STATEMENT

OF THE

ALLIANCE FOR AUTOMOTIVE INNOVATION

BEFORE THE:

COMMITTEE ON THE BUDGET

U.S. SENATE

HEARING TITLE:

"Charging Ahead: The Future of Electric Vehicles"

July 31, 2024

PRESENTED BY:

David Schwietert

Chief Government Affairs and Policy Officer

Chairman Whitehouse, Ranking Member Grassley, Senator Graham and distinguished members of the Committee: on behalf of the Alliance for Automotive Innovation (Auto Innovators) and our members, thank you for the opportunity to appear today to share my perspective on expanded electrification in the auto industry and what this means for the future of automotive innovation and manufacturing across the United States. This is a pivotal period for the automotive sector and policy decisions made over the coming years will have lasting implications for decades to come.

Auto Innovators was formed in 2020 to serve as the singular, authoritative, and respected voice of the automotive industry in the United States. Our members represent the full automotive industry, from the manufacturers producing most vehicles sold in the U.S. to autonomous vehicle innovators to equipment suppliers, battery producers, and semiconductor makers. As the nation's largest manufacturing sector, the automotive industry is responsible for nearly 10 million U.S. jobs and contributes $1 trillion to the U.S. economy each year – representing nearly 5 percent of the country's gross domestic product.[1]

Leadership in automotive technology and manufacturing has underpinned a century of U.S. economic growth and innovation. The leadership of the auto industry in the United States and our global competitiveness is not a forgone conclusion. The ability of the auto industry to maintain its position in our economy rests on our country's leadership in, and acceptance and integration of, the innovative technologies - including electrification, automation, and connectivity - that will define the future of mobility for the American public.

It is no longer a question of whether these technologies will prosper. Rather, it's a question of where and at what pace. Nations around the world are moving aggressively to lead the development and deployment of these emerging automotive technologies. These same nations have clearly recognized that, as we have witnessed with respect to other sectors, those that lead

[1] https://www.autosinnovate.org/EconomicImpactReport

the development and deployment of these technologies will also guide the development of international standards, control supply chains, and drive international markets.

I do not state this lightly – the future of this highly competitive, capital-intensive industry hangs in the balance. The next decade will define which nations shape the future of automotive innovation and manufacturing. If U.S. policymakers do not support the development, commercialization, and acceptance of electrified vehicles, our nation risks becoming more dependent on foreign sources for raw materials and critical minerals in a future defined by our competitors.

If you think this sounds hyperbolic, look no further than the current realities of the global shift toward electrification and electric vehicle battery supply chain. For well over a decade, China made strategic investments in EV technologies and supply chains, placing that nation – and its manufacturing sector – in a position of strength as the global shift to expanded electrification gains momentum. Supply chains do not emerge overnight and while our members are fully committed to an expanded electrified future, we also cannot snap our fingers and magically overcome nearly two decades of investment and innovation by a foreign competitor. It is fairly simple – China moved first and now they are in a position of strength as other nations play catch-up in the transition to electrified vehicles.

It is important to put this in perspective. Two decades ago, the U.S. was the leading manufacturer of automobiles in the world. Today, we remain one of the global leaders, manufacturing approximately 10 million vehicles in the U.S., and more than 16 million across North America.

But our position in the global market has been dramatically outpaced by China. At the turn of the century, China was manufacturing around 2 million vehicles. Today, they manufacture 30 million vehicles and have capacity for nearly 50 million. Nearly one-third of that production was for new energy – or electrified – vehicles. Put differently, <u>China is manufacturing EVs on a scale equivalent to the entire manufacturing output of the auto industry in the U.S.</u>

Despite those sobering statistics, the auto industry in the U.S. remains at the forefront of innovation and manufacturing capacity that is critical to our national and economic security.

Since 2009, the auto industry has invested $322 billion to strengthen or expand automotive manufacturing in the U.S. Keep in mind, every direct job in vehicle manufacturing creates another 10.5 American jobs. These are not just auto jobs – these are jobs throughout communities and the economy necessary to support our manufacturing sector and provide $650 billion in payroll compensation as well as more than $220 billion in federal and state revenue annually. As a result, every $1 added to the economy by vehicle manufacturing creates an additional $3.45 in economic value.[2]

Today, the auto industry supports 10 million jobs, coast-to-coast. This is what is at stake as we look toward the future of the industry. If we do not invest in the technologies of the future, this critical manufacturing base and the jobs it supports are at risk.

