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# Proposed EV Mandate Would Eliminate 117,000 Auto Manufacturing Jobs

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## TOPLINE POINTS

- ★ Proposed Biden Administration regulations would require Americans to switch to electric vehicles they do not want. Under the draft rules, auto manufacturers would be required to increase the proportion of electric vehicles they sell from 6% to 67% in less than a decade.
- ★ Electric vehicles have fewer parts and require considerably less labor to manufacture than conventional gas-powered vehicles. As a result, mass vehicle electrification will eliminate many jobs.
- ★ The Biden Administration's mandate would eliminate a net 117,000 auto manufacturing jobs nationwide. The Midwest would bear the brunt of these losses. Even under a best-case scenario, the Biden EV mandate would cost Michigan (-25,000), Indiana (-16,000), and Ohio (-14,000) tens of thousands of auto manufacturing jobs.

**Introduction**

Proposed Biden Administration regulations would require electric vehicle (EV) sales to increase from 6% to 67% of all U.S. auto sales by 2032. Industry analysts—including liberal organizations—have warned that this EV transition would eliminate many existing auto manufacturing jobs. The main reason for this is that electric vehicles require fewer parts and less labor to manufacture than vehicles powered by internal combustion engines (ICE). However, analysts have paid little attention to how EV mandates will affect individual states. This report uses data from the Quarterly Census of Employment and Wages (QCEW) to estimate both national and state-specific job losses. These estimates show the Biden Administration's proposed EV rules would likely eliminate at least 117,000 existing auto manufacturing jobs. Job losses would be concentrated in the Midwest, with Michigan (-25,000), Indiana (-16,000), and Ohio (-14,000) losing the most jobs. Southern states, including Tennessee, South Carolina, and Alabama, would also see significant job losses. If it takes effect, the Biden Administration's EV mandate would eliminate tens of thousands of blue-collar jobs.

**Electric Vehicle Mandate**

In April 2023 the Environmental Protection Agency proposed regulations that would significantly increase fuel economy and vehicle emission standards. However, it is physically impossible for conventional gasoline-powered vehicles to meet these proposed requirements. The rule would effectively force automakers to shift production to electric vehicles, which do not use fossil fuels or have direct emissions (though the power plants from which electric vehicles draw electricity

typically do).[1] The Biden Administration expects this rule to require EVs to make up 67% of new vehicles sold by 2032 (Environmental Protection Agency, 2023). This is a substantial increase from the Biden Administration's prior target of 50% of EV sales by 2030 (Executive Order 14037, 2021).

EVs currently make up only 5.6% of U.S. vehicle sales. One company—Tesla—accounts for almost two-thirds of those sales (Mihalascu, 2023). If this proposed rule withstands legal challenges, it would force automobile manufacturers to replace conventional vehicle production with EVs en masse—irrespective of what cars Americans want to buy.

**Most Americans Prefer Gas-Powered Vehicles**

EVs have advantages and disadvantages compared to gas-powered automobiles. Charging an EV typically costs less than fueling a conventional car, and EVs also have lower maintenance costs and faster acceleration. However, EVs cost substantially more than gas-powered vehicles, have shorter ranges, and can take a while to fully charge.

Although some Americans want EVs, Americans generally prefer conventional vehicles. The Deloitte 2023 Global Automotive Study found that 62% of Americans prefer their next car purchase to be a gas-powered vehicle, 8% prefer an entirely battery-powered car, and 20% prefer a hybrid vehicle (Deloitte, 2023). Range and price concerns are particularly important factors for Americans who prefer gas-powered vehicles; most Americans (53%) indicated they would not pay more for an electric vehicle (Edelstein, 2022). A recent survey of car dealerships also found that 45% of dealerships reported they would not sell EVs under any circumstances (Lewis, 2023).

After purchasing an EV, a significant proportion of drivers switch back to conventional vehicles. One study found that one-fifth of California EV owners returned to purchasing gas-powered vehicles, primarily because of the inconvenience of charging EVs (Powell et al., 2022, p. 39). Another survey looked at all Americans—not just Californians—who purchased a new vehicle in 2017. That study found that about half of EV owners chose not to buy another EV when they bought a new car. Respondents indicated that range, recharging time, and reduced performance in cold weather were key reasons for switching back to gas-powered vehicles (Dua & Bansal, 2021, p. 3).

