ALASKA EV WORKING GROUP

Overview of EV market, public policy, and research

Nicole Lepre, Atlas Public Policy

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ATLAS PUBLIC POLICY

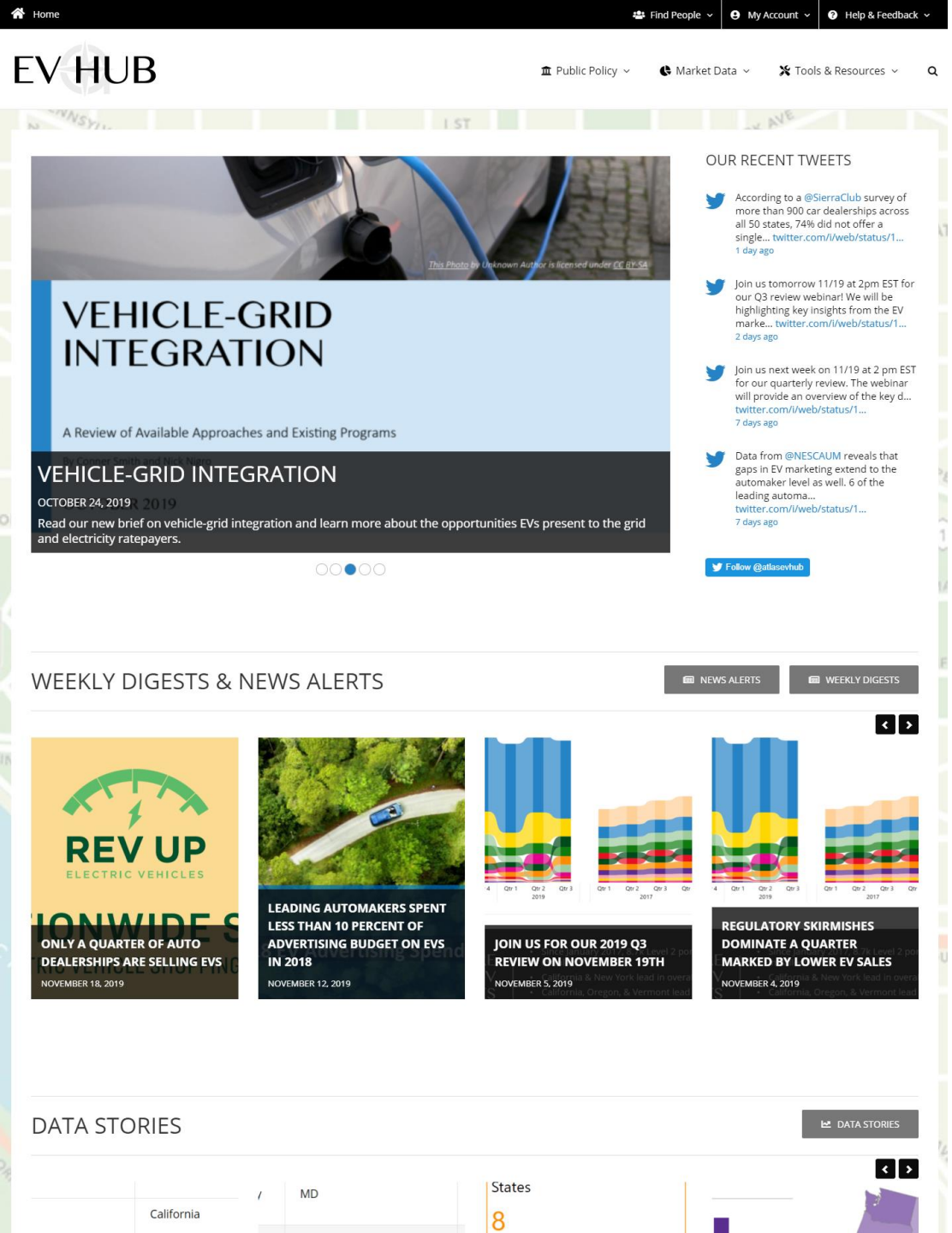
ABOUT ATLAS PUBLIC POLICY

DC-based policy tech firm started in 2015

We equip businesses and policymakers to make strategic, informed decisions that serve the public interest

Our Key Focus Areas

- **Access**: Collect and disseminate publicly available information.
- **Interpret:** Create dashboards and tools to spur insights and conduct data-driven analyses.
- **Empower**: Strengthen the ability of policymakers, businesses, and non-profits to meet emerging challenges and identify opportunities that serve the public interest.