Auto manufacturers and suppliers are committed to keeping the U.S. at the forefront of automotive innovation and manufacturing – and are investing in that future. In recent years, the auto industry has announced over $125 billion in EV investments, from battery factories to assembly plants.[3] Investments that will create more than 100,000 jobs and increase U.S. battery plant capacity by 649%.[4]

The success of these investments, however, depends on a host of factors outside the auto industry's control. Consumers must have confidence in the technology. This, in turn, depends on access to charging infrastructure, as well as overcoming concerns around range anxiety and the realities of longer fueling times. There are realities to the up-front costs of EVs, especially as we seek to transition the supply base to support this new technology – a transition that relies on mining, processing and other components that do not exist in the U.S. at a scale necessary to

---

[2] https://www.autosinnovate.org/EconomicImpactReport

[3] This does not include needed investments in subcomponent capacity as reflected in Alliance for Automotive Innovation, *The Future is Electric: Let's Drive Together* (Feb 2024), available at https://www.autosinnovate.org/posts/communications/the-future-is-electric-infographic.pdf.

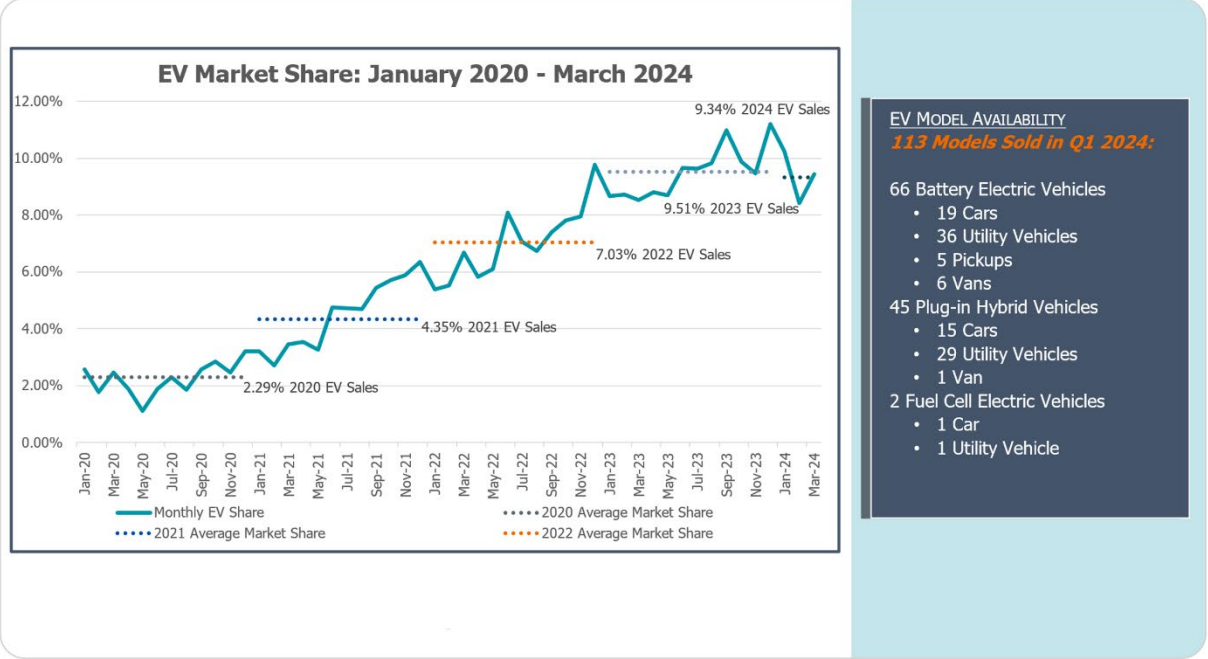
[4] Id.

meet existing, let alone future, demand. We call these supportive policies or "necessary conditions".

Current Vehicle Market in the U.S.

Let's start by looking at the U.S. vehicle market and then how that relates to the EV transition. Last year, the industry produced 10. million vehicles in the U.S., or 16.1 million in North America. Each year, manufacturers in the U.S. export 2 million vehicles, contributing to the incredible $140 billion in motor vehicles and parts exports – the second largest U.S. export.

