

REPORT JUL 6, 2022

# Prevailing Wages Can Build Good Jobs Into America's Electric Vehicle Industry

By instituting prevailing wage policies, policymakers can ensure that the jobs they subsidize in one of America's newest industries offer fair wages and benefits.

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Building an Economy for All, Biden Administration, Climate Change, Economy, Energy, Jobs, Wages, Worker Rights





Auto assembly workers lower a truck onto an assembly line at an electric vehicle plant in Normal, Illinois, on April 11, 2022. (Getty/Brian Cassella)

# Introduction and summary

Federal and state governments are playing a leading role in supporting domestic electric vehicle (EV) production, which presents a historic opportunity to establish high

standards for workers in the transformation of one of America's strongest manufacturing sectors. Designing and implementing a new prevailing wage policy would help ensure that the high labor standards of the existing automotive industry continue in the transition to new EV jobs.

Over the next decades, sales of EVs will likely surpass those of cars and trucks powered by gas-powered engines, transforming America's automotive industry and automotive jobs. The federal government is investing heavily in this transition, with billions of dollars of investment in the Infrastructure Investment and Jobs Act (IIJA) dedicated to supporting EVs, and President Joe Biden's economic agenda promises to go even further. In addition, state governments are making investments of their own, offering rebates for consumers purchasing EVs and tax incentives for companies building new plants.

Without effective policies in place, however, the transition to EVs could reduce the quality of jobs in the auto sector.

Autoworkers have fought hard through collective action over many decades to make existing auto sector jobs a route to the middle class, especially for Americans without college degrees. In contrast, many domestic EV producers offer lower wages, fewer benefits, and less opportunity for pay advancement—with worse working conditions for their employees.

To help ensure that the transition to EVs creates high-quality jobs, federal and state governments should create a new type of prevailing wage law. Prevailing wage laws require that government-subsidized firms pay at least the basic hourly rate of wages and benefits paid to similarly employed workers. These laws ensure that government spending supports a well-qualified workforce and does not drive down standards. They are common on government construction projects and for contracted government services, although they have not been frequently used in manufacturing. Thus, the prevailing wage concept holds great promise for maintaining high standards in the auto industry as it electrifies, but the policy must be properly adapted to the new jobs.

A properly designed EV prevailing wage policy should:

- Provide guidance for determining the most comparable workers, ensuring that existing internal combustion automobile jobs can help provide reference points for new EV jobs.
- Use national wage determinations when appropriate, so that subsidized firms are not provided additional incentives to move production elsewhere in the United States.
- Prioritize the use of actual wage and benefit rates paid to comparable workers, known as the modal rate.
- Provide a clear threshold for when the modal rate is considered prevailing, such as a certain number of workers covered by a collective bargaining agreement.
- Ensure that appropriate data are collected or made available so that prevailing wage calculations accurately reflect market conditions.
- Provide for regular updates of wage determinations.
- Ensure effective enforcement mechanisms.

These recommendations apply to prevailing wage policies that could be adopted by either the federal or state governments and applied to any type of EV subsidy, whether a grant, loan, tax incentive, or consumer rebate. For example, the federal or state governments could pass policies to ensure that firms that receive grants or tax incentives to help build or update an EV manufacturing facility are required to pay the prevailing wage. Similarly, federal or state consumer rebates for the purchase of an EV could include a requirement that these rebates go only to firms paying the prevailing wage. Indeed, governments in high-wage states could adopt this type of policy to help ensure that their workers are able to compete on a level playing field for these jobs. Ultimately, wherever federal or state governments are providing financial support for EV manufacturing, an opportunity is available to apply a prevailing wage policy.

Battery cell manufacturing illustrates how important a properly designed prevailing wage law could be for maintaining high labor standards. Batteries are the most valuable part of EVs and are central to the EV supply chain, similar in importance to the powertrain—the engine, transmission, and driveshaft—in an internal combustion vehicle. Furthermore, both types of manufacturing jobs require similar worker skills. Yet, reports suggest that EV battery manufacturing jobs sometimes pay wages less than \$20 per hour, whereas a typical unionized auto assembly worker makes around \$60 per hour in wages and benefits.

If union contracts covered enough workers so that the union rate was considered the prevailing rate—which can occur with other types of prevailing wage laws—workers at subsidized firms nationwide would receive at least \$60 per hour in total compensation. Thus, a properly designed prevailing wage policy can help build a strong domestic EV supply chain that offers American workers a route to the middle class, just as the traditional auto sector has for generations. Yet, the battery cell manufacturing example also shows that if better data are not made available, prevailing wage calculations could lead to much lower rates that would undermine existing standards.

