Truck	30109	0	960	31069
NM	2032	Light Commercial Truck	3696	0	96	3792
NM	2032	Passenger Car	57921	0	2829	60750
NM	2032	Passenger Truck	35114	0	958	36071
NV	2027	Light Commercial Truck	1752	0	95	1848
NV	2027	Passenger Car	26607	0	2582	29189
NV	2027	Passenger Truck	15317	0	874	16191
NV	2028	Light Commercial Truck	2507	0	95	2602
NV	2028	Passenger Car	29211	0	2676	31887
NV	2028	Passenger Truck	21931	0	868	22799
NV	2029	Light Commercial Truck	2521	0	94	2615
NV	2029	Passenger Car	37922	0	3269	41191
NV	2029	Passenger Truck	21770	0	857	22627
NV	2030	Light Commercial Truck	2953	0	94	3047
NV	2030	Passenger Car	45217	0	3359	48575
NV	2030	Passenger Truck	25384	0	855	26240
NV	2031	Light Commercial Truck	3108	0	92	3200
NV	2031	Passenger Car	52734	0	3367	56101

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
NV	2031	Passenger Truck	26600	0	840	27440
NV	2032	Light Commercial Truck	3685	0	92	3777
NV	2032	Passenger Car	56739	0	2771	59510
NV	2032	Passenger Truck	31189	0	838	32027
NY	2027	Light Commercial Truck	8149	0	447	8597
NY	2027	Passenger Car	124641	0	12097	136737
NY	2027	Passenger Truck	70445	0	4035	74480
NY	2028	Light Commercial Truck	11689	0	446	12135
NY	2028	Passenger Car	136840	0	12535	149375
NY	2028	Passenger Truck	100969	0	4006	104975
NY	2029	Light Commercial Truck	11757	0	442	12199
NY	2029	Passenger Car	177646	0	15314	192960
NY	2029	Passenger Truck	100227	0	3954	104181
NY	2030	Light Commercial Truck	13784	0	443	14227
NY	2030	Passenger Car	211817	0	15733	227551
NY	2030	Passenger Truck	116908	0	3946	120854
NY	2031	Light Commercial Truck	14215	0	430	14645
NY	2031	Passenger Car	247032	0	15773	262804
NY	2031	Passenger Truck	121527	0	3874	125401
NY	2032	Light Commercial Truck	16622	0	430	17052
NY	2032	Passenger Car	265796	0	12982	278778
NY	2032	Passenger Truck	141725	0	3865	145590
OH	2027	Light Commercial Truck	7046	0	1490	8536
OH	2027	Passenger Car	65114	0	15026	80140
OH	2027	Passenger Truck	62168	0	13888	76056
OH	2028	Light Commercial Truck	8429	0	1486	9915
OH	2028	Passenger Car	79483	0	15384	94867
OH	2028	Passenger Truck	73771	0	13788	87559
OH	2029	Light Commercial Truck	10239	0	1963	12202
OH	2029	Passenger Car	99728	0	20995	120723
OH	2029	Passenger Truck	89267	0	18146	107413
OH	2030	Light Commercial Truck	11896	0	2213	14110
OH	2030	Passenger Car	118639	0	24267	142906
OH	2030	Passenger Truck	103191	0	20369	123560
OH	2031	Light Commercial Truck	13418	0	2623	16041
OH	2031	Passenger Car	135151	0	29733	164884
OH	2031	Passenger Truck	116208	0	24444	140652
OH	2032	Light Commercial Truck	15081	0	3105	18185
OH	2032	Passenger Car	152125	0	35957	188082
OH	2032	Passenger Truck	128522	0	28817	157339
OK	2027	Light Commercial Truck	3055	0	646	3702
OK	2027	Passenger Car	27820	0	6420	34240
OK	2027	Passenger Truck	28689	0	6409	35098
OK	2028	Light Commercial Truck	3655	0	644	4300
OK	2028	Passenger Car	33959	0	6573	40532
OK	2028	Passenger Truck	34043	0	6363	40406
OK	2029	Light Commercial Truck	4440	0	851	5292
OK	2029	Passenger Car	42609	0	8970	51579
OK	2029	Passenger Truck	41194	0	8374	49568
OK	2030	Light Commercial Truck	5159	0	960	6119
OK	2030	Passenger Car	50689	0	10368	61057

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
OK	2030	Passenger Truck	47620	0	9400	57020
OK	2031	Light Commercial Truck	5819	0	1137	6956
OK	2031	Passenger Car	57744	0	12704	70448
OK	2031	Passenger Truck	53627	0	11280	64907
OK	2032	Light Commercial Truck	6540	0	1346	7886
OK	2032	Passenger Car	64996	0	15363	80359
OK	2032	Passenger Truck	59309	0	13298	72608
OR	2027	Light Commercial Truck	2650	0	145	2795
OR	2027	Passenger Car	40091	0	3891	43982
OR	2027	Passenger Truck	24442	0	1400	25842
OR	2028	Light Commercial Truck	3800	0	145	3945
OR	2028	Passenger Car	44015	0	4032	48047
OR	2028	Passenger Truck	35033	0	1390	36423
OR	2029	Light Commercial Truck	3822	0	144	3966
OR	2029	Passenger Car	57141	0	4926	62066
OR	2029	Passenger Truck	34776	0	1372	36148
OR	2030	Light Commercial Truck	4481	0	144	4626
OR	2030	Passenger Car	68132	0	5061	73193
OR	2030	Passenger Truck	40564	0	1369	41933
OR	2031	Light Commercial Truck	4622	0	140	4761
OR	2031	Passenger Car	79459	0	5073	84532
OR	2031	Passenger Truck	42166	0	1344	43510
OR	2032	Light Commercial Truck	5404	0	140	5544
OR	2032	Passenger Car	85494	0	4176	89670
OR	2032	Passenger Truck	49174	0	1341	50515
PA	2027	Light Commercial Truck	6266	0	1325	7592
PA	2027	Passenger Car	57961	0	13376	71336
PA	2027	Passenger Truck	55898	0	12488	68385
PA	2028	Light Commercial Truck	7497	0	1321	8818
PA	2028	Passenger Car	70752	0	13694	84446
PA	2028	Passenger Truck	66330	0	12398	78728
PA	2029	Light Commercial Truck	9106	0	1746	10853
PA	2029	Passenger Car	88773	0	18689	107462
PA	2029	Passenger Truck	80263	0	16316	96579
PA	2030	Light Commercial Truck	10580	0	1969	12549
PA	2030	Passenger Car	105607	0	21601	127208
PA	2030	Passenger Truck	92783	0	18314	111098
PA	2031	Light Commercial Truck	11934	0	2333	14267
PA	2031	Passenger Car	120305	0	26467	146772
PA	2031	Passenger Truck	104487	0	21978	126465
PA	2032	Light Commercial Truck	13412	0	2761	16174
PA	2032	Passenger Car	135414	0	32007	167421
PA	2032	Passenger Truck	115559	0	25910	141470
RI	2027	Light Commercial Truck	605	0	33	638
RI	2027	Passenger Car	9288	0	901	10189
RI	2027	Passenger Truck	5114	0	293	5407
RI	2028	Light Commercial Truck	867	0	33	900
RI	2028	Passenger Car	10197	0	934	11131
RI	2028	Passenger Truck	7330	0	291	7621
RI	2029	Light Commercial Truck	872	0	33	905
RI	2029	Passenger Car	13238	0	1141	14379

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
RI	2029	Passenger Truck	7276	0	287	7563
RI	2030	Light Commercial Truck	1023	0	33	1055
RI	2030	Passenger Car	15784	0	1172	16956
RI	2030	Passenger Truck	8487	0	286	8774
RI	2031	Light Commercial Truck	1055	0	32	1086
RI	2031	Passenger Car	18408	0	1175	19583
RI	2031	Passenger Truck	8823	0	281	9104
RI	2032	Light Commercial Truck	1233	0	32	1265
RI	2032	Passenger Car	19806	0	967	20773
RI	2032	Passenger Truck	10289	0	281	10570
SC	2027	Light Commercial Truck	3693	0	781	4474
SC	2027	Passenger Car	33906	0	7825	41731
SC	2027	Passenger Truck	34279	0	7658	41937
SC	2028	Light Commercial Truck	4418	0	779	5197
SC	2028	Passenger Car	41389	0	8011	49399
SC	2028	Passenger Truck	40676	0	7603	48279
SC	2029	Light Commercial Truck	5367	0	1029	6396
SC	2029	Passenger Car	51931	0	10933	62863
SC	2029	Passenger Truck	49221	0	10006	59226
SC	2030	Light Commercial Truck	6235	0	1160	7396
SC	2030	Passenger Car	61778	0	12636	74415
SC	2030	Passenger Truck	56898	0	11231	68130
SC	2031	Light Commercial Truck	7033	0	1375	8408
SC	2031	Passenger Car	70377	0	15483	85859
SC	2031	Passenger Truck	64076	0	13478	77554
SC	2032	Light Commercial Truck	7905	0	1627	9532
SC	2032	Passenger Car	79215	0	18724	97939
SC	2032	Passenger Truck	70865	0	15889	86755
SD	2027	Light Commercial Truck	648	0	137	785
SD	2027	Passenger Car	5831	0	1346	7177
SD	2027	Passenger Truck	6410	0	1432	7842
SD	2028	Light Commercial Truck	775	0	137	912
SD	2028	Passenger Car	7118	0	1378	8496
SD	2028	Passenger Truck	7606	0	1422	9028
SD	2029	Light Commercial Truck	942	0	181	1122
SD	2029	Passenger Car	8931	0	1880	10812
SD	2029	Passenger Truck	9204	0	1871	11075
SD	2030	Light Commercial Truck	1094	0	204	1298
SD	2030	Passenger Car	10625	0	2173	12798
SD	2030	Passenger Truck	10639	0	2100	12739
SD	2031	Light Commercial Truck	1234	0	241	1475
SD	2031	Passenger Car	12104	0	2663	14767
SD	2031	Passenger Truck	11981	0	2520	14501
SD	2032	Light Commercial Truck	1387	0	286	1673
SD	2032	Passenger Car	13624	0	3220	16844
SD	2032	Passenger Truck	13251	0	2971	16222
TN	2027	Light Commercial Truck	4745	0	1004	5749
TN	2027	Passenger Car	43885	0	10127	54012
TN	2027	Passenger Truck	42287	0	9447	51734
TN	2028	Light Commercial Truck	5677	0	1001	6677
TN	2028	Passenger Car	53569	0	10368	63937

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
TN	2028	Passenger Truck	50179	0	9379	59558
TN	2029	Light Commercial Truck	6896	0	1322	8218
TN	2029	Passenger Car	67214	0	14150	81364
TN	2029	Passenger Truck	60720	0	12343	73063
TN	2030	Light Commercial Truck	8012	0	1491	9503
TN	2030	Passenger Car	79959	0	16355	96314
TN	2030	Passenger Truck	70191	0	13855	84046
TN	2031	Light Commercial Truck	9037	0	1767	10804
TN	2031	Passenger Car	91088	0	20039	111128
TN	2031	Passenger Truck	79045	0	16627	95672
TN	2032	Light Commercial Truck	10157	0	2091	12248
TN	2032	Passenger Car	102528	0	24234	126762
TN	2032	Passenger Truck	87421	0	19601	107022
TX	2027	Light Commercial Truck	18560	0	3926	22485
TX	2027	Passenger Car	171663	0	39615	211277
TX	2027	Passenger Truck	163510	0	36529	200039
TX	2028	Light Commercial Truck	22204	0	3914	26118
TX	2028	Passenger Car	209546	0	40557	250103
TX	2028	Passenger Truck	194028	0	36265	230293
TX	2029	Light Commercial Truck	26972	0	5172	32144
TX	2029	Passenger Car	262918	0	55351	318270
TX	2029	Passenger Truck	234785	0	47727	282512
TX	2030	Light Commercial Truck	31338	0	5831	37169
TX	2030	Passenger Car	312775	0	63977	376752
TX	2030	Passenger Truck	271408	0	53573	324981
TX	2031	Light Commercial Truck	35347	0	6910	42256
TX	2031	Passenger Car	356308	0	78388	434695
TX	2031	Passenger Truck	305645	0	64290	369935
TX	2032	Light Commercial Truck	39726	0	8179	47905
TX	2032	Passenger Car	401056	0	94795	495852
TX	2032	Passenger Truck	338032	0	75793	413825
UT	2027	Light Commercial Truck	1874	0	396	2270
UT	2027	Passenger Car	17358	0	4006	21363
UT	2027	Passenger Truck	16437	0	3672	20108
UT	2028	Light Commercial Truck	2242	0	395	2637
UT	2028	Passenger Car	21188	0	4101	25289
UT	2028	Passenger Truck	19504	0	3645	23150
UT	2029	Light Commercial Truck	2723	0	522	3246
UT	2029	Passenger Car	26585	0	5597	32182
UT	2029	Passenger Truck	23601	0	4798	28399
UT	2030	Light Commercial Truck	3164	0	589	3753
UT	2030	Passenger Car	31626	0	6469	38095
UT	2030	Passenger Truck	27283	0	5385	32668
UT	2031	Light Commercial Truck	3569	0	698	4267
UT	2031	Passenger Car	36028	0	7926	43954
UT	2031	Passenger Truck	30724	0	6463	37187
UT	2032	Light Commercial Truck	4011	0	826	4837
UT	2032	Passenger Car	40553	0	9585	50138
UT	2032	Passenger Truck	33980	0	7619	41599
VA	2027	Light Commercial Truck	6274	0	341	6615
VA	2027	Passenger Car	94150	0	9137	103287

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
VA	2027	Passenger Truck	56592	0	3231	59822
VA	2028	Light Commercial Truck	8974	0	340	9315
VA	2028	Passenger Car	103365	0	9468	112833
VA	2028	Passenger Truck	81029	0	3208	84237
VA	2029	Light Commercial Truck	9025	0	337	9363
VA	2029	Passenger Car	134189	0	11568	145757
VA	2029	Passenger Truck	80433	0	3166	83599
VA	2030	Light Commercial Truck	10572	0	338	10910
VA	2030	Passenger Car	160001	0	11885	171886
VA	2030	Passenger Truck	93788	0	3160	96948
VA	2031	Light Commercial Truck	11130	0	328	11457
VA	2031	Passenger Car	186600	0	11914	198514
VA	2031	Passenger Truck	98280	0	3102	101382
VA	2032	Light Commercial Truck	13195	0	328	13523
VA	2032	Passenger Car	200774	0	9806	210580
VA	2032	Passenger Truck	115236	0	3095	118331
VT	2027	Light Commercial Truck	510	0	28	538
VT	2027	Passenger Car	7516	0	729	8245
VT	2027	Passenger Truck	5122	0	293	5416
VT	2028	Light Commercial Truck	731	0	28	759
VT	2028	Passenger Car	8251	0	756	9007
VT	2028	Passenger Truck	7342	0	291	7633
VT	2029	Light Commercial Truck	735	0	28	763
VT	2029	Passenger Car	10712	0	923	11635
VT	2029	Passenger Truck	7288	0	288	7575
VT	2030	Light Commercial Truck	862	0	28	890
VT	2030	Passenger Car	12773	0	949	13721
VT	2030	Passenger Truck	8501	0	287	8788
VT	2031	Light Commercial Truck	889	0	27	916
VT	2031	Passenger Car	14896	0	951	15847
VT	2031	Passenger Truck	8837	0	282	9118
VT	2032	Light Commercial Truck	1039	0	27	1066
VT	2032	Passenger Car	16027	0	783	16810
VT	2032	Passenger Truck	10305	0	281	10586
WA	2027	Light Commercial Truck	4367	0	240	4606
WA	2027	Passenger Car	66399	0	6444	72843
WA	2027	Passenger Truck	38769	0	2221	40989
WA	2028	Light Commercial Truck	6263	0	239	6502
WA	2028	Passenger Car	72898	0	6677	79575
WA	2028	Passenger Truck	55567	0	2205	57772
WA	2029	Light Commercial Truck	6299	0	237	6536
WA	2029	Passenger Car	94636	0	8158	102794
WA	2029	Passenger Truck	55159	0	2176	57335
WA	2030	Light Commercial Truck	7385	0	237	7623
WA	2030	Passenger Car	112839	0	8382	121221
WA	2030	Passenger Truck	64339	0	2172	66511
WA	2031	Light Commercial Truck	7617	0	230	7847
WA	2031	Passenger Car	131599	0	8402	140002
WA	2031	Passenger Truck	66881	0	2132	69014
WA	2032	Light Commercial Truck	8906	0	230	9137
WA	2032	Passenger Car	141595	0	6916	148510

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
WA	2032	Passenger Truck	77997	0	2127	80124
WI	2027	Light Commercial Truck	4246	0	898	5145
WI	2027	Passenger Car	38667	0	8923	47591
WI	2027	Passenger Truck	39976	0	8931	48907
WI	2028	Light Commercial Truck	5080	0	895	5976
WI	2028	Passenger Car	47200	0	9136	56336
WI	2028	Passenger Truck	47437	0	8866	56304
WI	2029	Light Commercial Truck	6171	0	1183	7355
WI	2029	Passenger Car	59223	0	12468	71691
WI	2029	Passenger Truck	57402	0	11669	69071
WI	2030	Light Commercial Truck	7170	0	1334	8504
WI	2030	Passenger Car	70453	0	14411	84864
WI	2030	Passenger Truck	66355	0	13098	79453
WI	2031	Light Commercial Truck	8087	0	1581	9668
WI	2031	Passenger Car	80259	0	17657	97916
WI	2031	Passenger Truck	74726	0	15718	90444
WI	2032	Light Commercial Truck	9089	0	1871	10961
WI	2032	Passenger Car	90339	0	21353	111692
WI	2032	Passenger Truck	82644	0	18530	101175
WV	2027	Light Commercial Truck	1249	0	264	1514
WV	2027	Passenger Car	11363	0	2622	13985
WV	2027	Passenger Truck	11776	0	2631	14407
WV	2028	Light Commercial Truck	1495	0	263	1758
WV	2028	Passenger Car	13871	0	2685	16555
WV	2028	Passenger Truck	13974	0	2612	16586
WV	2029	Light Commercial Truck	1816	0	348	2164
WV	2029	Passenger Car	17404	0	3664	21068
WV	2029	Passenger Truck	16910	0	3437	20347
WV	2030	Light Commercial Truck	2110	0	393	2502
WV	2030	Passenger Car	20704	0	4235	24939
WV	2030	Passenger Truck	19547	0	3858	23406
WV	2031	Light Commercial Truck	2380	0	465	2845
WV	2031	Passenger Car	23586	0	5189	28775
WV	2031	Passenger Truck	22013	0	4630	26644
WV	2032	Light Commercial Truck	2674	0	551	3225
WV	2032	Passenger Car	26548	0	6275	32823
WV	2032	Passenger Truck	24346	0	5459	29805
WY	2027	Light Commercial Truck	556	0	118	673
WY	2027	Passenger Car	5018	0	1158	6176
WY	2027	Passenger Truck	5478	0	1224	6701
WY	2028	Light Commercial Truck	665	0	117	782
WY	2028	Passenger Car	6125	0	1186	7311
WY	2028	Passenger Truck	6500	0	1215	7715
WY	2029	Light Commercial Truck	808	0	155	963
WY	2029	Passenger Car	7686	0	1618	9304
WY	2029	Passenger Truck	7865	0	1599	9464
WY	2030	Light Commercial Truck	938	0	175	1113
WY	2030	Passenger Car	9143	0	1870	11013
WY	2030	Passenger Truck	9092	0	1795	10887
WY	2031	Light Commercial Truck	1058	0	207	1265
WY	2031	Passenger Car	10415	0	2291	12707

State	Model Year	Vehicle Type	BEV	FCEV	PHEV	Total
WY	2031	Passenger Truck	10239	0	2154	12393
WY	2032	Light Commercial Truck	1190	0	245	1434
WY	2032	Passenger Car	11724	0	2771	14495
WY	2032	Passenger Truck	11324	0	2539	13863

State-level MDHD ZEV Populations Summary by Model Year

State	Model Year	Vehicle Type	BEV	FCEV	Total
AK	2027	Other Buses	1	0	1
AK	2027	School Bus	6	0	6
AK	2027	Single Unit Long-haul Truck	5	0	5
AK	2027	Single Unit Short-haul Truck	109	0	109
AK	2027	Transit Bus	2	0	2
AK	2028	Combination Short-haul Truck	7	0	7
AK	2028	Other Buses	1	0	1
AK	2028	School Bus	7	0	7
AK	2028	Single Unit Long-haul Truck	6	0	6
AK	2028	Single Unit Short-haul Truck	139	0	139
AK	2028	Transit Bus	3	0	3
AK	2029	Combination Short-haul Truck	10	0	10
AK	2029	Other Buses	5	0	5
AK	2029	Refuse Truck	1	0	1
AK	2029	School Bus	9	0	9
AK	2029	Single Unit Long-haul Truck	8	0	8
AK	2029	Single Unit Short-haul Truck	191	0	191
AK	2029	Transit Bus	3	0	3
AK	2030	Combination Long-haul Truck	9	1	10
AK	2030	Combination Short-haul Truck	13	1	14
AK	2030	Other Buses	6	0	6
AK	2030	Refuse Truck	1	0	1
AK	2030	School Bus	10	0	10
AK	2030	Single Unit Long-haul Truck	10	0	10
AK	2030	Single Unit Short-haul Truck	229	0	229
AK	2030	Transit Bus	3	0	4
AK	2031	Combination Long-haul Truck	18	2	20
AK	2031	Combination Short-haul Truck	22	2	25
AK	2031	Other Buses	8	0	8
AK	2031	Refuse Truck	2	0	2
AK	2031	School Bus	15	0	15
AK	2031	Single Unit Long-haul Truck	15	0	15
AK	2031	Single Unit Short-haul Truck	337	0	337
AK	2031	Transit Bus	4	0	4
AK	2032	Combination Long-haul Truck	37	4	42
AK	2032	Combination Short-haul Truck	32	4	35
AK	2032	Other Buses	11	0	11
AK	2032	Refuse Truck	2	0	2
AK	2032	School Bus	20	0	20
AK	2032	Single Unit Long-haul Truck	20	0	20
AK	2032	Single Unit Short-haul Truck	447	0	447
AK	2032	Transit Bus	5	1	5
AL	2027	Other Buses	11	0	11
AL	2027	Refuse Truck	2	0	2
AL	2027	School Bus	72	0	72
AL	2027	Single Unit Long-haul Truck	60	0	60
AL	2027	Single Unit Short-haul Truck	1368	0	1368
AL	2027	Transit Bus	26	0	26
AL	2028	Combination Short-haul Truck	89	0	89

State	Model Year	Vehicle Type	BEV	FCEV	Total
AL	2028	Other Buses	13	0	13
AL	2028	Refuse Truck	2	0	2
AL	2028	School Bus	89	0	89
AL	2028	Single Unit Long-haul Truck	77	0	77
AL	2028	Single Unit Short-haul Truck	1753	0	1753
AL	2028	Transit Bus	32	0	32
AL	2029	Combination Short-haul Truck	131	0	131
AL	2029	Other Buses	58	0	58
AL	2029	Refuse Truck	12	0	12
AL	2029	School Bus	110	0	110
AL	2029	Single Unit Long-haul Truck	106	0	106
AL	2029	Single Unit Short-haul Truck	2413	0	2413
AL	2029	Transit Bus	39	0	39
AL	2030	Combination Long-haul Truck	96	11	106
AL	2030	Combination Short-haul Truck	158	18	176
AL	2030	Other Buses	68	0	68
AL	2030	Refuse Truck	14	0	14
AL	2030	School Bus	131	0	131
AL	2030	Single Unit Long-haul Truck	127	0	127
AL	2030	Single Unit Short-haul Truck	2887	0	2887
AL	2030	Transit Bus	41	5	46
AL	2031	Combination Long-haul Truck	194	22	215
AL	2031	Combination Short-haul Truck	279	31	310
AL	2031	Other Buses	104	0	104
AL	2031	Refuse Truck	22	0	22
AL	2031	School Bus	189	0	189
AL	2031	Single Unit Long-haul Truck	187	0	187
AL	2031	Single Unit Short-haul Truck	4249	0	4249
AL	2031	Transit Bus	48	5	53
AL	2032	Combination Long-haul Truck	404	45	449
AL	2032	Combination Short-haul Truck	398	44	442
AL	2032	Other Buses	137	0	137
AL	2032	Refuse Truck	28	0	28
AL	2032	School Bus	247	0	247
AL	2032	Single Unit Long-haul Truck	249	0	249
AL	2032	Single Unit Short-haul Truck	5635	0	5635
AL	2032	Transit Bus	61	7	67
AR	2027	Other Buses	7	0	7
AR	2027	Refuse Truck	1	0	1
AR	2027	School Bus	45	0	45
AR	2027	Single Unit Long-haul Truck	38	0	38
AR	2027	Single Unit Short-haul Truck	858	0	858
AR	2027	Transit Bus	16	0	16
AR	2028	Combination Short-haul Truck	57	0	57
AR	2028	Other Buses	8	0	8
AR	2028	Refuse Truck	1	0	1
AR	2028	School Bus	55	0	55
AR	2028	Single Unit Long-haul Truck	48	0	48
AR	2028	Single Unit Short-haul Truck	1099	0	1099
AR	2028	Transit Bus	20	0	20
AR	2029	Combination Short-haul Truck	85	0	85

State	Model Year	Vehicle Type	BEV	FCEV	Total
AR	2029	Other Buses	36	0	36
AR	2029	Refuse Truck	7	0	7
AR	2029	School Bus	69	0	69
AR	2029	Single Unit Long-haul Truck	66	0	66
AR	2029	Single Unit Short-haul Truck	1514	0	1514
AR	2029	Transit Bus	24	0	24
AR	2030	Combination Long-haul Truck	63	7	70
AR	2030	Combination Short-haul Truck	102	11	113
AR	2030	Other Buses	42	0	42
AR	2030	Refuse Truck	9	0	9
AR	2030	School Bus	81	0	81
AR	2030	Single Unit Long-haul Truck	79	0	79
AR	2030	Single Unit Short-haul Truck	1811	0	1811
AR	2030	Transit Bus	25	3	28
AR	2031	Combination Long-haul Truck	128	14	142
AR	2031	Combination Short-haul Truck	180	20	200
AR	2031	Other Buses	64	0	64
AR	2031	Refuse Truck	13	0	13
AR	2031	School Bus	118	0	118
AR	2031	Single Unit Long-haul Truck	117	0	117
AR	2031	Single Unit Short-haul Truck	2665	0	2665
AR	2031	Transit Bus	29	3	33
AR	2032	Combination Long-haul Truck	267	30	297
AR	2032	Combination Short-haul Truck	257	29	286
AR	2032	Other Buses	84	0	84
AR	2032	Refuse Truck	18	0	18
AR	2032	School Bus	154	0	154
AR	2032	Single Unit Long-haul Truck	155	0	155
AR	2032	Single Unit Short-haul Truck	3535	0	3535
AR	2032	Transit Bus	37	4	41
AZ	2027	Other Buses	11	0	11
AZ	2027	Refuse Truck	2	0	2
AZ	2027	School Bus	69	0	69
AZ	2027	Single Unit Long-haul Truck	59	0	59
AZ	2027	Single Unit Short-haul Truck	1322	0	1322
AZ	2027	Transit Bus	26	0	26
AZ	2028	Combination Short-haul Truck	82	0	82
AZ	2028	Other Buses	13	0	13
AZ	2028	Refuse Truck	2	0	2
AZ	2028	School Bus	85	0	85
AZ	2028	Single Unit Long-haul Truck	75	0	75
AZ	2028	Single Unit Short-haul Truck	1694	0	1694
AZ	2028	Transit Bus	33	0	33
AZ	2029	Combination Short-haul Truck	122	0	122
AZ	2029	Other Buses	58	0	58
AZ	2029	Refuse Truck	11	0	11
AZ	2029	School Bus	106	0	106
AZ	2029	Single Unit Long-haul Truck	103	0	103
AZ	2029	Single Unit Short-haul Truck	2332	0	2332
AZ	2029	Transit Bus	40	0	40
AZ	2030	Combination Long-haul Truck	94	10	104

State	Model Year	Vehicle Type	BEV	FCEV	Total
AZ	2030	Combination Short-haul Truck	147	16	163
AZ	2030	Other Buses	68	0	68
AZ	2030	Refuse Truck	14	0	14
AZ	2030	School Bus	126	0	126
AZ	2030	Single Unit Long-haul Truck	123	0	123
AZ	2030	Single Unit Short-haul Truck	2791	0	2791
AZ	2030	Transit Bus	42	5	47
AZ	2031	Combination Long-haul Truck	190	21	211
AZ	2031	Combination Short-haul Truck	259	29	288
AZ	2031	Other Buses	105	0	105
AZ	2031	Refuse Truck	21	0	21
AZ	2031	School Bus	182	0	182
AZ	2031	Single Unit Long-haul Truck	182	0	182
AZ	2031	Single Unit Short-haul Truck	4107	0	4107
AZ	2031	Transit Bus	49	5	55
AZ	2032	Combination Long-haul Truck	396	44	440
AZ	2032	Combination Short-haul Truck	370	41	411
AZ	2032	Other Buses	138	0	138
AZ	2032	Refuse Truck	28	0	28
AZ	2032	School Bus	238	0	238
AZ	2032	Single Unit Long-haul Truck	241	0	241
AZ	2032	Single Unit Short-haul Truck	5448	0	5448
AZ	2032	Transit Bus	62	7	69
CA	2027	Combination Long-haul Truck	276	276	551
CA	2027	Combination Short-haul Truck	3315	368	3683
CA	2027	Other Buses	852	95	946
CA	2027	Refuse Truck	168	19	187
CA	2027	School Bus	1158	129	1287
CA	2027	Single Unit Long-haul Truck	836	93	929
CA	2027	Single Unit Short-haul Truck	18935	2104	21039
CA	2027	Transit Bus	174	174	347
CA	2028	Combination Long-haul Truck	321	321	643
CA	2028	Combination Short-haul Truck	2746	915	3662
CA	2028	Other Buses	924	103	1026
CA	2028	Refuse Truck	183	20	204
CA	2028	School Bus	1257	140	1396
CA	2028	Single Unit Long-haul Truck	938	104	1042
CA	2028	Single Unit Short-haul Truck	21228	2359	23586
CA	2028	Transit Bus	174	174	348
CA	2029	Combination Long-haul Truck	1172	1172	2343
CA	2029	Combination Short-haul Truck	2770	923	3693
CA	2029	Other Buses	1111	123	1234
CA	2029	Refuse Truck	225	25	250
CA	2029	School Bus	1515	168	1683
CA	2029	Single Unit Long-haul Truck	1138	126	1264
CA	2029	Single Unit Short-haul Truck	25757	2862	28619
CA	2029	Transit Bus	350	350	699
CA	2030	Combination Long-haul Truck	1254	1254	2508
CA	2030	Combination Short-haul Truck	2959	986	3945
CA	2030	Other Buses	1234	137	1371
CA	2030	Refuse Truck	252	28	280

State	Model Year	Vehicle Type	BEV	FCEV	Total
CA	2030	School Bus	1691	188	1879
CA	2030	Single Unit Long-haul Truck	1280	142	1422
CA	2030	Single Unit Short-haul Truck	28979	3220	32199
CA	2030	Transit Bus	355	355	711
CA	2031	Combination Long-haul Truck	1405	1405	2810
CA	2031	Combination Short-haul Truck	3116	1039	4154
CA	2031	Other Buses	1334	148	1482
CA	2031	Refuse Truck	273	30	303
CA	2031	School Bus	1828	203	2032
CA	2031	Single Unit Long-haul Truck	1408	156	1564
CA	2031	Single Unit Short-haul Truck	31865	3541	35406
CA	2031	Transit Bus	362	362	725
CA	2032	Combination Long-haul Truck	1513	1513	3027
CA	2032	Combination Short-haul Truck	3177	1059	4236
CA	2032	Other Buses	1486	165	1652
CA	2032	Refuse Truck	304	34	338
CA	2032	School Bus	2038	226	2264
CA	2032	Single Unit Long-haul Truck	1604	178	1782
CA	2032	Single Unit Short-haul Truck	36301	4033	40334
CA	2032	Transit Bus	367	367	734
CO	2027	Combination Long-haul Truck	237	0	237
CO	2027	Combination Short-haul Truck	143	0	143
CO	2027	Other Buses	69	0	69
CO	2027	Refuse Truck	14	0	14
CO	2027	School Bus	97	0	97
CO	2027	Single Unit Long-haul Truck	74	0	74
CO	2027	Single Unit Short-haul Truck	1688	0	1688
CO	2027	Transit Bus	22	0	22
CO	2028	Combination Long-haul Truck	309	0	309
CO	2028	Combination Short-haul Truck	187	0	187
CO	2028	Other Buses	103	0	103
CO	2028	Refuse Truck	21	0	21
CO	2028	School Bus	145	0	145
CO	2028	Single Unit Long-haul Truck	109	0	109
CO	2028	Single Unit Short-haul Truck	2477	0	2477
CO	2028	Transit Bus	28	0	28
CO	2029	Combination Long-haul Truck	382	0	382
CO	2029	Combination Short-haul Truck	229	0	229
CO	2029	Other Buses	137	0	137
CO	2029	Refuse Truck	28	0	28
CO	2029	School Bus	194	0	194
CO	2029	Single Unit Long-haul Truck	144	0	144
CO	2029	Single Unit Short-haul Truck	3280	0	3280
CO	2029	Transit Bus	33	0	33
CO	2030	Combination Long-haul Truck	412	46	458
CO	2030	Combination Short-haul Truck	249	28	277
CO	2030	Other Buses	175	0	175
CO	2030	Refuse Truck	36	0	36
CO	2030	School Bus	248	0	248
CO	2030	Single Unit Long-haul Truck	183	0	183
CO	2030	Single Unit Short-haul Truck	4144	0	4144