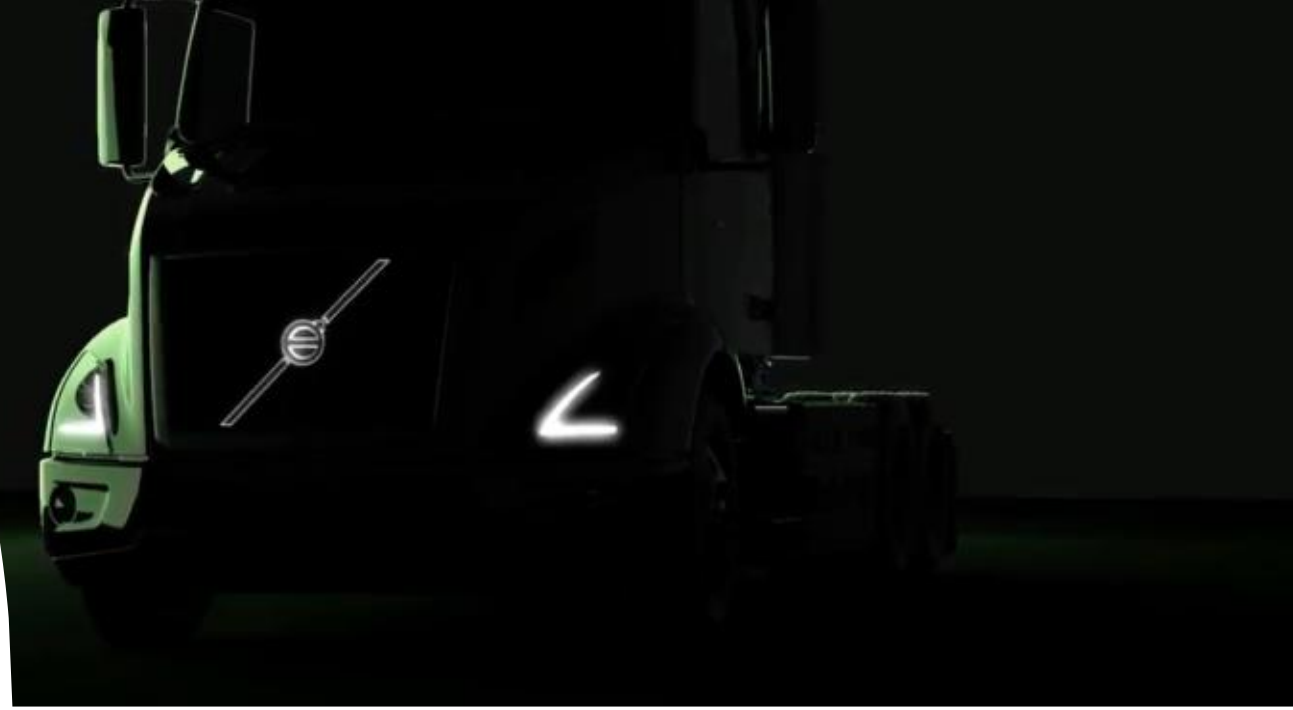
ABOUT THE ATLAS EV HUB

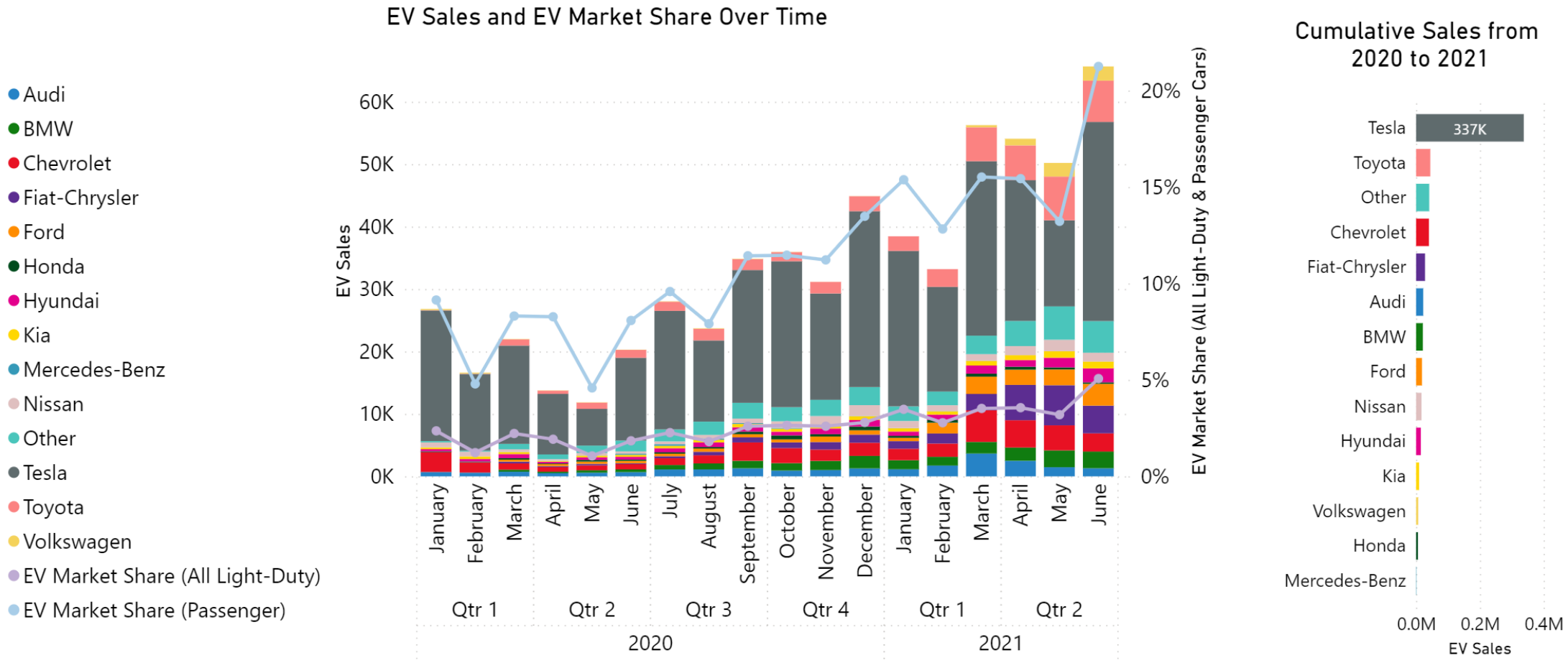
- The EV Hub gives stakeholders from across the EV industry quick access to key data and information on the market, policies and regulations, and activities by the EV community
- A one-stop shop for businesses, policy professionals, and the advocacy community to learn more about what's going on in the EV market
- A comprehensive platform for the EV community: www.atlasevhub.com

Free access for public agencies and Clean Cities Coordinators!