EVs appeal to some Americans, but without substantial government intervention, they would likely remain a niche market. However, the Biden Administration plans to force automakers to primarily produce—and Americans to purchase—EVs. This EV mandate would create significant challenges for energy supply chains, particularly by creating mineral dependencies on foreign powers.[2] The EV mandate also threatens many auto manufacturing jobs.

**EV Manufacturing Requires Fewer Workers**

EVs are technologically different from conventional vehicles. They are significantly more expensive than gas-powered vehicles because their batteries require costly minerals (Mills, 2022, pp.7-8; Frazin, 2022). Nonetheless, EVs are mechanically less complex. Conventional vehicles have many interconnected moving parts that convert the energy from burning gasoline to motion while processing exhaust. These parts include catalytic converters, gears, clutches, and torque converters. None of these parts are needed in electric vehicles, which consist of relatively simple motors and a battery. Ernst and Young report that conventional vehicles have 2,000 moving parts in their powertrains, while Tesla EV drivetrains have only 17 (Canis, 2019, p. 2).

Consequently, EVs require fewer workers to assemble. Automakers like Ford and Volkswagen report that EV manufacturing requires 30% to 40% less labor than gasoline-powered vehicles (United Auto Workers, 2020, p. 13; Bushey, 2022). Moreover, parts suppliers—not final assembly plants—employ almost three-quarters of auto manufacturing

[1] Obtaining the minerals necessary to produce a single (EV) battery requires mining about 250 tons of rock—an energy-intensive process (Mills, 2022, p. 21). As a result, between 8 and 20 tons of carbon dioxide are emitted during the production of each EV. If battery production becomes even more energy intensive as mining shifts to lower-grade ores, EVs could emit more carbon dioxide over their full lifespan than conventional vehicles (Mills, 2022, p. 21).

[2] China dominates the global market for refined energy minerals, surpassing OPEC's dominance in oil markets. China holds a 40% market share in aluminum, a metal vital for manufacturing electric vehicles. Each EV requires about 400 pounds more aluminum than a conventional gasoline-powered vehicle (Mills, 2022, p. 8). Chinese firms can refine minerals for EV batteries at a lower cost than U.S. firms, due in part to less stringent environmental regulations (Chang & Bradsher, 2023).

workers.[3] About one-quarter of those parts workers produce gasoline engines and parts or powertrain and transmission parts—jobs that would be largely eliminated by a shift to EVs (U.S. Bureau of Labor Statistics, 2021).

**EV Mandates Will Eliminate Manufacturing Jobs**

Auto industry analysts have accordingly noted that EV mandates will eliminate many existing auto manufacturing jobs. As Brett Smith, director of technology at the Center for Automotive Research, explained "[t]he industry is going through a transition unlike anything we've ever seen. There's a pretty strong chance that there will be fewer people building these cars, fewer people building the parts to these cars, and that will create challenges in some automotive communities" (Levin, 2022).

Analysts across the ideological spectrum project substantial job losses. In 2018, analysts projected EVs would account for about one-fifth of new U.S. vehicle sales by 2030 (International Energy Agency, 2018, p. 80; Cooper & Schefter, 2018, p. 2). That year, the United Auto Workers (UAW) union estimated that the shift to electric vehicles would eliminate 35,000 of its members' jobs (Bogage, 2022). That figure accounts for nearly 1 in 10 UAW members.

UAW research director Jennifer Kelly has publicly predicted that "[t]he workers who are making engines and transmissions today, their jobs will be eliminated when we make a transition to electric vehicles" (Beene & Coppola, 2018). She warns that "electric, to me, is where the real risk is to our membership" (Dawson et al., 2019).

In 2021 the Biden Administration set a target of EVs accounting for half of all new vehicle sales by 2030 (The White House, 2021). The left-wing Economic Policy Institute (EPI) estimated that, without substantial government intervention, hitting this target would eliminate 75,000 auto manufacturing jobs (Barrett & Bivens, 2021).

The Biden Administration's even stricter proposed new mandate—two-thirds of all vehicles sold by 2032—would cost even more jobs.

Foreign analysts similarly project that EV mandates will eliminate many auto-related jobs overseas. For example, the European Union has advanced aggressive EV mandates. The European Association of Automotive Suppliers estimated that by 2040, these measures will eliminate a net of 275,000 jobs in automotive suppliers (Sigal, 2021). Japanese analysts expect EVs to eliminate more than 80,000 auto-related jobs in their country by 2050 (Yamada & Abe, 2021).