State	Model Year	Vehicle Type	BEV	FCEV	Total
CO	2030	Transit Bus	36	4	40
CO	2031	Combination Long-haul Truck	487	54	541
CO	2031	Combination Short-haul Truck	293	33	325
CO	2031	Other Buses	197	0	197
CO	2031	Refuse Truck	41	0	41
CO	2031	School Bus	279	0	279
CO	2031	Single Unit Long-haul Truck	209	0	209
CO	2031	Single Unit Short-haul Truck	4745	0	4745
CO	2031	Transit Bus	41	5	46
CO	2032	Combination Long-haul Truck	556	62	618
CO	2032	Combination Short-haul Truck	334	37	371
CO	2032	Other Buses	216	0	216
CO	2032	Refuse Truck	45	0	45
CO	2032	School Bus	307	0	307
CO	2032	Single Unit Long-haul Truck	236	0	236
CO	2032	Single Unit Short-haul Truck	5356	0	5356
CO	2032	Transit Bus	52	6	58
CT	2027	Other Buses	5	0	5
CT	2027	Refuse Truck	1	0	1
CT	2027	School Bus	30	0	30
CT	2027	Single Unit Long-haul Truck	26	0	26
CT	2027	Single Unit Short-haul Truck	587	0	587
CT	2027	Transit Bus	12	0	12
CT	2028	Combination Short-haul Truck	35	0	35
CT	2028	Other Buses	6	0	6
CT	2028	Refuse Truck	1	0	1
CT	2028	School Bus	37	0	37
CT	2028	Single Unit Long-haul Truck	33	0	33
CT	2028	Single Unit Short-haul Truck	752	0	752
CT	2028	Transit Bus	15	0	15
CT	2029	Combination Short-haul Truck	52	0	52
CT	2029	Other Buses	26	0	26
CT	2029	Refuse Truck	5	0	5
CT	2029	School Bus	46	0	46
CT	2029	Single Unit Long-haul Truck	46	0	46
CT	2029	Single Unit Short-haul Truck	1035	0	1035
CT	2029	Transit Bus	19	0	19
CT	2030	Combination Long-haul Truck	36	4	40
CT	2030	Combination Short-haul Truck	63	7	70
CT	2030	Other Buses	31	0	31
CT	2030	Refuse Truck	6	0	6
CT	2030	School Bus	54	0	54
CT	2030	Single Unit Long-haul Truck	55	0	55
CT	2030	Single Unit Short-haul Truck	1239	0	1239
CT	2030	Transit Bus	20	2	22
CT	2031	Combination Long-haul Truck	73	8	81
CT	2031	Combination Short-haul Truck	111	12	123
CT	2031	Other Buses	47	0	47
CT	2031	Refuse Truck	9	0	9
CT	2031	School Bus	79	0	79
CT	2031	Single Unit Long-haul Truck	81	0	81

State	Model Year	Vehicle Type	BEV	FCEV	Total
CT	2031	Single Unit Short-haul Truck	1823	0	1823
CT	2031	Transit Bus	23	3	26
CT	2032	Combination Long-haul Truck	152	17	169
CT	2032	Combination Short-haul Truck	158	18	176
CT	2032	Other Buses	62	0	62
CT	2032	Refuse Truck	12	0	12
CT	2032	School Bus	102	0	102
CT	2032	Single Unit Long-haul Truck	107	0	107
CT	2032	Single Unit Short-haul Truck	2418	0	2418
CT	2032	Transit Bus	29	3	32
DC	2027	School Bus	1	0	1
DC	2027	Single Unit Long-haul Truck	1	0	1
DC	2027	Single Unit Short-haul Truck	23	0	23
DC	2027	Transit Bus	2	0	2
DC	2028	Combination Short-haul Truck	1	0	1
DC	2028	School Bus	2	0	2
DC	2028	Single Unit Long-haul Truck	1	0	1
DC	2028	Single Unit Short-haul Truck	29	0	29
DC	2028	Transit Bus	2	0	2
DC	2029	Combination Short-haul Truck	2	0	2
DC	2029	Other Buses	1	0	1
DC	2029	School Bus	2	0	2
DC	2029	Single Unit Long-haul Truck	2	0	2
DC	2029	Single Unit Short-haul Truck	40	0	40
DC	2029	Transit Bus	2	0	2
DC	2030	Combination Long-haul Truck	1	0	1
DC	2030	Combination Short-haul Truck	2	0	2
DC	2030	Other Buses	1	0	1
DC	2030	School Bus	2	0	2
DC	2030	Single Unit Long-haul Truck	2	0	2
DC	2030	Single Unit Short-haul Truck	48	0	48
DC	2030	Transit Bus	2	0	3
DC	2031	Combination Long-haul Truck	2	0	2
DC	2031	Combination Short-haul Truck	3	0	4
DC	2031	Other Buses	2	0	2
DC	2031	School Bus	3	0	3
DC	2031	Single Unit Long-haul Truck	3	0	3
DC	2031	Single Unit Short-haul Truck	70	0	70
DC	2031	Transit Bus	2	0	3
DC	2032	Combination Long-haul Truck	3	0	4
DC	2032	Combination Short-haul Truck	5	1	5
DC	2032	Other Buses	3	0	3
DC	2032	School Bus	4	0	4
DC	2032	Single Unit Long-haul Truck	4	0	4
DC	2032	Single Unit Short-haul Truck	93	0	93
DC	2032	Transit Bus	2	0	3
DE	2027	Other Buses	2	0	2
DE	2027	School Bus	11	0	11
DE	2027	Single Unit Long-haul Truck	9	0	9
DE	2027	Single Unit Short-haul Truck	208	0	208
DE	2027	Transit Bus	4	0	4

State	Model Year	Vehicle Type	BEV	FCEV	Total
DE	2028	Combination Short-haul Truck	13	0	13
DE	2028	Other Buses	2	0	2
DE	2028	School Bus	13	0	13
DE	2028	Single Unit Long-haul Truck	12	0	12
DE	2028	Single Unit Short-haul Truck	267	0	267
DE	2028	Transit Bus	5	0	5
DE	2029	Combination Short-haul Truck	19	0	19
DE	2029	Other Buses	9	0	9
DE	2029	Refuse Truck	2	0	2
DE	2029	School Bus	17	0	17
DE	2029	Single Unit Long-haul Truck	16	0	16
DE	2029	Single Unit Short-haul Truck	367	0	367
DE	2029	Transit Bus	6	0	6
DE	2030	Combination Long-haul Truck	12	1	14
DE	2030	Combination Short-haul Truck	23	3	25
DE	2030	Other Buses	11	0	11
DE	2030	Refuse Truck	2	0	2
DE	2030	School Bus	20	0	20
DE	2030	Single Unit Long-haul Truck	20	0	20
DE	2030	Single Unit Short-haul Truck	439	0	439
DE	2030	Transit Bus	7	1	7
DE	2031	Combination Long-haul Truck	25	3	28
DE	2031	Combination Short-haul Truck	40	4	44
DE	2031	Other Buses	16	0	16
DE	2031	Refuse Truck	3	0	3
DE	2031	School Bus	29	0	29
DE	2031	Single Unit Long-haul Truck	29	0	29
DE	2031	Single Unit Short-haul Truck	647	0	647
DE	2031	Transit Bus	8	1	9
DE	2032	Combination Long-haul Truck	53	6	58
DE	2032	Combination Short-haul Truck	57	6	63
DE	2032	Other Buses	22	0	22
DE	2032	Refuse Truck	4	0	4
DE	2032	School Bus	38	0	38
DE	2032	Single Unit Long-haul Truck	38	0	38
DE	2032	Single Unit Short-haul Truck	858	0	858
DE	2032	Transit Bus	10	1	11
FL	2027	Other Buses	32	0	32
FL	2027	Refuse Truck	5	0	5
FL	2027	School Bus	203	0	203
FL	2027	Single Unit Long-haul Truck	171	0	171
FL	2027	Single Unit Short-haul Truck	3827	0	3827
FL	2027	Transit Bus	78	0	78
FL	2028	Combination Short-haul Truck	226	0	226
FL	2028	Other Buses	39	0	39
FL	2028	Refuse Truck	6	0	6
FL	2028	School Bus	249	0	249
FL	2028	Single Unit Long-haul Truck	219	0	219
FL	2028	Single Unit Short-haul Truck	4903	0	4903
FL	2028	Transit Bus	98	0	98
FL	2029	Combination Short-haul Truck	334	0	334

State	Model Year	Vehicle Type	BEV	FCEV	Total
FL	2029	Other Buses	173	0	173
FL	2029	Refuse Truck	33	0	33
FL	2029	School Bus	311	0	311
FL	2029	Single Unit Long-haul Truck	302	0	302
FL	2029	Single Unit Short-haul Truck	6749	0	6749
FL	2029	Transit Bus	118	0	118
FL	2030	Combination Long-haul Truck	235	26	261
FL	2030	Combination Short-haul Truck	402	45	447
FL	2030	Other Buses	203	0	203
FL	2030	Refuse Truck	39	0	39
FL	2030	School Bus	368	0	368
FL	2030	Single Unit Long-haul Truck	361	0	361
FL	2030	Single Unit Short-haul Truck	8075	0	8075
FL	2030	Transit Bus	126	14	140
FL	2031	Combination Long-haul Truck	476	53	528
FL	2031	Combination Short-haul Truck	710	79	789
FL	2031	Other Buses	312	0	312
FL	2031	Refuse Truck	61	0	61
FL	2031	School Bus	533	0	533
FL	2031	Single Unit Long-haul Truck	531	0	531
FL	2031	Single Unit Short-haul Truck	11885	0	11885
FL	2031	Transit Bus	146	16	163
FL	2032	Combination Long-haul Truck	992	110	1102
FL	2032	Combination Short-haul Truck	1014	113	1126
FL	2032	Other Buses	410	0	410
FL	2032	Refuse Truck	80	0	80
FL	2032	School Bus	695	0	695
FL	2032	Single Unit Long-haul Truck	705	0	705
FL	2032	Single Unit Short-haul Truck	15764	0	15764
FL	2032	Transit Bus	185	21	206
GA	2027	Other Buses	18	0	18
GA	2027	Refuse Truck	3	0	3
GA	2027	School Bus	118	0	118
GA	2027	Single Unit Long-haul Truck	100	0	100
GA	2027	Single Unit Short-haul Truck	2263	0	2263
GA	2027	Transit Bus	44	0	44
GA	2028	Combination Short-haul Truck	141	0	141
GA	2028	Other Buses	22	0	22
GA	2028	Refuse Truck	3	0	3
GA	2028	School Bus	145	0	145
GA	2028	Single Unit Long-haul Truck	128	0	128
GA	2028	Single Unit Short-haul Truck	2899	0	2899
GA	2028	Transit Bus	56	0	56
GA	2029	Combination Short-haul Truck	209	0	209
GA	2029	Other Buses	98	0	98
GA	2029	Refuse Truck	20	0	20
GA	2029	School Bus	181	0	181
GA	2029	Single Unit Long-haul Truck	177	0	177
GA	2029	Single Unit Short-haul Truck	3991	0	3991
GA	2029	Transit Bus	67	0	67
GA	2030	Combination Long-haul Truck	150	17	166

State	Model Year	Vehicle Type	BEV	FCEV	Total
GA	2030	Combination Short-haul Truck	252	28	280
GA	2030	Other Buses	115	0	115
GA	2030	Refuse Truck	23	0	23
GA	2030	School Bus	215	0	215
GA	2030	Single Unit Long-haul Truck	211	0	211
GA	2030	Single Unit Short-haul Truck	4775	0	4775
GA	2030	Transit Bus	72	8	79
GA	2031	Combination Long-haul Truck	303	34	336
GA	2031	Combination Short-haul Truck	444	49	494
GA	2031	Other Buses	177	0	177
GA	2031	Refuse Truck	36	0	36
GA	2031	School Bus	311	0	311
GA	2031	Single Unit Long-haul Truck	311	0	311
GA	2031	Single Unit Short-haul Truck	7028	0	7028
GA	2031	Transit Bus	83	9	93
GA	2032	Combination Long-haul Truck	631	70	701
GA	2032	Combination Short-haul Truck	634	70	704
GA	2032	Other Buses	233	0	233
GA	2032	Refuse Truck	47	0	47
GA	2032	School Bus	405	0	405
GA	2032	Single Unit Long-haul Truck	413	0	413
GA	2032	Single Unit Short-haul Truck	9322	0	9322
GA	2032	Transit Bus	106	12	117
HI	2027	Other Buses	1	0	1
HI	2027	School Bus	9	0	9
HI	2027	Single Unit Long-haul Truck	8	0	8
HI	2027	Single Unit Short-haul Truck	173	0	173
HI	2027	Transit Bus	3	0	3
HI	2028	Combination Short-haul Truck	10	0	10
HI	2028	Other Buses	2	0	2
HI	2028	School Bus	11	0	11
HI	2028	Single Unit Long-haul Truck	10	0	10
HI	2028	Single Unit Short-haul Truck	221	0	221
HI	2028	Transit Bus	4	0	4
HI	2029	Combination Short-haul Truck	15	0	15
HI	2029	Other Buses	8	0	8
HI	2029	Refuse Truck	1	0	1
HI	2029	School Bus	14	0	14
HI	2029	Single Unit Long-haul Truck	14	0	14
HI	2029	Single Unit Short-haul Truck	305	0	305
HI	2029	Transit Bus	5	0	5
HI	2030	Combination Long-haul Truck	9	1	10
HI	2030	Combination Short-haul Truck	18	2	20
HI	2030	Other Buses	9	0	9
HI	2030	Refuse Truck	2	0	2
HI	2030	School Bus	16	0	16
HI	2030	Single Unit Long-haul Truck	16	0	16
HI	2030	Single Unit Short-haul Truck	364	0	364
HI	2030	Transit Bus	6	1	6
HI	2031	Combination Long-haul Truck	18	2	20
HI	2031	Combination Short-haul Truck	32	4	35

State	Model Year	Vehicle Type	BEV	FCEV	Total
HI	2031	Other Buses	14	0	14
HI	2031	Refuse Truck	3	0	3
HI	2031	School Bus	24	0	24
HI	2031	Single Unit Long-haul Truck	24	0	24
HI	2031	Single Unit Short-haul Truck	536	0	536
HI	2031	Transit Bus	7	1	7
HI	2032	Combination Long-haul Truck	37	4	42
HI	2032	Combination Short-haul Truck	45	5	50
HI	2032	Other Buses	18	0	18
HI	2032	Refuse Truck	4	0	4
HI	2032	School Bus	31	0	31
HI	2032	Single Unit Long-haul Truck	32	0	32
HI	2032	Single Unit Short-haul Truck	711	0	711
HI	2032	Transit Bus	8	1	9
IA	2027	Other Buses	6	0	6
IA	2027	Refuse Truck	1	0	1
IA	2027	School Bus	45	0	45
IA	2027	Single Unit Long-haul Truck	38	0	38
IA	2027	Single Unit Short-haul Truck	864	0	864
IA	2027	Transit Bus	15	0	15
IA	2028	Combination Short-haul Truck	59	0	59
IA	2028	Other Buses	8	0	8
IA	2028	Refuse Truck	1	0	1
IA	2028	School Bus	56	0	56
IA	2028	Single Unit Long-haul Truck	48	0	48
IA	2028	Single Unit Short-haul Truck	1108	0	1108
IA	2028	Transit Bus	19	0	19
IA	2029	Combination Short-haul Truck	87	0	87
IA	2029	Other Buses	35	0	35
IA	2029	Refuse Truck	7	0	7
IA	2029	School Bus	70	0	70
IA	2029	Single Unit Long-haul Truck	67	0	67
IA	2029	Single Unit Short-haul Truck	1525	0	1525
IA	2029	Transit Bus	23	0	23
IA	2030	Combination Long-haul Truck	65	7	73
IA	2030	Combination Short-haul Truck	105	12	117
IA	2030	Other Buses	41	0	41
IA	2030	Refuse Truck	9	0	9
IA	2030	School Bus	82	0	82
IA	2030	Single Unit Long-haul Truck	80	0	80
IA	2030	Single Unit Short-haul Truck	1824	0	1824
IA	2030	Transit Bus	25	3	27
IA	2031	Combination Long-haul Truck	132	15	147
IA	2031	Combination Short-haul Truck	186	21	206
IA	2031	Other Buses	63	0	63
IA	2031	Refuse Truck	13	0	13
IA	2031	School Bus	119	0	119
IA	2031	Single Unit Long-haul Truck	118	0	118
IA	2031	Single Unit Short-haul Truck	2685	0	2685
IA	2031	Transit Bus	29	3	32
IA	2032	Combination Long-haul Truck	276	31	306

State	Model Year	Vehicle Type	BEV	FCEV	Total
IA	2032	Combination Short-haul Truck	265	29	294
IA	2032	Other Buses	83	0	83
IA	2032	Refuse Truck	18	0	18
IA	2032	School Bus	156	0	156
IA	2032	Single Unit Long-haul Truck	156	0	156
IA	2032	Single Unit Short-haul Truck	3561	0	3561
IA	2032	Transit Bus	36	4	40
ID	2027	Other Buses	3	0	3
ID	2027	School Bus	20	0	20
ID	2027	Single Unit Long-haul Truck	17	0	17
ID	2027	Single Unit Short-haul Truck	389	0	389
ID	2027	Transit Bus	7	0	7
ID	2028	Combination Short-haul Truck	26	0	26
ID	2028	Other Buses	4	0	4
ID	2028	Refuse Truck	1	0	1
ID	2028	School Bus	25	0	25
ID	2028	Single Unit Long-haul Truck	22	0	22
ID	2028	Single Unit Short-haul Truck	498	0	498
ID	2028	Transit Bus	9	0	9
ID	2029	Combination Short-haul Truck	39	0	39
ID	2029	Other Buses	16	0	16
ID	2029	Refuse Truck	3	0	3
ID	2029	School Bus	31	0	31
ID	2029	Single Unit Long-haul Truck	30	0	30
ID	2029	Single Unit Short-haul Truck	685	0	685
ID	2029	Transit Bus	11	0	11
ID	2030	Combination Long-haul Truck	32	4	36
ID	2030	Combination Short-haul Truck	47	5	52
ID	2030	Other Buses	19	0	19
ID	2030	Refuse Truck	4	0	4
ID	2030	School Bus	37	0	37
ID	2030	Single Unit Long-haul Truck	36	0	36
ID	2030	Single Unit Short-haul Truck	820	0	820
ID	2030	Transit Bus	11	1	13
ID	2031	Combination Long-haul Truck	65	7	72
ID	2031	Combination Short-haul Truck	83	9	92
ID	2031	Other Buses	29	0	29
ID	2031	Refuse Truck	6	0	6
ID	2031	School Bus	54	0	54
ID	2031	Single Unit Long-haul Truck	53	0	53
ID	2031	Single Unit Short-haul Truck	1207	0	1207
ID	2031	Transit Bus	13	1	15
ID	2032	Combination Long-haul Truck	135	15	150
ID	2032	Combination Short-haul Truck	119	13	132
ID	2032	Other Buses	38	0	38
ID	2032	Refuse Truck	8	0	8
ID	2032	School Bus	70	0	70
ID	2032	Single Unit Long-haul Truck	70	0	70
ID	2032	Single Unit Short-haul Truck	1601	0	1601
ID	2032	Transit Bus	17	2	19
IL	2027	Other Buses	18	0	18

State	Model Year	Vehicle Type	BEV	FCEV	Total
IL	2027	Refuse Truck	3	0	3
IL	2027	School Bus	113	0	113
IL	2027	Single Unit Long-haul Truck	95	0	95
IL	2027	Single Unit Short-haul Truck	2154	0	2154
IL	2027	Transit Bus	43	0	43
IL	2028	Combination Short-haul Truck	133	0	133
IL	2028	Other Buses	21	0	21
IL	2028	Refuse Truck	3	0	3
IL	2028	School Bus	139	0	139
IL	2028	Single Unit Long-haul Truck	122	0	122
IL	2028	Single Unit Short-haul Truck	2760	0	2760
IL	2028	Transit Bus	53	0	53
IL	2029	Combination Short-haul Truck	197	0	197
IL	2029	Other Buses	95	0	95
IL	2029	Refuse Truck	19	0	19
IL	2029	School Bus	173	0	173
IL	2029	Single Unit Long-haul Truck	168	0	168
IL	2029	Single Unit Short-haul Truck	3800	0	3800
IL	2029	Transit Bus	65	0	65
IL	2030	Combination Long-haul Truck	147	16	164
IL	2030	Combination Short-haul Truck	238	26	264
IL	2030	Other Buses	111	0	111
IL	2030	Refuse Truck	22	0	22
IL	2030	School Bus	205	0	205
IL	2030	Single Unit Long-haul Truck	201	0	201
IL	2030	Single Unit Short-haul Truck	4546	0	4546
IL	2030	Transit Bus	69	8	77
IL	2031	Combination Long-haul Truck	299	33	332
IL	2031	Combination Short-haul Truck	419	47	466
IL	2031	Other Buses	171	0	171
IL	2031	Refuse Truck	34	0	34
IL	2031	School Bus	297	0	297
IL	2031	Single Unit Long-haul Truck	296	0	296
IL	2031	Single Unit Short-haul Truck	6691	0	6691
IL	2031	Transit Bus	80	9	89
IL	2032	Combination Long-haul Truck	622	69	692
IL	2032	Combination Short-haul Truck	599	67	665
IL	2032	Other Buses	225	0	225
IL	2032	Refuse Truck	45	0	45
IL	2032	School Bus	387	0	387
IL	2032	Single Unit Long-haul Truck	393	0	393
IL	2032	Single Unit Short-haul Truck	8875	0	8875
IL	2032	Transit Bus	102	11	113
IN	2027	Other Buses	12	0	12
IN	2027	Refuse Truck	2	0	2
IN	2027	School Bus	80	0	80
IN	2027	Single Unit Long-haul Truck	67	0	67
IN	2027	Single Unit Short-haul Truck	1531	0	1531
IN	2027	Transit Bus	29	0	29
IN	2028	Combination Short-haul Truck	99	0	99
IN	2028	Other Buses	15	0	15

State	Model Year	Vehicle Type	BEV	FCEV	Total
IN	2028	Refuse Truck	2	0	2
IN	2028	School Bus	99	0	99
IN	2028	Single Unit Long-haul Truck	86	0	86
IN	2028	Single Unit Short-haul Truck	1961	0	1961
IN	2028	Transit Bus	36	0	36
IN	2029	Combination Short-haul Truck	146	0	146
IN	2029	Other Buses	65	0	65
IN	2029	Refuse Truck	13	0	13
IN	2029	School Bus	123	0	123
IN	2029	Single Unit Long-haul Truck	119	0	119
IN	2029	Single Unit Short-haul Truck	2700	0	2700
IN	2029	Transit Bus	44	0	44
IN	2030	Combination Long-haul Truck	112	12	124
IN	2030	Combination Short-haul Truck	176	20	196
IN	2030	Other Buses	77	0	77
IN	2030	Refuse Truck	16	0	16
IN	2030	School Bus	146	0	146
IN	2030	Single Unit Long-haul Truck	142	0	142
IN	2030	Single Unit Short-haul Truck	3230	0	3230
IN	2030	Transit Bus	47	5	52
IN	2031	Combination Long-haul Truck	226	25	251
IN	2031	Combination Short-haul Truck	311	35	346
IN	2031	Other Buses	118	0	118
IN	2031	Refuse Truck	24	0	24
IN	2031	School Bus	212	0	212
IN	2031	Single Unit Long-haul Truck	209	0	209
IN	2031	Single Unit Short-haul Truck	4754	0	4754
IN	2031	Transit Bus	54	6	61
IN	2032	Combination Long-haul Truck	471	52	523
IN	2032	Combination Short-haul Truck	444	49	493
IN	2032	Other Buses	155	0	155
IN	2032	Refuse Truck	32	0	32
IN	2032	School Bus	275	0	275
IN	2032	Single Unit Long-haul Truck	278	0	278
IN	2032	Single Unit Short-haul Truck	6306	0	6306
IN	2032	Transit Bus	69	8	77
KS	2027	Other Buses	6	0	6
KS	2027	Refuse Truck	1	0	1
KS	2027	School Bus	39	0	39
KS	2027	Single Unit Long-haul Truck	33	0	33
KS	2027	Single Unit Short-haul Truck	750	0	750
KS	2027	Transit Bus	14	0	14
KS	2028	Combination Short-haul Truck	51	0	51
KS	2028	Other Buses	7	0	7
KS	2028	Refuse Truck	1	0	1
KS	2028	School Bus	48	0	48
KS	2028	Single Unit Long-haul Truck	42	0	42
KS	2028	Single Unit Short-haul Truck	961	0	961
KS	2028	Transit Bus	17	0	17
KS	2029	Combination Short-haul Truck	75	0	75
KS	2029	Other Buses	31	0	31

State	Model Year	Vehicle Type	BEV	FCEV	Total
KS	2029	Refuse Truck	6	0	6
KS	2029	School Bus	60	0	60
KS	2029	Single Unit Long-haul Truck	58	0	58
KS	2029	Single Unit Short-haul Truck	1324	0	1324
KS	2029	Transit Bus	21	0	21
KS	2030	Combination Long-haul Truck	60	7	66
KS	2030	Combination Short-haul Truck	90	10	100
KS	2030	Other Buses	37	0	37
KS	2030	Refuse Truck	8	0	8
KS	2030	School Bus	71	0	71
KS	2030	Single Unit Long-haul Truck	69	0	69
KS	2030	Single Unit Short-haul Truck	1584	0	1584
KS	2030	Transit Bus	22	2	25
KS	2031	Combination Long-haul Truck	121	13	134
KS	2031	Combination Short-haul Truck	159	18	177
KS	2031	Other Buses	56	0	56
KS	2031	Refuse Truck	12	0	12
KS	2031	School Bus	103	0	103
KS	2031	Single Unit Long-haul Truck	102	0	102
KS	2031	Single Unit Short-haul Truck	2331	0	2331
KS	2031	Transit Bus	26	3	29
KS	2032	Combination Long-haul Truck	252	28	280
KS	2032	Combination Short-haul Truck	227	25	253
KS	2032	Other Buses	74	0	74
KS	2032	Refuse Truck	16	0	16
KS	2032	School Bus	134	0	134
KS	2032	Single Unit Long-haul Truck	135	0	135
KS	2032	Single Unit Short-haul Truck	3091	0	3091
KS	2032	Transit Bus	33	4	36
KY	2027	Other Buses	9	0	9
KY	2027	Refuse Truck	1	0	1
KY	2027	School Bus	59	0	59
KY	2027	Single Unit Long-haul Truck	49	0	49
KY	2027	Single Unit Short-haul Truck	1130	0	1130
KY	2027	Transit Bus	21	0	21
KY	2028	Combination Short-haul Truck	77	0	77
KY	2028	Other Buses	11	0	11
KY	2028	Refuse Truck	2	0	2
KY	2028	School Bus	73	0	73
KY	2028	Single Unit Long-haul Truck	63	0	63
KY	2028	Single Unit Short-haul Truck	1448	0	1448
KY	2028	Transit Bus	26	0	26
KY	2029	Combination Short-haul Truck	114	0	114
KY	2029	Other Buses	47	0	47
KY	2029	Refuse Truck	10	0	10
KY	2029	School Bus	91	0	91
KY	2029	Single Unit Long-haul Truck	87	0	87
KY	2029	Single Unit Short-haul Truck	1993	0	1993
KY	2029	Transit Bus	31	0	31
KY	2030	Combination Long-haul Truck	97	11	108
KY	2030	Combination Short-haul Truck	137	15	152

State	Model Year	Vehicle Type	BEV	FCEV	Total
KY	2030	Other Buses	56	0	56
KY	2030	Refuse Truck	12	0	12
KY	2030	School Bus	107	0	107
KY	2030	Single Unit Long-haul Truck	104	0	104
KY	2030	Single Unit Short-haul Truck	2384	0	2384
KY	2030	Transit Bus	33	4	37
KY	2031	Combination Long-haul Truck	197	22	218
KY	2031	Combination Short-haul Truck	242	27	269
KY	2031	Other Buses	85	0	85
KY	2031	Refuse Truck	18	0	18
KY	2031	School Bus	155	0	155
KY	2031	Single Unit Long-haul Truck	153	0	153
KY	2031	Single Unit Short-haul Truck	3510	0	3510
KY	2031	Transit Bus	39	4	43
KY	2032	Combination Long-haul Truck	410	46	455
KY	2032	Combination Short-haul Truck	345	38	384
KY	2032	Other Buses	112	0	112
KY	2032	Refuse Truck	23	0	23
KY	2032	School Bus	202	0	202
KY	2032	Single Unit Long-haul Truck	203	0	203
KY	2032	Single Unit Short-haul Truck	4655	0	4655
KY	2032	Transit Bus	49	5	55
LA	2027	Other Buses	9	0	9
LA	2027	Refuse Truck	1	0	1
LA	2027	School Bus	58	0	58
LA	2027	Single Unit Long-haul Truck	49	0	49
LA	2027	Single Unit Short-haul Truck	1114	0	1114
LA	2027	Transit Bus	21	0	21
LA	2028	Combination Short-haul Truck	72	0	72
LA	2028	Other Buses	11	0	11
LA	2028	Refuse Truck	2	0	2
LA	2028	School Bus	72	0	72
LA	2028	Single Unit Long-haul Truck	63	0	63
LA	2028	Single Unit Short-haul Truck	1427	0	1427
LA	2028	Transit Bus	27	0	27
LA	2029	Combination Short-haul Truck	106	0	106
LA	2029	Other Buses	48	0	48
LA	2029	Refuse Truck	10	0	10
LA	2029	School Bus	89	0	89
LA	2029	Single Unit Long-haul Truck	86	0	86
LA	2029	Single Unit Short-haul Truck	1964	0	1964
LA	2029	Transit Bus	32	0	32
LA	2030	Combination Long-haul Truck	82	9	91
LA	2030	Combination Short-haul Truck	128	14	143
LA	2030	Other Buses	56	0	56
LA	2030	Refuse Truck	11	0	11
LA	2030	School Bus	106	0	106
LA	2030	Single Unit Long-haul Truck	103	0	103
LA	2030	Single Unit Short-haul Truck	2350	0	2350
LA	2030	Transit Bus	34	4	38
LA	2031	Combination Long-haul Truck	166	18	185

State	Model Year	Vehicle Type	BEV	FCEV	Total
LA	2031	Combination Short-haul Truck	226	25	252
LA	2031	Other Buses	86	0	86
LA	2031	Refuse Truck	18	0	18
LA	2031	School Bus	153	0	153
LA	2031	Single Unit Long-haul Truck	152	0	152
LA	2031	Single Unit Short-haul Truck	3459	0	3459
LA	2031	Transit Bus	40	4	44
LA	2032	Combination Long-haul Truck	347	39	385
LA	2032	Combination Short-haul Truck	323	36	359
LA	2032	Other Buses	113	0	113
LA	2032	Refuse Truck	23	0	23
LA	2032	School Bus	200	0	200
LA	2032	Single Unit Long-haul Truck	202	0	202
LA	2032	Single Unit Short-haul Truck	4588	0	4588
LA	2032	Transit Bus	50	6	56
MA	2027	Combination Long-haul Truck	180	0	180
MA	2027	Combination Short-haul Truck	123	0	123
MA	2027	Other Buses	69	0	69
MA	2027	Refuse Truck	13	0	13
MA	2027	School Bus	92	0	92
MA	2027	Single Unit Long-haul Truck	72	0	72
MA	2027	Single Unit Short-haul Truck	1608	0	1608
MA	2027	Transit Bus	26	0	26
MA	2028	Combination Long-haul Truck	235	0	235
MA	2028	Combination Short-haul Truck	160	0	160
MA	2028	Other Buses	104	0	104
MA	2028	Refuse Truck	20	0	20
MA	2028	School Bus	137	0	137
MA	2028	Single Unit Long-haul Truck	105	0	105
MA	2028	Single Unit Short-haul Truck	2360	0	2360
MA	2028	Transit Bus	34	0	34
MA	2029	Combination Long-haul Truck	290	0	290
MA	2029	Combination Short-haul Truck	197	0	197
MA	2029	Other Buses	138	0	138
MA	2029	Refuse Truck	27	0	27
MA	2029	School Bus	184	0	184
MA	2029	Single Unit Long-haul Truck	140	0	140
MA	2029	Single Unit Short-haul Truck	3125	0	3125
MA	2029	Transit Bus	42	0	42
MA	2030	Combination Long-haul Truck	313	35	348
MA	2030	Combination Short-haul Truck	214	24	237
MA	2030	Other Buses	176	0	176
MA	2030	Refuse Truck	35	0	35
MA	2030	School Bus	235	0	235
MA	2030	Single Unit Long-haul Truck	176	0	176
MA	2030	Single Unit Short-haul Truck	3948	0	3948
MA	2030	Transit Bus	46	5	51
MA	2031	Combination Long-haul Truck	370	41	411
MA	2031	Combination Short-haul Truck	251	28	279
MA	2031	Other Buses	199	0	199
MA	2031	Refuse Truck	39	0	39