Establishing high standards now, while U.S. electric vehicle production is still in its infancy, could affect earnings for autoworkers for years to come. As important as it is, a prevailing wage is not the only policy necessary to ensure high standards in the EV transition. Other needed policies include those that prevent discrimination, promote domestic production, ensure compliance with existing workplace laws, and respect workers' right to join a union and bargain collectively. Indeed, unionized workers enjoy many advantages compared with nonunion workers—such as safer workplaces, grievances procedures, protections from retaliation, and a strong voice—that are not addressed by a prevailing wage policy. Still, a prevailing wage would be a particularly important policy for ensuring high standards in EV jobs.

Moreover, this type of policy and its broader application could be critical to supporting job quality in the larger manufacturing sector—not just in EV manufacturing. Indeed, workers in the auto industry and other parts of the manufacturing industry have been struggling to hold on to their high standards since even before the EV transition began. The increased use of temporary workers, among other factors, is putting increased downward pressure on compensation in auto assembly and manufacturing more generally. A prevailing wage policy can help with these challenges as all workers on subsidized jobs—whether temporary or permanent—would be paid at least the prevailing hourly rate. Establishing high standards now, while U.S. electric vehicle production is still in its infancy, could affect earnings for autoworkers for years to come.

The EV transition provides an important inflection point for policymakers and an opportunity to promote high standards. On a few occasions in the past, during major transitions in important industries such as railroads and transit, policymakers have passed legislation to protect the high standards that workers have achieved through collective bargaining. This is another occasion for policymakers to do the same.

The following sections of this report explain in more detail why a prevailing wage law is critical for the production of EVs and how such laws could work. The report provides background on EV production, reviews how existing prevailing wage laws operate, discusses the elements of a model prevailing wage policy, and provides an illustrative example to show how EV prevailing wages could be calculated.

# Workers should not be left behind in America's transition to electric vehicles

Spurred on by governmental emissions requirements and tax incentives, American consumers will soon transition from cars and trucks powered by fossil fuels to electric vehicles powered by batteries. The domestic auto industry, which employs nearly 1 million Americans in manufacturing across the country, will retool from supplying internal combustion engines and associated powertrain components to the electric motors and batteries that power EVs. This transition will create hundreds of thousands of jobs to meet rising demand for EVs, which are projected to make up more than 50 percent of all passenger vehicle sales by 2040. The Biden-Harris administration promises to accelerate that transition, setting a target for EV sales to reach 50 percent by 2030.

Much like the engine and drivetrain powering an internal combustion engine vehicle, batteries not only power EVs but also sit at the center of the entire EV supply chain and manufacturing process. Batteries—including the manufacturing of battery cells, modules, and packs that power EVs—are one of the most valuable single parts of an EV and comprise roughly 25 percent to 30 percent of the vehicle's overall part value.<sup>11</sup> Indeed, because of the high costs of the battery, the EV powertrain is more expensive than the internal combustion engine powertrain.<sup>12</sup>

Today, most of the EV battery supply chain is located in China, <sup>1</sup> but the federal government is committed to fostering a robust American EV battery sector. The IIJA allocated \$3 billion in spending on battery manufacturing grants and an additional \$3 billion in battery material processing grants, on top of \$500 million for a zero-emission school bus program and \$200 billion for EV battery recycling. <sup>1</sup> Some states have gone even further in offering subsidies and tax breaks to encourage firms to build factories and consumers to buy EVs.

EV battery manufacturing in the United States is currently known for low wages and poor working conditions. For example, the White House supply chain report found that jobs in the new EV battery sector pay just \$17 to \$21 per hour. One company —Tesla, which alone accounted for nearly half of U.S. EV sales in 2017 —has faced allegations of low pay, racial discrimination, labor law violations, and dangerous working conditions. The company even relocated from California to Texas after a company executive experienced frustration with local orders halting production during

the COVID-19 pandemic. At the same time, Tesla has received billions of dollars in federal and state subsidies and incentives. Recently, Tesla, seeking additional tax incentives, claimed in a presentation to lawmakers in Travis County, Texas, that it would offer local workers a "living wage" of \$15 per hour. While \$15 per hour may be above the minimum wage in many communities across America, it is not a living wage in most parts of the country and is far from a family-supporting, middle-class wage.