**Great Lakes Region Will Be Particularly Affected**

EV mandates will particularly affect the industrial Midwest. The tri-state region of Indiana, Michigan, and Ohio is the heartland of U.S. automobile production, particularly for gas-powered vehicles, transmissions, and related parts manufacturing. More than two-fifths of U.S.-built vehicles and three-fifths of U.S.- built transmissions are manufactured in these three states (Massachusetts Institute of Technology, 2022, p. 2). These states account for 43% of U.S. autoworkers, including more than 70,000 workers who produce parts for motor vehicle powertrains, transmissions, or gasoline engines (U.S. Bureau of Labor Statistics, 2021).

Industry analysts have noted that an EV transition will be particularly painful to the Midwest (Massachusetts Institute of Technology, 2022, pp. 21-22). As Lawrence Burns, former vice president for research and development at General Motors, told reporters, "If you play this out in a five- to 10-year time frame, employment ramifications for states like Michigan and regions like southeast Michigan and northwest Ohio are really going to be a big deal" (Grzelewski, 2020).

Table 1 shows motor vehicle manufacturing employment in the tristate area and in the U.S. as a whole, including both employees on primary assembly lines and employees in parts production. Michigan, Ohio, and Indiana have significantly more jobs—and thus economic disruption—at stake from EV mandates than any other region of the country.

**Estimated Job Losses**

While EV mandates are widely expected to eliminate existing auto manufacturing jobs—especially in the Midwest—few public estimates are available for how EV mandates will affect individual states. The America First Policy Institute used data from the Bureau of Labor Statistics' Quarterly Census of Employment and Wages to model the net national auto manufacturing job losses from EV mandates.

Based on the automaker and UAW estimates discussed above, the model assumes EVs require

[3] As shown in Table 1, data from the Bureau of Labor Statistics Quarterly Census of Employment and Wages shows that 219,000 employees worked in automobile and/or light-duty motor vehicle manufacturing facilities in 2021, while 539,000 workers were employed in motor vehicle part manufacturing facilities.

TABLE 1

## Motor Vehicle Manufacturing Employment in Indiana, Michigan, Ohio, and the Entire United States (2021)

| | Motor Vehicle Assembly | Vehicle Parts Manufacturing | Total Auto Manufacturing Employment |
|---|---|---|---|
| Indiana | 19,959 | 58,792 | 78,751 |
| Michigan | 44,120 | 121,774 | 165,894 |
| Ohio | 17,002 | 66,641 | 83,643 |
| Total U.S. | 218,619 | 538,945 | 757,564 |

SOURCE: Author's calculations using data from the Bureau of Labor Statistics, Quarterly Census of Employment and Wages. See the Methodological Appendix for details.

30% less labor to assemble than conventional vehicles. It also assumes that positions in gas engines and parts manufacturing facilities do not have a role in producing EVs and that four-fifths of positions involved in producing transmission and powertrain parts are similarly unnecessary for EV production. The methodological appendix explains the model in detail.

This model focuses only on auto manufacturing jobs; it does not estimate jobs created or lost in other sectors, such as car dealerships, vehicle maintenance facilities, or battery manufacturing.[4] Workers cannot easily transition between these sectors because they generally involve different skill sets (St. John, 2022). As a European industry association explained, battery manufacturing "typically requires more academically schooled workers and less vocationally trained workers than the production of transmission systems, fuel tanks or other powertrain components" (European Association of Automotive Suppliers, 2022).

In 2022, electric vehicles accounted for 5.6% of U.S. motor vehicle sales (Mihalascu, 2023). Table 2 shows estimated net national auto-manufacturing job losses—in both final assembly and parts manufacturing—for different levels of EV growth.[5]

These national projections track those of other analysts. If EVs increase to one-fifth of the U.S. market, the model projects, 27,000 net auto-manufacturing jobs will be lost. This closely tracks the UAW's 2018 estimate that EVs would eliminate 35,000 auto manufacturing jobs— at a time when analysts expected EV market share to increase to only 20% over the decade.[6]

[4] The North American Industrial Classification System (NAICS) classifies battery manufacturing in a different industrial sector than it does auto manufacturing. NAICS code 336—transportation equipment manufacturing—encompasses motor vehicle and motor vehicle parts manufacturing. Battery manufacturing is covered under NAICS code 335—electrical equipment, appliance, and component manufacturing.