State	Model Year	Vehicle Type	BEV	FCEV	Total
MA	2031	School Bus	265	0	265
MA	2031	Single Unit Long-haul Truck	202	0	202
MA	2031	Single Unit Short-haul Truck	4521	0	4521
MA	2031	Transit Bus	54	6	60
MA	2032	Combination Long-haul Truck	423	47	470
MA	2032	Combination Short-haul Truck	287	32	319
MA	2032	Other Buses	219	0	219
MA	2032	Refuse Truck	43	0	43
MA	2032	School Bus	292	0	292
MA	2032	Single Unit Long-haul Truck	228	0	228
MA	2032	Single Unit Short-haul Truck	5103	0	5103
MA	2032	Transit Bus	64	7	71
MD	2027	Combination Long-haul Truck	222	0	222
MD	2027	Combination Short-haul Truck	143	0	143
MD	2027	Other Buses	73	0	73
MD	2027	Refuse Truck	15	0	15
MD	2027	School Bus	100	0	100
MD	2027	Single Unit Long-haul Truck	78	0	78
MD	2027	Single Unit Short-haul Truck	1764	0	1764
MD	2027	Transit Bus	24	0	24
MD	2028	Combination Long-haul Truck	290	0	290
MD	2028	Combination Short-haul Truck	186	0	186
MD	2028	Other Buses	110	0	110
MD	2028	Refuse Truck	22	0	22
MD	2028	School Bus	150	0	150
MD	2028	Single Unit Long-haul Truck	115	0	115
MD	2028	Single Unit Short-haul Truck	2589	0	2589
MD	2028	Transit Bus	30	0	30
MD	2029	Combination Long-haul Truck	357	0	357
MD	2029	Combination Short-haul Truck	229	0	229
MD	2029	Other Buses	147	0	147
MD	2029	Refuse Truck	30	0	30
MD	2029	School Bus	201	0	201
MD	2029	Single Unit Long-haul Truck	152	0	152
MD	2029	Single Unit Short-haul Truck	3429	0	3429
MD	2029	Transit Bus	36	0	36
MD	2030	Combination Long-haul Truck	386	43	429
MD	2030	Combination Short-haul Truck	249	28	276
MD	2030	Other Buses	187	0	187
MD	2030	Refuse Truck	38	0	38
MD	2030	School Bus	257	0	257
MD	2030	Single Unit Long-haul Truck	192	0	192
MD	2030	Single Unit Short-haul Truck	4331	0	4331
MD	2030	Transit Bus	39	4	43
MD	2031	Combination Long-haul Truck	456	51	506
MD	2031	Combination Short-haul Truck	293	33	325
MD	2031	Other Buses	210	0	210
MD	2031	Refuse Truck	43	0	43
MD	2031	School Bus	290	0	290
MD	2031	Single Unit Long-haul Truck	220	0	220
MD	2031	Single Unit Short-haul Truck	4960	0	4960

State	Model Year	Vehicle Type	BEV	FCEV	Total
MD	2031	Transit Bus	45	5	50
MD	2032	Combination Long-haul Truck	521	58	579
MD	2032	Combination Short-haul Truck	334	37	371
MD	2032	Other Buses	232	0	232
MD	2032	Refuse Truck	47	0	47
MD	2032	School Bus	319	0	319
MD	2032	Single Unit Long-haul Truck	248	0	248
MD	2032	Single Unit Short-haul Truck	5599	0	5599
MD	2032	Transit Bus	57	6	64
ME	2027	Other Buses	3	0	3
ME	2027	School Bus	19	0	19
ME	2027	Single Unit Long-haul Truck	16	0	16
ME	2027	Single Unit Short-haul Truck	366	0	366
ME	2027	Transit Bus	6	0	6
ME	2028	Combination Short-haul Truck	25	0	25
ME	2028	Other Buses	3	0	3
ME	2028	Refuse Truck	1	0	1
ME	2028	School Bus	24	0	24
ME	2028	Single Unit Long-haul Truck	20	0	20
ME	2028	Single Unit Short-haul Truck	469	0	469
ME	2028	Transit Bus	8	0	8
ME	2029	Combination Short-haul Truck	37	0	37
ME	2029	Other Buses	15	0	15
ME	2029	Refuse Truck	3	0	3
ME	2029	School Bus	29	0	29
ME	2029	Single Unit Long-haul Truck	28	0	28
ME	2029	Single Unit Short-haul Truck	646	0	646
ME	2029	Transit Bus	10	0	10
ME	2030	Combination Long-haul Truck	28	3	31
ME	2030	Combination Short-haul Truck	45	5	50
ME	2030	Other Buses	17	0	17
ME	2030	Refuse Truck	4	0	4
ME	2030	School Bus	35	0	35
ME	2030	Single Unit Long-haul Truck	34	0	34
ME	2030	Single Unit Short-haul Truck	773	0	773
ME	2030	Transit Bus	10	1	11
ME	2031	Combination Long-haul Truck	56	6	63
ME	2031	Combination Short-haul Truck	80	9	89
ME	2031	Other Buses	26	0	26
ME	2031	Refuse Truck	6	0	6
ME	2031	School Bus	50	0	50
ME	2031	Single Unit Long-haul Truck	50	0	50
ME	2031	Single Unit Short-haul Truck	1137	0	1137
ME	2031	Transit Bus	12	1	13
ME	2032	Combination Long-haul Truck	118	13	131
ME	2032	Combination Short-haul Truck	114	13	127
ME	2032	Other Buses	35	0	35
ME	2032	Refuse Truck	7	0	7
ME	2032	School Bus	66	0	66
ME	2032	Single Unit Long-haul Truck	66	0	66
ME	2032	Single Unit Short-haul Truck	1508	0	1508

State	Model Year	Vehicle Type	BEV	FCEV	Total
ME	2032	Transit Bus	15	2	17
MI	2027	Other Buses	18	0	18
MI	2027	Refuse Truck	3	0	3
MI	2027	School Bus	118	0	118
MI	2027	Single Unit Long-haul Truck	99	0	99
MI	2027	Single Unit Short-haul Truck	2247	0	2247
MI	2027	Transit Bus	43	0	43
MI	2028	Combination Short-haul Truck	142	0	142
MI	2028	Other Buses	22	0	22
MI	2028	Refuse Truck	3	0	3
MI	2028	School Bus	145	0	145
MI	2028	Single Unit Long-haul Truck	127	0	127
MI	2028	Single Unit Short-haul Truck	2879	0	2879
MI	2028	Transit Bus	54	0	54
MI	2029	Combination Short-haul Truck	210	0	210
MI	2029	Other Buses	96	0	96
MI	2029	Refuse Truck	19	0	19
MI	2029	School Bus	180	0	180
MI	2029	Single Unit Long-haul Truck	175	0	175
MI	2029	Single Unit Short-haul Truck	3963	0	3963
MI	2029	Transit Bus	65	0	65
MI	2030	Combination Long-haul Truck	150	17	167
MI	2030	Combination Short-haul Truck	254	28	282
MI	2030	Other Buses	113	0	113
MI	2030	Refuse Truck	23	0	23
MI	2030	School Bus	214	0	214
MI	2030	Single Unit Long-haul Truck	210	0	210
MI	2030	Single Unit Short-haul Truck	4741	0	4741
MI	2030	Transit Bus	70	8	77
MI	2031	Combination Long-haul Truck	304	34	337
MI	2031	Combination Short-haul Truck	447	50	497
MI	2031	Other Buses	174	0	174
MI	2031	Refuse Truck	36	0	36
MI	2031	School Bus	309	0	309
MI	2031	Single Unit Long-haul Truck	309	0	309
MI	2031	Single Unit Short-haul Truck	6978	0	6978
MI	2031	Transit Bus	81	9	90
MI	2032	Combination Long-haul Truck	633	70	703
MI	2032	Combination Short-haul Truck	639	71	710
MI	2032	Other Buses	228	0	228
MI	2032	Refuse Truck	47	0	47
MI	2032	School Bus	403	0	403
MI	2032	Single Unit Long-haul Truck	409	0	409
MI	2032	Single Unit Short-haul Truck	9256	0	9256
MI	2032	Transit Bus	103	11	114
MN	2027	Other Buses	10	0	10
MN	2027	Refuse Truck	2	0	2
MN	2027	School Bus	70	0	70
MN	2027	Single Unit Long-haul Truck	59	0	59
MN	2027	Single Unit Short-haul Truck	1351	0	1351
MN	2027	Transit Bus	25	0	25

State	Model Year	Vehicle Type	BEV	FCEV	Total
MN	2028	Combination Short-haul Truck	88	0	88
MN	2028	Other Buses	13	0	13
MN	2028	Refuse Truck	2	0	2
MN	2028	School Bus	86	0	86
MN	2028	Single Unit Long-haul Truck	76	0	76
MN	2028	Single Unit Short-haul Truck	1731	0	1731
MN	2028	Transit Bus	31	0	31
MN	2029	Combination Short-haul Truck	131	0	131
MN	2029	Other Buses	56	0	56
MN	2029	Refuse Truck	12	0	12
MN	2029	School Bus	108	0	108
MN	2029	Single Unit Long-haul Truck	105	0	105
MN	2029	Single Unit Short-haul Truck	2382	0	2382
MN	2029	Transit Bus	38	0	38
MN	2030	Combination Long-haul Truck	90	10	100
MN	2030	Combination Short-haul Truck	158	18	175
MN	2030	Other Buses	66	0	66
MN	2030	Refuse Truck	14	0	14
MN	2030	School Bus	128	0	128
MN	2030	Single Unit Long-haul Truck	125	0	125
MN	2030	Single Unit Short-haul Truck	2850	0	2850
MN	2030	Transit Bus	40	4	45
MN	2031	Combination Long-haul Truck	182	20	202
MN	2031	Combination Short-haul Truck	278	31	309
MN	2031	Other Buses	101	0	101
MN	2031	Refuse Truck	21	0	21
MN	2031	School Bus	185	0	185
MN	2031	Single Unit Long-haul Truck	185	0	185
MN	2031	Single Unit Short-haul Truck	4195	0	4195
MN	2031	Transit Bus	47	5	52
MN	2032	Combination Long-haul Truck	379	42	421
MN	2032	Combination Short-haul Truck	397	44	441
MN	2032	Other Buses	133	0	133
MN	2032	Refuse Truck	28	0	28
MN	2032	School Bus	241	0	241
MN	2032	Single Unit Long-haul Truck	245	0	245
MN	2032	Single Unit Short-haul Truck	5564	0	5564
MN	2032	Transit Bus	60	7	66
MO	2027	Other Buses	12	0	12
MO	2027	Refuse Truck	2	0	2
MO	2027	School Bus	78	0	78
MO	2027	Single Unit Long-haul Truck	66	0	66
MO	2027	Single Unit Short-haul Truck	1527	0	1527
MO	2027	Transit Bus	29	0	29
MO	2028	Combination Short-haul Truck	104	0	104
MO	2028	Other Buses	15	0	15
MO	2028	Refuse Truck	2	0	2
MO	2028	School Bus	96	0	96
MO	2028	Single Unit Long-haul Truck	85	0	85
MO	2028	Single Unit Short-haul Truck	1956	0	1956
MO	2028	Transit Bus	36	0	36

State	Model Year	Vehicle Type	BEV	FCEV	Total
MO	2029	Combination Short-haul Truck	153	0	153
MO	2029	Other Buses	64	0	64
MO	2029	Refuse Truck	13	0	13
MO	2029	School Bus	120	0	120
MO	2029	Single Unit Long-haul Truck	117	0	117
MO	2029	Single Unit Short-haul Truck	2692	0	2692
MO	2029	Transit Bus	44	0	44
MO	2030	Combination Long-haul Truck	132	15	146
MO	2030	Combination Short-haul Truck	184	20	205
MO	2030	Other Buses	75	0	75
MO	2030	Refuse Truck	16	0	16
MO	2030	School Bus	142	0	142
MO	2030	Single Unit Long-haul Truck	140	0	140
MO	2030	Single Unit Short-haul Truck	3221	0	3221
MO	2030	Transit Bus	46	5	52
MO	2031	Combination Long-haul Truck	266	30	296
MO	2031	Combination Short-haul Truck	326	36	362
MO	2031	Other Buses	116	0	116
MO	2031	Refuse Truck	24	0	24
MO	2031	School Bus	206	0	206
MO	2031	Single Unit Long-haul Truck	206	0	206
MO	2031	Single Unit Short-haul Truck	4741	0	4741
MO	2031	Transit Bus	54	6	60
MO	2032	Combination Long-haul Truck	556	62	617
MO	2032	Combination Short-haul Truck	465	52	516
MO	2032	Other Buses	152	0	152
MO	2032	Refuse Truck	32	0	32
MO	2032	School Bus	269	0	269
MO	2032	Single Unit Long-haul Truck	273	0	273
MO	2032	Single Unit Short-haul Truck	6288	0	6288
MO	2032	Transit Bus	69	8	76
MS	2027	Other Buses	7	0	7
MS	2027	Refuse Truck	1	0	1
MS	2027	School Bus	48	0	48
MS	2027	Single Unit Long-haul Truck	40	0	40
MS	2027	Single Unit Short-haul Truck	906	0	906
MS	2027	Transit Bus	16	0	16
MS	2028	Combination Short-haul Truck	61	0	61
MS	2028	Other Buses	8	0	8
MS	2028	Refuse Truck	1	0	1
MS	2028	School Bus	58	0	58
MS	2028	Single Unit Long-haul Truck	51	0	51
MS	2028	Single Unit Short-haul Truck	1161	0	1161
MS	2028	Transit Bus	20	0	20
MS	2029	Combination Short-haul Truck	90	0	90
MS	2029	Other Buses	37	0	37
MS	2029	Refuse Truck	8	0	8
MS	2029	School Bus	73	0	73
MS	2029	Single Unit Long-haul Truck	70	0	70
MS	2029	Single Unit Short-haul Truck	1598	0	1598
MS	2029	Transit Bus	24	0	24

State	Model Year	Vehicle Type	BEV	FCEV	Total
MS	2030	Combination Long-haul Truck	66	7	73
MS	2030	Combination Short-haul Truck	109	12	121
MS	2030	Other Buses	43	0	43
MS	2030	Refuse Truck	9	0	9
MS	2030	School Bus	86	0	86
MS	2030	Single Unit Long-haul Truck	84	0	84
MS	2030	Single Unit Short-haul Truck	1912	0	1912
MS	2030	Transit Bus	26	3	29
MS	2031	Combination Long-haul Truck	133	15	148
MS	2031	Combination Short-haul Truck	193	21	214
MS	2031	Other Buses	67	0	67
MS	2031	Refuse Truck	14	0	14
MS	2031	School Bus	125	0	125
MS	2031	Single Unit Long-haul Truck	123	0	123
MS	2031	Single Unit Short-haul Truck	2815	0	2815
MS	2031	Transit Bus	30	3	34
MS	2032	Combination Long-haul Truck	277	31	308
MS	2032	Combination Short-haul Truck	275	31	306
MS	2032	Other Buses	87	0	87
MS	2032	Refuse Truck	19	0	19
MS	2032	School Bus	163	0	163
MS	2032	Single Unit Long-haul Truck	164	0	164
MS	2032	Single Unit Short-haul Truck	3733	0	3733
MS	2032	Transit Bus	38	4	43
MT	2027	Other Buses	2	0	2
MT	2027	School Bus	16	0	16
MT	2027	Single Unit Long-haul Truck	14	0	14
MT	2027	Single Unit Short-haul Truck	311	0	311
MT	2027	Transit Bus	5	0	5
MT	2028	Combination Short-haul Truck	22	0	22
MT	2028	Other Buses	3	0	3
MT	2028	School Bus	20	0	20
MT	2028	Single Unit Long-haul Truck	17	0	17
MT	2028	Single Unit Short-haul Truck	399	0	399
MT	2028	Transit Bus	7	0	7
MT	2029	Combination Short-haul Truck	32	0	32
MT	2029	Other Buses	13	0	13
MT	2029	Refuse Truck	3	0	3
MT	2029	School Bus	25	0	25
MT	2029	Single Unit Long-haul Truck	24	0	24
MT	2029	Single Unit Short-haul Truck	549	0	549
MT	2029	Transit Bus	8	0	8
MT	2030	Combination Long-haul Truck	27	3	30
MT	2030	Combination Short-haul Truck	39	4	43
MT	2030	Other Buses	15	0	15
MT	2030	Refuse Truck	3	0	3
MT	2030	School Bus	30	0	30
MT	2030	Single Unit Long-haul Truck	29	0	29
MT	2030	Single Unit Short-haul Truck	657	0	657
MT	2030	Transit Bus	9	1	10
MT	2031	Combination Long-haul Truck	54	6	60

State	Model Year	Vehicle Type	BEV	FCEV	Total
MT	2031	Combination Short-haul Truck	69	8	77
MT	2031	Other Buses	23	0	23
MT	2031	Refuse Truck	5	0	5
MT	2031	School Bus	43	0	43
MT	2031	Single Unit Long-haul Truck	42	0	42
MT	2031	Single Unit Short-haul Truck	967	0	967
MT	2031	Transit Bus	10	1	11
MT	2032	Combination Long-haul Truck	112	12	125
MT	2032	Combination Short-haul Truck	98	11	109
MT	2032	Other Buses	30	0	30
MT	2032	Refuse Truck	6	0	6
MT	2032	School Bus	56	0	56
MT	2032	Single Unit Long-haul Truck	56	0	56
MT	2032	Single Unit Short-haul Truck	1283	0	1283
MT	2032	Transit Bus	13	1	14
NC	2027	Other Buses	18	0	18
NC	2027	Refuse Truck	3	0	3
NC	2027	School Bus	118	0	118
NC	2027	Single Unit Long-haul Truck	100	0	100
NC	2027	Single Unit Short-haul Truck	2265	0	2265
NC	2027	Transit Bus	44	0	44
NC	2028	Combination Short-haul Truck	144	0	144
NC	2028	Other Buses	22	0	22
NC	2028	Refuse Truck	3	0	3
NC	2028	School Bus	145	0	145
NC	2028	Single Unit Long-haul Truck	128	0	128
NC	2028	Single Unit Short-haul Truck	2902	0	2902
NC	2028	Transit Bus	55	0	55
NC	2029	Combination Short-haul Truck	213	0	213
NC	2029	Other Buses	97	0	97
NC	2029	Refuse Truck	20	0	20
NC	2029	School Bus	181	0	181
NC	2029	Single Unit Long-haul Truck	176	0	176
NC	2029	Single Unit Short-haul Truck	3995	0	3995
NC	2029	Transit Bus	66	0	66
NC	2030	Combination Long-haul Truck	156	17	173
NC	2030	Combination Short-haul Truck	257	29	286
NC	2030	Other Buses	114	0	114
NC	2030	Refuse Truck	23	0	23
NC	2030	School Bus	215	0	215
NC	2030	Single Unit Long-haul Truck	211	0	211
NC	2030	Single Unit Short-haul Truck	4780	0	4780
NC	2030	Transit Bus	70	8	78
NC	2031	Combination Long-haul Truck	315	35	351
NC	2031	Combination Short-haul Truck	454	50	505
NC	2031	Other Buses	175	0	175
NC	2031	Refuse Truck	36	0	36
NC	2031	School Bus	311	0	311
NC	2031	Single Unit Long-haul Truck	310	0	310
NC	2031	Single Unit Short-haul Truck	7036	0	7036
NC	2031	Transit Bus	82	9	91

State	Model Year	Vehicle Type	BEV	FCEV	Total
NC	2032	Combination Long-haul Truck	658	73	731
NC	2032	Combination Short-haul Truck	648	72	720
NC	2032	Other Buses	230	0	230
NC	2032	Refuse Truck	47	0	47
NC	2032	School Bus	405	0	405
NC	2032	Single Unit Long-haul Truck	412	0	412
NC	2032	Single Unit Short-haul Truck	9332	0	9332
NC	2032	Transit Bus	104	12	115
ND	2027	Other Buses	2	0	2
ND	2027	School Bus	13	0	13
ND	2027	Single Unit Long-haul Truck	11	0	11
ND	2027	Single Unit Short-haul Truck	253	0	253
ND	2027	Transit Bus	4	0	4
ND	2028	Combination Short-haul Truck	18	0	18
ND	2028	Other Buses	2	0	2
ND	2028	School Bus	16	0	16
ND	2028	Single Unit Long-haul Truck	14	0	14
ND	2028	Single Unit Short-haul Truck	324	0	324
ND	2028	Transit Bus	5	0	5
ND	2029	Combination Short-haul Truck	26	0	26
ND	2029	Other Buses	10	0	10
ND	2029	Refuse Truck	2	0	2
ND	2029	School Bus	20	0	20
ND	2029	Single Unit Long-haul Truck	19	0	19
ND	2029	Single Unit Short-haul Truck	446	0	446
ND	2029	Transit Bus	7	0	7
ND	2030	Combination Long-haul Truck	20	2	22
ND	2030	Combination Short-haul Truck	31	3	35
ND	2030	Other Buses	12	0	12
ND	2030	Refuse Truck	3	0	3
ND	2030	School Bus	24	0	24
ND	2030	Single Unit Long-haul Truck	23	0	23
ND	2030	Single Unit Short-haul Truck	533	0	533
ND	2030	Transit Bus	7	1	8
ND	2031	Combination Long-haul Truck	40	4	44
ND	2031	Combination Short-haul Truck	55	6	62
ND	2031	Other Buses	18	0	18
ND	2031	Refuse Truck	4	0	4
ND	2031	School Bus	35	0	35
ND	2031	Single Unit Long-haul Truck	34	0	34
ND	2031	Single Unit Short-haul Truck	785	0	785
ND	2031	Transit Bus	8	1	9
ND	2032	Combination Long-haul Truck	82	9	92
ND	2032	Combination Short-haul Truck	79	9	88
ND	2032	Other Buses	24	0	24
ND	2032	Refuse Truck	5	0	5
ND	2032	School Bus	45	0	45
ND	2032	Single Unit Long-haul Truck	45	0	45
ND	2032	Single Unit Short-haul Truck	1041	0	1041
ND	2032	Transit Bus	10	1	11
NE	2027	Other Buses	4	0	4

State	Model Year	Vehicle Type	BEV	FCEV	Total
NE	2027	Refuse Truck	1	0	1
NE	2027	School Bus	27	0	27
NE	2027	Single Unit Long-haul Truck	22	0	22
NE	2027	Single Unit Short-haul Truck	513	0	513
NE	2027	Transit Bus	9	0	9
NE	2028	Combination Short-haul Truck	35	0	35
NE	2028	Other Buses	5	0	5
NE	2028	Refuse Truck	1	0	1
NE	2028	School Bus	33	0	33
NE	2028	Single Unit Long-haul Truck	29	0	29
NE	2028	Single Unit Short-haul Truck	657	0	657
NE	2028	Transit Bus	12	0	12
NE	2029	Combination Short-haul Truck	52	0	52
NE	2029	Other Buses	21	0	21
NE	2029	Refuse Truck	4	0	4
NE	2029	School Bus	41	0	41
NE	2029	Single Unit Long-haul Truck	39	0	39
NE	2029	Single Unit Short-haul Truck	904	0	904
NE	2029	Transit Bus	14	0	14
NE	2030	Combination Long-haul Truck	43	5	47
NE	2030	Combination Short-haul Truck	63	7	70
NE	2030	Other Buses	25	0	25
NE	2030	Refuse Truck	5	0	5
NE	2030	School Bus	49	0	49
NE	2030	Single Unit Long-haul Truck	47	0	47
NE	2030	Single Unit Short-haul Truck	1082	0	1082
NE	2030	Transit Bus	15	2	16
NE	2031	Combination Long-haul Truck	86	10	96
NE	2031	Combination Short-haul Truck	111	12	123
NE	2031	Other Buses	38	0	38
NE	2031	Refuse Truck	8	0	8
NE	2031	School Bus	71	0	71
NE	2031	Single Unit Long-haul Truck	69	0	69
NE	2031	Single Unit Short-haul Truck	1593	0	1593
NE	2031	Transit Bus	17	2	19
NE	2032	Combination Long-haul Truck	180	20	200
NE	2032	Combination Short-haul Truck	158	18	176
NE	2032	Other Buses	50	0	50
NE	2032	Refuse Truck	11	0	11
NE	2032	School Bus	92	0	92
NE	2032	Single Unit Long-haul Truck	92	0	92
NE	2032	Single Unit Short-haul Truck	2113	0	2113
NE	2032	Transit Bus	22	2	24
NH	2027	Other Buses	2	0	2
NH	2027	School Bus	16	0	16
NH	2027	Single Unit Long-haul Truck	14	0	14
NH	2027	Single Unit Short-haul Truck	310	0	310
NH	2027	Transit Bus	6	0	6
NH	2028	Combination Short-haul Truck	20	0	20
NH	2028	Other Buses	3	0	3
NH	2028	School Bus	20	0	20

State	Model Year	Vehicle Type	BEV	FCEV	Total
NH	2028	Single Unit Long-haul Truck	17	0	17
NH	2028	Single Unit Short-haul Truck	397	0	397
NH	2028	Transit Bus	7	0	7
NH	2029	Combination Short-haul Truck	30	0	30
NH	2029	Other Buses	13	0	13
NH	2029	Refuse Truck	3	0	3
NH	2029	School Bus	25	0	25
NH	2029	Single Unit Long-haul Truck	24	0	24
NH	2029	Single Unit Short-haul Truck	546	0	546
NH	2029	Transit Bus	9	0	9
NH	2030	Combination Long-haul Truck	22	2	24
NH	2030	Combination Short-haul Truck	36	4	40
NH	2030	Other Buses	15	0	15
NH	2030	Refuse Truck	3	0	3
NH	2030	School Bus	29	0	29
NH	2030	Single Unit Long-haul Truck	29	0	29
NH	2030	Single Unit Short-haul Truck	653	0	653
NH	2030	Transit Bus	9	1	10
NH	2031	Combination Long-haul Truck	44	5	49
NH	2031	Combination Short-haul Truck	64	7	71
NH	2031	Other Buses	23	0	23
NH	2031	Refuse Truck	5	0	5
NH	2031	School Bus	42	0	42
NH	2031	Single Unit Long-haul Truck	42	0	42
NH	2031	Single Unit Short-haul Truck	962	0	962
NH	2031	Transit Bus	11	1	12
NH	2032	Combination Long-haul Truck	92	10	102
NH	2032	Combination Short-haul Truck	91	10	101
NH	2032	Other Buses	31	0	31
NH	2032	Refuse Truck	6	0	6
NH	2032	School Bus	55	0	55
NH	2032	Single Unit Long-haul Truck	56	0	56
NH	2032	Single Unit Short-haul Truck	1276	0	1276
NH	2032	Transit Bus	14	2	15
NJ	2027	Combination Long-haul Truck	229	0	229
NJ	2027	Combination Short-haul Truck	153	0	153
NJ	2027	Other Buses	85	0	85
NJ	2027	Refuse Truck	16	0	16
NJ	2027	School Bus	113	0	113
NJ	2027	Single Unit Long-haul Truck	88	0	88
NJ	2027	Single Unit Short-haul Truck	1977	0	1977
NJ	2027	Transit Bus	28	0	28
NJ	2028	Combination Long-haul Truck	299	0	299
NJ	2028	Combination Short-haul Truck	199	0	199
NJ	2028	Other Buses	127	0	127
NJ	2028	Refuse Truck	25	0	25
NJ	2028	School Bus	169	0	169
NJ	2028	Single Unit Long-haul Truck	129	0	129
NJ	2028	Single Unit Short-haul Truck	2900	0	2900
NJ	2028	Transit Bus	35	0	35
NJ	2029	Combination Long-haul Truck	369	0	369

State	Model Year	Vehicle Type	BEV	FCEV	Total
NJ	2029	Combination Short-haul Truck	245	0	245
NJ	2029	Other Buses	169	0	169
NJ	2029	Refuse Truck	33	0	33
NJ	2029	School Bus	226	0	226
NJ	2029	Single Unit Long-haul Truck	171	0	171
NJ	2029	Single Unit Short-haul Truck	3841	0	3841
NJ	2029	Transit Bus	43	0	43
NJ	2030	Combination Long-haul Truck	399	44	443
NJ	2030	Combination Short-haul Truck	266	30	295
NJ	2030	Other Buses	216	0	216
NJ	2030	Refuse Truck	43	0	43
NJ	2030	School Bus	289	0	289
NJ	2030	Single Unit Long-haul Truck	216	0	216
NJ	2030	Single Unit Short-haul Truck	4852	0	4852
NJ	2030	Transit Bus	45	5	50
NJ	2031	Combination Long-haul Truck	471	52	523
NJ	2031	Combination Short-haul Truck	312	35	347
NJ	2031	Other Buses	243	0	243
NJ	2031	Refuse Truck	48	0	48
NJ	2031	School Bus	325	0	325
NJ	2031	Single Unit Long-haul Truck	248	0	248
NJ	2031	Single Unit Short-haul Truck	5556	0	5556
NJ	2031	Transit Bus	53	6	59
NJ	2032	Combination Long-haul Truck	538	60	598
NJ	2032	Combination Short-haul Truck	357	40	396
NJ	2032	Other Buses	267	0	267
NJ	2032	Refuse Truck	53	0	53
NJ	2032	School Bus	358	0	358
NJ	2032	Single Unit Long-haul Truck	280	0	280
NJ	2032	Single Unit Short-haul Truck	6272	0	6272
NJ	2032	Transit Bus	67	7	74
NM	2027	Combination Long-haul Truck	145	0	145
NM	2027	Combination Short-haul Truck	82	0	82
NM	2027	Other Buses	36	0	36
NM	2027	Refuse Truck	7	0	7
NM	2027	School Bus	53	0	53
NM	2027	Single Unit Long-haul Truck	40	0	40
NM	2027	Single Unit Short-haul Truck	905	0	905
NM	2027	Transit Bus	11	0	11
NM	2028	Combination Long-haul Truck	190	0	190
NM	2028	Combination Short-haul Truck	106	0	106
NM	2028	Other Buses	53	0	53
NM	2028	Refuse Truck	11	0	11
NM	2028	School Bus	79	0	79
NM	2028	Single Unit Long-haul Truck	58	0	58
NM	2028	Single Unit Short-haul Truck	1328	0	1328
NM	2028	Transit Bus	14	0	14
NM	2029	Combination Long-haul Truck	234	0	234
NM	2029	Combination Short-haul Truck	131	0	131
NM	2029	Other Buses	71	0	71
NM	2029	Refuse Truck	15	0	15

State	Model Year	Vehicle Type	BEV	FCEV	Total
NM	2029	School Bus	105	0	105
NM	2029	Single Unit Long-haul Truck	77	0	77
NM	2029	Single Unit Short-haul Truck	1759	0	1759
NM	2029	Transit Bus	17	0	17
NM	2030	Combination Long-haul Truck	253	28	281
NM	2030	Combination Short-haul Truck	142	16	158
NM	2030	Other Buses	91	0	91
NM	2030	Refuse Truck	19	0	19
NM	2030	School Bus	135	0	135
NM	2030	Single Unit Long-haul Truck	97	0	97
NM	2030	Single Unit Short-haul Truck	2222	0	2222
NM	2030	Transit Bus	18	2	20
NM	2031	Combination Long-haul Truck	299	33	332
NM	2031	Combination Short-haul Truck	167	19	185
NM	2031	Other Buses	102	0	102
NM	2031	Refuse Truck	22	0	22
NM	2031	School Bus	152	0	152
NM	2031	Single Unit Long-haul Truck	111	0	111
NM	2031	Single Unit Short-haul Truck	2545	0	2545
NM	2031	Transit Bus	21	2	23
NM	2032	Combination Long-haul Truck	341	38	379
NM	2032	Combination Short-haul Truck	190	21	212
NM	2032	Other Buses	112	0	112
NM	2032	Refuse Truck	24	0	24
NM	2032	School Bus	167	0	167
NM	2032	Single Unit Long-haul Truck	126	0	126
NM	2032	Single Unit Short-haul Truck	2872	0	2872
NM	2032	Transit Bus	26	3	29
NV	2027	Other Buses	4	0	4
NV	2027	Refuse Truck	1	0	1
NV	2027	School Bus	26	0	26
NV	2027	Single Unit Long-haul Truck	22	0	22
NV	2027	Single Unit Short-haul Truck	491	0	491
NV	2027	Transit Bus	10	0	10
NV	2028	Combination Short-haul Truck	30	0	30
NV	2028	Other Buses	5	0	5
NV	2028	Refuse Truck	1	0	1
NV	2028	School Bus	32	0	32
NV	2028	Single Unit Long-haul Truck	28	0	28
NV	2028	Single Unit Short-haul Truck	629	0	629
NV	2028	Transit Bus	12	0	12
NV	2029	Combination Short-haul Truck	45	0	45
NV	2029	Other Buses	22	0	22
NV	2029	Refuse Truck	4	0	4
NV	2029	School Bus	39	0	39
NV	2029	Single Unit Long-haul Truck	38	0	38
NV	2029	Single Unit Short-haul Truck	866	0	866
NV	2029	Transit Bus	15	0	15
NV	2030	Combination Long-haul Truck	34	4	38
NV	2030	Combination Short-haul Truck	54	6	60
NV	2030	Other Buses	26	0	26