In terms of sales, last year 15.4 million new vehicles were sold across the country. Of those vehicles, 80% were light duty trucks – crossovers, SUVs, pickups, and vans – continuing the trend of U.S. consumers preference for larger vehicles. We also see consumers holding on to vehicles for longer, with the average age of vehicles on the road at over 12 years.



EV sales have been increasing in recent years and of the 15.4 million vehicles sold in the U.S. last year, roughly 10 percent of these vehicles – or 1.4 million – were electrified products (battery electric, plug-in hybrid, or fuel cell). Today there are 113 electrified models available in

the U.S.[5] Over the past eight years, internal combustion engine (ICE) market share has steadily declined from more than 97 percent in 2016 to 78.6 percent in 2024 for an overall loss of 18.6 percentage points (pp). The ICE market share loss was replaced by increases in share of hybrids, BEVs, and PHEVs. Hybrids made up most of the alternative vehicle gains (+10.1 pp) followed by BEVs (+6.6 pp) and PHEVs (+1.9 pp) over the last eight years. Despite this trend, we must keep in mind that EVs remain just north of 1% of the 286 million vehicles registered in the U.S.

The market has changed substantially from where we were just a few years ago but, without question, the pace of consumer acceptance and willingness to purchase EVs has slowed in recent months. In response, you have seen a number of manufacturers reevaluating their product mix to respond to consumer expectations.

So what is driving this shift in consumer acceptance in electrified vehicles? In my opinion, there are a number of factors at play from higher interest rates to reaching the peak of "early adopters." As a result, the EV market will be choppy for some time as customers get comfortable with the technology, charging becomes installed and noticeable, and prices come down. Further, it must be stressed that most of these companies are self-funders, meaning they must raise and allocate massive capital to invest in cutting edge technologies through the sale of profitable ICE vehicles That process takes some time and recognition that companies can't get too far ahead of the customer.

Strategies that facilitate consumer awareness and wider-scale adoption are critical to sustaining a robust supply base and providing a smooth transition to advanced clean technologies. Rather than viewing this through the lens of "cost parity" to achieve meaningful consumer acceptance, we need to examine supportive policies that take it a step further, toward "convenience parity" — what is necessary to reach a point where a consumer can go shopping for a new vehicle and look at the EV and internal combustion engine (ICE) options with few questions about the

---

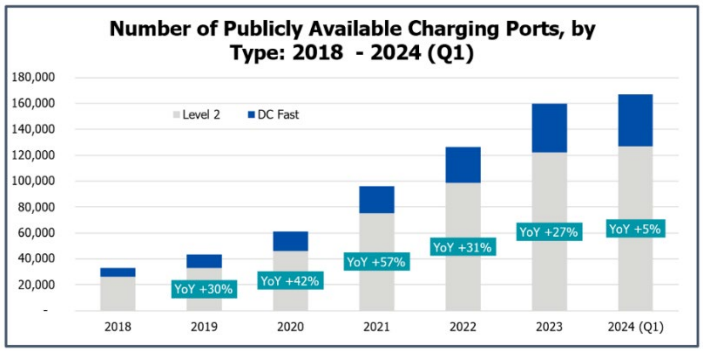
[5] Alliance for Automotive Innovation, *New American Auto Industry*, available at https://bit.ly/3Ss17tA (see also Attachment 1)

relative costs, ease, or convenience of ownership between the two. Let's take a look at some of the chief impediments to consumer acceptance of EVs – charging infrastructure and cost.

Charging Infrastructure

Access to convenient and reliable electric charging and hydrogen fueling infrastructure along with concerns surrounding "range anxiety" are among the most substantial impediments to widespread EV adoption. The Department of Energy estimates that 80 percent of vehicle charging occurs at home or work.[6] Most homes and businesses, however, lack the electric infrastructure to support vehicle charging, creating additional expense or inconvenience for those seeking to adopt the technology. Unfortunately, the ratio of publicly available EV charging infrastructure is widening and going in the wrong direction despite continued private and public sector investments to ensure reliable public EV charging across the country. Further, geographic disparities in charging infrastructure are pervasive. At the end of 2023, nearly 30 percent of all public charging infrastructure was located in California. Of the more than 3,100 counties in the U.S., 53 percent had five or fewer chargers installed; 31 percent had zero. The top 25 counties with the highest number of chargers accounted for one-third of all U.S. EV charging infrastructure.[7]

Level 2: 54,332 Locations, 126,630 EVSE Ports
DC Fast: 9,619 Locations, 40,583 EVSE Ports
Hydrogen Refueling: 56 Stations (55 are in California)
U.S. Total: *62,760 Locations, 167,213 EVSE Ports*
Some station locations have both Level 2 and DC Fast installed.