[5] The model does not show a strictly linear relationship between job losses and EV market share, i.e. job losses at 20% market share are not two-fifths of the job losses at 50% EV market share. This is because EVs currently account for about 6% of the U.S. market, and the model takes that into account.

[6] The discrepancy between the AFPI model and the UAW's 2018 estimates is explained by EV market share growth and auto manufacturing job losses between 2018 and 2022. In 2018, EVs accounted for only 2 percent of all vehicle sales (McDonald, 2019). If the model were specified using employment data from 2018 and estimating job losses from EV market share rising from 2% to 20%, it would project 35,100 jobs lost nationally—almost exactly the UAW estimate.

TABLE 2

## U.S. Auto Manufacturing Job Losses if Electric Vehicle Market Share Rises to:

| | Motor Vehicle Assembly | Gas Engines & Parts | Transmission & Power Train Parts | Total Job Losses |
|---|---|---|---|---|
| 20% | 9,612 | 8,539 | 9,283 | 27,434 |
| 50% | 29,638 | 26,327 | 28,623 | 84,589 |
| 67% | 40,986 | 36,407 | 39,582 | 116,976 |

SOURCE: Author's calculations using data from the Bureau of Labor Statistics, Quarterly Census of Employment and Wages. See the Methodological Appendix for details.

If EVs rise to half of U.S. vehicle sales—the Biden Administration's original policy—the model estimates almost 85,000 net auto-manufacturing jobs will be lost. This is similar to EPI's estimated 75,000 manufacturing jobs lost at 50% EV market share.

The model also shows the Biden Administration's proposed stricter EV mandate would cost tens of thousands more jobs than its original policy. If EV sales rose to two-thirds of the market—the proposed new requirement—then 117,000 net auto-manufacturing jobs would be eliminated. About two-thirds of those job losses would come from parts manufacturers. The remaining third would be in final assembly positions. Overall, the Biden Administration's policies will substantially reduce auto-manufacturing employment.

**Job Losses by State**

Previous studies do not provide state-specific estimates of EV-induced job losses. Table 3 presents "best-case scenario" estimates of auto-manufacturing job losses by state if EVs rise to two-thirds of new vehicle sales. The model assumes that existing auto manufacturers would retain their market share through the EV transition and that they would build these EVs at their existing facilities instead of closing some plants and opening new facilities in different states. Under these optimistic assumptions, total job losses are driven only by the aggregate labor efficiencies in EV assembly and by the elimination of engine and powertrain part manufacturing positions.

Table 3 presents the nine states that, under this best-case scenario, would experience the greatest auto manufacturing job losses under the Biden Administration's new policy. These states collectively account for almost 84,000 of the 117,000 jobs lost nationally. Overall, the Midwest would bear the brunt of job losses, although several southern states would also see significant losses.

Michigan is projected to experience the worst job losses, with 25,000 jobs lost. About 8,000 of those jobs would occur in final assembly, while about 17,000 would be in parts manufacturing. Indiana and Ohio would suffer the next worst losses, with 16,000 and 14,000 jobs lost, respectively. Tennessee (-7,000), South Carolina (-5,600), and Alabama (-5,200) would also experience large job losses.

However, the Midwest is likely to see substantially greater job losses than these best-case projections. EV mandates are likely to push auto manufacturing jobs out of the Midwest. Telsa dominates EV manufacturing, accounting for almost two-thirds of EVs sold in 2022. It is accordingly likely that Tesla will take considerable market share from the other automakers if the government forces them to switch to EVs. This would mean higher employment in Tesla's California, Texas, and forthcoming Nevada manufacturing facilities, but even lower employment in Michigan, Ohio, and Indiana. Similarly, many of the traditional auto manufacturers are building their EVs in new facilities outside the tri-state area. Ford Motor Co., for example, has announced plans to create a large assembly plant for electric trucks in Tennessee (Ford, 2021). This shift would mitigate job losses in Tennessee but would result in even worse job losses for Michigan.

less labor to produce than gas-powered vehicles.