State	Model Year	Vehicle Type	BEV	FCEV	Total
NV	2030	Refuse Truck	5	0	5
NV	2030	School Bus	47	0	47
NV	2030	Single Unit Long-haul Truck	46	0	46
NV	2030	Single Unit Short-haul Truck	1036	0	1036
NV	2030	Transit Bus	16	2	18
NV	2031	Combination Long-haul Truck	69	8	76
NV	2031	Combination Short-haul Truck	95	11	106
NV	2031	Other Buses	39	0	39
NV	2031	Refuse Truck	8	0	8
NV	2031	School Bus	68	0	68
NV	2031	Single Unit Long-haul Truck	68	0	68
NV	2031	Single Unit Short-haul Truck	1525	0	1525
NV	2031	Transit Bus	18	2	20
NV	2032	Combination Long-haul Truck	143	16	159
NV	2032	Combination Short-haul Truck	136	15	151
NV	2032	Other Buses	51	0	51
NV	2032	Refuse Truck	10	0	10
NV	2032	School Bus	88	0	88
NV	2032	Single Unit Long-haul Truck	90	0	90
NV	2032	Single Unit Short-haul Truck	2023	0	2023
NV	2032	Transit Bus	23	3	26
NY	2027	Combination Long-haul Truck	437	0	437
NY	2027	Combination Short-haul Truck	274	0	274
NY	2027	Other Buses	140	0	140
NY	2027	Refuse Truck	28	0	28
NY	2027	School Bus	192	0	192
NY	2027	Single Unit Long-haul Truck	149	0	149
NY	2027	Single Unit Short-haul Truck	3356	0	3356
NY	2027	Transit Bus	46	0	46
NY	2028	Combination Long-haul Truck	570	0	570
NY	2028	Combination Short-haul Truck	357	0	357
NY	2028	Other Buses	209	0	209
NY	2028	Refuse Truck	41	0	41
NY	2028	School Bus	287	0	287
NY	2028	Single Unit Long-haul Truck	218	0	218
NY	2028	Single Unit Short-haul Truck	4924	0	4924
NY	2028	Transit Bus	57	0	57
NY	2029	Combination Long-haul Truck	703	0	703
NY	2029	Combination Short-haul Truck	439	0	439
NY	2029	Other Buses	279	0	279
NY	2029	Refuse Truck	56	0	56
NY	2029	School Bus	384	0	384
NY	2029	Single Unit Long-haul Truck	289	0	289
NY	2029	Single Unit Short-haul Truck	6521	0	6521
NY	2029	Transit Bus	69	0	69
NY	2030	Combination Long-haul Truck	760	84	845
NY	2030	Combination Short-haul Truck	477	53	530
NY	2030	Other Buses	355	0	355
NY	2030	Refuse Truck	72	0	72
NY	2030	School Bus	491	0	491
NY	2030	Single Unit Long-haul Truck	365	0	365

State	Model Year	Vehicle Type	BEV	FCEV	Total
NY	2030	Single Unit Short-haul Truck	8238	0	8238
NY	2030	Transit Bus	73	8	82
NY	2031	Combination Long-haul Truck	897	100	997
NY	2031	Combination Short-haul Truck	561	62	623
NY	2031	Other Buses	400	0	400
NY	2031	Refuse Truck	82	0	82
NY	2031	School Bus	553	0	553
NY	2031	Single Unit Long-haul Truck	418	0	418
NY	2031	Single Unit Short-haul Truck	9434	0	9434
NY	2031	Transit Bus	86	10	95
NY	2032	Combination Long-haul Truck	1026	114	1140
NY	2032	Combination Short-haul Truck	640	71	711
NY	2032	Other Buses	440	0	440
NY	2032	Refuse Truck	90	0	90
NY	2032	School Bus	609	0	609
NY	2032	Single Unit Long-haul Truck	471	0	471
NY	2032	Single Unit Short-haul Truck	10648	0	10648
NY	2032	Transit Bus	108	12	120
OH	2027	Other Buses	19	0	19
OH	2027	Refuse Truck	3	0	3
OH	2027	School Bus	121	0	121
OH	2027	Single Unit Long-haul Truck	103	0	103
OH	2027	Single Unit Short-haul Truck	2339	0	2339
OH	2027	Transit Bus	46	0	46
OH	2028	Combination Short-haul Truck	149	0	149
OH	2028	Other Buses	23	0	23
OH	2028	Refuse Truck	4	0	4
OH	2028	School Bus	149	0	149
OH	2028	Single Unit Long-haul Truck	132	0	132
OH	2028	Single Unit Short-haul Truck	2997	0	2997
OH	2028	Transit Bus	57	0	57
OH	2029	Combination Short-haul Truck	221	0	221
OH	2029	Other Buses	100	0	100
OH	2029	Refuse Truck	20	0	20
OH	2029	School Bus	186	0	186
OH	2029	Single Unit Long-haul Truck	182	0	182
OH	2029	Single Unit Short-haul Truck	4126	0	4126
OH	2029	Transit Bus	69	0	69
OH	2030	Combination Long-haul Truck	167	19	186
OH	2030	Combination Short-haul Truck	266	30	296
OH	2030	Other Buses	118	0	118
OH	2030	Refuse Truck	24	0	24
OH	2030	School Bus	220	0	220
OH	2030	Single Unit Long-haul Truck	217	0	217
OH	2030	Single Unit Short-haul Truck	4936	0	4936
OH	2030	Transit Bus	73	8	82
OH	2031	Combination Long-haul Truck	339	38	377
OH	2031	Combination Short-haul Truck	470	52	522
OH	2031	Other Buses	181	0	181
OH	2031	Refuse Truck	37	0	37
OH	2031	School Bus	319	0	319

State	Model Year	Vehicle Type	BEV	FCEV	Total
OH	2031	Single Unit Long-haul Truck	320	0	320
OH	2031	Single Unit Short-haul Truck	7265	0	7265
OH	2031	Transit Bus	85	9	95
OH	2032	Combination Long-haul Truck	707	79	785
OH	2032	Combination Short-haul Truck	671	75	746
OH	2032	Other Buses	238	0	238
OH	2032	Refuse Truck	49	0	49
OH	2032	School Bus	415	0	415
OH	2032	Single Unit Long-haul Truck	424	0	424
OH	2032	Single Unit Short-haul Truck	9636	0	9636
OH	2032	Transit Bus	108	12	120
OK	2027	Other Buses	9	0	9
OK	2027	Refuse Truck	1	0	1
OK	2027	School Bus	58	0	58
OK	2027	Single Unit Long-haul Truck	49	0	49
OK	2027	Single Unit Short-haul Truck	1121	0	1121
OK	2027	Transit Bus	20	0	20
OK	2028	Combination Short-haul Truck	75	0	75
OK	2028	Other Buses	10	0	10
OK	2028	Refuse Truck	2	0	2
OK	2028	School Bus	72	0	72
OK	2028	Single Unit Long-haul Truck	63	0	63
OK	2028	Single Unit Short-haul Truck	1436	0	1436
OK	2028	Transit Bus	25	0	25
OK	2029	Combination Short-haul Truck	111	0	111
OK	2029	Other Buses	46	0	46
OK	2029	Refuse Truck	10	0	10
OK	2029	School Bus	89	0	89
OK	2029	Single Unit Long-haul Truck	87	0	87
OK	2029	Single Unit Short-haul Truck	1977	0	1977
OK	2029	Transit Bus	31	0	31
OK	2030	Combination Long-haul Truck	82	9	91
OK	2030	Combination Short-haul Truck	134	15	149
OK	2030	Other Buses	54	0	54
OK	2030	Refuse Truck	11	0	11
OK	2030	School Bus	106	0	106
OK	2030	Single Unit Long-haul Truck	104	0	104
OK	2030	Single Unit Short-haul Truck	2366	0	2366
OK	2030	Transit Bus	33	4	37
OK	2031	Combination Long-haul Truck	165	18	184
OK	2031	Combination Short-haul Truck	236	26	263
OK	2031	Other Buses	83	0	83
OK	2031	Refuse Truck	18	0	18
OK	2031	School Bus	154	0	154
OK	2031	Single Unit Long-haul Truck	153	0	153
OK	2031	Single Unit Short-haul Truck	3482	0	3482
OK	2031	Transit Bus	38	4	43
OK	2032	Combination Long-haul Truck	344	38	383
OK	2032	Combination Short-haul Truck	337	37	375
OK	2032	Other Buses	109	0	109
OK	2032	Refuse Truck	23	0	23

State	Model Year	Vehicle Type	BEV	FCEV	Total
OK	2032	School Bus	200	0	200
OK	2032	Single Unit Long-haul Truck	202	0	202
OK	2032	Single Unit Short-haul Truck	4618	0	4618
OK	2032	Transit Bus	48	5	54
OR	2027	Combination Long-haul Truck	170	0	170
OR	2027	Combination Short-haul Truck	104	0	104
OR	2027	Other Buses	49	0	49
OR	2027	Refuse Truck	10	0	10
OR	2027	School Bus	70	0	70
OR	2027	Single Unit Long-haul Truck	53	0	53
OR	2027	Single Unit Short-haul Truck	1212	0	1212
OR	2027	Transit Bus	15	0	15
OR	2028	Combination Long-haul Truck	222	0	222
OR	2028	Combination Short-haul Truck	136	0	136
OR	2028	Other Buses	73	0	73
OR	2028	Refuse Truck	15	0	15
OR	2028	School Bus	105	0	105
OR	2028	Single Unit Long-haul Truck	78	0	78
OR	2028	Single Unit Short-haul Truck	1779	0	1779
OR	2028	Transit Bus	19	0	19
OR	2029	Combination Long-haul Truck	274	0	274
OR	2029	Combination Short-haul Truck	167	0	167
OR	2029	Other Buses	97	0	97
OR	2029	Refuse Truck	20	0	20
OR	2029	School Bus	141	0	141
OR	2029	Single Unit Long-haul Truck	104	0	104
OR	2029	Single Unit Short-haul Truck	2355	0	2355
OR	2029	Transit Bus	23	0	23
OR	2030	Combination Long-haul Truck	296	33	329
OR	2030	Combination Short-haul Truck	181	20	201
OR	2030	Other Buses	124	0	124
OR	2030	Refuse Truck	26	0	26
OR	2030	School Bus	180	0	180
OR	2030	Single Unit Long-haul Truck	131	0	131
OR	2030	Single Unit Short-haul Truck	2976	0	2976
OR	2030	Transit Bus	25	3	28
OR	2031	Combination Long-haul Truck	350	39	389
OR	2031	Combination Short-haul Truck	213	24	237
OR	2031	Other Buses	140	0	140
OR	2031	Refuse Truck	29	0	29
OR	2031	School Bus	203	0	203
OR	2031	Single Unit Long-haul Truck	150	0	150
OR	2031	Single Unit Short-haul Truck	3407	0	3407
OR	2031	Transit Bus	29	3	32
OR	2032	Combination Long-haul Truck	400	44	444
OR	2032	Combination Short-haul Truck	243	27	270
OR	2032	Other Buses	154	0	154
OR	2032	Refuse Truck	32	0	32
OR	2032	School Bus	223	0	223
OR	2032	Single Unit Long-haul Truck	170	0	170
OR	2032	Single Unit Short-haul Truck	3846	0	3846

State	Model Year	Vehicle Type	BEV	FCEV	Total
OR	2032	Transit Bus	37	4	41
PA	2027	Other Buses	17	0	17
PA	2027	Refuse Truck	3	0	3
PA	2027	School Bus	111	0	111
PA	2027	Single Unit Long-haul Truck	93	0	93
PA	2027	Single Unit Short-haul Truck	2117	0	2117
PA	2027	Transit Bus	41	0	41
PA	2028	Combination Short-haul Truck	136	0	136
PA	2028	Other Buses	21	0	21
PA	2028	Refuse Truck	3	0	3
PA	2028	School Bus	136	0	136
PA	2028	Single Unit Long-haul Truck	119	0	119
PA	2028	Single Unit Short-haul Truck	2712	0	2712
PA	2028	Transit Bus	51	0	51
PA	2029	Combination Short-haul Truck	201	0	201
PA	2029	Other Buses	91	0	91
PA	2029	Refuse Truck	18	0	18
PA	2029	School Bus	170	0	170
PA	2029	Single Unit Long-haul Truck	164	0	164
PA	2029	Single Unit Short-haul Truck	3734	0	3734
PA	2029	Transit Bus	62	0	62
PA	2030	Combination Long-haul Truck	160	18	177
PA	2030	Combination Short-haul Truck	242	27	269
PA	2030	Other Buses	108	0	108
PA	2030	Refuse Truck	22	0	22
PA	2030	School Bus	201	0	201
PA	2030	Single Unit Long-haul Truck	197	0	197
PA	2030	Single Unit Short-haul Truck	4467	0	4467
PA	2030	Transit Bus	66	7	73
PA	2031	Combination Long-haul Truck	323	36	359
PA	2031	Combination Short-haul Truck	428	48	475
PA	2031	Other Buses	165	0	165
PA	2031	Refuse Truck	34	0	34
PA	2031	School Bus	291	0	291
PA	2031	Single Unit Long-haul Truck	289	0	289
PA	2031	Single Unit Short-haul Truck	6575	0	6575
PA	2031	Transit Bus	77	9	85
PA	2032	Combination Long-haul Truck	674	75	748
PA	2032	Combination Short-haul Truck	611	68	679
PA	2032	Other Buses	217	0	217
PA	2032	Refuse Truck	44	0	44
PA	2032	School Bus	379	0	379
PA	2032	Single Unit Long-haul Truck	384	0	384
PA	2032	Single Unit Short-haul Truck	8721	0	8721
PA	2032	Transit Bus	97	11	108
RI	2027	Combination Long-haul Truck	30	0	30
RI	2027	Combination Short-haul Truck	19	0	19
RI	2027	Other Buses	10	0	10
RI	2027	Refuse Truck	2	0	2
RI	2027	School Bus	14	0	14
RI	2027	Single Unit Long-haul Truck	11	0	11

State	Model Year	Vehicle Type	BEV	FCEV	Total
RI	2027	Single Unit Short-haul Truck	239	0	239
RI	2027	Transit Bus	3	0	3
RI	2028	Combination Long-haul Truck	39	0	39
RI	2028	Combination Short-haul Truck	25	0	25
RI	2028	Other Buses	15	0	15
RI	2028	Refuse Truck	3	0	3
RI	2028	School Bus	20	0	20
RI	2028	Single Unit Long-haul Truck	16	0	16
RI	2028	Single Unit Short-haul Truck	351	0	351
RI	2028	Transit Bus	4	0	4
RI	2029	Combination Long-haul Truck	48	0	48
RI	2029	Combination Short-haul Truck	31	0	31
RI	2029	Other Buses	20	0	20
RI	2029	Refuse Truck	4	0	4
RI	2029	School Bus	27	0	27
RI	2029	Single Unit Long-haul Truck	21	0	21
RI	2029	Single Unit Short-haul Truck	465	0	465
RI	2029	Transit Bus	5	0	5
RI	2030	Combination Long-haul Truck	52	6	58
RI	2030	Combination Short-haul Truck	33	4	37
RI	2030	Other Buses	26	0	26
RI	2030	Refuse Truck	5	0	5
RI	2030	School Bus	35	0	35
RI	2030	Single Unit Long-haul Truck	26	0	26
RI	2030	Single Unit Short-haul Truck	587	0	587
RI	2030	Transit Bus	5	1	6
RI	2031	Combination Long-haul Truck	61	7	68
RI	2031	Combination Short-haul Truck	39	4	43
RI	2031	Other Buses	29	0	29
RI	2031	Refuse Truck	6	0	6
RI	2031	School Bus	39	0	39
RI	2031	Single Unit Long-haul Truck	30	0	30
RI	2031	Single Unit Short-haul Truck	672	0	672
RI	2031	Transit Bus	6	1	7
RI	2032	Combination Long-haul Truck	70	8	78
RI	2032	Combination Short-haul Truck	44	5	49
RI	2032	Other Buses	32	0	32
RI	2032	Refuse Truck	6	0	6
RI	2032	School Bus	43	0	43
RI	2032	Single Unit Long-haul Truck	34	0	34
RI	2032	Single Unit Short-haul Truck	759	0	759
RI	2032	Transit Bus	8	1	9
SC	2027	Other Buses	10	0	10
SC	2027	Refuse Truck	2	0	2
SC	2027	School Bus	70	0	70
SC	2027	Single Unit Long-haul Truck	58	0	58
SC	2027	Single Unit Short-haul Truck	1325	0	1325
SC	2027	Transit Bus	25	0	25
SC	2028	Combination Short-haul Truck	87	0	87
SC	2028	Other Buses	13	0	13
SC	2028	Refuse Truck	2	0	2

State	Model Year	Vehicle Type	BEV	FCEV	Total
SC	2028	School Bus	86	0	86
SC	2028	Single Unit Long-haul Truck	75	0	75
SC	2028	Single Unit Short-haul Truck	1698	0	1698
SC	2028	Transit Bus	31	0	31
SC	2029	Combination Short-haul Truck	129	0	129
SC	2029	Other Buses	56	0	56
SC	2029	Refuse Truck	11	0	11
SC	2029	School Bus	107	0	107
SC	2029	Single Unit Long-haul Truck	103	0	103
SC	2029	Single Unit Short-haul Truck	2337	0	2337
SC	2029	Transit Bus	37	0	37
SC	2030	Combination Long-haul Truck	101	11	112
SC	2030	Combination Short-haul Truck	156	17	173
SC	2030	Other Buses	66	0	66
SC	2030	Refuse Truck	13	0	13
SC	2030	School Bus	127	0	127
SC	2030	Single Unit Long-haul Truck	123	0	123
SC	2030	Single Unit Short-haul Truck	2796	0	2796
SC	2030	Transit Bus	40	4	44
SC	2031	Combination Long-haul Truck	205	23	228
SC	2031	Combination Short-haul Truck	275	31	305
SC	2031	Other Buses	101	0	101
SC	2031	Refuse Truck	21	0	21
SC	2031	School Bus	183	0	183
SC	2031	Single Unit Long-haul Truck	181	0	181
SC	2031	Single Unit Short-haul Truck	4116	0	4116
SC	2031	Transit Bus	46	5	51
SC	2032	Combination Long-haul Truck	427	47	475
SC	2032	Combination Short-haul Truck	392	44	436
SC	2032	Other Buses	133	0	133
SC	2032	Refuse Truck	27	0	27
SC	2032	School Bus	239	0	239
SC	2032	Single Unit Long-haul Truck	240	0	240
SC	2032	Single Unit Short-haul Truck	5459	0	5459
SC	2032	Transit Bus	59	7	65
SD	2027	Other Buses	2	0	2
SD	2027	School Bus	14	0	14
SD	2027	Single Unit Long-haul Truck	12	0	12
SD	2027	Single Unit Short-haul Truck	267	0	267
SD	2027	Transit Bus	5	0	5
SD	2028	Combination Short-haul Truck	19	0	19
SD	2028	Other Buses	2	0	2
SD	2028	School Bus	17	0	17
SD	2028	Single Unit Long-haul Truck	15	0	15
SD	2028	Single Unit Short-haul Truck	342	0	342
SD	2028	Transit Bus	6	0	6
SD	2029	Combination Short-haul Truck	28	0	28
SD	2029	Other Buses	11	0	11
SD	2029	Refuse Truck	2	0	2
SD	2029	School Bus	21	0	21
SD	2029	Single Unit Long-haul Truck	20	0	20

State	Model Year	Vehicle Type	BEV	FCEV	Total
SD	2029	Single Unit Short-haul Truck	471	0	471
SD	2029	Transit Bus	7	0	7
SD	2030	Combination Long-haul Truck	24	3	27
SD	2030	Combination Short-haul Truck	34	4	38
SD	2030	Other Buses	13	0	13
SD	2030	Refuse Truck	3	0	3
SD	2030	School Bus	25	0	25
SD	2030	Single Unit Long-haul Truck	24	0	24
SD	2030	Single Unit Short-haul Truck	563	0	563
SD	2030	Transit Bus	7	1	8
SD	2031	Combination Long-haul Truck	48	5	54
SD	2031	Combination Short-haul Truck	60	7	66
SD	2031	Other Buses	19	0	19
SD	2031	Refuse Truck	4	0	4
SD	2031	School Bus	37	0	37
SD	2031	Single Unit Long-haul Truck	36	0	36
SD	2031	Single Unit Short-haul Truck	829	0	829
SD	2031	Transit Bus	9	1	10
SD	2032	Combination Long-haul Truck	101	11	112
SD	2032	Combination Short-haul Truck	85	9	95
SD	2032	Other Buses	25	0	25
SD	2032	Refuse Truck	5	0	5
SD	2032	School Bus	48	0	48
SD	2032	Single Unit Long-haul Truck	48	0	48
SD	2032	Single Unit Short-haul Truck	1099	0	1099
SD	2032	Transit Bus	11	1	12
TN	2027	Other Buses	13	0	13
TN	2027	Refuse Truck	2	0	2
TN	2027	School Bus	83	0	83
TN	2027	Single Unit Long-haul Truck	70	0	70
TN	2027	Single Unit Short-haul Truck	1592	0	1592
TN	2027	Transit Bus	31	0	31
TN	2028	Combination Short-haul Truck	102	0	102
TN	2028	Other Buses	16	0	16
TN	2028	Refuse Truck	2	0	2
TN	2028	School Bus	102	0	102
TN	2028	Single Unit Long-haul Truck	90	0	90
TN	2028	Single Unit Short-haul Truck	2039	0	2039
TN	2028	Transit Bus	39	0	39
TN	2029	Combination Short-haul Truck	150	0	150
TN	2029	Other Buses	69	0	69
TN	2029	Refuse Truck	14	0	14
TN	2029	School Bus	127	0	127
TN	2029	Single Unit Long-haul Truck	124	0	124
TN	2029	Single Unit Short-haul Truck	2807	0	2807
TN	2029	Transit Bus	46	0	46
TN	2030	Combination Long-haul Truck	115	13	128
TN	2030	Combination Short-haul Truck	181	20	201
TN	2030	Other Buses	81	0	81
TN	2030	Refuse Truck	16	0	16
TN	2030	School Bus	151	0	151

State	Model Year	Vehicle Type	BEV	FCEV	Total
TN	2030	Single Unit Long-haul Truck	148	0	148
TN	2030	Single Unit Short-haul Truck	3359	0	3359
TN	2030	Transit Bus	50	6	55
TN	2031	Combination Long-haul Truck	234	26	260
TN	2031	Combination Short-haul Truck	320	36	355
TN	2031	Other Buses	124	0	124
TN	2031	Refuse Truck	25	0	25
TN	2031	School Bus	219	0	219
TN	2031	Single Unit Long-haul Truck	218	0	218
TN	2031	Single Unit Short-haul Truck	4943	0	4943
TN	2031	Transit Bus	58	6	64
TN	2032	Combination Long-haul Truck	487	54	541
TN	2032	Combination Short-haul Truck	456	51	507
TN	2032	Other Buses	163	0	163
TN	2032	Refuse Truck	33	0	33
TN	2032	School Bus	285	0	285
TN	2032	Single Unit Long-haul Truck	289	0	289
TN	2032	Single Unit Short-haul Truck	6557	0	6557
TN	2032	Transit Bus	73	8	81
TX	2027	Other Buses	48	0	48
TX	2027	Refuse Truck	7	0	7
TX	2027	School Bus	315	0	315
TX	2027	Single Unit Long-haul Truck	268	0	268
TX	2027	Single Unit Short-haul Truck	6063	0	6063
TX	2027	Transit Bus	118	0	118
TX	2028	Combination Short-haul Truck	382	0	382
TX	2028	Other Buses	59	0	59
TX	2028	Refuse Truck	9	0	9
TX	2028	School Bus	387	0	387
TX	2028	Single Unit Long-haul Truck	343	0	343
TX	2028	Single Unit Short-haul Truck	7768	0	7768
TX	2028	Transit Bus	148	0	148
TX	2029	Combination Short-haul Truck	564	0	564
TX	2029	Other Buses	261	0	261
TX	2029	Refuse Truck	52	0	52
TX	2029	School Bus	483	0	483
TX	2029	Single Unit Long-haul Truck	472	0	472
TX	2029	Single Unit Short-haul Truck	10693	0	10693
TX	2029	Transit Bus	179	0	179
TX	2030	Combination Long-haul Truck	400	44	445
TX	2030	Combination Short-haul Truck	680	76	756
TX	2030	Other Buses	307	0	307
TX	2030	Refuse Truck	62	0	62
TX	2030	School Bus	572	0	572
TX	2030	Single Unit Long-haul Truck	565	0	565
TX	2030	Single Unit Short-haul Truck	12793	0	12793
TX	2030	Transit Bus	191	21	212
TX	2031	Combination Long-haul Truck	810	90	900
TX	2031	Combination Short-haul Truck	1201	133	1334
TX	2031	Other Buses	471	0	471
TX	2031	Refuse Truck	96	0	96

State	Model Year	Vehicle Type	BEV	FCEV	Total
TX	2031	School Bus	828	0	828
TX	2031	Single Unit Long-haul Truck	832	0	832
TX	2031	Single Unit Short-haul Truck	18830	0	18830
TX	2031	Transit Bus	222	25	247
TX	2032	Combination Long-haul Truck	1689	188	1877
TX	2032	Combination Short-haul Truck	1714	190	1904
TX	2032	Other Buses	618	0	618
TX	2032	Refuse Truck	126	0	126
TX	2032	School Bus	1079	0	1079
TX	2032	Single Unit Long-haul Truck	1104	0	1104
TX	2032	Single Unit Short-haul Truck	24976	0	24976
TX	2032	Transit Bus	281	31	313
UT	2027	Other Buses	5	0	5
UT	2027	Refuse Truck	1	0	1
UT	2027	School Bus	32	0	32
UT	2027	Single Unit Long-haul Truck	27	0	27
UT	2027	Single Unit Short-haul Truck	619	0	619
UT	2027	Transit Bus	12	0	12
UT	2028	Combination Short-haul Truck	40	0	40
UT	2028	Other Buses	6	0	6
UT	2028	Refuse Truck	1	0	1
UT	2028	School Bus	40	0	40
UT	2028	Single Unit Long-haul Truck	35	0	35
UT	2028	Single Unit Short-haul Truck	793	0	793
UT	2028	Transit Bus	15	0	15
UT	2029	Combination Short-haul Truck	58	0	58
UT	2029	Other Buses	27	0	27
UT	2029	Refuse Truck	5	0	5
UT	2029	School Bus	49	0	49
UT	2029	Single Unit Long-haul Truck	48	0	48
UT	2029	Single Unit Short-haul Truck	1092	0	1092
UT	2029	Transit Bus	18	0	18
UT	2030	Combination Long-haul Truck	46	5	51
UT	2030	Combination Short-haul Truck	70	8	78
UT	2030	Other Buses	32	0	32
UT	2030	Refuse Truck	6	0	6
UT	2030	School Bus	58	0	58
UT	2030	Single Unit Long-haul Truck	57	0	57
UT	2030	Single Unit Short-haul Truck	1306	0	1306
UT	2030	Transit Bus	20	2	22
UT	2031	Combination Long-haul Truck	94	10	104
UT	2031	Combination Short-haul Truck	124	14	138
UT	2031	Other Buses	48	0	48
UT	2031	Refuse Truck	10	0	10
UT	2031	School Bus	85	0	85
UT	2031	Single Unit Long-haul Truck	85	0	85
UT	2031	Single Unit Short-haul Truck	1923	0	1923
UT	2031	Transit Bus	23	3	25
UT	2032	Combination Long-haul Truck	195	22	217
UT	2032	Combination Short-haul Truck	177	20	197
UT	2032	Other Buses	64	0	64

State	Model Year	Vehicle Type	BEV	FCEV	Total
UT	2032	Refuse Truck	13	0	13
UT	2032	School Bus	110	0	110
UT	2032	Single Unit Long-haul Truck	112	0	112
UT	2032	Single Unit Short-haul Truck	2550	0	2550
UT	2032	Transit Bus	29	3	32
VA	2027	Other Buses	15	0	15
VA	2027	Refuse Truck	2	0	2
VA	2027	School Bus	98	0	98
VA	2027	Single Unit Long-haul Truck	83	0	83
VA	2027	Single Unit Short-haul Truck	1892	0	1892
VA	2027	Transit Bus	36	0	36
VA	2028	Combination Short-haul Truck	123	0	123
VA	2028	Other Buses	18	0	18
VA	2028	Refuse Truck	3	0	3
VA	2028	School Bus	121	0	121
VA	2028	Single Unit Long-haul Truck	106	0	106
VA	2028	Single Unit Short-haul Truck	2424	0	2424
VA	2028	Transit Bus	45	0	45
VA	2029	Combination Short-haul Truck	181	0	181
VA	2029	Other Buses	81	0	81
VA	2029	Refuse Truck	16	0	16
VA	2029	School Bus	151	0	151
VA	2029	Single Unit Long-haul Truck	147	0	147
VA	2029	Single Unit Short-haul Truck	3338	0	3338
VA	2029	Transit Bus	55	0	55
VA	2030	Combination Long-haul Truck	140	16	156
VA	2030	Combination Short-haul Truck	219	24	243
VA	2030	Other Buses	95	0	95
VA	2030	Refuse Truck	19	0	19
VA	2030	School Bus	179	0	179
VA	2030	Single Unit Long-haul Truck	175	0	175
VA	2030	Single Unit Short-haul Truck	3993	0	3993
VA	2030	Transit Bus	58	6	65
VA	2031	Combination Long-haul Truck	284	32	315
VA	2031	Combination Short-haul Truck	386	43	429
VA	2031	Other Buses	146	0	146
VA	2031	Refuse Truck	30	0	30
VA	2031	School Bus	259	0	259
VA	2031	Single Unit Long-haul Truck	258	0	258
VA	2031	Single Unit Short-haul Truck	5877	0	5877
VA	2031	Transit Bus	68	8	76
VA	2032	Combination Long-haul Truck	591	66	657
VA	2032	Combination Short-haul Truck	551	61	613
VA	2032	Other Buses	191	0	191
VA	2032	Refuse Truck	39	0	39
VA	2032	School Bus	337	0	337
VA	2032	Single Unit Long-haul Truck	342	0	342
VA	2032	Single Unit Short-haul Truck	7795	0	7795
VA	2032	Transit Bus	86	10	96
VT	2027	Combination Long-haul Truck	44	0	44
VT	2027	Combination Short-haul Truck	26	0	26

State	Model Year	Vehicle Type	BEV	FCEV	Total
VT	2027	Other Buses	10	0	10
VT	2027	Refuse Truck	2	0	2
VT	2027	School Bus	16	0	16
VT	2027	Single Unit Long-haul Truck	12	0	12
VT	2027	Single Unit Short-haul Truck	274	0	274
VT	2027	Transit Bus	3	0	3
VT	2028	Combination Long-haul Truck	57	0	57
VT	2028	Combination Short-haul Truck	33	0	33
VT	2028	Other Buses	15	0	15
VT	2028	Refuse Truck	3	0	3
VT	2028	School Bus	24	0	24
VT	2028	Single Unit Long-haul Truck	18	0	18
VT	2028	Single Unit Short-haul Truck	403	0	403
VT	2028	Transit Bus	4	0	4
VT	2029	Combination Long-haul Truck	71	0	71
VT	2029	Combination Short-haul Truck	41	0	41
VT	2029	Other Buses	21	0	21
VT	2029	Refuse Truck	5	0	5
VT	2029	School Bus	32	0	32
VT	2029	Single Unit Long-haul Truck	23	0	23
VT	2029	Single Unit Short-haul Truck	533	0	533
VT	2029	Transit Bus	5	0	5
VT	2030	Combination Long-haul Truck	77	9	85
VT	2030	Combination Short-haul Truck	45	5	50
VT	2030	Other Buses	26	0	26
VT	2030	Refuse Truck	6	0	6
VT	2030	School Bus	41	0	41
VT	2030	Single Unit Long-haul Truck	29	0	29
VT	2030	Single Unit Short-haul Truck	674	0	674
VT	2030	Transit Bus	5	1	6
VT	2031	Combination Long-haul Truck	90	10	100
VT	2031	Combination Short-haul Truck	53	6	58
VT	2031	Other Buses	30	0	30
VT	2031	Refuse Truck	7	0	7
VT	2031	School Bus	46	0	46
VT	2031	Single Unit Long-haul Truck	34	0	34
VT	2031	Single Unit Short-haul Truck	772	0	772
VT	2031	Transit Bus	6	1	7
VT	2032	Combination Long-haul Truck	103	11	115
VT	2032	Combination Short-haul Truck	60	7	67
VT	2032	Other Buses	33	0	33
VT	2032	Refuse Truck	7	0	7
VT	2032	School Bus	50	0	50
VT	2032	Single Unit Long-haul Truck	38	0	38
VT	2032	Single Unit Short-haul Truck	871	0	871
VT	2032	Transit Bus	8	1	8
WA	2027	Combination Long-haul Truck	280	0	280
WA	2027	Combination Short-haul Truck	162	0	162
WA	2027	Other Buses	78	0	78
WA	2027	Refuse Truck	16	0	16
WA	2027	School Bus	109	0	109