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Major automakers often produce the engines and transmissions that drive gas-powered vehicles in-house at rates on par with industry standards. Yet when it comes to the battery cells that power EVs, these automakers often rely on imports from battery companies or create joint ventures with battery companies that will pay manufacturing workers at rates well below industry standards.

The quality of EV jobs contrasts starkly with the gas-powered auto industry, where American autoworkers earn far higher wages and benefits, largely won through collective bargaining. While roughly 9.3 percent of workers across America's entire manufacturing industry were unionized in the period from 2016 to 2020, that proportion nearly doubles to 17 percent in the auto sector, leading to higher median wages compared with their nonunion counterparts, especially for workers without college degrees. Internal combustion autoworkers not only earn much more in general than those in the EV sector, they also have a chance to earn significantly more at the top end of the pay scale, reached by gaining additional skills and experience.

America's high-wage, well-paid, and highly unionized auto industry based around internal combustion vehicles is at risk of being supplanted by EV jobs with lower wages and working conditions. Yet, the transition to EVs also presents a tremendous opportunity to establish high job standards in a new and growing portion of the industry and support American competitiveness for decades to come.

# Prevailing wages maintain high standards for workers

U.S. policymakers will need to take many steps to help support domestic electric vehicle manufacturing that produces high-quality jobs. These steps include promoting domestic content, developing a comprehensive strategy to responsibly mine and recycle critical minerals, and ensuring that companies receiving federal funds respect workers' right to join a union and bargain collectively and do not discriminate against workers based on race and ethnicity, religion, sex, sexual orientation, gender identity, national origin, disability, or veteran status. Prevailing wage laws should be part of this strategy, as they can be a powerful tool for maintaining high-wage standards for U.S. autoworkers.

A prevailing wage is a minimum hourly wage and benefits standard comparable to what workers employed in similar jobs receive. When the government institutes a prevailing wage standard for a contract, grant, or tax subsidy, it requires that employers on that project pay all of its employees at least as much as those workers would expect to earn for a similar job in their industry. By basing its wage determinations on typical market wage rates already received by workers in an occupation or industry, the government can prevent firms from competing by short-changing workers and undermining existing standards that workers and their employers have established.

The federal government has required prevailing wages in its service and construction contracts for decades and has extended the use of prevailing wages to other types of spending, such as grants and tax expenditures. These standards allow the government to ensure companies receiving its money do not erode wages for workers in the existing labor market. <sup>11</sup> Prevailing wage standards have proven successful at avoiding a race to the bottom that prevents contractors from winning bids by offering workers poverty wages. They also ensure that the government receives good value for its investment by reducing turnover and supporting a well-qualified, experienced workforce.

Moreover, prevailing wage laws have been shown to support jobs offering good wages and benefits. Prevailing wage laws have offered construction workers a route to the middle class and increased wages and enrollment in health insurance for service workers such as janitors. They have also been shown to close racial pay gaps in both the construction and service sectors, as employers must pay all workers the same minimum rate, regardless of race, leading to especially large compensation gains for workers of color. Indeed, as the Congressional Black Caucus notes, prevailing wage laws protect "workers against exploitation regardless of race, ethnicity, gender or union membership."

These effects likely extend to manufacturing jobs: Indeed, the federal government once required prevailing wages to be paid to workers on manufacturing contracts to "eliminate the practice under which the Government is compelled to deal with sweatshops" under the Walsh-Healey Public Contracts Act of 1936. However, lawsuits from businesses and anti-worker legislation have effectively rendered the law moribund.

Prevailing wage laws also encourage competition by leveling the playing field. Indeed, research has shown that prevailing wages do not reduce the number of bidders for contracts and in many cases actually increase it. Similarly, uniform contracting wage standards, such as living wage laws, have also increased competition for government contracts. Whether a prevailing wage for EV workers would, like other types of prevailing wage laws, maintain or increase competition in the U.S. industry is not known, yet there is suggestive evidence that it would.

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And while critics may worry that EV manufacturing will go abroad if compensation standards are maintained, EV subsidies and regulations should—as some already do— come with domestic content requirements, and state subsidies often have similar local requirements. Furthermore, labor costs are a relatively small part of battery production costs, and other countries—most notably Germany, where autoworkers

earn far more than their U.S. counterparts—have shown that a high-wage strategy can be competitive. In addition, the scale of subsidies is quite large and thus is likely to encourage firms to enter the market. Some estimates suggest that firms can receive \$100,000 in subsidies per EV job. Indeed, over the past several years, there have been numerous major battery manufacturing projects announced in the United States.