TABLE 3

**Auto Manufacturing Job Losses by State under a 67% EV Mandate**

| | Motor Vehicle Assembly | Gas Engines & Parts | Transmission & Power Train Parts | Total Job Losses |
|---|---|---|---|---|
| Michigan | 8,272 | 8,578 | 8,151 | 25,000 |
| Indiana | 3,742 | 1,418 | 10,923 | 16,083 |
| Ohio | 3,188 | 6,045 | 4,891 | 14,123 |
| Tennessee | 3,290 | 2,719 | 1,009 | 7,018 |
| South Carolina | 2,321 | 1,371 | 1,957 | 5,648 |
| Alabama | 2,930 | 1,657 | 576 | 5,164 |
| Illinois | 1,833 | 1,067 | 1,144 | 4,045 |
| North Carolina | 0 | 794 | 2,748 | 3,542 |
| Kentucky | 0 | 1,646 | 1,328 | 2,975 |
| **Total For All States** | **25,575** | **25,296** | **32,728** | **83,598** |

SOURCE: Author's calculations using data from the Bureau of Labor Statistics, Quarterly Census of Employment and Wages. See the Methodological Appendix for details.

Job losses from vehicle electrification have already begun. As part of its push to focus on electric vehicles, General Motors announced plans in 2018 to eliminate 8,000 salaried positions and 6,000 hourly positions, closing five North American assembly plants (Goldman, 2018). In 2022, Ford Motor Co. announced plans to eliminate 3,000 positions as part of its shift to electric vehicles (Peiser & Halper, 2022). Stellantis (which now owns Chrysler) announced plans in 2023 to eliminate 3,500 hourly positions in the U.S. as it reorients to produce electric vehicles (Moore, 2023). Since Gov. Gretchen Whitmer took office in 2019, Michigan has lost a net total of 1,600 auto jobs (Dickson, 2022).

They cost more primarily because their batteries require expensive materials to produce. If the Biden Administration follows through with this mandate, at least 117,000 auto manufacturing workers will lose their jobs nationwide. Even under a best-case scenario, the Midwest would lose many jobs, with Michigan (-25,000), Indiana (-16,000) and Ohio (-14,000) experiencing the worst losses. If—as seems likely—EV mandates cause Tesla to expand its market share at the expense of traditional automakers, the Midwest would see even greater job losses.

## Conclusion

Requiring Americans to buy electric vehicles they do not want has serious consequences for American workers. The Biden Administration plans to require electric vehicles to make up two-thirds of motor vehicle sales by 2032—a more than tenfold increase in EV market share. This would eliminate many existing auto manufacturing jobs. Electric vehicles require fewer parts and

**Methodological Appendix**

The America First Policy Institute (AFPI) used motor vehicle manufacturing employment data from the Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW) to estimate net job losses from EV adoption. The QCEW is based on records derived from unemployment payroll tax payments. It is highly reliable administrative data, but it is produced with a lag. QCEW data from 2021 is the most recent annual data available. AFPI collected both national and statewide QCEW employment data for 2021 from four industry subsectors:

- Automobile and light-duty motor vehicle manufacturing (NAICS code 33611);
- Motor Vehicle Parts Manufacturing (NAICS code 3363);
- Motor Vehicle Gasoline Engine and Engine Parts Manufacturing (NAICS code 336310); and
- Motor Vehicle Transmission and Power Train Parts Manufacturing (NAICS code 33635).

AFPI assumed the annual quantity of vehicles sold would remain constant throughout any transition to EVs. This is a somewhat strong assumption, as—even with substantial tax credits—EVs remain considerably more expensive than gas-powered vehicles. The average cost of vehicles consequently would rise considerably as EV market share increases, and higher prices reduce sales. To the extent that vehicle sales drop instead of remaining constant, the model will tend to underestimate job losses, as fewer workers would be needed to make fewer vehicles.

Assuming constant production and constant market share, the model assumes job losses at the national and state level would be proportional to the reduction in conventional vehicle sales. Automakers report that EVs require 30% to 40% less labor to assemble than conventional vehicles (United Auto Workers, 2020, p.13; Bushey, 2022). AFPI used the lower end of this range, estimating that the reduction of employment in automobile and light-duty motor vehicle manufacturing ("Motor Vehicle Assembly" in Tables 2 and 3) is proportional to 30% of the reduction in conventional vehicle sales.