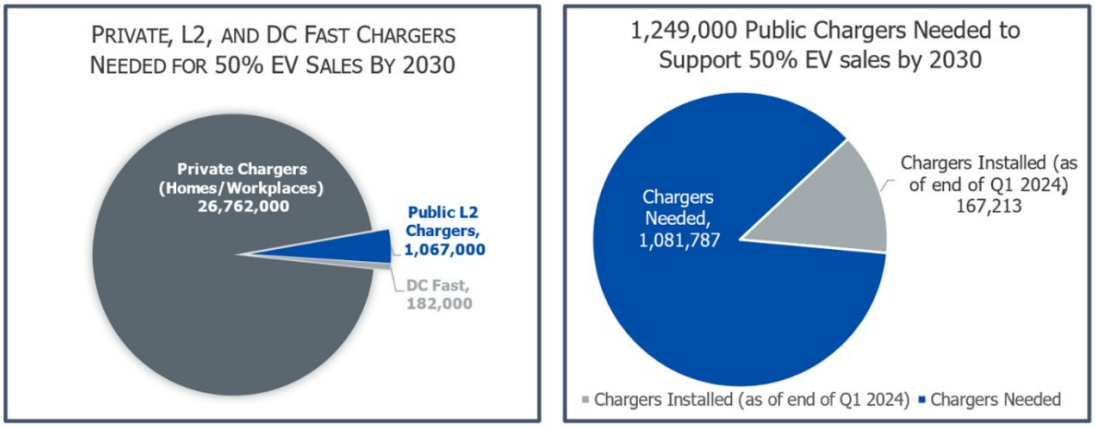


[6] U.S. Department of Energy. "Batteries, Charging, and Electric Vehicles." Accessed November 24, 2020. https://www.energy.gov/eere/electricvehicles/charging-home

[7] Auto Innovators, *Get Connected: Electric Vehicle Quarterly Report 2023 (Q4)* available at, https://www.autosinnovate.org/posts/papers-reports/Get%20Connected%20EV%20Quarterly%20Report%202023%20Q4.pdf

There are 4.7 million EVs on the road and a total of 167,213 publicly available charging outlets in the U.S. – a ratio of 28 EVs for every public port. Nationwide, in the first quarter of 2024 the number of publicly available EV chargers increased 5 percent from the previous quarter – while total EVs on the road increased 8 percent. Only 7,247 new public chargers were added while 344,533 new EVs were registered – a ratio of 48 new EVs for every new public port.

Number of Chargers needed to support 33 M EVs in 2030



More than 1 million additional public chargers (940,370 L2 and 141,417 DC Fast) will need to be installed to satisfy the necessary infrastructure estimate to accommodate 33 million EVs by 2030. This means that between the end of Q1 2024 and December 31, 2030, 438 chargers need to be installed every day, for the next 6.75 years. Or 3 chargers every 10 minutes through the end of 2030.[8]

Auto Innovators recently highlighted the importance of collaboration across government and multiple sectors to ensure a more seamless pathway to vehicle grid integration (VGI) – a simplified term to describe the converge of automotive and electric power sectors. This

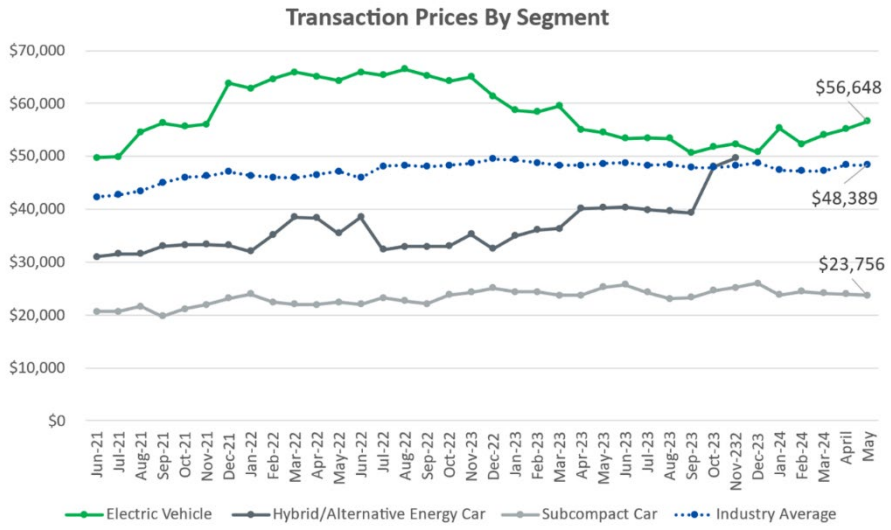
[8] Auto Innovators, *Get Connected: Electric Vehicle Quarterly Report 2024 (Q1),* available at, https://www.autosinnovate.org/posts/papers-reports/get-connected-q1-2024