State	Model Year	Vehicle Type	BEV	FCEV	Total
WA	2027	Single Unit Long-haul Truck	84	0	84
WA	2027	Single Unit Short-haul Truck	1911	0	1911
WA	2027	Transit Bus	25	0	25
WA	2028	Combination Long-haul Truck	365	0	365
WA	2028	Combination Short-haul Truck	212	0	212
WA	2028	Other Buses	117	0	117
WA	2028	Refuse Truck	23	0	23
WA	2028	School Bus	164	0	164
WA	2028	Single Unit Long-haul Truck	123	0	123
WA	2028	Single Unit Short-haul Truck	2804	0	2804
WA	2028	Transit Bus	31	0	31
WA	2029	Combination Long-haul Truck	451	0	451
WA	2029	Combination Short-haul Truck	260	0	260
WA	2029	Other Buses	156	0	156
WA	2029	Refuse Truck	32	0	32
WA	2029	School Bus	219	0	219
WA	2029	Single Unit Long-haul Truck	163	0	163
WA	2029	Single Unit Short-haul Truck	3714	0	3714
WA	2029	Transit Bus	38	0	38
WA	2030	Combination Long-haul Truck	487	54	541
WA	2030	Combination Short-haul Truck	283	31	314
WA	2030	Other Buses	199	0	199
WA	2030	Refuse Truck	41	0	41
WA	2030	School Bus	280	0	280
WA	2030	Single Unit Long-haul Truck	206	0	206
WA	2030	Single Unit Short-haul Truck	4692	0	4692
WA	2030	Transit Bus	41	5	45
WA	2031	Combination Long-haul Truck	575	64	639
WA	2031	Combination Short-haul Truck	332	37	369
WA	2031	Other Buses	224	0	224
WA	2031	Refuse Truck	46	0	46
WA	2031	School Bus	316	0	316
WA	2031	Single Unit Long-haul Truck	236	0	236
WA	2031	Single Unit Short-haul Truck	5373	0	5373
WA	2031	Transit Bus	47	5	53
WA	2032	Combination Long-haul Truck	657	73	730
WA	2032	Combination Short-haul Truck	379	42	421
WA	2032	Other Buses	246	0	246
WA	2032	Refuse Truck	51	0	51
WA	2032	School Bus	347	0	347
WA	2032	Single Unit Long-haul Truck	267	0	267
WA	2032	Single Unit Short-haul Truck	6064	0	6064
WA	2032	Transit Bus	60	7	67
WI	2027	Other Buses	12	0	12
WI	2027	Refuse Truck	2	0	2
WI	2027	School Bus	81	0	81
WI	2027	Single Unit Long-haul Truck	68	0	68
WI	2027	Single Unit Short-haul Truck	1560	0	1560
WI	2027	Transit Bus	28	0	28
WI	2028	Combination Short-haul Truck	104	0	104
WI	2028	Other Buses	15	0	15

State	Model Year	Vehicle Type	BEV	FCEV	Total
WI	2028	Refuse Truck	2	0	2
WI	2028	School Bus	100	0	100
WI	2028	Single Unit Long-haul Truck	88	0	88
WI	2028	Single Unit Short-haul Truck	1998	0	1998
WI	2028	Transit Bus	35	0	35
WI	2029	Combination Short-haul Truck	154	0	154
WI	2029	Other Buses	64	0	64
WI	2029	Refuse Truck	13	0	13
WI	2029	School Bus	125	0	125
WI	2029	Single Unit Long-haul Truck	121	0	121
WI	2029	Single Unit Short-haul Truck	2751	0	2751
WI	2029	Transit Bus	43	0	43
WI	2030	Combination Long-haul Truck	113	13	125
WI	2030	Combination Short-haul Truck	186	21	207
WI	2030	Other Buses	75	0	75
WI	2030	Refuse Truck	16	0	16
WI	2030	School Bus	148	0	148
WI	2030	Single Unit Long-haul Truck	144	0	144
WI	2030	Single Unit Short-haul Truck	3291	0	3291
WI	2030	Transit Bus	46	5	51
WI	2031	Combination Long-haul Truck	228	25	253
WI	2031	Combination Short-haul Truck	328	36	365
WI	2031	Other Buses	116	0	116
WI	2031	Refuse Truck	24	0	24
WI	2031	School Bus	214	0	214
WI	2031	Single Unit Long-haul Truck	213	0	213
WI	2031	Single Unit Short-haul Truck	4844	0	4844
WI	2031	Transit Bus	53	6	59
WI	2032	Combination Long-haul Truck	475	53	528
WI	2032	Combination Short-haul Truck	468	52	521
WI	2032	Other Buses	152	0	152
WI	2032	Refuse Truck	32	0	32
WI	2032	School Bus	279	0	279
WI	2032	Single Unit Long-haul Truck	282	0	282
WI	2032	Single Unit Short-haul Truck	6425	0	6425
WI	2032	Transit Bus	67	7	75
WV	2027	Other Buses	4	0	4
WV	2027	Refuse Truck	1	0	1
WV	2027	School Bus	24	0	24
WV	2027	Single Unit Long-haul Truck	20	0	20
WV	2027	Single Unit Short-haul Truck	463	0	463
WV	2027	Transit Bus	8	0	8
WV	2028	Combination Short-haul Truck	31	0	31
WV	2028	Other Buses	4	0	4
WV	2028	Refuse Truck	1	0	1
WV	2028	School Bus	30	0	30
WV	2028	Single Unit Long-haul Truck	26	0	26
WV	2028	Single Unit Short-haul Truck	594	0	594
WV	2028	Transit Bus	10	0	10
WV	2029	Combination Short-haul Truck	46	0	46
WV	2029	Other Buses	19	0	19

State	Model Year	Vehicle Type	BEV	FCEV	Total
WV	2029	Refuse Truck	4	0	4
WV	2029	School Bus	37	0	37
WV	2029	Single Unit Long-haul Truck	36	0	36
WV	2029	Single Unit Short-haul Truck	817	0	817
WV	2029	Transit Bus	13	0	13
WV	2030	Combination Long-haul Truck	35	4	38
WV	2030	Combination Short-haul Truck	56	6	62
WV	2030	Other Buses	22	0	22
WV	2030	Refuse Truck	5	0	5
WV	2030	School Bus	44	0	44
WV	2030	Single Unit Long-haul Truck	43	0	43
WV	2030	Single Unit Short-haul Truck	978	0	978
WV	2030	Transit Bus	14	2	15
WV	2031	Combination Long-haul Truck	70	8	78
WV	2031	Combination Short-haul Truck	98	11	109
WV	2031	Other Buses	34	0	34
WV	2031	Refuse Truck	7	0	7
WV	2031	School Bus	63	0	63
WV	2031	Single Unit Long-haul Truck	63	0	63
WV	2031	Single Unit Short-haul Truck	1439	0	1439
WV	2031	Transit Bus	16	2	18
WV	2032	Combination Long-haul Truck	146	16	162
WV	2032	Combination Short-haul Truck	140	16	156
WV	2032	Other Buses	45	0	45
WV	2032	Refuse Truck	10	0	10
WV	2032	School Bus	83	0	83
WV	2032	Single Unit Long-haul Truck	84	0	84
WV	2032	Single Unit Short-haul Truck	1909	0	1909
WV	2032	Transit Bus	20	2	22
WY	2027	Other Buses	2	0	2
WY	2027	School Bus	12	0	12
WY	2027	Single Unit Long-haul Truck	10	0	10
WY	2027	Single Unit Short-haul Truck	229	0	229
WY	2027	Transit Bus	4	0	4
WY	2028	Combination Short-haul Truck	16	0	16
WY	2028	Other Buses	2	0	2
WY	2028	School Bus	15	0	15
WY	2028	Single Unit Long-haul Truck	13	0	13
WY	2028	Single Unit Short-haul Truck	293	0	293
WY	2028	Transit Bus	5	0	5
WY	2029	Combination Short-haul Truck	24	0	24
WY	2029	Other Buses	9	0	9
WY	2029	Refuse Truck	2	0	2
WY	2029	School Bus	18	0	18
WY	2029	Single Unit Long-haul Truck	17	0	17
WY	2029	Single Unit Short-haul Truck	404	0	404
WY	2029	Transit Bus	6	0	6
WY	2030	Combination Long-haul Truck	22	2	24
WY	2030	Combination Short-haul Truck	29	3	32
WY	2030	Other Buses	11	0	11
WY	2030	Refuse Truck	2	0	2

State	Model Year	Vehicle Type	BEV	FCEV	Total
WY	2030	School Bus	22	0	22
WY	2030	Single Unit Long-haul Truck	21	0	21
WY	2030	Single Unit Short-haul Truck	483	0	483
WY	2030	Transit Bus	6	1	7
WY	2031	Combination Long-haul Truck	44	5	49
WY	2031	Combination Short-haul Truck	51	6	57
WY	2031	Other Buses	17	0	17
WY	2031	Refuse Truck	4	0	4
WY	2031	School Bus	32	0	32
WY	2031	Single Unit Long-haul Truck	31	0	31
WY	2031	Single Unit Short-haul Truck	711	0	711
WY	2031	Transit Bus	8	1	8
WY	2032	Combination Long-haul Truck	91	10	102
WY	2032	Combination Short-haul Truck	73	8	81
WY	2032	Other Buses	22	0	22
WY	2032	Refuse Truck	5	0	5
WY	2032	School Bus	41	0	41
WY	2032	Single Unit Long-haul Truck	41	0	41
WY	2032	Single Unit Short-haul Truck	943	0	943
WY	2032	Transit Bus	10	1	11

Appendix IV: EVI-Pro and EVI-OnDemand Modeling Outputs

State-level L1 & L2 Port Count Summary

State	2025	2030	2035	2040	2045	2050
Alabama	180,121	698,626	1,329,246	1,767,946	1,928,434	2,085,949
Alaska	14,602	55,710	107,994	140,352	163,812	176,999
Arizona	184,676	715,925	1,383,589	1,825,450	2,133,941	2,157,120
Arkansas	109,319	415,313	803,052	995,543	1,161,830	1,255,545
California	1,548,487	4,289,662	8,164,674	11,134,288	12,154,276	13,477,506
Colorado	242,582	679,833	1,313,441	1,799,702	1,989,603	2,178,128
Connecticut	138,321	384,858	738,058	1,022,878	1,131,976	1,157,147
Delaware	29,673	115,017	222,716	293,317	343,002	347,291
Florida	557,316	2,134,920	4,117,063	5,400,782	6,298,319	6,338,701
Georgia	315,392	1,223,850	2,369,653	3,118,041	3,404,316	3,686,169
Hawaii	25,435	96,273	185,171	241,255	281,343	303,706
Idaho	48,151	185,568	357,105	465,595	541,515	583,933
Illinois	301,697	1,159,686	2,246,611	2,965,156	3,467,624	3,506,214
Indiana	202,786	785,812	1,520,572	1,998,656	2,182,086	2,362,191
Iowa	105,831	408,104	787,933	1,029,024	1,121,306	1,212,196
Kansas	94,660	365,633	695,139	925,627	1,009,346	1,092,361
Kentucky	140,199	542,007	1,047,650	1,372,628	1,497,830	1,621,092
Louisiana	147,967	562,832	1,089,902	1,448,635	1,578,660	1,707,286
Maine	67,023	191,363	369,248	479,350	571,766	589,564
Maryland	271,609	747,792	1,483,641	1,911,670	2,120,742	2,337,377
Massachusetts	265,506	733,576	1,409,076	1,957,002	2,170,863	2,222,644
Michigan	307,957	1,195,250	2,286,161	3,057,472	3,349,814	3,630,669
Minnesota	279,193	784,252	1,566,768	2,063,381	2,326,907	2,585,056
Mississippi	112,618	427,450	826,616	1,023,516	1,194,198	1,290,581
Missouri	193,276	748,342	1,428,481	1,904,925	2,081,217	2,253,221
Montana	37,184	142,775	270,220	364,428	395,481	428,677
Nebraska	62,895	242,702	469,003	612,124	713,677	721,139
Nevada	109,090	306,046	600,363	809,493	894,370	979,756
New Hampshire	40,283	153,775	297,099	390,417	455,793	459,978
New Jersey	321,945	890,661	1,706,580	2,369,900	2,626,463	2,687,227
New Mexico	115,488	324,912	636,166	813,856	896,132	983,447
New York	508,698	1,413,560	2,776,228	3,754,167	4,153,147	4,553,750
North Carolina	308,135	1,191,828	2,305,013	3,028,353	3,307,293	3,580,501
North Dakota	30,756	117,731	223,543	301,123	326,316	353,710
Ohio	317,306	1,229,497	2,377,842	3,131,783	3,660,186	3,701,765
Oklahoma	141,926	539,325	1,049,200	1,306,600	1,529,178	1,537,525
Oregon	168,317	479,100	933,323	1,269,615	1,410,771	1,548,592
Pennsylvania	285,507	1,101,867	2,128,341	2,811,482	3,288,558	3,557,948
Rhode Island	37,570	104,107	202,455	278,601	309,010	339,515
South Carolina	170,178	659,569	1,274,744	1,663,909	1,813,808	1,962,166
South Dakota	31,631	121,282	234,926	309,478	335,495	363,558
Tennessee	215,397	835,655	1,616,697	2,120,481	2,314,521	2,505,185
Texas	836,523	3,250,107	6,295,124	8,272,525	9,012,094	9,766,141
Utah	84,312	326,120	629,349	830,518	970,726	1,049,577
Vermont	32,780	91,343	178,019	226,686	247,408	271,296
Virginia	392,161	1,106,631	2,154,536	2,772,385	3,293,102	3,383,137
Washington	274,975	773,240	1,517,973	2,062,401	2,290,307	2,513,644
West Virginia	58,366	225,757	429,792	572,894	625,061	675,507
Wisconsin	197,704	762,284	1,450,675	1,938,051	2,115,356	2,292,618
Wyoming	26,686	101,193	195,697	243,152	283,534	283,358

State-level DCFC Port Count Summary (Passenger LD Only)

State	2025	2030	2035	2040	2045	2050
Alabama	1,816	6,485	11,777	18,819	24,647	28,912
Alaska	270	884	1,863	2,144	2,739	3,179
Arizona	1,571	6,203	12,771	18,921	24,510	28,646
Arkansas	1,271	3,931	6,355	10,374	13,645	16,041
California	8,628	24,648	55,057	89,202	124,222	147,265
Colorado	2,566	7,658	14,024	22,873	30,501	36,189
Connecticut	1,083	3,852	7,924	12,999	17,336	20,607
Delaware	107	442	1,091	1,672	2,295	2,746
Florida	4,606	18,284	37,236	54,292	69,872	81,419
Georgia	3,333	12,420	26,261	36,345	47,158	55,095
Hawaii	204	770	1,603	2,190	2,839	3,325
Idaho	625	2,031	4,365	5,355	6,897	8,039
Illinois	2,857	6,397	13,688	19,012	25,362	29,972
Indiana	2,219	7,825	16,452	21,992	28,598	33,486
Iowa	1,432	4,340	9,654	11,053	14,435	16,931
Kansas	1,083	3,213	4,901	8,116	10,701	12,589
Kentucky	1,542	4,841	10,931	13,144	17,363	20,459
Louisiana	1,332	4,789	8,701	13,812	18,090	21,206
Maine	682	1,797	3,450	5,919	8,106	9,647
Maryland	1,536	5,366	11,775	20,619	28,450	34,239
Massachusetts	2,021	4,853	10,048	17,292	23,637	28,394
Michigan	3,326	12,336	22,747	35,656	46,218	54,078
Minnesota	3,291	9,268	17,996	30,844	42,127	50,518
Mississippi	1,144	3,373	5,444	9,220	12,277	14,493
Missouri	2,836	10,013	17,385	26,739	34,425	40,192
Montana	584	1,560	2,075	3,374	4,529	5,330
Nebraska	950	2,847	6,069	6,786	8,766	10,213
Nevada	943	3,015	6,431	9,402	12,585	14,936
New Hampshire	264	959	2,135	2,998	3,996	4,731
New Jersey	930	3,007	7,894	15,110	21,512	26,274
New Mexico	1,161	2,877	5,295	9,094	12,408	14,828
New York	5,942	21,092	42,507	62,500	81,615	96,152
North Carolina	3,138	11,905	24,948	34,647	44,846	52,394
North Dakota	613	1,754	2,454	3,869	5,100	5,962
Ohio	3,412	13,008	26,355	36,979	47,665	55,694
Oklahoma	1,590	5,066	8,760	14,258	18,752	22,006
Oregon	1,409	4,396	9,695	14,608	19,738	23,530
Pennsylvania	3,402	13,224	26,185	37,320	47,710	55,511
Rhode Island	430	1,644	3,207	4,793	6,225	7,320
South Carolina	1,419	5,335	11,567	15,903	20,866	24,524
South Dakota	571	1,589	3,701	3,471	4,612	5,414
Tennessee	2,443	9,010	18,859	25,531	33,066	38,695
Texas	7,261	27,558	58,546	81,770	106,403	124,572
Utah	953	3,595	7,130	9,958	12,734	14,813
Vermont	383	864	1,503	2,639	3,643	4,332
Virginia	2,725	7,893	16,118	28,647	39,784	47,936
Washington	1,870	4,591	10,607	17,080	23,839	28,806
West Virginia	761	2,411	3,870	6,301	8,207	9,596
Wisconsin	2,077	7,413	13,515	21,240	27,610	32,394
Wyoming	360	1,000	1,484	2,450	3,220	3,763

Appendix V: MDHD Infrastructure Needs Assessment Modeling Results

State-level MDHD EVSE Modeling Summary

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
AK	2027	Depot	DCFC (150 kW)	5	$1,109,637
AK	2027	Depot	DCFC (50 kW)	7	$734,830
AK	2027	Depot	L2 (3-19 kW)	128	$1,686,088
AK	2027	Public	DCFC (350 kW)	3	$1,129,761
AK	2028	Depot	DCFC (150 kW)	5	$1,076,348
AK	2028	Depot	DCFC (50 kW)	7	$712,785
AK	2028	Depot	L2 (3-19 kW)	128	$1,635,505
AK	2028	Public	DCFC (350 kW)	3	$1,095,869
AK	2029	Depot	DCFC (150 kW)	5	$1,044,057
AK	2029	Depot	DCFC (50 kW)	7	$691,401
AK	2029	Depot	L2 (3-19 kW)	128	$1,586,440
AK	2029	Public	DCFC (350 kW)	3	$1,062,993
AK	2030	Depot	DCFC (150 kW)	6	$1,225,943
AK	2030	Depot	DCFC (50 kW)	7	$711,720
AK	2030	Depot	L2 (3-19 kW)	128	$1,538,847
AK	2030	Public	DCFC (350 kW)	7	$2,300,152
AK	2030	Public	MCS (1 MW)	1	$547,263
AK	2031	Depot	DCFC (150 kW)	18	$3,923,018
AK	2031	Depot	DCFC (50 kW)	21	$1,995,553
AK	2031	Depot	L2 (3-19 kW)	333	$3,993,582
AK	2031	Public	DCFC (350 kW)	25	$8,058,464
AK	2031	Public	MCS (1 MW)	2	$985,073
AK	2032	Depot	DCFC (150 kW)	18	$3,923,018
AK	2032	Depot	DCFC (50 kW)	21	$1,995,553
AK	2032	Depot	L2 (3-19 kW)	333	$3,993,582
AK	2032	Public	DCFC (350 kW)	25	$8,058,464
AK	2032	Public	MCS (1 MW)	2	$985,073
AL	2027	Depot	DCFC (150 kW)	57	$13,257,242
AL	2027	Depot	DCFC (50 kW)	82	$8,576,510
AL	2027	Depot	L2 (3-19 kW)	1614	$21,215,736
AL	2027	Public	DCFC (350 kW)	39	$13,557,137
AL	2028	Depot	DCFC (150 kW)	57	$12,859,524
AL	2028	Depot	DCFC (50 kW)	82	$8,319,215
AL	2028	Depot	L2 (3-19 kW)	1614	$20,579,264
AL	2028	Public	DCFC (350 kW)	39	$13,150,423
AL	2029	Depot	DCFC (150 kW)	57	$12,473,739
AL	2029	Depot	DCFC (50 kW)	82	$8,069,639
AL	2029	Depot	L2 (3-19 kW)	1614	$19,961,886
AL	2029	Public	DCFC (350 kW)	39	$12,755,910
AL	2030	Depot	DCFC (150 kW)	67	$14,231,602
AL	2030	Depot	DCFC (50 kW)	86	$8,238,157
AL	2030	Depot	L2 (3-19 kW)	1614	$19,363,029
AL	2030	Public	DCFC (350 kW)	81	$25,698,253
AL	2030	Public	MCS (1 MW)	5	$2,736,313
AL	2031	Depot	DCFC (150 kW)	224	$47,801,125
AL	2031	Depot	DCFC (50 kW)	259	$24,860,921

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
AL	2031	Depot	L2 (3-19 kW)	4191	$50,274,820
AL	2031	Public	DCFC (350 kW)	289	$91,625,375
AL	2031	Public	MCS (1 MW)	20	$10,835,800
AL	2032	Depot	DCFC (150 kW)	224	$47,801,125
AL	2032	Depot	DCFC (50 kW)	259	$24,860,921
AL	2032	Depot	L2 (3-19 kW)	4191	$50,274,820
AL	2032	Public	DCFC (350 kW)	289	$91,625,375
AL	2032	Public	MCS (1 MW)	20	$10,835,800
AR	2027	Depot	DCFC (150 kW)	37	$8,526,684
AR	2027	Depot	DCFC (50 kW)	51	$5,327,514
AR	2027	Depot	L2 (3-19 kW)	1012	$13,304,801
AR	2027	Public	DCFC (350 kW)	25	$8,690,472
AR	2028	Depot	DCFC (150 kW)	37	$8,270,883
AR	2028	Depot	DCFC (50 kW)	51	$5,167,689
AR	2028	Depot	L2 (3-19 kW)	1012	$12,905,657
AR	2028	Public	DCFC (350 kW)	25	$8,429,758
AR	2029	Depot	DCFC (150 kW)	37	$8,022,757
AR	2029	Depot	DCFC (50 kW)	51	$5,012,658
AR	2029	Depot	L2 (3-19 kW)	1012	$12,518,487
AR	2029	Public	DCFC (350 kW)	25	$8,176,865
AR	2030	Depot	DCFC (150 kW)	44	$9,274,527
AR	2030	Depot	DCFC (50 kW)	54	$5,136,017
AR	2030	Depot	L2 (3-19 kW)	1012	$12,142,933
AR	2030	Public	DCFC (350 kW)	53	$16,814,906
AR	2030	Public	MCS (1 MW)	4	$2,189,050
AR	2031	Depot	DCFC (150 kW)	145	$30,872,448
AR	2031	Depot	DCFC (50 kW)	162	$15,488,119
AR	2031	Depot	L2 (3-19 kW)	2628	$31,523,526
AR	2031	Public	DCFC (350 kW)	187	$59,454,969
AR	2031	Public	MCS (1 MW)	13	$7,114,414
AR	2032	Depot	DCFC (150 kW)	145	$30,872,448
AR	2032	Depot	DCFC (50 kW)	162	$15,488,119
AR	2032	Depot	L2 (3-19 kW)	2628	$31,523,526
AR	2032	Public	DCFC (350 kW)	187	$59,454,969
AR	2032	Public	MCS (1 MW)	13	$7,114,414
AZ	2027	Depot	DCFC (150 kW)	54	$12,556,418
AZ	2027	Depot	DCFC (50 kW)	81	$8,476,784
AZ	2027	Depot	L2 (3-19 kW)	1561	$20,511,674
AZ	2027	Public	DCFC (350 kW)	37	$12,948,804
AZ	2028	Depot	DCFC (150 kW)	54	$12,179,726
AZ	2028	Depot	DCFC (50 kW)	81	$8,222,480
AZ	2028	Depot	L2 (3-19 kW)	1561	$19,896,324
AZ	2028	Public	DCFC (350 kW)	37	$12,560,340
AZ	2029	Depot	DCFC (150 kW)	54	$11,814,334
AZ	2029	Depot	DCFC (50 kW)	81	$7,975,806
AZ	2029	Depot	L2 (3-19 kW)	1561	$19,299,434
AZ	2029	Public	DCFC (350 kW)	37	$12,183,529
AZ	2030	Depot	DCFC (150 kW)	64	$13,591,979
AZ	2030	Depot	DCFC (50 kW)	85	$8,138,015
AZ	2030	Depot	L2 (3-19 kW)	1561	$18,720,451
AZ	2030	Public	DCFC (350 kW)	79	$25,143,043

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
AZ	2030	Public	MCS (1 MW)	5	$2,736,313
AZ	2031	Depot	DCFC (150 kW)	211	$44,944,144
AZ	2031	Depot	DCFC (50 kW)	256	$24,545,210
AZ	2031	Depot	L2 (3-19 kW)	4053	$48,618,682
AZ	2031	Public	DCFC (350 kW)	279	$88,643,108
AZ	2031	Public	MCS (1 MW)	19	$10,507,442
AZ	2032	Depot	DCFC (150 kW)	211	$44,944,144
AZ	2032	Depot	DCFC (50 kW)	256	$24,545,210
AZ	2032	Depot	L2 (3-19 kW)	4053	$48,618,682
AZ	2032	Public	DCFC (350 kW)	279	$88,643,108
AZ	2032	Public	MCS (1 MW)	19	$10,507,442
CA	2027	Depot	DCFC (150 kW)	1612	$376,642,488
CA	2027	Depot	DCFC (50 kW)	1630	$171,162,177
CA	2027	Depot	L2 (3-19 kW)	17224	$226,370,421
CA	2027	Public	DCFC (350 kW)	989	$343,934,132
CA	2027	Public	MCS (1 MW)	33	$19,907,589
CA	2028	Depot	DCFC (150 kW)	1612	$365,343,214
CA	2028	Depot	DCFC (50 kW)	1630	$166,027,312
CA	2028	Depot	L2 (3-19 kW)	17224	$219,579,308
CA	2028	Public	DCFC (350 kW)	989	$333,616,108
CA	2028	Public	MCS (1 MW)	33	$19,310,361
CA	2029	Depot	DCFC (150 kW)	1612	$354,382,917
CA	2029	Depot	DCFC (50 kW)	1630	$161,046,493
CA	2029	Depot	L2 (3-19 kW)	17224	$212,991,929
CA	2029	Public	DCFC (350 kW)	989	$323,607,625
CA	2029	Public	MCS (1 MW)	33	$18,731,050
CA	2030	Depot	DCFC (150 kW)	1612	$343,751,430
CA	2030	Depot	DCFC (50 kW)	1630	$156,215,098
CA	2030	Depot	L2 (3-19 kW)	17224	$206,602,171
CA	2030	Public	DCFC (350 kW)	989	$313,899,396
CA	2030	Public	MCS (1 MW)	33	$18,169,119
CA	2031	Depot	DCFC (150 kW)	1275	$271,796,939
CA	2031	Depot	DCFC (50 kW)	2870	$274,960,078
CA	2031	Depot	L2 (3-19 kW)	28893	$346,563,973
CA	2031	Public	DCFC (350 kW)	1596	$506,287,302
CA	2031	Public	MCS (1 MW)	89	$48,706,372
CA	2032	Depot	DCFC (150 kW)	1275	$271,796,939
CA	2032	Depot	DCFC (50 kW)	2870	$274,960,078
CA	2032	Depot	L2 (3-19 kW)	28893	$346,563,973
CA	2032	Public	DCFC (350 kW)	1596	$506,287,302
CA	2032	Public	MCS (1 MW)	89	$48,706,372
CO	2027	Depot	DCFC (150 kW)	136	$31,657,192
CO	2027	Depot	DCFC (50 kW)	163	$17,064,100
CO	2027	Depot	L2 (3-19 kW)	1947	$25,593,422
CO	2027	Public	DCFC (350 kW)	191	$66,395,208
CO	2027	Public	MCS (1 MW)	15	$9,114,318
CO	2028	Depot	DCFC (150 kW)	136	$30,707,476
CO	2028	Depot	DCFC (50 kW)	163	$16,552,177
CO	2028	Depot	L2 (3-19 kW)	1947	$24,825,620
CO	2028	Public	DCFC (350 kW)	191	$64,403,352
CO	2028	Public	MCS (1 MW)	15	$8,840,888

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
CO	2029	Depot	DCFC (150 kW)	136	$29,786,252
CO	2029	Depot	DCFC (50 kW)	163	$16,055,612
CO	2029	Depot	L2 (3-19 kW)	1947	$24,080,851
CO	2029	Public	DCFC (350 kW)	191	$62,471,252
CO	2029	Public	MCS (1 MW)	15	$8,575,661
CO	2030	Depot	DCFC (150 kW)	136	$28,892,664
CO	2030	Depot	DCFC (50 kW)	163	$15,573,944
CO	2030	Depot	L2 (3-19 kW)	1947	$23,358,426
CO	2030	Public	DCFC (350 kW)	191	$60,597,114
CO	2030	Public	MCS (1 MW)	15	$8,318,392
CO	2031	Depot	DCFC (150 kW)	203	$43,238,484
CO	2031	Depot	DCFC (50 kW)	384	$36,785,932
CO	2031	Depot	L2 (3-19 kW)	4558	$54,673,413
CO	2031	Public	DCFC (350 kW)	348	$110,534,212
CO	2031	Public	MCS (1 MW)	26	$14,338,280
CO	2032	Depot	DCFC (150 kW)	203	$43,238,484
CO	2032	Depot	DCFC (50 kW)	384	$36,785,932
CO	2032	Depot	L2 (3-19 kW)	4558	$54,673,413
CO	2032	Public	DCFC (350 kW)	348	$110,534,212
CO	2032	Public	MCS (1 MW)	26	$14,338,280
CT	2027	Depot	DCFC (150 kW)	24	$5,489,783
CT	2027	Depot	DCFC (50 kW)	37	$3,836,860
CT	2027	Depot	L2 (3-19 kW)	693	$9,103,240
CT	2027	Public	DCFC (350 kW)	17	$5,822,616
CT	2028	Depot	DCFC (150 kW)	24	$5,325,089
CT	2028	Depot	DCFC (50 kW)	37	$3,721,754
CT	2028	Depot	L2 (3-19 kW)	693	$8,830,143
CT	2028	Public	DCFC (350 kW)	17	$5,647,938
CT	2029	Depot	DCFC (150 kW)	24	$5,165,337
CT	2029	Depot	DCFC (50 kW)	37	$3,610,102
CT	2029	Depot	L2 (3-19 kW)	693	$8,565,239
CT	2029	Public	DCFC (350 kW)	17	$5,478,500
CT	2030	Depot	DCFC (150 kW)	28	$5,863,207
CT	2030	Depot	DCFC (50 kW)	38	$3,656,917
CT	2030	Depot	L2 (3-19 kW)	693	$8,308,282
CT	2030	Public	DCFC (350 kW)	33	$10,390,343
CT	2030	Public	MCS (1 MW)	2	$1,094,525
CT	2031	Depot	DCFC (150 kW)	89	$18,890,186
CT	2031	Depot	DCFC (50 kW)	114	$10,962,310
CT	2031	Depot	L2 (3-19 kW)	1798	$21,566,131
CT	2031	Public	DCFC (350 kW)	113	$35,914,101
CT	2031	Public	MCS (1 MW)	7	$4,049,743
CT	2032	Depot	DCFC (150 kW)	89	$18,890,186
CT	2032	Depot	DCFC (50 kW)	114	$10,962,310
CT	2032	Depot	L2 (3-19 kW)	1798	$21,566,131
CT	2032	Public	DCFC (350 kW)	113	$35,914,101
CT	2032	Public	MCS (1 MW)	7	$4,049,743
DC	2027	Depot	DCFC (150 kW)	1	$233,608
DC	2027	Depot	DCFC (50 kW)	4	$367,415
DC	2027	Depot	L2 (3-19 kW)	28	$361,982
DC	2027	Public	DCFC (350 kW)	1	$347,619