OVERVIEW

- Market update
  - EV Sales
  - Model availability
  - Automaker investments
- Utility Investment update
- VW settlement update
- Policies & regulations update
- Recent Research Highlights
- Federal Infrastructure Bill Update

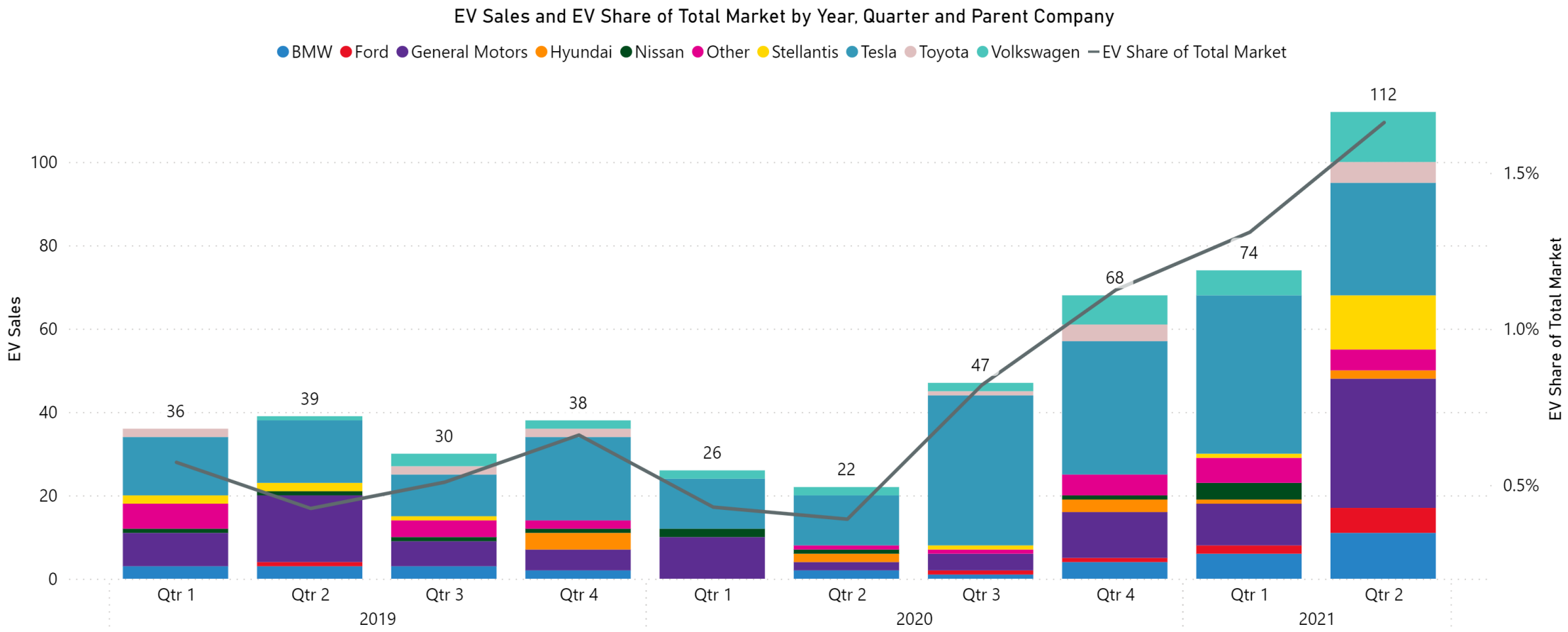




U.S. EV SALES UP 270% IN Q2

- EV market posts highest quarter on record
- 4% of passenger vehicle sales were EVs in Q2 2021
- Quarterly EV sales 33% higher in Q2 2021 than Q1 2021
- Cumulative EVs up 17% in first half of 2021 (19% for BEVs)