partnership and coordination with the utility sector is critical to ensure the level of power needed to service both light and medium-heavy duty vehicles is commensurate with state and federal regulatory requirements (see Get Connected and Vehicle Grid Integration: The Convergence of the Automotive and Electric Power Industries for more information on charging infrastructure and modernizing the electric grid).

One additional note on the access to infrastructure, we need to work together with state and local governments to carefully consider what is necessary to equip homes and businesses (especially new construction) with the infrastructure to support cleaner transportation both now and in the future. Multiunit dwellings (MUDs) like apartment or condominium buildings pose a particular challenge to ubiquitous home charging capabilities. A large number of MUDs can be found in underserved communities where construction and accessibility to charging infrastructure should be prioritized and supported in order to ensure entire communities have the opportunity to participate in the EV transformation.

Costs

The auto industry has made significant progress in driving down electric vehicles costs — specifically battery technology, which is the largest cost-driver for EVs – typically around 30-40% of the vehicle cost.



Growing global demand for EVs coupled with constraints in a transitioning global supply chain continue to add cost pressures for new vehicle costs. As a result, these vehicles up-front generally remain more expensive than their ICE counterparts. For example:

- In May, according to estimates by Kelley Blue Book, the average transaction price (ATP) for a new vehicle in the U.S. was $48,389.
- The average price paid for an electric vehicle in May was $56,648.
- In May, the average incentive package offered by OEMs/Dealers – excluding any federal or state incentives - for an electric vehicle was 12.4% of the ATP, up from April and 5.7 percentage points higher than the industry average.

One of the greatest opportunities to continue to lower costs and bolster economic security is the establishment of robust and resilient supply chains for electrified vehicles. My fellow witness, Ms. Hinman, has provided more detail and context around the current supply chain realities relative to our largest global competitor. So what does this mean for the auto industry in the U.S., especially as we face increasing pressure to eliminate components and minerals from China?

It is fairly simple on paper - as U.S. EV manufacturing grows, we need complementary support for the entire supply chain, including mining, processing and associated permitting reform, to reduce dependence on foreign sources. We also need to work collaboratively with neighbors, allies, and partners across the globe to establish robust and resilient supply chains, even if they extend beyond our borders. Failure to do so will stress limited global capacity and – as witnessed with the semiconductor shortage – result in constrained supply and higher prices for consumers. Worse, if we do nothing to bolster key supply chains, it will leave us dependent on and exposed to foreign competitors and their ability to manipulate the market for materials, components, or finished products through market dominance.

I cannot stress enough the importance of accelerating our efforts to secure the upstream supply chain – specifically around mining and processing. While the U.S. has vast resources, our nation lacks sufficient geologic deposits of several critical minerals and the mining and processing capacity to support the growing demand and regulatory requirements for electric vehicles. Simply put, new mines and processing facilities face long lead times for permitting and

development, raising questions about how quickly domestic capacity can be developed. As we have noted previously - "While it only takes two to four years to bring battery cell and active component manufacturing online, mining and refining can take 10-15 years of development and an additional ten years until nameplate capacity is reached. The lag time between permitting, opening, mining, and refining available critical minerals domestically and processing the material into components and building the cells is significant, leaving the U.S. dependent on foreign sources of minerals for at least a decade."[9] (See Get Connected (2023-Q3) for more information on critical minerals and mines.)

If we do not develop a holistic national strategy for these emerging and future supply chains, from mineral extraction to battery end-of-life, we will cement future dependence on foreign competitors for the minerals and components critical to the future of the industry.