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
DC	2028	Depot	DCFC (150 kW)	1	$226,600
DC	2028	Depot	DCFC (50 kW)	4	$356,392
DC	2028	Depot	L2 (3-19 kW)	28	$351,122
DC	2028	Public	DCFC (350 kW)	1	$337,190
DC	2029	Depot	DCFC (150 kW)	1	$219,802
DC	2029	Depot	DCFC (50 kW)	4	$345,701
DC	2029	Depot	L2 (3-19 kW)	28	$340,589
DC	2029	Public	DCFC (350 kW)	1	$327,075
DC	2030	Depot	DCFC (150 kW)	2	$426,415
DC	2030	Depot	DCFC (50 kW)	4	$339,892
DC	2030	Depot	L2 (3-19 kW)	28	$330,371
DC	2030	Public	DCFC (350 kW)	2	$634,525
DC	2030	Public	MCS (1 MW)	1	$547,263
DC	2031	Depot	DCFC (150 kW)	3	$554,340
DC	2031	Depot	DCFC (50 kW)	5	$502,766
DC	2031	Depot	L2 (3-19 kW)	70	$838,950
DC	2031	Public	DCFC (350 kW)	3	$951,787
DC	2032	Depot	DCFC (150 kW)	3	$554,340
DC	2032	Depot	DCFC (50 kW)	5	$502,766
DC	2032	Depot	L2 (3-19 kW)	70	$838,950
DC	2032	Public	DCFC (350 kW)	3	$951,787
DE	2027	Depot	DCFC (150 kW)	9	$1,985,666
DE	2027	Depot	DCFC (50 kW)	13	$1,369,932
DE	2027	Depot	L2 (3-19 kW)	246	$3,236,526
DE	2027	Public	DCFC (350 kW)	6	$2,085,713
DE	2028	Depot	DCFC (150 kW)	9	$1,926,096
DE	2028	Depot	DCFC (50 kW)	13	$1,328,834
DE	2028	Depot	L2 (3-19 kW)	246	$3,139,430
DE	2028	Public	DCFC (350 kW)	6	$2,023,142
DE	2029	Depot	DCFC (150 kW)	9	$1,868,313
DE	2029	Depot	DCFC (50 kW)	13	$1,288,969
DE	2029	Depot	L2 (3-19 kW)	246	$3,045,248
DE	2029	Public	DCFC (350 kW)	6	$1,962,448
DE	2030	Depot	DCFC (150 kW)	11	$2,238,679
DE	2030	Depot	DCFC (50 kW)	14	$1,305,048
DE	2030	Depot	L2 (3-19 kW)	246	$2,953,890
DE	2030	Public	DCFC (350 kW)	12	$3,807,149
DE	2030	Public	MCS (1 MW)	1	$547,263
DE	2031	Depot	DCFC (150 kW)	31	$6,694,716
DE	2031	Depot	DCFC (50 kW)	40	$3,829,600
DE	2031	Depot	L2 (3-19 kW)	639	$7,660,049
DE	2031	Public	DCFC (350 kW)	40	$12,563,590
DE	2031	Public	MCS (1 MW)	3	$1,422,883
DE	2032	Depot	DCFC (150 kW)	31	$6,694,716
DE	2032	Depot	DCFC (50 kW)	40	$3,829,600
DE	2032	Depot	L2 (3-19 kW)	639	$7,660,049
DE	2032	Public	DCFC (350 kW)	40	$12,563,590
DE	2032	Public	MCS (1 MW)	3	$1,422,883
FL	2027	Depot	DCFC (150 kW)	149	$34,865,961
FL	2027	Depot	DCFC (50 kW)	236	$24,737,512
FL	2027	Depot	L2 (3-19 kW)	4519	$59,386,412

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
FL	2027	Public	DCFC (350 kW)	106	$36,760,698
FL	2028	Depot	DCFC (150 kW)	149	$33,819,982
FL	2028	Depot	DCFC (50 kW)	236	$23,995,386
FL	2028	Depot	L2 (3-19 kW)	4519	$57,604,819
FL	2028	Public	DCFC (350 kW)	106	$35,657,877
FL	2029	Depot	DCFC (150 kW)	149	$32,805,383
FL	2029	Depot	DCFC (50 kW)	236	$23,275,525
FL	2029	Depot	L2 (3-19 kW)	4519	$55,876,675
FL	2029	Public	DCFC (350 kW)	106	$34,588,141
FL	2030	Depot	DCFC (150 kW)	173	$36,938,202
FL	2030	Depot	DCFC (50 kW)	246	$23,585,529
FL	2030	Depot	L2 (3-19 kW)	4519	$54,200,375
FL	2030	Public	DCFC (350 kW)	210	$66,545,784
FL	2030	Public	MCS (1 MW)	13	$7,114,414
FL	2031	Depot	DCFC (150 kW)	573	$122,082,623
FL	2031	Depot	DCFC (50 kW)	746	$71,484,958
FL	2031	Depot	L2 (3-19 kW)	11737	$140,786,015
FL	2031	Public	DCFC (350 kW)	737	$233,949,277
FL	2031	Public	MCS (1 MW)	48	$26,268,605
FL	2032	Depot	DCFC (150 kW)	573	$122,082,623
FL	2032	Depot	DCFC (50 kW)	746	$71,484,958
FL	2032	Depot	L2 (3-19 kW)	11737	$140,786,015
FL	2032	Public	DCFC (350 kW)	737	$233,949,277
FL	2032	Public	MCS (1 MW)	48	$26,268,605
GA	2027	Depot	DCFC (150 kW)	92	$21,375,112
GA	2027	Depot	DCFC (50 kW)	137	$14,397,410
GA	2027	Depot	L2 (3-19 kW)	2670	$35,086,697
GA	2027	Public	DCFC (350 kW)	64	$22,073,800
GA	2028	Depot	DCFC (150 kW)	92	$20,733,859
GA	2028	Depot	DCFC (50 kW)	137	$13,965,488
GA	2028	Depot	L2 (3-19 kW)	2670	$34,034,096
GA	2028	Public	DCFC (350 kW)	64	$21,411,586
GA	2029	Depot	DCFC (150 kW)	92	$20,111,843
GA	2029	Depot	DCFC (50 kW)	137	$13,546,523
GA	2029	Depot	L2 (3-19 kW)	2670	$33,013,073
GA	2029	Public	DCFC (350 kW)	64	$20,769,238
GA	2030	Depot	DCFC (150 kW)	107	$22,706,600
GA	2030	Depot	DCFC (50 kW)	144	$13,783,413
GA	2030	Depot	L2 (3-19 kW)	2670	$32,022,681
GA	2030	Public	DCFC (350 kW)	130	$41,085,478
GA	2030	Public	MCS (1 MW)	8	$4,378,101
GA	2031	Depot	DCFC (150 kW)	357	$76,157,724
GA	2031	Depot	DCFC (50 kW)	435	$41,630,136
GA	2031	Depot	L2 (3-19 kW)	6934	$83,176,891
GA	2031	Public	DCFC (350 kW)	459	$145,686,884
GA	2031	Public	MCS (1 MW)	31	$16,746,236
GA	2032	Depot	DCFC (150 kW)	357	$76,157,724
GA	2032	Depot	DCFC (50 kW)	435	$41,630,136
GA	2032	Depot	L2 (3-19 kW)	6934	$83,176,891
GA	2032	Public	DCFC (350 kW)	459	$145,686,884
GA	2032	Public	MCS (1 MW)	31	$16,746,236

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
HI	2027	Depot	DCFC (150 kW)	7	$1,635,254
HI	2027	Depot	DCFC (50 kW)	11	$1,149,483
HI	2027	Depot	L2 (3-19 kW)	205	$2,690,174
HI	2027	Public	DCFC (350 kW)	5	$1,824,999
HI	2028	Depot	DCFC (150 kW)	7	$1,586,197
HI	2028	Depot	DCFC (50 kW)	11	$1,114,999
HI	2028	Depot	L2 (3-19 kW)	205	$2,609,469
HI	2028	Public	DCFC (350 kW)	5	$1,770,249
HI	2029	Depot	DCFC (150 kW)	7	$1,538,611
HI	2029	Depot	DCFC (50 kW)	11	$1,081,549
HI	2029	Depot	L2 (3-19 kW)	205	$2,531,185
HI	2029	Public	DCFC (350 kW)	5	$1,717,142
HI	2030	Depot	DCFC (150 kW)	8	$1,705,660
HI	2030	Depot	DCFC (50 kW)	11	$1,090,163
HI	2030	Depot	L2 (3-19 kW)	205	$2,455,249
HI	2030	Public	DCFC (350 kW)	9	$2,934,677
HI	2030	Public	MCS (1 MW)	1	$547,263
HI	2031	Depot	DCFC (150 kW)	25	$5,330,188
HI	2031	Depot	DCFC (50 kW)	33	$3,183,578
HI	2031	Depot	L2 (3-19 kW)	529	$6,349,360
HI	2031	Public	DCFC (350 kW)	30	$9,581,324
HI	2031	Public	MCS (1 MW)	2	$985,073
HI	2032	Depot	DCFC (150 kW)	25	$5,330,188
HI	2032	Depot	DCFC (50 kW)	33	$3,183,578
HI	2032	Depot	L2 (3-19 kW)	529	$6,349,360
HI	2032	Public	DCFC (350 kW)	30	$9,581,324
HI	2032	Public	MCS (1 MW)	2	$985,073
IA	2027	Depot	DCFC (150 kW)	37	$8,643,488
IA	2027	Depot	DCFC (50 kW)	50	$5,264,529
IA	2027	Depot	L2 (3-19 kW)	1020	$13,400,741
IA	2027	Public	DCFC (350 kW)	26	$8,864,282
IA	2028	Depot	DCFC (150 kW)	37	$8,384,183
IA	2028	Depot	DCFC (50 kW)	50	$5,106,593
IA	2028	Depot	L2 (3-19 kW)	1020	$12,998,719
IA	2028	Public	DCFC (350 kW)	26	$8,598,353
IA	2029	Depot	DCFC (150 kW)	37	$8,132,658
IA	2029	Depot	DCFC (50 kW)	50	$4,953,395
IA	2029	Depot	L2 (3-19 kW)	1020	$12,608,757
IA	2029	Public	DCFC (350 kW)	26	$8,340,403
IA	2030	Depot	DCFC (150 kW)	44	$9,381,131
IA	2030	Depot	DCFC (50 kW)	53	$5,087,656
IA	2030	Depot	L2 (3-19 kW)	1020	$12,230,495
IA	2030	Public	DCFC (350 kW)	55	$17,290,800
IA	2030	Public	MCS (1 MW)	4	$2,189,050
IA	2031	Depot	DCFC (150 kW)	149	$31,810,561
IA	2031	Depot	DCFC (50 kW)	162	$15,497,243
IA	2031	Depot	L2 (3-19 kW)	2648	$31,756,225
IA	2031	Public	DCFC (350 kW)	192	$60,977,829
IA	2031	Public	MCS (1 MW)	13	$7,333,319
IA	2032	Depot	DCFC (150 kW)	149	$31,810,561
IA	2032	Depot	DCFC (50 kW)	162	$15,497,243

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
IA	2032	Depot	L2 (3-19 kW)	2648	$31,756,225
IA	2032	Public	DCFC (350 kW)	192	$60,977,829
IA	2032	Public	MCS (1 MW)	13	$7,333,319
ID	2027	Depot	DCFC (150 kW)	17	$3,912,930
ID	2027	Depot	DCFC (50 kW)	24	$2,472,177
ID	2027	Depot	L2 (3-19 kW)	459	$6,030,901
ID	2027	Public	DCFC (350 kW)	12	$3,997,617
ID	2028	Depot	DCFC (150 kW)	17	$3,795,542
ID	2028	Depot	DCFC (50 kW)	24	$2,398,011
ID	2028	Depot	L2 (3-19 kW)	459	$5,849,974
ID	2028	Public	DCFC (350 kW)	12	$3,877,689
ID	2029	Depot	DCFC (150 kW)	17	$3,681,676
ID	2029	Depot	DCFC (50 kW)	24	$2,326,071
ID	2029	Depot	L2 (3-19 kW)	459	$5,674,475
ID	2029	Public	DCFC (350 kW)	12	$3,761,358
ID	2030	Depot	DCFC (150 kW)	21	$4,424,056
ID	2030	Depot	DCFC (50 kW)	25	$2,397,720
ID	2030	Depot	L2 (3-19 kW)	459	$5,504,241
ID	2030	Public	DCFC (350 kW)	27	$8,407,453
ID	2030	Public	MCS (1 MW)	2	$1,094,525
ID	2031	Depot	DCFC (150 kW)	68	$14,498,111
ID	2031	Depot	DCFC (50 kW)	74	$7,058,801
ID	2031	Depot	L2 (3-19 kW)	1190	$14,277,235
ID	2031	Public	DCFC (350 kW)	91	$28,934,329
ID	2031	Public	MCS (1 MW)	7	$3,611,933
ID	2032	Depot	DCFC (150 kW)	68	$14,498,111
ID	2032	Depot	DCFC (50 kW)	74	$7,058,801
ID	2032	Depot	L2 (3-19 kW)	1190	$14,277,235
ID	2032	Public	DCFC (350 kW)	91	$28,934,329
ID	2032	Public	MCS (1 MW)	7	$3,611,933
IL	2027	Depot	DCFC (150 kW)	87	$20,265,475
IL	2027	Depot	DCFC (50 kW)	132	$13,809,547
IL	2027	Depot	L2 (3-19 kW)	2542	$33,414,033
IL	2027	Public	DCFC (350 kW)	61	$21,030,943
IL	2028	Depot	DCFC (150 kW)	87	$19,657,511
IL	2028	Depot	DCFC (50 kW)	132	$13,395,260
IL	2028	Depot	L2 (3-19 kW)	2542	$32,411,612
IL	2028	Public	DCFC (350 kW)	61	$20,400,015
IL	2029	Depot	DCFC (150 kW)	87	$19,067,785
IL	2029	Depot	DCFC (50 kW)	132	$12,993,402
IL	2029	Depot	L2 (3-19 kW)	2542	$31,439,264
IL	2029	Public	DCFC (350 kW)	61	$19,788,014
IL	2030	Depot	DCFC (150 kW)	102	$21,693,865
IL	2030	Depot	DCFC (50 kW)	138	$13,237,761
IL	2030	Depot	L2 (3-19 kW)	2542	$30,496,086
IL	2030	Public	DCFC (350 kW)	126	$39,816,428
IL	2030	Public	MCS (1 MW)	8	$4,378,101
IL	2031	Depot	DCFC (150 kW)	340	$72,490,555
IL	2031	Depot	DCFC (50 kW)	417	$39,934,783
IL	2031	Depot	L2 (3-19 kW)	6603	$79,203,357
IL	2031	Public	DCFC (350 kW)	446	$141,372,115

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
IL	2031	Public	MCS (1 MW)	30	$16,527,331
IL	2032	Depot	DCFC (150 kW)	340	$72,490,555
IL	2032	Depot	DCFC (50 kW)	417	$39,934,783
IL	2032	Depot	L2 (3-19 kW)	6603	$79,203,357
IL	2032	Public	DCFC (350 kW)	446	$141,372,115
IL	2032	Public	MCS (1 MW)	30	$16,527,331
IN	2027	Depot	DCFC (150 kW)	64	$14,834,094
IN	2027	Depot	DCFC (50 kW)	92	$9,642,013
IN	2027	Depot	L2 (3-19 kW)	1806	$23,734,776
IN	2027	Public	DCFC (350 kW)	44	$15,208,327
IN	2028	Depot	DCFC (150 kW)	64	$14,389,071
IN	2028	Depot	DCFC (50 kW)	92	$9,352,753
IN	2028	Depot	L2 (3-19 kW)	1806	$23,022,733
IN	2028	Public	DCFC (350 kW)	44	$14,752,077
IN	2029	Depot	DCFC (150 kW)	64	$13,957,399
IN	2029	Depot	DCFC (50 kW)	92	$9,072,170
IN	2029	Depot	L2 (3-19 kW)	1806	$22,332,051
IN	2029	Public	DCFC (350 kW)	44	$14,309,514
IN	2030	Depot	DCFC (150 kW)	76	$16,097,167
IN	2030	Depot	DCFC (50 kW)	97	$9,279,047
IN	2030	Depot	L2 (3-19 kW)	1806	$21,662,089
IN	2030	Public	DCFC (350 kW)	93	$29,426,085
IN	2030	Public	MCS (1 MW)	6	$3,283,576
IN	2031	Depot	DCFC (150 kW)	252	$53,643,011
IN	2031	Depot	DCFC (50 kW)	292	$28,014,388
IN	2031	Depot	L2 (3-19 kW)	4690	$56,258,682
IN	2031	Public	DCFC (350 kW)	331	$104,886,942
IN	2031	Public	MCS (1 MW)	23	$12,587,040
IN	2032	Depot	DCFC (150 kW)	252	$53,643,011
IN	2032	Depot	DCFC (50 kW)	292	$28,014,388
IN	2032	Depot	L2 (3-19 kW)	4690	$56,258,682
IN	2032	Public	DCFC (350 kW)	331	$104,886,942
IN	2032	Public	MCS (1 MW)	23	$12,587,040
KS	2027	Depot	DCFC (150 kW)	32	$7,475,449
KS	2027	Depot	DCFC (50 kW)	45	$4,671,416
KS	2027	Depot	L2 (3-19 kW)	885	$11,632,794
KS	2027	Public	DCFC (350 kW)	22	$7,647,616
KS	2028	Depot	DCFC (150 kW)	32	$7,251,186
KS	2028	Depot	DCFC (50 kW)	45	$4,531,274
KS	2028	Depot	L2 (3-19 kW)	885	$11,283,811
KS	2028	Public	DCFC (350 kW)	22	$7,418,187
KS	2029	Depot	DCFC (150 kW)	32	$7,033,650
KS	2029	Depot	DCFC (50 kW)	45	$4,395,336
KS	2029	Depot	L2 (3-19 kW)	885	$10,945,296
KS	2029	Public	DCFC (350 kW)	22	$7,195,642
KS	2030	Depot	DCFC (150 kW)	38	$8,101,886
KS	2030	Depot	DCFC (50 kW)	47	$4,518,965
KS	2030	Depot	L2 (3-19 kW)	885	$10,616,937
KS	2030	Public	DCFC (350 kW)	49	$15,545,856
KS	2030	Public	MCS (1 MW)	4	$2,189,050
KS	2031	Depot	DCFC (150 kW)	130	$27,674,335

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
KS	2031	Depot	DCFC (50 kW)	142	$13,611,186
KS	2031	Depot	L2 (3-19 kW)	2298	$27,564,386
KS	2031	Public	DCFC (350 kW)	172	$54,505,676
KS	2031	Public	MCS (1 MW)	12	$6,676,604
KS	2032	Depot	DCFC (150 kW)	130	$27,674,335
KS	2032	Depot	DCFC (50 kW)	142	$13,611,186
KS	2032	Depot	L2 (3-19 kW)	2298	$27,564,386
KS	2032	Public	DCFC (350 kW)	172	$54,505,676
KS	2032	Public	MCS (1 MW)	12	$6,676,604
KY	2027	Depot	DCFC (150 kW)	49	$11,388,379
KY	2027	Depot	DCFC (50 kW)	67	$7,064,861
KY	2027	Depot	L2 (3-19 kW)	1333	$17,516,500
KY	2027	Public	DCFC (350 kW)	33	$11,384,519
KY	2028	Depot	DCFC (150 kW)	49	$11,046,728
KY	2028	Depot	DCFC (50 kW)	67	$6,852,915
KY	2028	Depot	L2 (3-19 kW)	1333	$16,991,005
KY	2028	Public	DCFC (350 kW)	33	$11,042,983
KY	2029	Depot	DCFC (150 kW)	49	$10,715,326
KY	2029	Depot	DCFC (50 kW)	67	$6,647,328
KY	2029	Depot	L2 (3-19 kW)	1333	$16,481,275
KY	2029	Public	DCFC (350 kW)	33	$10,711,694
KY	2030	Depot	DCFC (150 kW)	59	$12,525,941
KY	2030	Depot	DCFC (50 kW)	72	$6,863,078
KY	2030	Depot	L2 (3-19 kW)	1333	$15,986,837
KY	2030	Public	DCFC (350 kW)	76	$24,032,625
KY	2030	Public	MCS (1 MW)	5	$2,736,313
KY	2031	Depot	DCFC (150 kW)	199	$42,513,578
KY	2031	Depot	DCFC (50 kW)	215	$20,573,266
KY	2031	Depot	L2 (3-19 kW)	3460	$41,505,767
KY	2031	Public	DCFC (350 kW)	272	$86,422,272
KY	2031	Public	MCS (1 MW)	20	$10,945,252
KY	2032	Depot	DCFC (150 kW)	199	$42,513,578
KY	2032	Depot	DCFC (50 kW)	215	$20,573,266
KY	2032	Depot	L2 (3-19 kW)	3460	$41,505,767
KY	2032	Public	DCFC (350 kW)	272	$86,422,272
KY	2032	Public	MCS (1 MW)	20	$10,945,252
LA	2027	Depot	DCFC (150 kW)	46	$10,804,360
LA	2027	Depot	DCFC (50 kW)	67	$7,075,359
LA	2027	Depot	L2 (3-19 kW)	1314	$17,268,482
LA	2027	Public	DCFC (350 kW)	32	$11,123,805
LA	2028	Depot	DCFC (150 kW)	46	$10,480,229
LA	2028	Depot	DCFC (50 kW)	67	$6,863,098
LA	2028	Depot	L2 (3-19 kW)	1314	$16,750,428
LA	2028	Public	DCFC (350 kW)	32	$10,790,090
LA	2029	Depot	DCFC (150 kW)	46	$10,165,822
LA	2029	Depot	DCFC (50 kW)	67	$6,657,205
LA	2029	Depot	L2 (3-19 kW)	1314	$16,247,915
LA	2029	Public	DCFC (350 kW)	32	$10,466,388
LA	2030	Depot	DCFC (150 kW)	55	$11,779,715
LA	2030	Depot	DCFC (50 kW)	71	$6,808,786
LA	2030	Depot	L2 (3-19 kW)	1314	$15,760,478

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
LA	2030	Public	DCFC (350 kW)	69	$21,891,104
LA	2030	Public	MCS (1 MW)	5	$2,736,313
LA	2031	Depot	DCFC (150 kW)	184	$39,187,541
LA	2031	Depot	DCFC (50 kW)	213	$20,394,423
LA	2031	Depot	L2 (3-19 kW)	3412	$40,929,160
LA	2031	Public	DCFC (350 kW)	242	$76,840,948
LA	2031	Public	MCS (1 MW)	17	$9,194,012
LA	2032	Depot	DCFC (150 kW)	184	$39,187,541
LA	2032	Depot	DCFC (50 kW)	213	$20,394,423
LA	2032	Depot	L2 (3-19 kW)	3412	$40,929,160
LA	2032	Public	DCFC (350 kW)	242	$76,840,948
LA	2032	Public	MCS (1 MW)	17	$9,194,012
MA	2027	Depot	DCFC (150 kW)	116	$27,191,946
MA	2027	Depot	DCFC (50 kW)	163	$17,135,731
MA	2027	Depot	L2 (3-19 kW)	1856	$24,398,074
MA	2027	Public	DCFC (350 kW)	155	$53,811,405
MA	2027	Public	MCS (1 MW)	11	$6,835,738
MA	2028	Depot	DCFC (150 kW)	116	$26,376,187
MA	2028	Depot	DCFC (50 kW)	163	$16,621,659
MA	2028	Depot	L2 (3-19 kW)	1856	$23,666,132
MA	2028	Public	DCFC (350 kW)	155	$52,197,062
MA	2028	Public	MCS (1 MW)	11	$6,630,666
MA	2029	Depot	DCFC (150 kW)	116	$25,584,902
MA	2029	Depot	DCFC (50 kW)	163	$16,123,009
MA	2029	Depot	L2 (3-19 kW)	1856	$22,956,148
MA	2029	Public	DCFC (350 kW)	155	$50,631,151
MA	2029	Public	MCS (1 MW)	11	$6,431,746
MA	2030	Depot	DCFC (150 kW)	116	$24,817,355
MA	2030	Depot	DCFC (50 kW)	163	$15,639,319
MA	2030	Depot	L2 (3-19 kW)	1856	$22,267,463
MA	2030	Public	DCFC (350 kW)	155	$49,112,216
MA	2030	Public	MCS (1 MW)	11	$6,238,794
MA	2031	Depot	DCFC (150 kW)	172	$36,586,409
MA	2031	Depot	DCFC (50 kW)	394	$37,713,583
MA	2031	Depot	L2 (3-19 kW)	4349	$52,167,065
MA	2031	Public	DCFC (350 kW)	285	$90,483,230
MA	2031	Public	MCS (1 MW)	20	$10,945,252
MA	2032	Depot	DCFC (150 kW)	172	$36,586,409
MA	2032	Depot	DCFC (50 kW)	394	$37,713,583
MA	2032	Depot	L2 (3-19 kW)	4349	$52,167,065
MA	2032	Public	DCFC (350 kW)	285	$90,483,230
MA	2032	Public	MCS (1 MW)	20	$10,945,252
MD	2027	Depot	DCFC (150 kW)	135	$31,523,701
MD	2027	Depot	DCFC (50 kW)	172	$18,065,692
MD	2027	Depot	L2 (3-19 kW)	2036	$26,751,861
MD	2027	Public	DCFC (350 kW)	184	$64,100,924
MD	2027	Public	MCS (1 MW)	14	$8,514,691
MD	2028	Depot	DCFC (150 kW)	135	$30,577,990
MD	2028	Depot	DCFC (50 kW)	172	$17,523,721
MD	2028	Depot	L2 (3-19 kW)	2036	$25,949,305
MD	2028	Public	DCFC (350 kW)	184	$62,177,896

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
MD	2028	Public	MCS (1 MW)	14	$8,259,251
MD	2029	Depot	DCFC (150 kW)	135	$29,660,651
MD	2029	Depot	DCFC (50 kW)	172	$16,998,009
MD	2029	Depot	L2 (3-19 kW)	2036	$25,170,826
MD	2029	Public	DCFC (350 kW)	184	$60,312,559
MD	2029	Public	MCS (1 MW)	14	$8,011,473
MD	2030	Depot	DCFC (150 kW)	135	$28,770,831
MD	2030	Depot	DCFC (50 kW)	172	$16,488,069
MD	2030	Depot	L2 (3-19 kW)	2036	$24,415,701
MD	2030	Public	DCFC (350 kW)	184	$58,503,182
MD	2030	Public	MCS (1 MW)	14	$7,771,129
MD	2031	Depot	DCFC (150 kW)	201	$42,812,069
MD	2031	Depot	DCFC (50 kW)	406	$38,907,244
MD	2031	Depot	L2 (3-19 kW)	4765	$57,152,244
MD	2031	Public	DCFC (350 kW)	338	$107,361,588
MD	2031	Public	MCS (1 MW)	25	$13,462,660
MD	2032	Depot	DCFC (150 kW)	201	$42,812,069
MD	2032	Depot	DCFC (50 kW)	406	$38,907,244
MD	2032	Depot	L2 (3-19 kW)	4765	$57,152,244
MD	2032	Public	DCFC (350 kW)	338	$107,361,588
MD	2032	Public	MCS (1 MW)	25	$13,462,660
ME	2027	Depot	DCFC (150 kW)	16	$3,737,724
ME	2027	Depot	DCFC (50 kW)	22	$2,256,976
ME	2027	Depot	L2 (3-19 kW)	432	$5,679,997
ME	2027	Public	DCFC (350 kW)	11	$3,736,903
ME	2028	Depot	DCFC (150 kW)	16	$3,625,593
ME	2028	Depot	DCFC (50 kW)	22	$2,189,267
ME	2028	Depot	L2 (3-19 kW)	432	$5,509,597
ME	2028	Public	DCFC (350 kW)	11	$3,624,796
ME	2029	Depot	DCFC (150 kW)	16	$3,516,825
ME	2029	Depot	DCFC (50 kW)	22	$2,123,589
ME	2029	Depot	L2 (3-19 kW)	432	$5,344,309
ME	2029	Public	DCFC (350 kW)	11	$3,516,052
ME	2030	Depot	DCFC (150 kW)	19	$4,050,943
ME	2030	Depot	DCFC (50 kW)	23	$2,183,064
ME	2030	Depot	L2 (3-19 kW)	432	$5,183,980
ME	2030	Public	DCFC (350 kW)	24	$7,534,981
ME	2030	Public	MCS (1 MW)	2	$1,094,525
ME	2031	Depot	DCFC (150 kW)	64	$13,602,639
ME	2031	Depot	DCFC (50 kW)	68	$6,523,186
ME	2031	Depot	L2 (3-19 kW)	1121	$13,447,195
ME	2031	Public	DCFC (350 kW)	82	$26,078,967
ME	2031	Public	MCS (1 MW)	6	$3,174,123
ME	2032	Depot	DCFC (150 kW)	64	$13,602,639
ME	2032	Depot	DCFC (50 kW)	68	$6,523,186
ME	2032	Depot	L2 (3-19 kW)	1121	$13,447,195
ME	2032	Public	DCFC (350 kW)	82	$26,078,967
ME	2032	Public	MCS (1 MW)	6	$3,174,123
MI	2027	Depot	DCFC (150 kW)	92	$21,375,112
MI	2027	Depot	DCFC (50 kW)	135	$14,192,708
MI	2027	Depot	L2 (3-19 kW)	2651	$34,840,275

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
MI	2027	Public	DCFC (350 kW)	64	$22,073,800
MI	2028	Depot	DCFC (150 kW)	92	$20,733,859
MI	2028	Depot	DCFC (50 kW)	135	$13,766,926
MI	2028	Depot	L2 (3-19 kW)	2651	$33,795,067
MI	2028	Public	DCFC (350 kW)	64	$21,411,586
MI	2029	Depot	DCFC (150 kW)	92	$20,111,843
MI	2029	Depot	DCFC (50 kW)	135	$13,353,919
MI	2029	Depot	L2 (3-19 kW)	2651	$32,781,215
MI	2029	Public	DCFC (350 kW)	64	$20,769,238
MI	2030	Depot	DCFC (150 kW)	107	$22,706,600
MI	2030	Depot	DCFC (50 kW)	142	$13,596,586
MI	2030	Depot	L2 (3-19 kW)	2651	$31,797,778
MI	2030	Public	DCFC (350 kW)	130	$41,085,478
MI	2030	Public	MCS (1 MW)	8	$4,378,101
MI	2031	Depot	DCFC (150 kW)	359	$76,541,498
MI	2031	Depot	DCFC (50 kW)	429	$41,093,609
MI	2031	Depot	L2 (3-19 kW)	6885	$82,579,550
MI	2031	Public	DCFC (350 kW)	459	$145,750,336
MI	2031	Public	MCS (1 MW)	31	$16,855,688
MI	2032	Depot	DCFC (150 kW)	359	$76,541,498
MI	2032	Depot	DCFC (50 kW)	429	$41,093,609
MI	2032	Depot	L2 (3-19 kW)	6885	$82,579,550
MI	2032	Public	DCFC (350 kW)	459	$145,750,336
MI	2032	Public	MCS (1 MW)	31	$16,855,688
MN	2027	Depot	DCFC (150 kW)	56	$13,140,438
MN	2027	Depot	DCFC (50 kW)	80	$8,424,296
MN	2027	Depot	L2 (3-19 kW)	1593	$20,934,486
MN	2027	Public	DCFC (350 kW)	39	$13,470,232
MN	2028	Depot	DCFC (150 kW)	56	$12,746,225
MN	2028	Depot	DCFC (50 kW)	80	$8,171,567
MN	2028	Depot	L2 (3-19 kW)	1593	$20,306,452
MN	2028	Public	DCFC (350 kW)	39	$13,066,125
MN	2029	Depot	DCFC (150 kW)	56	$12,363,838
MN	2029	Depot	DCFC (50 kW)	80	$7,926,420
MN	2029	Depot	L2 (3-19 kW)	1593	$19,697,258
MN	2029	Public	DCFC (350 kW)	39	$12,674,141
MN	2030	Depot	DCFC (150 kW)	65	$13,911,790
MN	2030	Depot	DCFC (50 kW)	84	$8,076,423
MN	2030	Depot	L2 (3-19 kW)	1593	$19,106,341
MN	2030	Public	DCFC (350 kW)	79	$24,984,412
MN	2030	Public	MCS (1 MW)	5	$2,736,313
MN	2031	Depot	DCFC (150 kW)	221	$47,118,861
MN	2031	Depot	DCFC (50 kW)	254	$24,320,744
MN	2031	Depot	L2 (3-19 kW)	4137	$49,622,303
MN	2031	Public	DCFC (350 kW)	277	$87,881,678
MN	2031	Public	MCS (1 MW)	18	$10,069,632
MN	2032	Depot	DCFC (150 kW)	221	$47,118,861
MN	2032	Depot	DCFC (50 kW)	254	$24,320,744
MN	2032	Depot	L2 (3-19 kW)	4137	$49,622,303
MN	2032	Public	DCFC (350 kW)	277	$87,881,678
MN	2032	Public	MCS (1 MW)	18	$10,069,632