ALASKA EV SALES UP 198% IN Q2

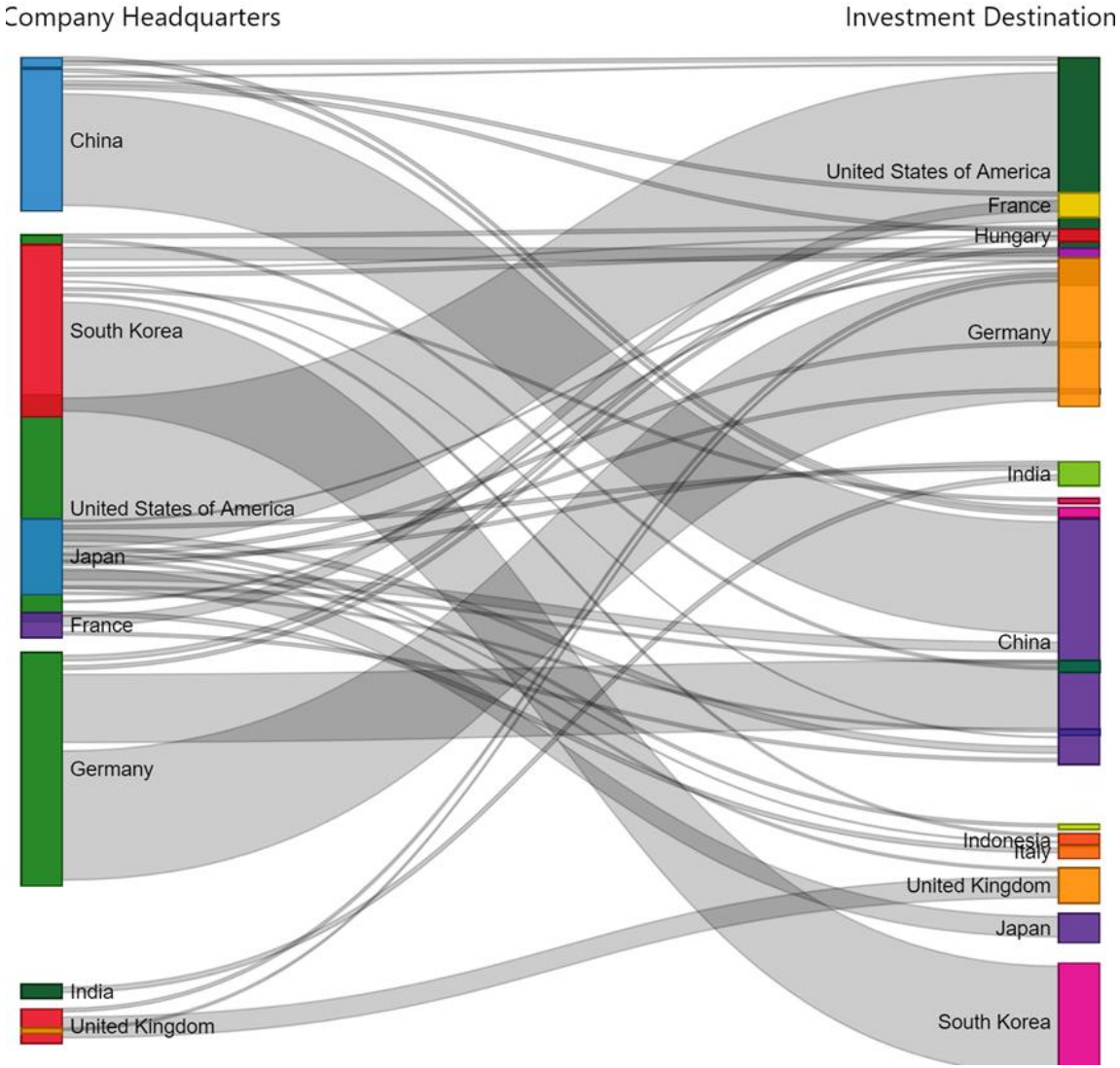


NEW MODELS RISING

- More than 25 new BEVs expected by the end of 2021
- Jeep Wrangler Plug-in is 4th-best selling EV in it's first quarter on the market.
- VW ID.4 and Ford Mustang Mach-E come in as 4th and 5th best-selling BEV in their first full quarter on the market.
- Ford announces F-150 Lightning for 2022, priced under $40,000.
- Subaru Solterra coming in 2022 (price not announced but expected ~$30,000)

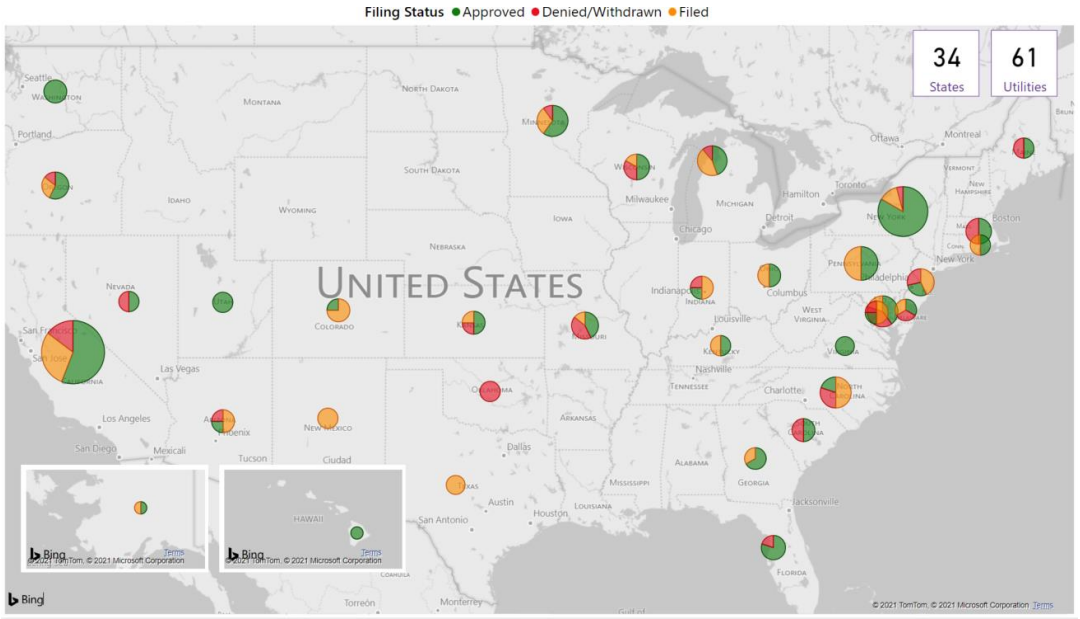
$41B OF INVESTMENTS ANNOUNCED IN Q2

- $568B in global investments through Q2 of 2021
- Expanded plans from GM accounted for the largest Q2 investment announcement
- Automaker investment continues to soar despite prolonged pandemic
- $41B announced in Q2
  - GM: $15.9B
  - Ford: $8B
  - Jidu Auto: $7.7B
  - Hyundai: $7.4B
  - Nissan: $1.8B



Approved	Pending/Filed	Denied/Withdrawn
31 States	23 States	21 States
109 Filings	58 Filings	38 Filings
49 Utilities	35 Utilities	26 Utilities
$3,059,487,830 Investment	$1,791,578,780 Investment	$537,866,476 Investment
6,502 DC Fast Charging Stations	3,008 DC Fast Charging Stations	504 DC Fast Charging Stations
228,098 Level 2 Charging Stations	196,120 Level 2 Charging Stations	86,143 Level 2 Charging Stations

UTILITY FILINGS STATUS (2012 THROUGH Q2 2021)