This is not simply a question, therefore, of global or economic competitiveness. It is about defining the future of this technology - and associated infrastructure - in a manner that emphasizes safety, responsibility, and opportunity for more citizens to benefit from this transformative shift in personal mobility.

We are approaching a pivotal moment in the evolution of our industry and have an opportunity to work collaboratively to chart a course that sustains U.S. leadership and innovation in personal mobility solutions for decades to come. It is not just about the future of the auto industry - it is about the nation's global competitiveness and economic security.

The industry is committed to this future, but we cannot do it alone – nor do we want to. It will take all of us to realize the benefits of expanded electrification and what it means to the future of our industry and U.S. competitiveness. Consumers must trust the technology. Companies must

---

[9] Auto Innovators, *Get Connected: Electric Vehicle Quarterly Report 2023 (Q4)* available at, https://www.autosinnovate.org/posts/papers-reports/Get%20Connected%20EV%20Quarterly%20Report%202023%20Q4.pdf

earn that trust. And policymakers – at all levels – must implement the policies that facilitate those shared objectives, while recognizing market realities and consumer choice.

The global shift to expanded electrification is no longer a concept. The technology is here and scaling around the world. The question we must all ask ourselves is whether the U.S. will continue to be a leader in defining the future of personal mobility or allow it to be defined by others?

This is not about the next 5-10 years, specific technologies or policy objectives – it is about the future of automotive innovation and manufacturing in the U.S. for decades to come.
We look forward to continuing to work with you and your colleagues in Congress, as well as the Administration and other stakeholders, to shape the future of cleaner, safer, and smarter personal mobility.

ATTACHMENT 1

ALLIANCE FOR AUTOMOTIVE INNOVATION

THE *NEW* AMERICAN AUTO INDUSTRY

ELECTRIC VEHICLE TRANSITION

$125 BILLION
EV INVESTMENTS
BATTERY FACTORIES & ASSEMBLY PLANTS

114 EV MODELS
FOR SALE IN U.S.

10%
U.S. VEHICLE SALES IN 2023

ECONOMY

5% GDP

$1 TRILLION
TO U.S. ECONOMY

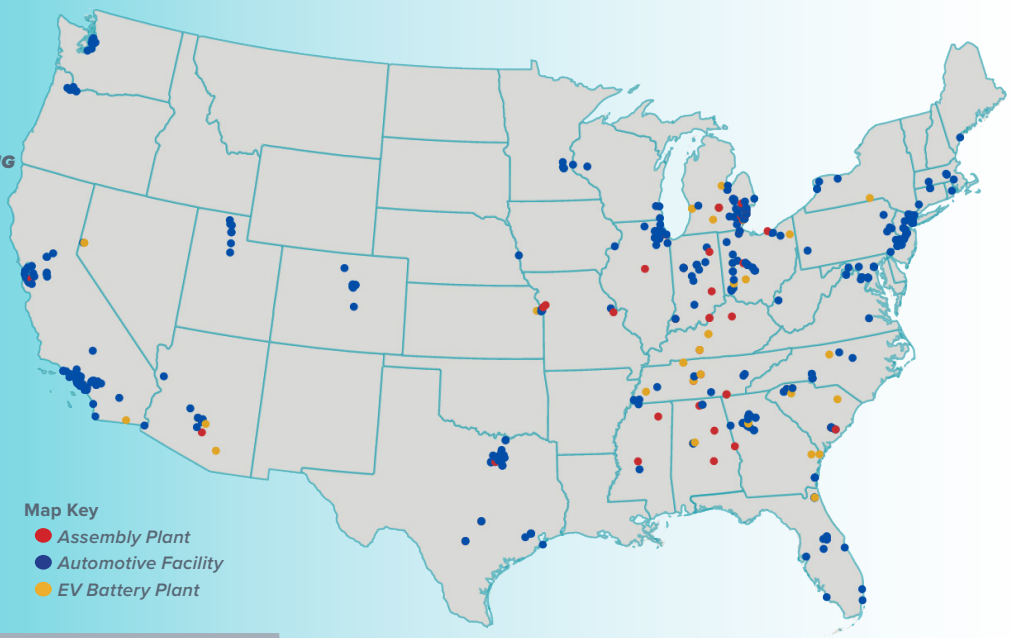
10 MILLION JOBS
COAST - TO - COAST

MANUFACTURING

$322 BILLION
INVESTED BY AUTOMAKERS AND SUPPLIERS TO STRENGHTEN AMERICAN AUTO MANUFACTURING (2009-2022)