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
MO	2027	Depot	DCFC (150 kW)	66	$15,301,310
MO	2027	Depot	DCFC (50 kW)	91	$9,594,774
MO	2027	Depot	L2 (3-19 kW)	1799	$23,642,778
MO	2027	Public	DCFC (350 kW)	44	$15,295,231
MO	2028	Depot	DCFC (150 kW)	66	$14,842,270
MO	2028	Depot	DCFC (50 kW)	91	$9,306,931
MO	2028	Depot	L2 (3-19 kW)	1799	$22,933,495
MO	2028	Public	DCFC (350 kW)	44	$14,836,374
MO	2029	Depot	DCFC (150 kW)	66	$14,397,002
MO	2029	Depot	DCFC (50 kW)	91	$9,027,723
MO	2029	Depot	L2 (3-19 kW)	1799	$22,245,490
MO	2029	Public	DCFC (350 kW)	44	$14,391,283
MO	2030	Depot	DCFC (150 kW)	80	$16,949,997
MO	2030	Depot	DCFC (50 kW)	97	$9,322,617
MO	2030	Depot	L2 (3-19 kW)	1799	$21,578,126
MO	2030	Public	DCFC (350 kW)	102	$32,360,762
MO	2030	Public	MCS (1 MW)	7	$3,830,838
MO	2031	Depot	DCFC (150 kW)	268	$57,224,897
MO	2031	Depot	DCFC (50 kW)	292	$28,005,263
MO	2031	Depot	L2 (3-19 kW)	4672	$56,040,376
MO	2031	Public	DCFC (350 kW)	368	$116,879,460
MO	2031	Public	MCS (1 MW)	27	$14,776,090
MO	2032	Depot	DCFC (150 kW)	268	$57,224,897
MO	2032	Depot	DCFC (50 kW)	292	$28,005,263
MO	2032	Depot	L2 (3-19 kW)	4672	$56,040,376
MO	2032	Public	DCFC (350 kW)	368	$116,879,460
MO	2032	Public	MCS (1 MW)	27	$14,776,090
MS	2027	Depot	DCFC (150 kW)	39	$9,052,302
MS	2027	Depot	DCFC (50 kW)	53	$5,579,456
MS	2027	Depot	L2 (3-19 kW)	1069	$14,047,352
MS	2027	Public	DCFC (350 kW)	27	$9,211,901
MS	2028	Depot	DCFC (150 kW)	39	$8,780,732
MS	2028	Depot	DCFC (50 kW)	53	$5,412,072
MS	2028	Depot	L2 (3-19 kW)	1069	$13,625,931
MS	2028	Public	DCFC (350 kW)	27	$8,935,544
MS	2029	Depot	DCFC (150 kW)	39	$8,517,310
MS	2029	Depot	DCFC (50 kW)	53	$5,249,710
MS	2029	Depot	L2 (3-19 kW)	1069	$13,217,153
MS	2029	Public	DCFC (350 kW)	27	$8,667,477
MS	2030	Depot	DCFC (150 kW)	46	$9,754,244
MS	2030	Depot	DCFC (50 kW)	56	$5,375,082
MS	2030	Depot	L2 (3-19 kW)	1069	$12,820,639
MS	2030	Public	DCFC (350 kW)	56	$17,608,062
MS	2030	Public	MCS (1 MW)	4	$2,189,050
MS	2031	Depot	DCFC (150 kW)	154	$32,833,957
MS	2031	Depot	DCFC (50 kW)	169	$16,187,064
MS	2031	Depot	L2 (3-19 kW)	2776	$33,291,559
MS	2031	Public	DCFC (350 kW)	196	$62,310,331
MS	2031	Public	MCS (1 MW)	13	$7,333,319
MS	2032	Depot	DCFC (150 kW)	154	$32,833,957
MS	2032	Depot	DCFC (50 kW)	169	$16,187,064

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
MS	2032	Depot	L2 (3-19 kW)	2776	$33,291,559
MS	2032	Public	DCFC (350 kW)	196	$62,310,331
MS	2032	Public	MCS (1 MW)	13	$7,333,319
MT	2027	Depot	DCFC (150 kW)	14	$3,212,107
MT	2027	Depot	DCFC (50 kW)	18	$1,936,801
MT	2027	Depot	L2 (3-19 kW)	367	$4,829,678
MT	2027	Public	DCFC (350 kW)	10	$3,302,379
MT	2028	Depot	DCFC (150 kW)	14	$3,115,744
MT	2028	Depot	DCFC (50 kW)	18	$1,878,697
MT	2028	Depot	L2 (3-19 kW)	367	$4,684,787
MT	2028	Public	DCFC (350 kW)	10	$3,203,308
MT	2029	Depot	DCFC (150 kW)	14	$3,022,271
MT	2029	Depot	DCFC (50 kW)	18	$1,822,336
MT	2029	Depot	L2 (3-19 kW)	367	$4,544,244
MT	2029	Public	DCFC (350 kW)	10	$3,107,209
MT	2030	Depot	DCFC (150 kW)	17	$3,571,226
MT	2030	Depot	DCFC (50 kW)	20	$1,881,723
MT	2030	Depot	L2 (3-19 kW)	367	$4,407,916
MT	2030	Public	DCFC (350 kW)	22	$6,821,141
MT	2030	Public	MCS (1 MW)	2	$1,094,525
MT	2031	Depot	DCFC (150 kW)	56	$12,024,904
MT	2031	Depot	DCFC (50 kW)	58	$5,575,139
MT	2031	Depot	L2 (3-19 kW)	953	$11,434,469
MT	2031	Public	DCFC (350 kW)	75	$23,794,678
MT	2031	Public	MCS (1 MW)	5	$2,955,218
MT	2032	Depot	DCFC (150 kW)	56	$12,024,904
MT	2032	Depot	DCFC (50 kW)	58	$5,575,139
MT	2032	Depot	L2 (3-19 kW)	953	$11,434,469
MT	2032	Public	DCFC (350 kW)	75	$23,794,678
MT	2032	Public	MCS (1 MW)	5	$2,955,218
NC	2027	Depot	DCFC (150 kW)	93	$21,667,122
NC	2027	Depot	DCFC (50 kW)	136	$14,287,186
NC	2027	Depot	L2 (3-19 kW)	2672	$35,119,553
NC	2027	Public	DCFC (350 kW)	64	$22,334,514
NC	2028	Depot	DCFC (150 kW)	93	$21,017,108
NC	2028	Depot	DCFC (50 kW)	136	$13,858,570
NC	2028	Depot	L2 (3-19 kW)	2672	$34,065,966
NC	2028	Public	DCFC (350 kW)	64	$21,664,478
NC	2029	Depot	DCFC (150 kW)	93	$20,386,595
NC	2029	Depot	DCFC (50 kW)	136	$13,442,813
NC	2029	Depot	L2 (3-19 kW)	2672	$33,043,987
NC	2029	Public	DCFC (350 kW)	64	$21,014,544
NC	2030	Depot	DCFC (150 kW)	109	$23,186,317
NC	2030	Depot	DCFC (50 kW)	143	$13,705,625
NC	2030	Depot	L2 (3-19 kW)	2672	$32,052,668
NC	2030	Public	DCFC (350 kW)	133	$42,275,212
NC	2030	Public	MCS (1 MW)	8	$4,378,101
NC	2031	Depot	DCFC (150 kW)	366	$77,948,667
NC	2031	Depot	DCFC (50 kW)	433	$41,480,492
NC	2031	Depot	L2 (3-19 kW)	6940	$83,244,062
NC	2031	Public	DCFC (350 kW)	472	$149,684,390

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
NC	2031	Public	MCS (1 MW)	32	$17,512,403
NC	2032	Depot	DCFC (150 kW)	366	$77,948,667
NC	2032	Depot	DCFC (50 kW)	433	$41,480,492
NC	2032	Depot	L2 (3-19 kW)	6940	$83,244,062
NC	2032	Public	DCFC (350 kW)	472	$149,684,390
NC	2032	Public	MCS (1 MW)	32	$17,512,403
ND	2027	Depot	DCFC (150 kW)	11	$2,628,088
ND	2027	Depot	DCFC (50 kW)	15	$1,569,386
ND	2027	Depot	L2 (3-19 kW)	298	$3,922,564
ND	2027	Public	DCFC (350 kW)	8	$2,607,142
ND	2028	Depot	DCFC (150 kW)	11	$2,549,245
ND	2028	Depot	DCFC (50 kW)	15	$1,522,304
ND	2028	Depot	L2 (3-19 kW)	298	$3,804,887
ND	2028	Public	DCFC (350 kW)	8	$2,528,927
ND	2029	Depot	DCFC (150 kW)	11	$2,472,768
ND	2029	Depot	DCFC (50 kW)	15	$1,476,635
ND	2029	Depot	L2 (3-19 kW)	298	$3,690,741
ND	2029	Public	DCFC (350 kW)	8	$2,453,060
ND	2030	Depot	DCFC (150 kW)	13	$2,825,000
ND	2030	Depot	DCFC (50 kW)	16	$1,519,020
ND	2030	Depot	L2 (3-19 kW)	298	$3,580,018
ND	2030	Public	DCFC (350 kW)	17	$5,234,829
ND	2030	Public	MCS (1 MW)	2	$1,094,525
ND	2031	Depot	DCFC (150 kW)	45	$9,509,055
ND	2031	Depot	DCFC (50 kW)	47	$4,474,710
ND	2031	Depot	L2 (3-19 kW)	774	$9,286,543
ND	2031	Public	DCFC (350 kW)	57	$18,210,860
ND	2031	Public	MCS (1 MW)	4	$2,189,050
ND	2032	Depot	DCFC (150 kW)	45	$9,509,055
ND	2032	Depot	DCFC (50 kW)	47	$4,474,710
ND	2032	Depot	L2 (3-19 kW)	774	$9,286,543
ND	2032	Public	DCFC (350 kW)	57	$18,210,860
ND	2032	Public	MCS (1 MW)	4	$2,189,050
NE	2027	Depot	DCFC (150 kW)	22	$5,197,773
NE	2027	Depot	DCFC (50 kW)	30	$3,180,762
NE	2027	Depot	L2 (3-19 kW)	605	$7,952,615
NE	2027	Public	DCFC (350 kW)	15	$5,301,188
NE	2028	Depot	DCFC (150 kW)	22	$5,041,840
NE	2028	Depot	DCFC (50 kW)	30	$3,085,339
NE	2028	Depot	L2 (3-19 kW)	605	$7,714,037
NE	2028	Public	DCFC (350 kW)	15	$5,142,152
NE	2029	Depot	DCFC (150 kW)	22	$4,890,585
NE	2029	Depot	DCFC (50 kW)	30	$2,992,779
NE	2029	Depot	L2 (3-19 kW)	605	$7,482,616
NE	2029	Public	DCFC (350 kW)	15	$4,987,888
NE	2030	Depot	DCFC (150 kW)	27	$5,809,905
NE	2030	Depot	DCFC (50 kW)	32	$3,085,488
NE	2030	Depot	L2 (3-19 kW)	605	$7,258,137
NE	2030	Public	DCFC (350 kW)	34	$10,866,236
NE	2030	Public	MCS (1 MW)	3	$1,641,788
NE	2031	Depot	DCFC (150 kW)	90	$19,273,959

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
NE	2031	Depot	DCFC (50 kW)	97	$9,265,132
NE	2031	Depot	L2 (3-19 kW)	1570	$18,831,317
NE	2031	Public	DCFC (350 kW)	121	$38,325,295
NE	2031	Public	MCS (1 MW)	9	$4,706,458
NE	2032	Depot	DCFC (150 kW)	90	$19,273,959
NE	2032	Depot	DCFC (50 kW)	97	$9,265,132
NE	2032	Depot	L2 (3-19 kW)	1570	$18,831,317
NE	2032	Public	DCFC (350 kW)	121	$38,325,295
NE	2032	Public	MCS (1 MW)	9	$4,706,458
NH	2027	Depot	DCFC (150 kW)	13	$3,036,901
NH	2027	Depot	DCFC (50 kW)	19	$1,978,791
NH	2027	Depot	L2 (3-19 kW)	366	$4,805,083
NH	2027	Public	DCFC (350 kW)	9	$3,215,475
NH	2028	Depot	DCFC (150 kW)	13	$2,945,794
NH	2028	Depot	DCFC (50 kW)	19	$1,919,427
NH	2028	Depot	L2 (3-19 kW)	366	$4,660,930
NH	2028	Public	DCFC (350 kW)	9	$3,119,011
NH	2029	Depot	DCFC (150 kW)	13	$2,857,420
NH	2029	Depot	DCFC (50 kW)	19	$1,861,844
NH	2029	Depot	L2 (3-19 kW)	366	$4,521,102
NH	2029	Public	DCFC (350 kW)	9	$3,025,440
NH	2030	Depot	DCFC (150 kW)	16	$3,411,320
NH	2030	Depot	DCFC (50 kW)	20	$1,901,798
NH	2030	Depot	L2 (3-19 kW)	366	$4,385,469
NH	2030	Public	DCFC (350 kW)	19	$6,107,301
NH	2030	Public	MCS (1 MW)	2	$1,094,525
NH	2031	Depot	DCFC (150 kW)	51	$10,916,225
NH	2031	Depot	DCFC (50 kW)	59	$5,614,375
NH	2031	Depot	L2 (3-19 kW)	949	$11,378,436
NH	2031	Public	DCFC (350 kW)	66	$20,812,412
NH	2031	Public	MCS (1 MW)	4	$2,407,955
NH	2032	Depot	DCFC (150 kW)	51	$10,916,225
NH	2032	Depot	DCFC (50 kW)	59	$5,614,375
NH	2032	Depot	L2 (3-19 kW)	949	$11,378,436
NH	2032	Public	DCFC (350 kW)	66	$20,812,412
NH	2032	Public	MCS (1 MW)	4	$2,407,955
NJ	2027	Depot	DCFC (150 kW)	145	$33,833,081
NJ	2027	Depot	DCFC (50 kW)	195	$20,501,127
NJ	2027	Depot	L2 (3-19 kW)	2281	$29,979,767
NJ	2027	Public	DCFC (350 kW)	195	$67,855,208
NJ	2027	Public	MCS (1 MW)	15	$8,874,467
NJ	2028	Depot	DCFC (150 kW)	145	$32,818,089
NJ	2028	Depot	DCFC (50 kW)	195	$19,886,093
NJ	2028	Depot	L2 (3-19 kW)	2281	$29,080,374
NJ	2028	Public	DCFC (350 kW)	195	$65,819,552
NJ	2028	Public	MCS (1 MW)	15	$8,608,233
NJ	2029	Depot	DCFC (150 kW)	145	$31,833,546
NJ	2029	Depot	DCFC (50 kW)	195	$19,289,510
NJ	2029	Depot	L2 (3-19 kW)	2281	$28,207,963
NJ	2029	Public	DCFC (350 kW)	195	$63,844,965
NJ	2029	Public	MCS (1 MW)	15	$8,349,986

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
NJ	2030	Depot	DCFC (150 kW)	145	$30,878,540
NJ	2030	Depot	DCFC (50 kW)	195	$18,710,825
NJ	2030	Depot	L2 (3-19 kW)	2281	$27,361,724
NJ	2030	Public	DCFC (350 kW)	195	$61,929,616
NJ	2030	Public	MCS (1 MW)	15	$8,099,487
NJ	2031	Depot	DCFC (150 kW)	214	$45,669,050
NJ	2031	Depot	DCFC (50 kW)	461	$44,215,031
NJ	2031	Depot	L2 (3-19 kW)	5340	$64,047,982
NJ	2031	Public	DCFC (350 kW)	358	$113,643,384
NJ	2031	Public	MCS (1 MW)	25	$13,791,018
NJ	2032	Depot	DCFC (150 kW)	214	$45,669,050
NJ	2032	Depot	DCFC (50 kW)	461	$44,215,031
NJ	2032	Depot	L2 (3-19 kW)	5340	$64,047,982
NJ	2032	Public	DCFC (350 kW)	358	$113,643,384
NJ	2032	Public	MCS (1 MW)	25	$13,791,018
NM	2027	Depot	DCFC (150 kW)	77	$18,101,266
NM	2027	Depot	DCFC (50 kW)	86	$8,989,621
NM	2027	Depot	L2 (3-19 kW)	1045	$13,729,000
NM	2027	Public	DCFC (350 kW)	113	$39,419,982
NM	2027	Public	MCS (1 MW)	9	$5,636,486
NM	2028	Depot	DCFC (150 kW)	77	$17,558,228
NM	2028	Depot	DCFC (50 kW)	86	$8,719,932
NM	2028	Depot	L2 (3-19 kW)	1045	$13,317,130
NM	2028	Public	DCFC (350 kW)	113	$38,237,383
NM	2028	Public	MCS (1 MW)	9	$5,467,391
NM	2029	Depot	DCFC (150 kW)	77	$17,031,481
NM	2029	Depot	DCFC (50 kW)	86	$8,458,334
NM	2029	Depot	L2 (3-19 kW)	1045	$12,917,616
NM	2029	Public	DCFC (350 kW)	113	$37,090,261
NM	2029	Public	MCS (1 MW)	9	$5,303,370
NM	2030	Depot	DCFC (150 kW)	77	$16,520,537
NM	2030	Depot	DCFC (50 kW)	86	$8,204,584
NM	2030	Depot	L2 (3-19 kW)	1045	$12,530,087
NM	2030	Public	DCFC (350 kW)	113	$35,977,554
NM	2030	Public	MCS (1 MW)	9	$5,144,269
NM	2031	Depot	DCFC (150 kW)	117	$24,945,279
NM	2031	Depot	DCFC (50 kW)	202	$19,395,010
NM	2031	Depot	L2 (3-19 kW)	2445	$29,321,775
NM	2031	Public	DCFC (350 kW)	205	$65,165,692
NM	2031	Public	MCS (1 MW)	16	$8,756,202
NM	2032	Depot	DCFC (150 kW)	117	$24,945,279
NM	2032	Depot	DCFC (50 kW)	202	$19,395,010
NM	2032	Depot	L2 (3-19 kW)	2445	$29,321,775
NM	2032	Public	DCFC (350 kW)	205	$65,165,692
NM	2032	Public	MCS (1 MW)	16	$8,756,202
NV	2027	Depot	DCFC (150 kW)	20	$4,672,156
NV	2027	Depot	DCFC (50 kW)	31	$3,217,504
NV	2027	Depot	L2 (3-19 kW)	580	$7,625,086
NV	2027	Public	DCFC (350 kW)	14	$4,866,664
NV	2028	Depot	DCFC (150 kW)	20	$4,531,991
NV	2028	Depot	DCFC (50 kW)	31	$3,120,979

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
NV	2028	Depot	L2 (3-19 kW)	580	$7,396,333
NV	2028	Public	DCFC (350 kW)	14	$4,720,665
NV	2029	Depot	DCFC (150 kW)	20	$4,396,031
NV	2029	Depot	DCFC (50 kW)	31	$3,027,349
NV	2029	Depot	L2 (3-19 kW)	580	$7,174,443
NV	2029	Public	DCFC (350 kW)	14	$4,579,045
NV	2030	Depot	DCFC (150 kW)	24	$5,116,980
NV	2030	Depot	DCFC (50 kW)	32	$3,082,522
NV	2030	Depot	L2 (3-19 kW)	580	$6,959,210
NV	2030	Public	DCFC (350 kW)	29	$9,200,609
NV	2030	Public	MCS (1 MW)	2	$1,094,525
NV	2031	Depot	DCFC (150 kW)	77	$16,459,620
NV	2031	Depot	DCFC (50 kW)	95	$9,113,664
NV	2031	Depot	L2 (3-19 kW)	1505	$18,053,197
NV	2031	Public	DCFC (350 kW)	102	$32,360,762
NV	2031	Public	MCS (1 MW)	7	$3,830,838
NV	2032	Depot	DCFC (150 kW)	77	$16,459,620
NV	2032	Depot	DCFC (50 kW)	95	$9,113,664
NV	2032	Depot	L2 (3-19 kW)	1505	$18,053,197
NV	2032	Public	DCFC (350 kW)	102	$32,360,762
NV	2032	Public	MCS (1 MW)	7	$3,830,838
NY	2027	Depot	DCFC (150 kW)	259	$60,584,509
NY	2027	Depot	DCFC (50 kW)	327	$34,304,807
NY	2027	Depot	L2 (3-19 kW)	3872	$50,885,981
NY	2027	Public	DCFC (350 kW)	360	$125,003,754
NY	2027	Public	MCS (1 MW)	28	$16,789,533
NY	2028	Depot	DCFC (150 kW)	259	$58,766,974
NY	2028	Depot	DCFC (50 kW)	327	$33,275,663
NY	2028	Depot	L2 (3-19 kW)	3872	$49,359,402
NY	2028	Public	DCFC (350 kW)	360	$121,253,641
NY	2028	Public	MCS (1 MW)	28	$16,285,847
NY	2029	Depot	DCFC (150 kW)	259	$57,003,965
NY	2029	Depot	DCFC (50 kW)	327	$32,277,393
NY	2029	Depot	L2 (3-19 kW)	3872	$47,878,619
NY	2029	Public	DCFC (350 kW)	360	$117,616,032
NY	2029	Public	MCS (1 MW)	28	$15,797,271
NY	2030	Depot	DCFC (150 kW)	259	$55,293,846
NY	2030	Depot	DCFC (50 kW)	327	$31,309,071
NY	2030	Depot	L2 (3-19 kW)	3872	$46,442,261
NY	2030	Public	DCFC (350 kW)	360	$114,087,551
NY	2030	Public	MCS (1 MW)	28	$15,323,353
NY	2031	Depot	DCFC (150 kW)	387	$82,468,667
NY	2031	Depot	DCFC (50 kW)	772	$73,924,665
NY	2031	Depot	L2 (3-19 kW)	9063	$108,713,077
NY	2031	Public	DCFC (350 kW)	658	$208,631,739
NY	2031	Public	MCS (1 MW)	48	$26,378,058
NY	2032	Depot	DCFC (150 kW)	387	$82,468,667
NY	2032	Depot	DCFC (50 kW)	772	$73,924,665
NY	2032	Depot	L2 (3-19 kW)	9063	$108,713,077
NY	2032	Public	DCFC (350 kW)	658	$208,631,739
NY	2032	Public	MCS (1 MW)	48	$26,378,058

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
OH	2027	Depot	DCFC (150 kW)	96	$22,426,347
OH	2027	Depot	DCFC (50 kW)	141	$14,817,313
OH	2027	Depot	L2 (3-19 kW)	2759	$36,256,003
OH	2027	Public	DCFC (350 kW)	66	$23,029,752
OH	2028	Depot	DCFC (150 kW)	96	$21,753,557
OH	2028	Depot	DCFC (50 kW)	141	$14,372,793
OH	2028	Depot	L2 (3-19 kW)	2759	$35,168,323
OH	2028	Public	DCFC (350 kW)	66	$22,338,859
OH	2029	Depot	DCFC (150 kW)	96	$21,100,950
OH	2029	Depot	DCFC (50 kW)	141	$13,941,610
OH	2029	Depot	L2 (3-19 kW)	2759	$34,113,273
OH	2029	Public	DCFC (350 kW)	66	$21,668,693
OH	2030	Depot	DCFC (150 kW)	113	$24,092,449
OH	2030	Depot	DCFC (50 kW)	149	$14,239,643
OH	2030	Depot	L2 (3-19 kW)	2759	$33,089,875
OH	2030	Public	DCFC (350 kW)	140	$44,496,048
OH	2030	Public	MCS (1 MW)	9	$4,925,363
OH	2031	Depot	DCFC (150 kW)	381	$81,189,421
OH	2031	Depot	DCFC (50 kW)	449	$43,006,128
OH	2031	Depot	L2 (3-19 kW)	7165	$85,946,147
OH	2031	Public	DCFC (350 kW)	499	$158,377,379
OH	2031	Public	MCS (1 MW)	34	$18,825,834
OH	2032	Depot	DCFC (150 kW)	381	$81,189,421
OH	2032	Depot	DCFC (50 kW)	449	$43,006,128
OH	2032	Depot	L2 (3-19 kW)	7165	$85,946,147
OH	2032	Public	DCFC (350 kW)	499	$158,377,379
OH	2032	Public	MCS (1 MW)	34	$18,825,834
OK	2027	Depot	DCFC (150 kW)	48	$11,096,370
OK	2027	Depot	DCFC (50 kW)	66	$6,944,139
OK	2027	Depot	L2 (3-19 kW)	1322	$17,375,218
OK	2027	Public	DCFC (350 kW)	33	$11,297,614
OK	2028	Depot	DCFC (150 kW)	48	$10,763,479
OK	2028	Depot	DCFC (50 kW)	66	$6,735,815
OK	2028	Depot	L2 (3-19 kW)	1322	$16,853,962
OK	2028	Public	DCFC (350 kW)	33	$10,958,686
OK	2029	Depot	DCFC (150 kW)	48	$10,440,574
OK	2029	Depot	DCFC (50 kW)	66	$6,533,741
OK	2029	Depot	L2 (3-19 kW)	1322	$16,348,343
OK	2029	Public	DCFC (350 kW)	33	$10,629,925
OK	2030	Depot	DCFC (150 kW)	57	$12,046,225
OK	2030	Depot	DCFC (50 kW)	70	$6,689,026
OK	2030	Depot	L2 (3-19 kW)	1322	$15,857,893
OK	2030	Public	DCFC (350 kW)	69	$21,732,473
OK	2030	Public	MCS (1 MW)	5	$2,736,313
OK	2031	Depot	DCFC (150 kW)	189	$40,381,503
OK	2031	Depot	DCFC (50 kW)	210	$20,145,321
OK	2031	Depot	L2 (3-19 kW)	3434	$41,184,306
OK	2031	Public	DCFC (350 kW)	243	$77,221,663
OK	2031	Public	MCS (1 MW)	17	$9,084,559
OK	2032	Depot	DCFC (150 kW)	189	$40,381,503
OK	2032	Depot	DCFC (50 kW)	210	$20,145,321

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
OK	2032	Depot	L2 (3-19 kW)	3434	$41,184,306
OK	2032	Public	DCFC (350 kW)	243	$77,221,663
OK	2032	Public	MCS (1 MW)	17	$9,084,559
OR	2027	Depot	DCFC (150 kW)	98	$22,893,563
OR	2027	Depot	DCFC (50 kW)	116	$12,138,890
OR	2027	Depot	L2 (3-19 kW)	1399	$18,388,377
OR	2027	Public	DCFC (350 kW)	137	$47,762,836
OR	2027	Public	MCS (1 MW)	11	$6,595,888
OR	2028	Depot	DCFC (150 kW)	98	$22,206,756
OR	2028	Depot	DCFC (50 kW)	116	$11,774,723
OR	2028	Depot	L2 (3-19 kW)	1399	$17,836,726
OR	2028	Public	DCFC (350 kW)	137	$46,329,951
OR	2028	Public	MCS (1 MW)	11	$6,398,011
OR	2029	Depot	DCFC (150 kW)	98	$21,540,553
OR	2029	Depot	DCFC (50 kW)	116	$11,421,482
OR	2029	Depot	L2 (3-19 kW)	1399	$17,301,624
OR	2029	Public	DCFC (350 kW)	137	$44,940,052
OR	2029	Public	MCS (1 MW)	11	$6,206,071
OR	2030	Depot	DCFC (150 kW)	98	$20,894,336
OR	2030	Depot	DCFC (50 kW)	116	$11,078,837
OR	2030	Depot	L2 (3-19 kW)	1399	$16,782,575
OR	2030	Public	DCFC (350 kW)	137	$43,591,851
OR	2030	Public	MCS (1 MW)	11	$6,019,889
OR	2031	Depot	DCFC (150 kW)	147	$31,341,505
OR	2031	Depot	DCFC (50 kW)	274	$26,235,732
OR	2031	Depot	L2 (3-19 kW)	3274	$39,271,106
OR	2031	Public	DCFC (350 kW)	251	$79,632,857
OR	2031	Public	MCS (1 MW)	19	$10,288,537
OR	2032	Depot	DCFC (150 kW)	147	$31,341,505
OR	2032	Depot	DCFC (50 kW)	274	$26,235,732
OR	2032	Depot	L2 (3-19 kW)	3274	$39,271,106
OR	2032	Public	DCFC (350 kW)	251	$79,632,857
OR	2032	Public	MCS (1 MW)	19	$10,288,537
PA	2027	Depot	DCFC (150 kW)	88	$20,440,681
PA	2027	Depot	DCFC (50 kW)	128	$13,436,883
PA	2027	Depot	L2 (3-19 kW)	2498	$32,823,935
PA	2027	Public	DCFC (350 kW)	60	$20,857,134
PA	2028	Depot	DCFC (150 kW)	88	$19,827,460
PA	2028	Depot	DCFC (50 kW)	128	$13,033,777
PA	2028	Depot	L2 (3-19 kW)	2498	$31,839,217
PA	2028	Public	DCFC (350 kW)	60	$20,231,420
PA	2029	Depot	DCFC (150 kW)	88	$19,232,637
PA	2029	Depot	DCFC (50 kW)	128	$12,642,763
PA	2029	Depot	L2 (3-19 kW)	2498	$30,884,040
PA	2029	Public	DCFC (350 kW)	60	$19,624,477
PA	2030	Depot	DCFC (150 kW)	104	$22,066,978
PA	2030	Depot	DCFC (50 kW)	135	$12,947,826
PA	2030	Depot	L2 (3-19 kW)	2498	$29,957,519
PA	2030	Public	DCFC (350 kW)	131	$41,561,371
PA	2030	Public	MCS (1 MW)	9	$4,925,363
PA	2031	Depot	DCFC (150 kW)	349	$74,452,064

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
PA	2031	Depot	DCFC (50 kW)	407	$38,988,560
PA	2031	Depot	L2 (3-19 kW)	6486	$77,802,365
PA	2031	Public	DCFC (350 kW)	466	$147,844,268
PA	2031	Public	MCS (1 MW)	33	$17,840,761
PA	2032	Depot	DCFC (150 kW)	349	$74,452,064
PA	2032	Depot	DCFC (50 kW)	407	$38,988,560
PA	2032	Depot	L2 (3-19 kW)	6486	$77,802,365
PA	2032	Public	DCFC (350 kW)	466	$147,844,268
PA	2032	Public	MCS (1 MW)	33	$17,840,761
RI	2027	Depot	DCFC (150 kW)	18	$4,251,662
RI	2027	Depot	DCFC (50 kW)	24	$2,504,595
RI	2027	Depot	L2 (3-19 kW)	276	$3,625,273
RI	2027	Public	DCFC (350 kW)	25	$8,620,949
RI	2027	Public	MCS (1 MW)	2	$1,079,327
RI	2028	Depot	DCFC (150 kW)	18	$4,124,112
RI	2028	Depot	DCFC (50 kW)	24	$2,429,458
RI	2028	Depot	L2 (3-19 kW)	276	$3,516,515
RI	2028	Public	DCFC (350 kW)	25	$8,362,320
RI	2028	Public	MCS (1 MW)	2	$1,046,947
RI	2029	Depot	DCFC (150 kW)	18	$4,000,388
RI	2029	Depot	DCFC (50 kW)	24	$2,356,574
RI	2029	Depot	L2 (3-19 kW)	276	$3,411,020
RI	2029	Public	DCFC (350 kW)	25	$8,111,450
RI	2029	Public	MCS (1 MW)	2	$1,015,539
RI	2030	Depot	DCFC (150 kW)	18	$3,880,377
RI	2030	Depot	DCFC (50 kW)	24	$2,285,877
RI	2030	Depot	L2 (3-19 kW)	276	$3,308,689
RI	2030	Public	DCFC (350 kW)	25	$7,868,107
RI	2030	Public	MCS (1 MW)	2	$985,073
RI	2031	Depot	DCFC (150 kW)	27	$5,713,961
RI	2031	Depot	DCFC (50 kW)	55	$5,294,262
RI	2031	Depot	L2 (3-19 kW)	646	$7,745,393
RI	2031	Public	DCFC (350 kW)	46	$14,530,617
RI	2031	Public	MCS (1 MW)	3	$1,860,693
RI	2032	Depot	DCFC (150 kW)	27	$5,713,961
RI	2032	Depot	DCFC (50 kW)	55	$5,294,262
RI	2032	Depot	L2 (3-19 kW)	646	$7,745,393
RI	2032	Public	DCFC (350 kW)	46	$14,530,617
RI	2032	Public	MCS (1 MW)	3	$1,860,693
SC	2027	Depot	DCFC (150 kW)	56	$13,023,634
SC	2027	Depot	DCFC (50 kW)	79	$8,282,579
SC	2027	Depot	L2 (3-19 kW)	1564	$20,549,411
SC	2027	Public	DCFC (350 kW)	38	$13,209,518
SC	2028	Depot	DCFC (150 kW)	56	$12,632,925
SC	2028	Depot	DCFC (50 kW)	79	$8,034,101
SC	2028	Depot	L2 (3-19 kW)	1564	$19,932,929
SC	2028	Public	DCFC (350 kW)	38	$12,813,232
SC	2029	Depot	DCFC (150 kW)	56	$12,253,937
SC	2029	Depot	DCFC (50 kW)	79	$7,793,078
SC	2029	Depot	L2 (3-19 kW)	1564	$19,334,941
SC	2029	Public	DCFC (350 kW)	38	$12,428,835