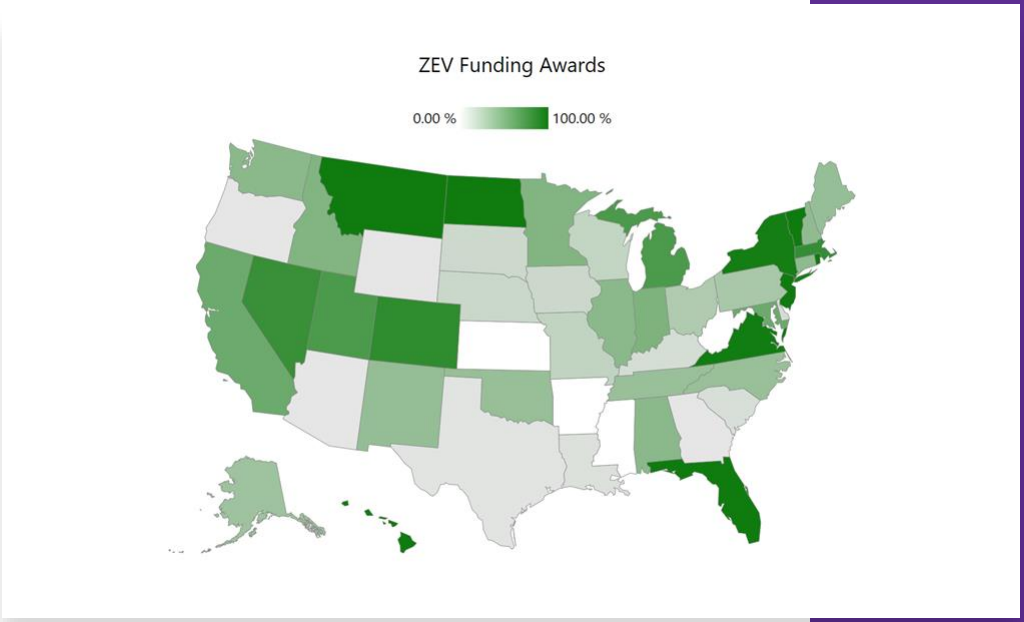
	State	Approved Investment
1	California	$1,547,324,974
2	New York	$711,507,097
3	New Jersey	$225,865,000
4	Colorado	$110,170,000

34 STATES HAVE PROPOSED OR APPROVED UTILITY EV PROGRAMS

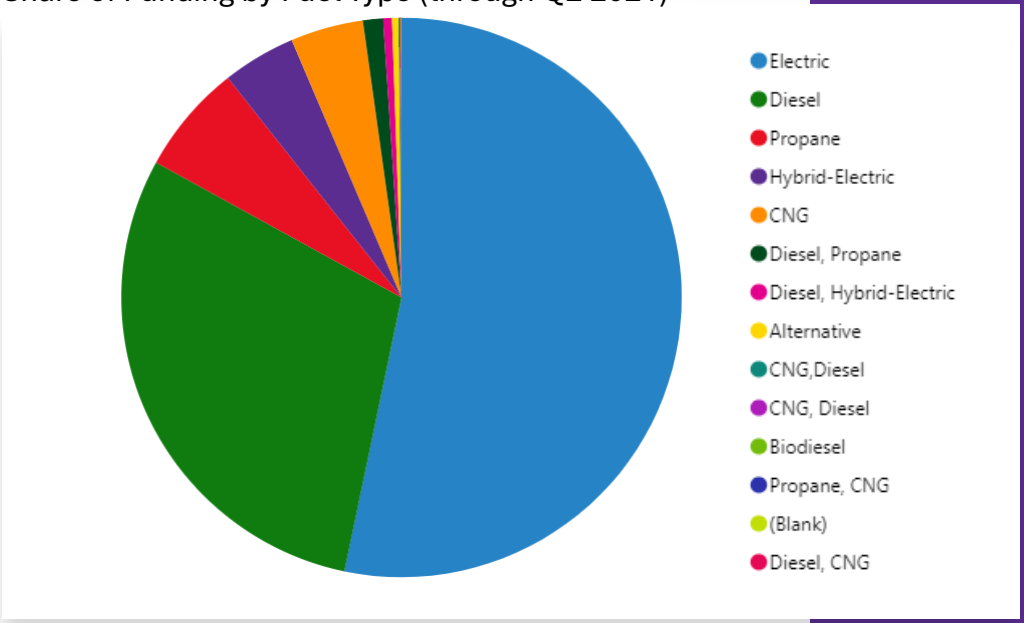
- California, New York, New Jersey, and Colorado lead in total approved investment dollars
- Alaska IOUs have no proposed or approved charging programs but Alaska Electric Light and Power offer EV rates and a charger rental program

61% OF VOLKSWAGEN SETTLEMENT FUNDS NOT YET AWARDED

- $1.07 billion out of available $2.9 billion VW settlement funds awarded
- EVs and EV charging claim more than 50% of all awards
- 7 states made funding announcements in Q2 worth $91 million
- Alaska awarded 27% of its available funding ($2.2 million out of $8.25 million)
    - Funding gone to diesel and electric school buses and transit buses (more than half for diesel)



Share of Funding by Fuel Type (through Q2 2021)