Finally, prevailing wage laws can help protect the gains workers have achieved through collective bargaining because they prevent low-road contractors from undermining existing standards. Indeed, prevailing wage laws tend to be particularly important for protecting market rates in areas with strong unions.

# Applying the prevailing wage concept to electric vehicles

The concept of a prevailing wage is simple: Jobs subsidized by the government should be paid at least what similar workers are already receiving. Nonetheless, there are several factors that must be considered in correctly determining the prevailing wages and benefits for electric vehicle jobs. A properly designed EV prevailing wage policy will need to have a number of specific features.

To illustrate these features and how an EV prevailing wage policy could work in practice, the authors chose to use the example of EV battery cell manufacturing because of its importance to the industry, although an actual prevailing wage policy should apply to a broader range of EV jobs. Battery cells are a particularly valuable part of an EV and are a critical part of the car's supply chain. Labor standards for battery cell manufacturing will be a critical marker for the future EV-focused domestic auto industry as a whole. A properly designed EV prevailing wage policy should include the features listed below.

## Provide guidance for determining the most comparable workers, ensuring that existing internal combustion automobile jobs provide reference points for EV jobs

While there are important nuances that may be necessary to consider for a particular calculation, the basic approach for a prevailing wage policy for EVs should be to use the compensation for the comparable internal combustion engine vehicle jobs. This approach is consistent with existing practice for calculating other types of prevailing wages: When data for a precise occupation do not exist, U.S. Department of Labor (DOL) analysts must instead rely on similar jobs for their calculations.

Internal combustion engine manufacturing jobs are the appropriate comparison for EV battery cell manufacturing jobs. Both are at the center of the automobile value chain and are done in plants of similar size, and quality control is critical since mistakes can be quite costly. Furthermore, the skill requirements are quite similar. According to a detailed study that compared eight different physical, cognitive, and social skill requirements for EV and internal combustion engine manufacturing, the skill requirements for battery cell manufacturing "lie within" the internal combustion engine powertrain manufacturing skill requirements. The skill requirements between these jobs are therefore comparable to the battery manufacturing equipment operators requiring higher skills on average.

## Emphasize national wage determinations when appropriate so that subsidized firms are not provided additional incentives to move production elsewhere in the United States

When calculating a prevailing wage for EVs, a particularly important factor to consider

is the relevant geographic area of labor market competition within the United States. The DOL should use national compensation rates when considering the EV labor market.

Although many prevailing wage calculations are based on a local geography, when the relevant labor market is nationwide, the DOL has used nationwide compensation figures. Indeed, nationwide wage determinations were a regular practice under the Walsh-Healey Public Contracts Act, with courts noting that this was necessary to preserve the purpose of the act. The U.S. Court of Appeals for the District of Columbia Circuit found that to do otherwise in certain industries would "freeze the competitive advantage of concerns that operate in low-wage communities and would in effect offer a reward for moving into such communities."

### Prioritize the use of actual wage and benefit rates paid to comparable workers

Prevailing wage determinations require an analysis of the market rate for a particular occupation and geography. The Davis-Bacon and Related Acts (DBA) and the Service Contract Act (SCA) prevailing wage laws prefer to make this determination based on the actual wage rates paid to comparable workers. As the DOL recently noted, "The definition of first choice for the term 'prevailing wage' should be an actual wage rate that is most widely paid." This preference for wages that already exist in the market is generally calculated based on a modal rate: the most commonly occurring single wage rate. According to DOL practice for DBA and SCA calculations, if the modal wage reaches a threshold level, it is considered prevailing.

If the modal rate does not reach the threshold level for EV jobs, another measure of central tendency, such as mean or median, should be used, as is standard in DBA and SCA policies. More generally, the existing and successful DBA and SCA programs—and similar state policies—should serve as broad models for prevailing wage calculations; government programs that calculate wages for migrant labor should not. Migrant labor policies, such as the H1-B program, may use the term "prevailing wage," but they rely on a deeply flawed methodology for their calculations that allow employers to pay "migrant workers well below market wages," according to an Economic Policy Institute analysis.

# Provide a clear threshold for when the modal rate is considered prevailing

Currently, under DBA and SCA regulations, the modal rate is considered prevailing when more than 50 percent of workers receive the same rate. Proposed rules for the DBA would lower this rate to 30 percent in order to ensure that the wage standard better reflects actual wage rates paid to workers—returning to the standard used prior to 1982, when the current 50 percent threshold was established during extensive rewrites of DBA regulations.