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
SC	2030	Depot	DCFC (150 kW)	67	$14,231,602
SC	2030	Depot	DCFC (50 kW)	83	$7,992,705
SC	2030	Depot	L2 (3-19 kW)	1564	$18,754,893
SC	2030	Public	DCFC (350 kW)	83	$26,332,777
SC	2030	Public	MCS (1 MW)	6	$3,283,576
SC	2031	Depot	DCFC (150 kW)	223	$47,587,917
SC	2031	Depot	DCFC (50 kW)	252	$24,155,589
SC	2031	Depot	L2 (3-19 kW)	4060	$48,698,704
SC	2031	Public	DCFC (350 kW)	295	$93,655,854
SC	2031	Public	MCS (1 MW)	21	$11,273,610
SC	2032	Depot	DCFC (150 kW)	223	$47,587,917
SC	2032	Depot	DCFC (50 kW)	252	$24,155,589
SC	2032	Depot	L2 (3-19 kW)	4060	$48,698,704
SC	2032	Public	DCFC (350 kW)	295	$93,655,854
SC	2032	Public	MCS (1 MW)	21	$11,273,610
SD	2027	Depot	DCFC (150 kW)	12	$2,803,293
SD	2027	Depot	DCFC (50 kW)	16	$1,642,869
SD	2027	Depot	L2 (3-19 kW)	315	$4,139,415
SD	2027	Public	DCFC (350 kW)	8	$2,780,951
SD	2028	Depot	DCFC (150 kW)	12	$2,719,195
SD	2028	Depot	DCFC (50 kW)	16	$1,593,583
SD	2028	Depot	L2 (3-19 kW)	315	$4,015,233
SD	2028	Public	DCFC (350 kW)	8	$2,697,523
SD	2029	Depot	DCFC (150 kW)	12	$2,637,619
SD	2029	Depot	DCFC (50 kW)	16	$1,545,775
SD	2029	Depot	L2 (3-19 kW)	315	$3,894,776
SD	2029	Public	DCFC (350 kW)	8	$2,616,597
SD	2030	Depot	DCFC (150 kW)	15	$3,198,113
SD	2030	Depot	DCFC (50 kW)	17	$1,604,335
SD	2030	Depot	L2 (3-19 kW)	315	$3,777,933
SD	2030	Public	DCFC (350 kW)	19	$6,027,985
SD	2030	Public	MCS (1 MW)	2	$1,094,525
SD	2031	Depot	DCFC (150 kW)	49	$10,404,527
SD	2031	Depot	DCFC (50 kW)	50	$4,818,708
SD	2031	Depot	L2 (3-19 kW)	817	$9,795,122
SD	2031	Public	DCFC (350 kW)	67	$21,129,674
SD	2031	Public	MCS (1 MW)	5	$2,626,861
SD	2032	Depot	DCFC (150 kW)	49	$10,404,527
SD	2032	Depot	DCFC (50 kW)	50	$4,818,708
SD	2032	Depot	L2 (3-19 kW)	817	$9,795,122
SD	2032	Public	DCFC (350 kW)	67	$21,129,674
SD	2032	Public	MCS (1 MW)	5	$2,626,861
TN	2027	Depot	DCFC (150 kW)	66	$15,301,310
TN	2027	Depot	DCFC (50 kW)	96	$10,119,653
TN	2027	Depot	L2 (3-19 kW)	1878	$24,676,435
TN	2027	Public	DCFC (350 kW)	45	$15,729,755
TN	2028	Depot	DCFC (150 kW)	66	$14,842,270
TN	2028	Depot	DCFC (50 kW)	96	$9,816,063
TN	2028	Depot	L2 (3-19 kW)	1878	$23,936,142
TN	2028	Public	DCFC (350 kW)	45	$15,257,862
TN	2029	Depot	DCFC (150 kW)	66	$14,397,002

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
TN	2029	Depot	DCFC (50 kW)	96	$9,521,581
TN	2029	Depot	L2 (3-19 kW)	1878	$23,218,058
TN	2029	Public	DCFC (350 kW)	45	$14,800,126
TN	2030	Depot	DCFC (150 kW)	78	$16,523,582
TN	2030	Depot	DCFC (50 kW)	102	$9,733,225
TN	2030	Depot	L2 (3-19 kW)	1878	$22,521,516
TN	2030	Public	DCFC (350 kW)	96	$30,536,504
TN	2030	Public	MCS (1 MW)	6	$3,283,576
TN	2031	Depot	DCFC (150 kW)	260	$55,348,671
TN	2031	Depot	DCFC (50 kW)	305	$29,258,985
TN	2031	Depot	L2 (3-19 kW)	4876	$58,492,113
TN	2031	Public	DCFC (350 kW)	342	$108,503,733
TN	2031	Public	MCS (1 MW)	24	$13,024,850
TN	2032	Depot	DCFC (150 kW)	260	$55,348,671
TN	2032	Depot	DCFC (50 kW)	305	$29,258,985
TN	2032	Depot	L2 (3-19 kW)	4876	$58,492,113
TN	2032	Public	DCFC (350 kW)	342	$108,503,733
TN	2032	Public	MCS (1 MW)	24	$13,024,850
TX	2027	Depot	DCFC (150 kW)	246	$57,409,112
TX	2027	Depot	DCFC (50 kW)	365	$38,321,360
TX	2027	Depot	L2 (3-19 kW)	7151	$93,976,322
TX	2027	Public	DCFC (350 kW)	171	$59,269,021
TX	2028	Depot	DCFC (150 kW)	246	$55,686,839
TX	2028	Depot	DCFC (50 kW)	365	$37,171,720
TX	2028	Depot	L2 (3-19 kW)	7151	$91,157,032
TX	2028	Public	DCFC (350 kW)	171	$57,490,950
TX	2029	Depot	DCFC (150 kW)	246	$54,016,234
TX	2029	Depot	DCFC (50 kW)	365	$36,056,568
TX	2029	Depot	L2 (3-19 kW)	7151	$88,422,321
TX	2029	Public	DCFC (350 kW)	171	$55,766,222
TX	2030	Depot	DCFC (150 kW)	286	$60,924,047
TX	2030	Depot	DCFC (50 kW)	383	$36,685,736
TX	2030	Depot	L2 (3-19 kW)	7151	$85,769,652
TX	2030	Public	DCFC (350 kW)	347	$109,931,414
TX	2030	Public	MCS (1 MW)	21	$11,492,515
TX	2031	Depot	DCFC (150 kW)	963	$205,276,195
TX	2031	Depot	DCFC (50 kW)	1161	$111,219,912
TX	2031	Depot	L2 (3-19 kW)	18574	$222,792,214
TX	2031	Public	DCFC (350 kW)	1231	$390,423,081
TX	2031	Public	MCS (1 MW)	82	$44,875,534
TX	2032	Depot	DCFC (150 kW)	963	$205,276,195
TX	2032	Depot	DCFC (50 kW)	1161	$111,219,912
TX	2032	Depot	L2 (3-19 kW)	18574	$222,792,214
TX	2032	Public	DCFC (350 kW)	1231	$390,423,081
TX	2032	Public	MCS (1 MW)	82	$44,875,534
UT	2027	Depot	DCFC (150 kW)	26	$5,956,998
UT	2027	Depot	DCFC (50 kW)	38	$3,999,572
UT	2027	Depot	L2 (3-19 kW)	731	$9,602,655
UT	2027	Public	DCFC (350 kW)	18	$6,170,235
UT	2028	Depot	DCFC (150 kW)	26	$5,778,288
UT	2028	Depot	DCFC (50 kW)	38	$3,879,585

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
UT	2028	Depot	L2 (3-19 kW)	731	$9,314,575
UT	2028	Public	DCFC (350 kW)	18	$5,985,128
UT	2029	Depot	DCFC (150 kW)	26	$5,604,940
UT	2029	Depot	DCFC (50 kW)	38	$3,763,197
UT	2029	Depot	L2 (3-19 kW)	731	$9,035,138
UT	2029	Public	DCFC (350 kW)	18	$5,805,574
UT	2030	Depot	DCFC (150 kW)	31	$6,502,829
UT	2030	Depot	DCFC (50 kW)	40	$3,851,043
UT	2030	Depot	L2 (3-19 kW)	731	$8,764,084
UT	2030	Public	DCFC (350 kW)	39	$12,293,917
UT	2030	Public	MCS (1 MW)	3	$1,641,788
UT	2031	Depot	DCFC (150 kW)	102	$21,661,883
UT	2031	Depot	DCFC (50 kW)	119	$11,429,491
UT	2031	Depot	L2 (3-19 kW)	1896	$22,746,419
UT	2031	Public	DCFC (350 kW)	135	$42,957,326
UT	2031	Public	MCS (1 MW)	9	$5,144,269
UT	2032	Depot	DCFC (150 kW)	102	$21,661,883
UT	2032	Depot	DCFC (50 kW)	119	$11,429,491
UT	2032	Depot	L2 (3-19 kW)	1896	$22,746,419
UT	2032	Public	DCFC (350 kW)	135	$42,957,326
UT	2032	Public	MCS (1 MW)	9	$5,144,269
VA	2027	Depot	DCFC (150 kW)	79	$18,338,211
VA	2027	Depot	DCFC (50 kW)	113	$11,904,239
VA	2027	Depot	L2 (3-19 kW)	2232	$29,336,012
VA	2027	Public	DCFC (350 kW)	54	$18,684,515
VA	2028	Depot	DCFC (150 kW)	79	$17,788,064
VA	2028	Depot	DCFC (50 kW)	113	$11,547,111
VA	2028	Depot	L2 (3-19 kW)	2232	$28,455,931
VA	2028	Public	DCFC (350 kW)	54	$18,123,980
VA	2029	Depot	DCFC (150 kW)	79	$17,254,423
VA	2029	Depot	DCFC (50 kW)	113	$11,200,698
VA	2029	Depot	L2 (3-19 kW)	2232	$27,602,253
VA	2029	Public	DCFC (350 kW)	54	$17,580,261
VA	2030	Depot	DCFC (150 kW)	93	$19,721,695
VA	2030	Depot	DCFC (50 kW)	120	$11,466,902
VA	2030	Depot	L2 (3-19 kW)	2232	$26,774,186
VA	2030	Public	DCFC (350 kW)	116	$36,723,120
VA	2030	Public	MCS (1 MW)	8	$4,378,101
VA	2031	Depot	DCFC (150 kW)	314	$66,861,877
VA	2031	Depot	DCFC (50 kW)	362	$34,690,867
VA	2031	Depot	L2 (3-19 kW)	5796	$69,519,444
VA	2031	Public	DCFC (350 kW)	413	$131,029,362
VA	2031	Public	MCS (1 MW)	29	$15,651,711
VA	2032	Depot	DCFC (150 kW)	314	$66,861,877
VA	2032	Depot	DCFC (50 kW)	362	$34,690,867
VA	2032	Depot	L2 (3-19 kW)	5796	$69,519,444
VA	2032	Public	DCFC (350 kW)	413	$131,029,362
VA	2032	Public	MCS (1 MW)	29	$15,651,711
VT	2027	Depot	DCFC (150 kW)	24	$5,606,587
VT	2027	Depot	DCFC (50 kW)	25	$2,651,561
VT	2027	Depot	L2 (3-19 kW)	317	$4,160,405

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
VT	2027	Public	DCFC (350 kW)	34	$11,958,090
VT	2027	Public	MCS (1 MW)	3	$1,678,953
VT	2028	Depot	DCFC (150 kW)	24	$5,438,389
VT	2028	Depot	DCFC (50 kW)	25	$2,572,015
VT	2028	Depot	L2 (3-19 kW)	317	$4,035,593
VT	2028	Public	DCFC (350 kW)	34	$11,599,347
VT	2028	Public	MCS (1 MW)	3	$1,628,585
VT	2029	Depot	DCFC (150 kW)	24	$5,275,237
VT	2029	Depot	DCFC (50 kW)	25	$2,494,854
VT	2029	Depot	L2 (3-19 kW)	317	$3,914,525
VT	2029	Public	DCFC (350 kW)	34	$11,251,367
VT	2029	Public	MCS (1 MW)	3	$1,579,727
VT	2030	Depot	DCFC (150 kW)	24	$5,116,980
VT	2030	Depot	DCFC (50 kW)	25	$2,420,008
VT	2030	Depot	L2 (3-19 kW)	317	$3,797,089
VT	2030	Public	DCFC (350 kW)	34	$10,913,826
VT	2030	Public	MCS (1 MW)	3	$1,532,335
VT	2031	Depot	DCFC (150 kW)	36	$7,718,112
VT	2031	Depot	DCFC (50 kW)	60	$5,734,981
VT	2031	Depot	L2 (3-19 kW)	741	$8,886,310
VT	2031	Public	DCFC (350 kW)	62	$19,797,172
VT	2031	Public	MCS (1 MW)	5	$2,736,313
VT	2032	Depot	DCFC (150 kW)	36	$7,718,112
VT	2032	Depot	DCFC (50 kW)	60	$5,734,981
VT	2032	Depot	L2 (3-19 kW)	741	$8,886,310
VT	2032	Public	DCFC (350 kW)	62	$19,797,172
VT	2032	Public	MCS (1 MW)	5	$2,736,313
WA	2027	Depot	DCFC (150 kW)	155	$36,295,975
WA	2027	Depot	DCFC (50 kW)	185	$19,373,565
WA	2027	Depot	L2 (3-19 kW)	2205	$28,982,109
WA	2027	Public	DCFC (350 kW)	223	$77,588,537
WA	2027	Public	MCS (1 MW)	18	$10,793,271
WA	2028	Depot	DCFC (150 kW)	155	$35,207,095
WA	2028	Depot	DCFC (50 kW)	185	$18,792,358
WA	2028	Depot	L2 (3-19 kW)	2205	$28,112,645
WA	2028	Public	DCFC (350 kW)	223	$75,260,881
WA	2028	Public	MCS (1 MW)	18	$10,469,473
WA	2029	Depot	DCFC (150 kW)	155	$34,150,883
WA	2029	Depot	DCFC (50 kW)	185	$18,228,587
WA	2029	Depot	L2 (3-19 kW)	2205	$27,269,266
WA	2029	Public	DCFC (350 kW)	223	$73,003,054
WA	2029	Public	MCS (1 MW)	18	$10,155,389
WA	2030	Depot	DCFC (150 kW)	155	$33,126,356
WA	2030	Depot	DCFC (50 kW)	185	$17,681,729
WA	2030	Depot	L2 (3-19 kW)	2205	$26,451,188
WA	2030	Public	DCFC (350 kW)	223	$70,812,963
WA	2030	Public	MCS (1 MW)	18	$9,850,727
WA	2031	Depot	DCFC (150 kW)	233	$49,592,068
WA	2031	Depot	DCFC (50 kW)	436	$41,787,133
WA	2031	Depot	L2 (3-19 kW)	5161	$61,899,925
WA	2031	Public	DCFC (350 kW)	406	$128,681,620

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
WA	2031	Public	MCS (1 MW)	31	$16,965,141
WA	2032	Depot	DCFC (150 kW)	233	$49,592,068
WA	2032	Depot	DCFC (50 kW)	436	$41,787,133
WA	2032	Depot	L2 (3-19 kW)	5161	$61,899,925
WA	2032	Public	DCFC (350 kW)	406	$128,681,620
WA	2032	Public	MCS (1 MW)	31	$16,965,141
WI	2027	Depot	DCFC (150 kW)	66	$15,359,712
WI	2027	Depot	DCFC (50 kW)	92	$9,631,516
WI	2027	Depot	L2 (3-19 kW)	1839	$24,175,049
WI	2027	Public	DCFC (350 kW)	45	$15,642,850
WI	2028	Depot	DCFC (150 kW)	66	$14,898,920
WI	2028	Depot	DCFC (50 kW)	92	$9,342,570
WI	2028	Depot	L2 (3-19 kW)	1839	$23,449,798
WI	2028	Public	DCFC (350 kW)	45	$15,173,565
WI	2029	Depot	DCFC (150 kW)	66	$14,451,953
WI	2029	Depot	DCFC (50 kW)	92	$9,062,293
WI	2029	Depot	L2 (3-19 kW)	1839	$22,746,304
WI	2029	Public	DCFC (350 kW)	45	$14,718,358
WI	2030	Depot	DCFC (150 kW)	78	$16,576,884
WI	2030	Depot	DCFC (50 kW)	97	$9,274,029
WI	2030	Depot	L2 (3-19 kW)	1839	$22,063,915
WI	2030	Public	DCFC (350 kW)	95	$30,139,926
WI	2030	Public	MCS (1 MW)	6	$3,283,576
WI	2031	Depot	DCFC (150 kW)	263	$56,073,576
WI	2031	Depot	DCFC (50 kW)	293	$28,038,112
WI	2031	Depot	L2 (3-19 kW)	4776	$57,290,234
WI	2031	Public	DCFC (350 kW)	337	$106,853,969
WI	2031	Public	MCS (1 MW)	23	$12,696,492
WI	2032	Depot	DCFC (150 kW)	263	$56,073,576
WI	2032	Depot	DCFC (50 kW)	293	$28,038,112
WI	2032	Depot	L2 (3-19 kW)	4776	$57,290,234
WI	2032	Public	DCFC (350 kW)	337	$106,853,969
WI	2032	Public	MCS (1 MW)	23	$12,696,492
WV	2027	Depot	DCFC (150 kW)	20	$4,672,156
WV	2027	Depot	DCFC (50 kW)	27	$2,860,586
WV	2027	Depot	L2 (3-19 kW)	547	$7,186,126
WV	2027	Public	DCFC (350 kW)	14	$4,692,855
WV	2028	Depot	DCFC (150 kW)	20	$4,531,991
WV	2028	Depot	DCFC (50 kW)	27	$2,774,769
WV	2028	Depot	L2 (3-19 kW)	547	$6,970,543
WV	2028	Public	DCFC (350 kW)	14	$4,552,069
WV	2029	Depot	DCFC (150 kW)	20	$4,396,031
WV	2029	Depot	DCFC (50 kW)	27	$2,691,526
WV	2029	Depot	L2 (3-19 kW)	547	$6,761,426
WV	2029	Public	DCFC (350 kW)	14	$4,415,507
WV	2030	Depot	DCFC (150 kW)	24	$5,116,980
WV	2030	Depot	DCFC (50 kW)	29	$2,761,336
WV	2030	Depot	L2 (3-19 kW)	547	$6,558,584
WV	2030	Public	DCFC (350 kW)	30	$9,359,240
WV	2030	Public	MCS (1 MW)	2	$1,094,525
WV	2031	Depot	DCFC (150 kW)	79	$16,843,394

State	Year	Sector	Power Level	Annual No. of Ports	Annual Costs for Equipment and Installation ($)
WV	2031	Depot	DCFC (50 kW)	87	$8,351,759
WV	2031	Depot	L2 (3-19 kW)	1419	$17,021,645
WV	2031	Public	DCFC (350 kW)	102	$32,487,667
WV	2031	Public	MCS (1 MW)	7	$3,940,291
WV	2032	Depot	DCFC (150 kW)	79	$16,843,394
WV	2032	Depot	DCFC (50 kW)	87	$8,351,759
WV	2032	Depot	L2 (3-19 kW)	1419	$17,021,645
WV	2032	Public	DCFC (350 kW)	102	$32,487,667
WV	2032	Public	MCS (1 MW)	7	$3,940,291
WY	2027	Depot	DCFC (150 kW)	10	$2,394,480
WY	2027	Depot	DCFC (50 kW)	14	$1,448,664
WY	2027	Depot	L2 (3-19 kW)	270	$3,551,946
WY	2027	Public	DCFC (350 kW)	7	$2,433,332
WY	2028	Depot	DCFC (150 kW)	10	$2,322,645
WY	2028	Depot	DCFC (50 kW)	14	$1,405,204
WY	2028	Depot	L2 (3-19 kW)	270	$3,445,388
WY	2028	Public	DCFC (350 kW)	7	$2,360,332
WY	2029	Depot	DCFC (150 kW)	10	$2,252,966
WY	2029	Depot	DCFC (50 kW)	14	$1,363,048
WY	2029	Depot	L2 (3-19 kW)	270	$3,342,026
WY	2029	Public	DCFC (350 kW)	7	$2,289,522
WY	2030	Depot	DCFC (150 kW)	13	$2,825,000
WY	2030	Depot	DCFC (50 kW)	15	$1,417,965
WY	2030	Depot	L2 (3-19 kW)	270	$3,241,765
WY	2030	Public	DCFC (350 kW)	17	$5,393,460
WY	2030	Public	MCS (1 MW)	2	$1,094,525
WY	2031	Depot	DCFC (150 kW)	43	$9,082,640
WY	2031	Depot	DCFC (50 kW)	43	$4,158,086
WY	2031	Depot	L2 (3-19 kW)	701	$8,408,524
WY	2031	Public	DCFC (350 kW)	59	$18,718,480
WY	2031	Public	MCS (1 MW)	4	$2,407,955
WY	2032	Depot	DCFC (150 kW)	43	$9,082,640
WY	2032	Depot	DCFC (50 kW)	43	$4,158,086
WY	2032	Depot	L2 (3-19 kW)	701	$8,408,524
WY	2032	Public	DCFC (350 kW)	59	$18,718,480
WY	2032	Public	MCS (1 MW)	4	$2,407,955

State-level MDHD Hydrogen Infrastructure Modeling Summary

Year	State	3000 kg/day	5000 kg/day	7000 kg/day	10,000 kg/day	Annual Cost for Equipment and Installation (&)
2027	CA	0	23	0	0	$240,154
2028	CA	0	0	12	0	$168,644
2029	CA	0	0	10	0	$136,719
2030	CA	0	0	0	6	$107,248
2031	CA	0	0	0	21	$342,725
2032	CA	0	0	0	22	$340,697
2030	AK	1	0	0	0	$5,362
2030	AL	2	0	0	0	$10,725
2031	AL	2	0	0	0	$9,792
2032	AL	0	1	0	0	$7,743
2030	AR	1	0	0	0	$5,362
2031	AR	2	0	0	0	$9,792
2032	AR	0	1	0	0	$7,743
2030	AZ	2	0	0	0	$10,725
2031	AZ	2	0	0	0	$9,792
2032	AZ	0	1	0	0	$7,743
2030	CO	4	0	0	0	$21,450
2031	CO	3	0	0	0	$14,688
2032	CO	0	1	0	0	$7,743
2030	CT	1	0	0	0	$5,362
2031	CT	1	0	0	0	$4,896
2032	CT	0	1	0	0	$7,743
2030	DC	1	0	0	0	$5,362
2030	DE	1	0	0	0	$5,362
2030	FL	4	0	0	0	$21,450
2031	FL	6	0	0	0	$29,376
2032	FL	0	3	0	0	$23,229
2030	GA	2	0	0	0	$10,725
2031	GA	5	0	0	0	$24,480
2032	GA	0	2	0	0	$15,486
2030	HI	1	0	0	0	$5,362
2030	IA	1	0	0	0	$5,362
2031	IA	2	0	0	0	$9,792
2032	IA	0	1	0	0	$7,743
2030	ID	1	0	0	0	$5,362
2031	ID	1	0	0	0	$4,896
2030	IL	2	0	0	0	$10,725
2031	IL	5	0	0	0	$24,480
2032	IL	0	1	0	0	$7,743
2030	IN	2	0	0	0	$10,725
2031	IN	3	0	0	0	$14,688
2032	IN	0	1	0	0	$7,743
2030	KS	1	0	0	0	$5,362
2031	KS	2	0	0	0	$9,792
2032	KS	0	1	0	0	$7,743
2030	KY	2	0	0	0	$10,725
2031	KY	2	0	0	0	$9,792
2032	KY	0	1	0	0	$7,743
2030	LA	2	0	0	0	$10,725

Year	State	3000 kg/day	5000 kg/day	7000 kg/day	10,000 kg/day	Annual Cost for Equipment and Installation (&)
2031	LA	2	0	0	0	$9,792
2032	LA	0	1	0	0	$7,743
2030	MA	3	0	0	0	$16,087
2031	MA	3	0	0	0	$14,688
2032	MA	0	1	0	0	$7,743
2030	MD	4	0	0	0	$21,450
2031	MD	3	0	0	0	$14,688
2032	MD	0	1	0	0	$7,743
2030	ME	1	0	0	0	$5,362
2031	ME	1	0	0	0	$4,896
2030	MI	2	0	0	0	$10,725
2031	MI	5	0	0	0	$24,480
2032	MI	0	2	0	0	$15,486
2030	MN	2	0	0	0	$10,725
2031	MN	2	0	0	0	$9,792
2032	MN	0	1	0	0	$7,743
2030	MO	2	0	0	0	$10,725
2031	MO	4	0	0	0	$19,584
2032	MO	0	1	0	0	$7,743
2030	MS	1	0	0	0	$5,362
2031	MS	2	0	0	0	$9,792
2032	MS	0	1	0	0	$7,743
2030	MT	1	0	0	0	$5,362
2031	MT	1	0	0	0	$4,896
2030	NC	3	0	0	0	$16,087
2031	NC	4	0	0	0	$19,584
2032	NC	0	2	0	0	$15,486
2030	ND	1	0	0	0	$5,362
2032	ND	1	0	0	0	$4,646
2030	NE	1	0	0	0	$5,362
2031	NE	1	0	0	0	$4,896
2032	NE	0	1	0	0	$7,743
2030	NH	1	0	0	0	$5,362
2032	NH	0	1	0	0	$7,743
2030	NJ	4	0	0	0	$21,450
2031	NJ	3	0	0	0	$14,688
2032	NJ	0	1	0	0	$7,743
2030	NM	3	0	0	0	$16,087
2031	NM	1	0	0	0	$4,896
2032	NM	0	1	0	0	$7,743
2030	NV	1	0	0	0	$5,362
2031	NV	1	0	0	0	$4,896
2030	NY	7	0	0	0	$37,537
2031	NY	6	0	0	0	$29,376
2032	NY	0	2	0	0	$15,486
2030	OH	3	0	0	0	$16,087
2031	OH	4	0	0	0	$19,584
2032	OH	0	2	0	0	$15,486
2030	OK	2	0	0	0	$10,725
2031	OK	2	0	0	0	$9,792

Year	State	3000 kg/day	5000 kg/day	7000 kg/day	10,000 kg/day	Annual Cost for Equipment and Installation (&)
2032	OK	0	1	0	0	$7,743
2030	OR	3	0	0	0	$16,087
2031	OR	2	0	0	0	$9,792
2032	OR	0	1	0	0	$7,743
2030	PA	2	0	0	0	$10,725
2031	PA	5	0	0	0	$24,480
2032	PA	0	2	0	0	$15,486
2030	RI	1	0	0	0	$5,362
2032	RI	1	0	0	0	$4,646
2030	SC	2	0	0	0	$10,725
2031	SC	3	0	0	0	$14,688
2032	SC	0	1	0	0	$7,743
2030	SD	1	0	0	0	$5,362
2032	SD	0	1	0	0	$7,743
2030	TN	2	0	0	0	$10,725
2031	TN	3	0	0	0	$14,688
2032	TN	0	1	0	0	$7,743
2030	TX	6	0	0	0	$32,174
2031	TX	11	0	0	0	$53,857
2032	TX	0	4	0	0	$30,972
2030	UT	1	0	0	0	$5,362
2031	UT	1	0	0	0	$4,896
2032	UT	0	1	0	0	$7,743
2030	VA	2	0	0	0	$10,725
2031	VA	4	0	0	0	$19,584
2032	VA	0	2	0	0	$15,486
2030	VT	1	0	0	0	$5,362
2031	VT	1	0	0	0	$4,896
2030	WA	5	0	0	0	$26,812
2031	WA	3	0	0	0	$14,688
2032	WA	0	2	0	0	$15,486
2030	WI	2	0	0	0	$10,725
2031	WI	3	0	0	0	$14,688
2032	WI	0	1	0	0	$7,743
2030	WV	1	0	0	0	$5,362
2031	WV	1	0	0	0	$4,896
2030	WY	1	0	0	0	$5,362
2032	WY	1	0	0	0	$4,646

Appendix VI: Available Federal Funding and Incentive Programs

Incentive Program	Description
Congestion Mitigation & Air Quality Improvement Program	The Congestion Mitigation & Air Quality Improvement Program (CMAQ) Program provides funding to state and local governments and agencies for projects and programs that help meet the requirements of the Clean Air Act by reducing mobile source emissions and regional congestion on transportation networks. Eligible activities include transit improvements, travel demand management strategies, congestion relief efforts (such as high occupancy vehicle lanes), diesel retrofit projects, alternative fuel vehicles and infrastructure, and medium- or heavy-duty zero emission vehicles and related charging equipment.
Electric Vehicle (EV) Charging and Clean Transportation Grants	The U.S. Department of Energy (DOE) provides grants for transportation decarbonization research projects. Eligible program includes planning and development of medium- and heavy-duty EV charging and hydrogen fueling corridors and advanced engine and fuel technologies to improve fuel economy and reduce greenhouse gas emissions.
National Electric Vehicle Infrastructure Program (NEVI)	The U.S. Department of Transportation's (DOT) Federal Highway Administration (FHWA) NEVI Formula Program will provide funding to states to strategically deploy electric vehicle (EV) charging stations and to establish an interconnected network to facilitate data collection, access, and reliability. Funding is available for up to 80% of eligible project costs, including: the acquisition, installation, and network connection of EV charging stations to facilitate data collection, access, and reliability; proper operation and maintenance of EV charging stations; and long-term EV charging station data sharing.
Charging and Fueling Infrastructure Grants	The FHWA Charging and Fueling Infrastructure Discretionary Grant Program (CFI Program) offers funding to strategically deploy publicly accessible electric vehicle charging infrastructure and other alternative fueling infrastructure. CFI Program offers two tracks of funding opportunities: the Community Charging and Fueling Grants (Community Program) and the Alternative Fuel Corridor Grants (Corridor Program). The Corridor Program aims to install infrastructure along designated alternative fuel corridors, while the Community Program includes locations such as public roads, schools, parks, and in publicly accessible parking facilities.
Alternative Fuel Infrastructure Tax Credit	Alternative Fueling equipment for various fuels can receive a tax credit of 30% of the cost up to $30,000 until December 31, 2022, and after that date, the credit is 30% or 6% for depreciable property up to $100,000, with specific requirements. Additionally, residential fueling equipment purchased between January 1, 2023, and December 31, 2032, can receive up to a $1,000 tax credit.
Heavy-Duty Zero Emission Vehicle (ZEV) and Infrastructure Grants	The Inflation Reduction Act (IRA) allocated $1 billion towards replacing polluting heavy-duty vehicles with clean, ZEVs, supporting ZEV infrastructure, and providing workforce development and training. Additionally, funds will be provided for planning and technical activities to promote the adoption and deployment of zero-emission vehicles. The EPA will distribute the funding between now and 2031, with $400 million going to communities in nonattainment areas.
Rebuilding American Infrastructure with Sustainability and Equity	The U.S. Department of Transportation (DOT) Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant program provides federal financial assistance to eligible transportation infrastructure projects that address climate

	change and environmental justice impacts, among other key objectives. Starting in FY21, RAISE has substantially increased program focus on ZEV infrastructure, including EV charging.
Port Infrastructure Development Program (PIDP)	The U.S. DOT Federal Highway Administration (FHWA) will establish the Port Infrastructure Development Program (PIDP) to fund projects that improve port resiliency to address sea-level rise, flooding, extreme weather events, earthquakes, and tsunami inundation, as well as projects that reduce or eliminate port-related criteria pollutant or greenhouse gas emissions, including EV charging or hydrogen fueling infrastructure.
Carbon Reduction Program (CRP)	The U.S. DOT will establish a carbon reduction formula program for states to reduce transportation emissions. Eligible activities include truck stop electrification, vehicle-to-infrastructure communications equipment, public transportation, port electrification, and deployment of alternative fuel vehicles, including charging or fueling infrastructure and the purchase or lease of zero emission vehicles.
National Multimodal Cooperative Freight Research Program	The U.S. DOT will establish a national cooperative freight transportation research program (Program), administered in collaboration with the National Academy of Sciences (NAS). NAS will establish an advisory committee to recommend a national research agenda on improvements in the efficiency and resiliency of freight movement, including adapting to future trends such as zero-emissions transportation. NAS may award research contracts or grants under the Program. Funding will be made available each fiscal year until November 15, 2026, and will remain available until expended for this Program.

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