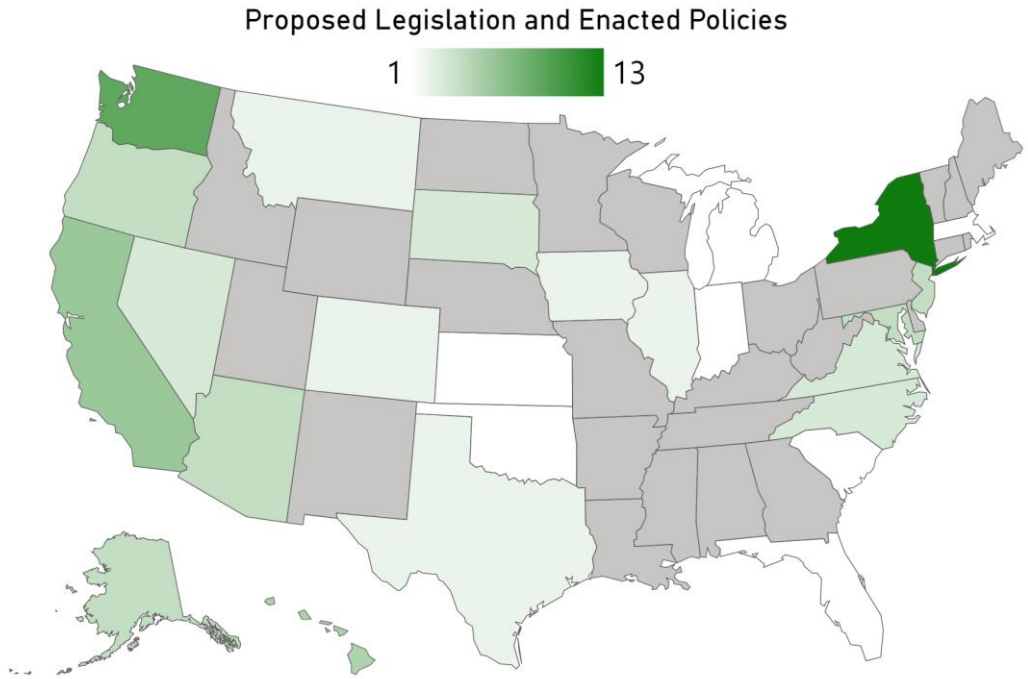


Source: Atlas EV Hub (www.atlasevhub.com)

LEGISLATIVE ACTIVITY IN Q2

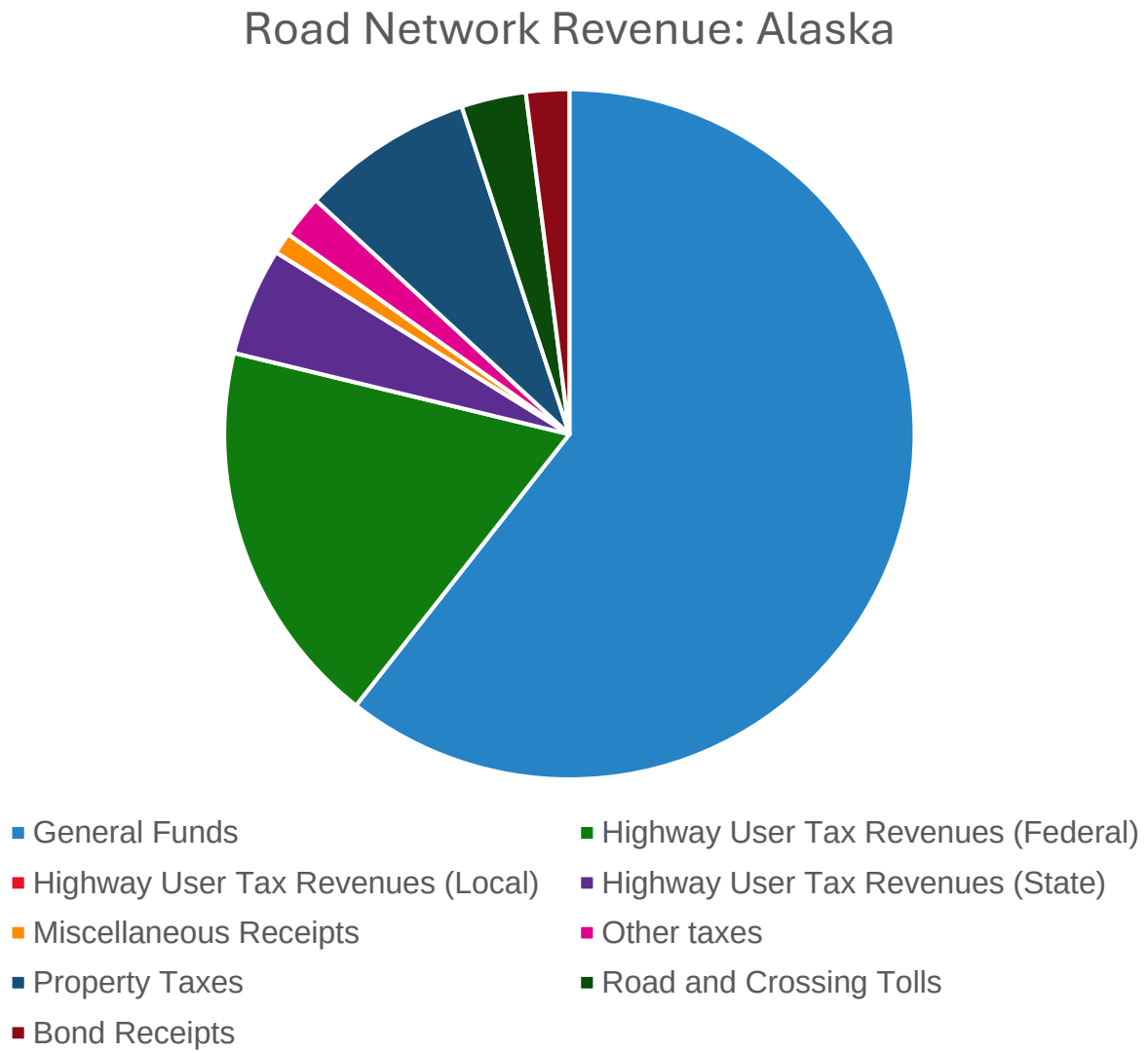
Policy	Enacted States	Proposed States
Annual Registration Fee	OK	FL, MT*, TX
Clean Fuel Standard	WA	
Charging Incentive	CO, HI, MD	
MD/HD Vehicle Incentive	CO	CA
Public EV Fleet Target	HI	MD
State EV Incentive	OR	NC
Transportation Electrification Plan	CO, NV, OR	MD
Transportation Electrification Target	CO	MD
Utility Enabling Legislation	OR	
ZEV Sales Requirement		NY, WA*

