

# Department of Administrative Services



**Electric Vehicles and Charging Infrastructure**

# Department of Administrative Services



**DAS directly supplies light fleet vehicles for most agencies and has policy oversight for the remainder.**

# Increasing Zero Emission Vehicles (ZEV's)



**Executive Order 17-21**

**+**

**Senate Bill 1044 (2019) → ORS 283.327**

**+**

**Executive Order 20-04**

**=**

**By 2025, agencies will procure Zero Emission Vehicles for new light fleet purchases where feasible.**



# A long road with a steep climb...

It will take considerable time and funding for agencies to install charging infrastructure and budget in the additional purchase cost of the vehicles

The largest hurdles to fleet electrification are the cost and effort to install charging infrastructure and the incremental cost of the vehicles.



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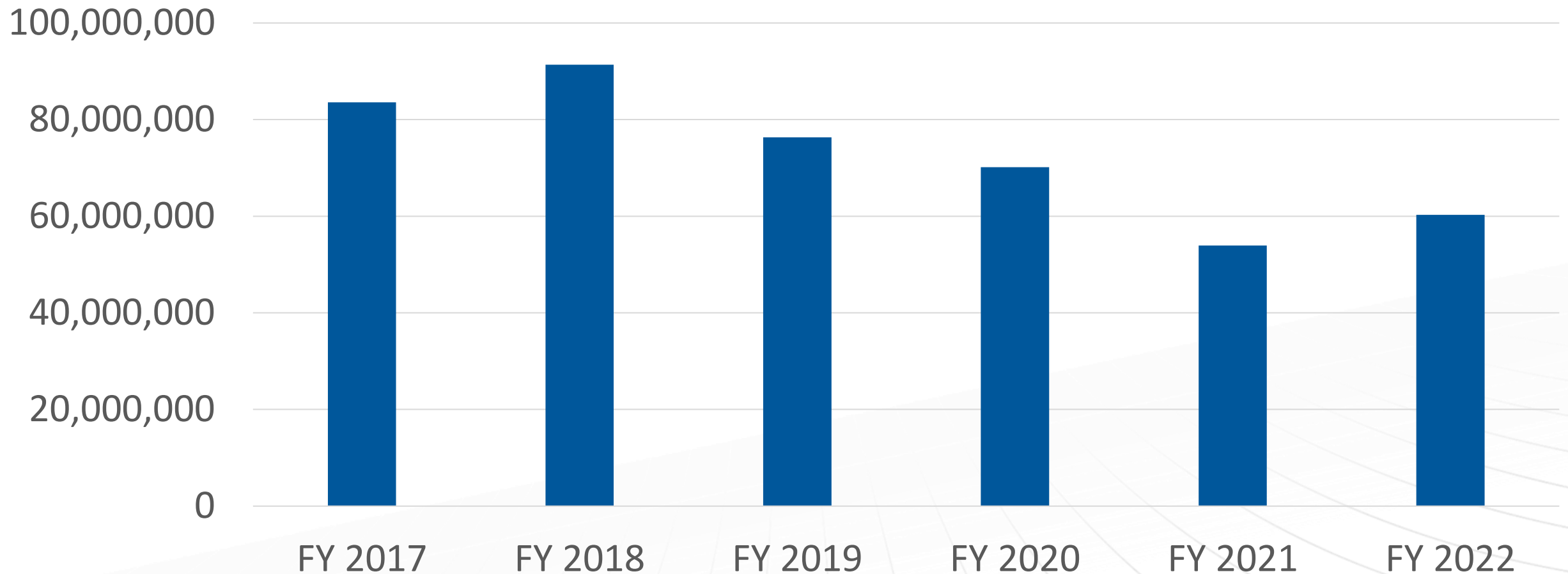


| FY 2022                                  | Totals | Percent |
|------------------------------------------|--------|---------|
| EVs (Full Battery Electric)              | 14     | 0.2%    |
| PHEVs (Plug-in Hybrid Electric Vehicle)  | 23     | 0.3%    |
| Cargo Van                                | 163    | 2.3%    |
| LEVs (Hybrids or over 40 MPG efficiency) | 387    | 5.4%    |
| Other                                    | 48     | 0.7%    |
| Passenger Van                            | 500    | 7.0%    |
| Pickup (one ton and under)               | 2582   | 36.1%   |
| Sedans                                   | 2028   | 28.4%   |
| Station Wagon                            | 4      | 0.1%    |
| SUV                                      | 1394   | 19.5%   |
| Total                                    | 7143   |         |

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Light Fleet Miles Traveled



# If we could electrify right now...



DAS estimates the cost to completely electrify the state's entire light fleet with the vehicles available on the market *right now* is between \$200 million and \$300 million.



How do we get  
there?



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**Follow CA's lead for  
funding and project  
resources to install EV  
chargers to support state  
fleet electrification**

# Project costs

Many locations need significant site and electric service improvements to support current and future charger installation needs.

The cost per charger port in the current DAS and ODOT projects ranges from \$6,618 to over \$30,000, depending on the site.



# Risks



# Those humans...



# Educate on the ZEV differences



Lean on already  
available videos and  
educational materials  
from manufacturers

- [Ford Electric Vehicles | Ford Owner Support](#)
- <https://evlive.gm.com>

# Route planning and options



 ChargeHub

 PlugShare



# Cord Management



# New takes on old risks



**Chevy Bolt Battery Recall:** “Park your vehicle outside immediately after charging and do not leave your vehicle charging indoors overnight.”



# New takes on old risks



Auto Technician  
training for new  
hazards

Ford Lightning = 450  
Volt battery system



# The “Big One”



**Fuel resilience and mitigation during major disasters becomes much more complex as we bring on more and more electric vehicles.**



# Worth it?



 Tailpipe Emissions



**With an average fleet fuel efficiency of 21 MPG, converting the state light fleet would reduce vehicle emissions by about 92,000,000 pounds of CO2 *per year*.**

**= ~5.4 million Douglas Firs**