*Every direct job in vehicle manufacturing creates another **10.5 American jobs.***

*Every **$1** added to the economy by vehicle manufacturing creates an additional **$3.45** in economic value.*



SALES

15 MILLION
NEW VEHICLES SOLD IN 2023

WATCH THE VIDEO:

EXPORTS

$105 BILLION
EXPORT POWERHOUSE

Motor vehicles and parts: second largest U.S. export

POLICY MATTERS

- CONSUMER CHOICE
- PUBLIC EV CHARGING
- SUPPLY CHAINS
- MINING & PERMITTING REFORM
- GRID MODERNIZATION
- MANUFACTURING & CONSUMER INCENTIVES

LEARN MORE: WWW.AUTOSINNOVATE.ORG

MARCH 2024

50-STATE AUTOMOTIVE DATA

State	Auto Jobs*		Automotive Economic Impact*			2023 Powertrain Sales**					
	Total	%Sate Total	% State GDP	Vehicle & Parts As % of All Trade	New Vehicles Sold 2023**	ICE	Hybrid	PHEV	BEV	FCEV	ZEV Total
AK	12,455	2.9%	1.8%	0%	24,662	88.2%	8.2%	0.8%	2.8%	0.0%	3.6%
AL	134,774	5.1%	5.8%	31.4%	192,270	88.9%	8.5%	0.6%	2.0%	0.0%	2.6%
AR	53,514	3.3%	3.1%	3%	110,264	90.3%	7.4%	0.5%	1.7%	0.0%	2.3%
AZ	171,152	4.3%	3.7%	3%	352,667	81.1%	9.5%	1.2%	8.2%	0.0%	9.4%
CA	772,112	3.3%	2.6%	9%	1,721,223	60.4%	13.8%	3.5%	22.1%	0.2%	25.7%
CO	120,735	3.1%	2.6%	1%	268,324	74.7%	10.1%	4.2%	10.9%	0.0%	15.1%
CT	65,911	3.0%	2.5%	1%	144,927	77.4%	12.4%	3.4%	6.7%	0.0%	10.2%
DC	1,454	0.2%	0.1%	1%	16,847	64.9%	15.4%	4.0%	15.6%	0.0%	19.6%
DE	18,777	3.2%	3.4%	1%	47,195	80.0%	11.2%	2.2%	6.6%	0.0%	8.8%
FL	489,663	3.9%	3.5%	6%	1,308,738	82.9%	9.7%	0.9%	6.5%	0.0%	7.4%
GA	257,586	4.1%	3.9%	10.7%	450,362	83.8%	8.8%	0.8%	6.5%	0.0%	7.4%
HI	22,812	2.7%	3.0%	9.5%	71,138	82.0%	7.0%	1.3%	9.8%	0.0%	11.0%
IA	64,913	3.2%	2.5%	6%	120,983	88.2%	8.7%	0.9%	2.3%	0.0%	3.2%
ID	40,129	3.7%	3.4%	1%	68,219	84.3%	11.0%	1.4%	3.4%	0.0%	4.7%
IL	256,778	3.4%	3.0%	3%	518,575	81.7%	10.5%	1.3%	6.5%	0.0%	7.8%
IN	200,348	5.2%	6.1%	10.2%	239,187	85.7%	10.2%	1.0%	3.2%	0.0%	4.1%
KS	63,619	3.4%	3.8%	2%	93,869	86.2%	9.1%	1.0%	3.8%	0.0%	4.8%
KY	141,589	5.7%	7.2%	9%	138,947	87.5%	9.2%	0.8%	2.6%	0.0%	3.3%
LA	79,759	3.1%	2.5%	1%	192,187	90.9%	7.1%	0.5%	1.4%	0.0%	2.0%
MA	109,477	2.3%	1.6%	1%	307,590	75.2%	12.8%	4.0%	8.1%	0.0%	12.0%
MD	104,727	2.9%	2.5%	24.2%	272,204	76.2%	12.1%	2.9%	8.8%	0.0%	11.7%
ME	32,096	3.9%	4.0%	1%	64,201	84.1%	9.8%	2.8%	3.2%	0.0%	6.0%
MI	392,193	7.2%	9.3%	50.8%	479,866	88.7%	7.3%	1.0%	3.0%	0.0%	4.0%