* Vetoed



AT LEAST 30 STATES HAVE IMPOSED EV FEES

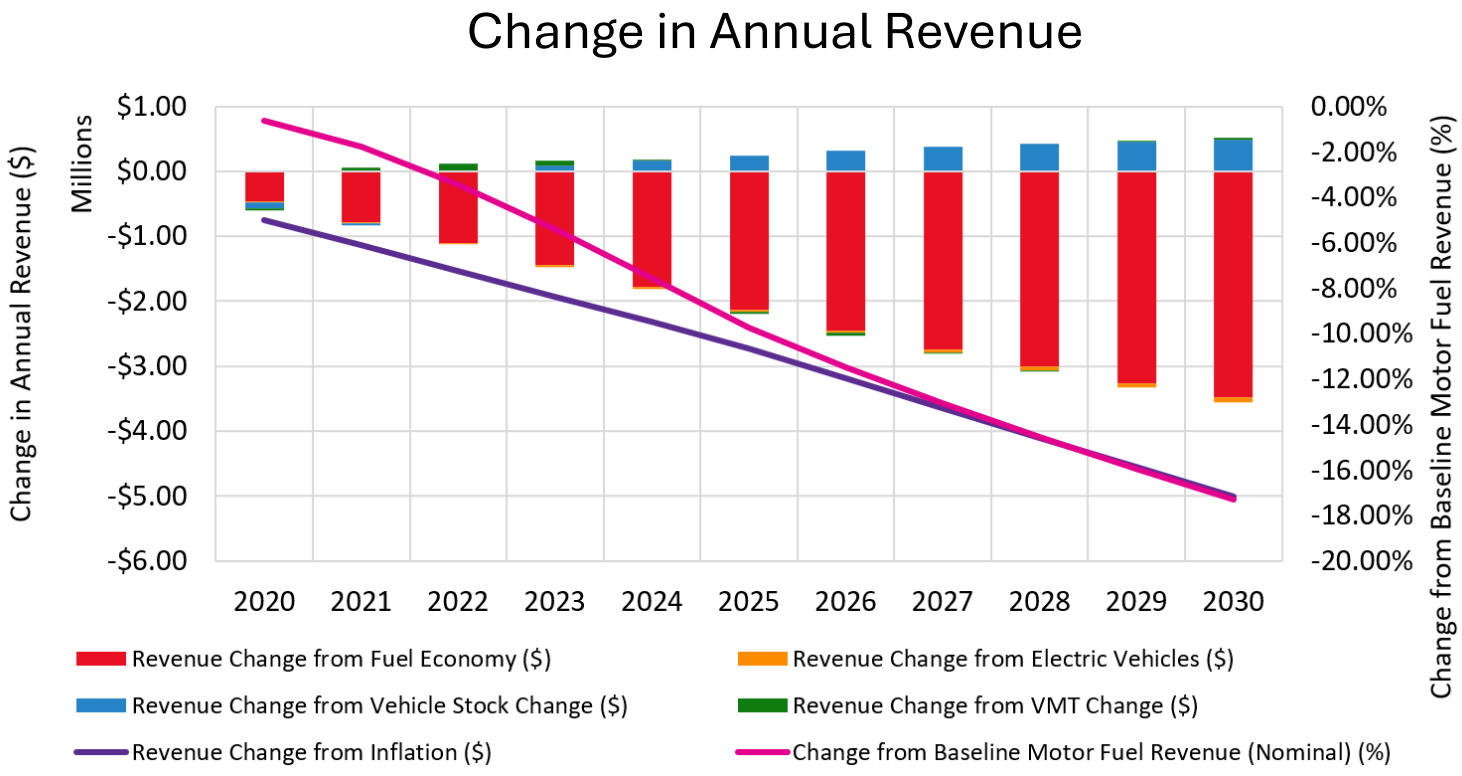
- Annual fees range from $50 - $214, average $120, compared to average estimated state gas tax revenue per passenger vehicle is $61.64
- Only 35% of road network revenue comes from user fees, like the gas tax and registration fees (23% in Alaska)



Source: Atlas Public Policy's Highway Revenue Assessment Tool

INFLATION COULD ACCOUNT FOR 75X MORE DECREASED HIGHWAY REVENUE THAN ELECTRIC VEHICLES IN 2030 IN ALASKA

- EV adoption responsible for $67,000 of lost gas tax revenue in 2030, compared to $5M due to inflation and $3.3M due to 25% rise in fleet-wide fuel economy
- A $100 annual EV fee ($50 PHEV) would generate $1M in 2030 (compared to only $67,000 of lost gas tax revenue due to EV adoption)
- Assumes 328% EV growth from 2019 – 2030, based on EIA Annual Energy Outlook 2020