This assumption implies that automakers would respond to the mandate by retooling their existing conventional vehicle assembly facilities to produce EVs, keeping the large majority of their current assembly workforces. This is an optimistic assumption. In reality, some facilities that assemble gas-powered vehicles are likely to close entirely, while new EV assembly facilities are likely to open. Those new EV facilities may not be in the same states as the conventional facilities, and they are unlikely to solely reemploy workers laid off from conventional vehicle production. Such shifts in domestic production have no impact on net national job loss estimates. However, as discussed in the text, they mean the state job loss figures are a "best-case scenario" for the Midwest. In reality, production shifts would mean the Midwest would likely experience even greater job losses.

The model assumes that job losses for workers in motor vehicle gasoline engine and engine parts manufacturing would be fully proportional to decreases in conventional vehicle sales, i.e., none of these jobs would have a role in producing electric vehicles. The model further assumes that job losses in motor vehicle transmission and power train parts manufacturing would be proportional to 80% of the reduction in conventional vehicle sales, e.g., EV manufacturing would require 20% of current transmission and powertrain parts employees. This allows for the possibility that transmission and powertrain parts manufacturers will retool to provide parts for EV power trains, while recognizing that EV power trains are much simpler and require far fewer parts than gas-powered vehicles.[7]

The assumption that some current transmission and powertrain parts manufacturing employees will have a role in producing EVs is somewhat optimistic. As discussed above, the UAW's research director has predicted these jobs will be completely eliminated (Beene & Coppola, 2018). If employment losses in transmission and powertrain parts manufacturing are fully proportional to the reduction in conventional vehicle sales, then job losses among powertrain and transmission parts manufacturing employees will be proportionately higher.

Using these assumptions, the model calculated employment losses from increased EV market share at both the state and national levels as follows.

[7] The UAW reports that an EV Chevy Bolt powertrain has 80% fewer moving parts than the gas-powered version, and predicted that design improvements would enable that figure to rise in the future (United Auto Workers, 2020, pp. 12-13).

The model first calculates the percentage decrease in conventional gas-powered vehicle sales implied by a given proportion of EV market share. For example, if EV market share rises from 5.6% (2022 levels) to 67% (the Biden Administration's proposed requirement for 2032), then the conventional vehicle market share will drop from 94.4% to 33%. This would be a 61.3 percentage point decrease in conventional vehicle market share, and—assuming vehicles sold remain constant—a 64.9% reduction in conventional vehicles sold (61.3 percentage point reduction in market share / 94.4% initial market share).

The model assumes that all employees in gasoline engine and parts manufacturing work on conventional vehicles. The model estimates job losses in this sector by multiplying the percentage reduction in conventional gas-powered vehicle sales by QCEW employment in that sector.

The number of positions involved in assembling conventional gas-powered vehicles is estimated by multiplying QCEW employment for all automobile and light-duty motor vehicle manufacturing by the 2022 conventional vehicle market share (94.4%), as well as an adjustment factor to account for the fact that EVs require less labor to assemble. The estimated number of positions involved in assembling conventional motor vehicles is then multiplied by the percentage reduction in conventional vehicle sales and the 30% labor efficiency factor to estimate total job losses in motor vehicle assembly.

The number of positions involved in manufacturing transmission and powertrain parts for conventional vehicles is estimated by multiplying QCEW employment for all transmission and powertrain parts by the 2022 conventional vehicle market share (94.6%), plus an adjustment factor to account for the 80% assumed reduced labor requirements for EV powertrains. The estimated number of positions involved in manufacturing conventional vehicle powertrains and transmission parts is then multiplied by the percentage reduction in conventional vehicle sales and the 80% labor efficiency factor to estimate total job losses in transmission and powertrain parts manufacturing.

As discussed in the text, the model assumes that existing automakers maintain their current market share through the transition to EVs. This optimistic assumption seems unlikely to actually materialize. Tesla currently dominates EV production, accounting for almost two-thirds of new EV sales in 2022 (Mihalascu, 2023). Tesla's U.S. factories are primarily located in California and Texas, with a new facility under construction in Nevada. If Tesla continues to maintain its dominant EV position, the market share of the Detroit-based automakers—General Motors, Ford, and Stellantis/Chrysler—will fall. As long as domestic manufacturers maintain their collective market share, changes in market share will not affect the net national job loss figures. However, such shifts would produce even larger job losses in Michigan and other Midwestern states than the model projects.

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