MN	107,188	2.9%	2.4%	3%	228,949	84.0%	9.6%	1.4%	5.0%	0.0%	6.4%
MO	168,454	4.6%	5.3%	10.6%	284,658	86.3%	7.7%	2.4%	3.5%	0.0%	5.9%
MS	67,782	4.3%	5.1%	6%	101,935	90.9%	7.5%	0.5%	1.0%	0.0%	1.5%
MT	27,360	4.0%	3.1%	1%	58,276	86.6%	10.0%	1.2%	2.2%	0.0%	3.4%
NC	221,071	3.6%	2.8%	3%	422,990	82.1%	10.8%	1.1%	5.9%	0.0%	7.0%
ND	17,781	1.4%	2.6%	3%	37,914	92.5%	6.2%	0.5%	0.8%	0.0%	1.3%
NE	44,878	3.4%	2.5%	4%	81,465	88.1%	8.2%	1.2%	2.5%	0.0%	3.7%
NH	34,094	3.9%	3.5%	1%	87,297	85.0%	10.0%	1.7%	3.2%	0.0%	4.9%
NJ	146,997	2.8%	2.2%	5%	492,075	75.7%	10.7%	2.7%	10.9%	0.0%	13.6%
NM	32,833	3.0%	2.6%	2%	76,764	85.3%	9.8%	1.2%	3.7%	0.0%	4.9%
NV	57,203	3.2%	3.1%	1%	133,103	76.5%	10.2%	1.7%	11.6%	0.0%	13.2%
NY	239,384	2.0%	1.3%	1%	839,538	80.0%	11.0%	3.5%	5.6%	0.0%	9.1%
OH	305,340	4.5%	4.4%	13.3%	509,566	86.4%	9.4%	1.1%	3.1%	0.0%	4.2%
OK	80,160	3.6%	3.0%	2%	488,934	90.9%	4.4%	3.0%	1.7%	0.0%	4.7%
OR	80,763	3.2%	2.7%	8%	151,929	70.8%	13.7%	3.7%	11.8%	0.0%	15.4%
PA	235,623	3.2%	2.4%	4%	541,989	82.6%	11.0%	2.1%	4.2%	0.0%	6.3%
RI	17,422	2.8%	2.2%	30.6%	47,468	81.9%	10.4%	3.4%	4.4%	0.0%	7.8%
SC	131,581	4.7%	5.2%	24.8%	211,948	86.4%	9.7%	0.8%	3.1%	0.0%	3.9%
SD	21,801	3.6%	3.1%	3%	37,684	90.9%	7.0%	0.9%	1.3%	0.0%	2.1%
TN	214,130	5.2%	6.4%	14.1%	266,032	86.5%	8.6%	0.6%	4.2%	0.0%	4.9%
TX	685,089	3.9%	3.9%	8%	1,462,554	85.8%	8.0%	0.7%	5.5%	0.0%	6.2%
UT	75,385	3.5%	3.1%	4%	146,441	80.5%	10.8%	1.6%	7.1%	0.0%	8.7%
VA	160,474	3.1%	2.4%	5%	334,908	78.3%	11.9%	1.4%	8.3%	0.0%	9.7%
VT	14,986	3.6%	3.2%	1%	39,210	79.1%	10.6%	3.6%	6.7%	0.0%	10.3%
WA	113,800	2.6%	1.9%	5%	276,907	65.8%	15.4%	3.0%	15.8%	0.0%	18.8%
WI	127,419	3.5%	3.0%	3%	220,530	86.0%	9.7%	0.9%	3.3%	0.0%	4.3%
WV	27,186	3.2%	2.8%	12.3%	72,184	89.7%	8.5%	0.6%	1.1%	0.0%	1.8%
WY	11,627	3.0%	2.3%	0%	22,615	89.6%	8.3%	0.8%	1.3%	0.0%	2.1%
U.S.	**9,668,915**	**4.94%**	**4.9%**	**9%**	**14,880,308**	**80.4%**	**10.1%**	**1.9%**	**7.6%**	**0.0%**	**9.5%**

*Multi-industry contribution analysis of the economic impact of automotive manufacturing, selling, repairing, renting, and additional manitenance model using IMPLAN economic analysis data software, 2021 data year;

** Figures compiled by Alliance for Autotmoive Innovation with new registration retail and fleet data provided by S&P Global Mobility covering January 1, 2023 - December 31, 2023