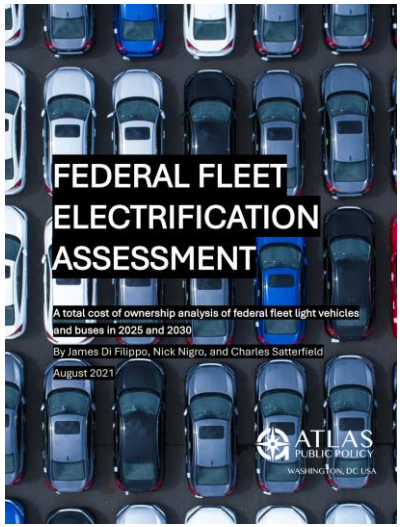


Source: Atlas Public Policy's Highway Revenue Assessment Tool

RECENT RESEARCH FROM ATLAS

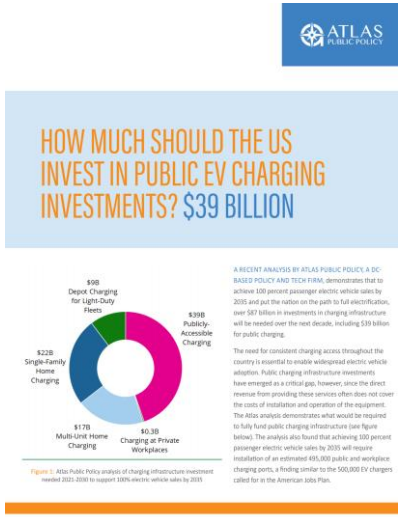
Federal Fleet Electrification Assessment, Atlas Public Policy

- Electrification of non-USPS federal fleet vehicles could yield vehicle lifetime savings of as much as $1.18 billion.
- USPS electrification could yield as much as $4.3 billion in savings.



U.S. Passenger Vehicle Electrification Infrastructure Assessment, Atlas Public Policy

- $87 billion in investments in charging infrastructure will be needed over the next decade to achieve 100 percent passenger electric vehicle sales by 2035



SENATE PASSES BIPARTISAN INFRASTRUCTURE INVESTMENT AND JOBS ACT (H.R. 3684)

$1.2 trillion ($500 billion new spending)

•$26.7 billion eligible for EV-related investments

$7.7 billion dedicated to ZEVs

$8.8 billion eligible for “clean vehicles”

$10.3 billion for grid and batteries

Source: INVEST in America Act tracker on EV Hub

KEY PROVISIONS IN INVEST IN AMERICAN ACT

Section Number	Title	Description	Lead Agency	Supporting Agency (consulted / engaged by Lead Agency)	Funding ($ millions)
Division J	National Electric Vehicle Formula Program	Funding to states to "strategically" deploy EV charging, maintenance for the infrastructure and "establish an interconnected network to facilitate data collection, access and reliability".	DOT	DOE, States	$5,000
11401	Grants for charging and fueling infrastructure	Grant program for publicly accessible electric vehicle charging infrastructure, hydrogen fueling infrastructure, propane fueling infrastructure (for MD and HD vehicles only), and natural gas fueling infrastructure. Priority to rural areas, low- and moderate-income neighborhoods, and communities with low rate of private parking. Grants of up to $15 million.	DOT	DOE	$2,500
71101	Clean School Bus Program (zero-emission buses only)	Funding for zero emissions school buses.	EPA		$2,500
71101	Clean School Bus Program (zero-emission buses or lower emission buses)	Funding for zero emissions and low emissions school buses.	EPA		$2,500

Source: INVEST in America Act tracker on EV Hub

HIGHLIGHTS FOR STATE EV FUNDING IN INFRASTRUCTURE BILL

Section Number	Title	Description	Lead Agency	Supporting Agency (consulted / engaged by Lead Agency)	Funding ($ millions)
40107	Deployment of Technologies to Enhance Grid Flexibility	Funding eligible for various methods of enhancing grid flexibility, including vehicle-to-grid technologies.	DOE		$3,000
NA	Port Infrastructure Development Program	Funding for projects that improve resiliency of ports, including port electrification and "Electric vehicle charge or hydrogen refueling infrastructure for drayage, and medium or heavy-duty trucks and locomotives that service the port and related grid upgrades."	DOT		$2,250
40109	State Energy Program	State Energy Program mandate (in the Energy Policy and Conservation Act) amended to include: "programs to increase transportation energy efficiency, including programs to help reduce carbon emissions in the transportation sector by 2050 and accelerate the use of alternative transportation fuels for, and the electrification of, State government vehicles, fleet vehicles, taxis and ridesharing services, mass transit, school buses, ferries, and privately owned passenger and medium- and heavy-duty vehicles''. Unclear how much of the Program budget allocated to Transportation Electrification (TE).	DOE		$500
40541	Grants for Energy Efficiency Improvements and Renewable Energy Improvements at Public School Facilities.	Funding for improvements at Public Schools, including for installing alternative fueled vehicle infrastructure for school buses, fleets, students, and the general public. Funding can also be used to procure alternative fuel vehicles.	DOE	DOT, Local Education Agencies	$500
11402	Reduction of Truck Emissions at Port Facilities	Program to reduce truck idling at port facilities including to study port electrification, study emerging technologies and fund projects that reduce port related emissions.	DOT	DOE, EPA	$250
71102	Electric or Low Emitting Ferry Pilot Program	Electric or low emitting ferry pilot that provides grants for the purchase of "alternative" fuel and electric ferries.	DOT		$250
40431	Consideration of Measures to Promote Greater Electrification of the Transportation Sector	States to promote greater transportation electrification by amending rates to: 1. Promote affordable and equitable EV charging 2. Improve customer experience with EV charging 3. Accelerate third party investment in EV charging infrastructure 4. Recover marginal costs of electricity delivery to EVs and infrastructure	State PUCs		Not stated

Source: INVEST in America Act tracker on EV Hub

CONTEXT: INVEST IN AMERICA ACT WOULD BE TRANSFORMATIONAL FOR ELECTRIC VEHICLES

- < $5 billion in public funding for EVs to date**
- $2 billion in investments from Electrify America
- $3 billion in approved investments from utilities
- More info: INVEST in America Act tracker on EV Hub

** *Does not include federal vehicle and charging tax credits*

WWW.ATLASPOLICY.COM
WASHINGTON, DC USA

Nicole Lepre
nicole.lepre@atlaspolicy.com