Several states use a similar or lower threshold for modal rate calculations. For example, Illinois' prevailing wage law considers rates for work performed under collective bargaining agreements in the locality, provided that the agreements cover at least 30 percent of workers, and Minnesota calculates its construction prevailing wage rate based on the "actual wage rates paid to the largest number of workers within each labor classification reported in the statewide survey." Some states refer directly to union contracts in calculating their modal wages: Connecticut's wage-setting process takes into consideration the largest statewide collective bargaining agreement, provided that the contract covers at least 500 employees.

Prevailing wage calculations also include benefits, which can be provided by the employer in the form of a cash equivalent. A prevailing fringe benefit calculation is

similar to the wage calculation discussed previously. Under DBA procedures, if a benefit is received by enough workers to reach the required threshold, it is considered prevailing. Otherwise, another measure of central tendency is used. The fringe benefit amount typically includes the value of health and life insurance coverage, sick leave, retirement plans, and vacations and holidays, though it can include additional benefits, such as when union contracts set the prevailing rate.

A model policy should set the modal standard at either 30 percent of workers in a particular occupation or preferably at a numerical standard—such as the standard used by Connecticut—rather than at a percentage, as a standard based on a total number of workers paid the same rate is easier to calculate and enforce than one based on a percentage.

### Ensure appropriate data are collected or made available so that prevailing wage calculations accurately reflect market conditions

Determining whether the union rate is the modal—and therefore prevailing—rate for battery manufacturing is difficult and somewhat uncertain with existing publicly available data. For example, production data suggest that around half of the vehicles assembled in the United States are produced at unionized facilities, <sup>11</sup> which implies that the union wage could possibly be the modal wage—particularly if a threshold similar to what is used in Connecticut is applied. Yet, the publicly available data—which are for broader categories of workers—indicate lower unionization rates in auto manufacturing. Thus, there is a chance the union rate is modal and therefore prevailing, but the authors cannot be certain based on existing publicly available data.

A model policy should ensure that the DOL conducts a new survey to collect appropriate data on comparable jobs for EV prevailing wage calculations as well as collects data from unions on the extent of contract coverage.

For this report's modal-style illustrative example, the authors refer to the union contracts for auto assembly workers and reports about them. Although analysts typically issue different determinations for each job category on a contract, the authors offer for simplicity a single example for a prevailing wage determination for a production auto assembly worker. SCA-covered cooks in New York City, for instance, can earn one of several different prevailing wages depending on their job classification. Similarly, a worker on an EV battery assembly line could be assembling individual battery cells, combining those cells into larger battery packs, or recycling old packs for their raw materials.

While reports do not provide a precise modal rate, they suggest that the typical unionized powertrain assembly worker earns about \$60 per hour in wages and benefits, with more senior and skilled workers earning significantly more. If the union rate were the modal rate, the prevailing hourly wage for EV battery cell manufacturing workers would be \$60 per hour in total.

A prevailing wage of more than \$60 is consistent with examples from construction and service prevailing wage laws, showing that these types of laws tend to produce the highest compensation rates when some employers in the industry already pay decent wages and benefits, as is often the case in areas with strong unions. For example, the prevailing hourly rate for electricians in Chicago is more than \$85; \$69 for certain laborers in New York City; \$61 for forklift operators in Chippewa County, Michigan; and \$54 for boilermakers in Cullman County, Alabama.

It is important to note that the authors performed an alternative prevailing wage calculation based on estimates of median compensation for auto assembly jobs, discussed in greater detail in the Appendix, which led to a much lower prevailing wage

rate calculation of approximately \$36 per hour. The median-based alternative assumes that the union rate is not the modal rate. The alternative estimate relies on publicly available data which do not allow for appropriately precise comparisons to comparable jobs. Indeed, the alternative estimates are much lower than what even the typical nonunion auto assembly production worker earns—\$50 per hour in combined wages and benefits—suggesting they may not be the most accurate. The wide differences in wage determinations highlight the risk that a poorly designed prevailing wage policy could set standards that are too low. But with a prevailing wage policy that is correctly specified, including with proper data collection and availability, high standards can be upheld.

### Provide for regular updates of wage determinations

Just like other prevailing wage policies, an EV prevailing wage should be regularly updated so that changes in the market are properly reflected in the prevailing wage calculation. For example, some SCA and DBA wage determinations are updated once per year.

### **Ensure effective enforcement mechanisms**

In order to ensure that worker protections are effective, prevailing wage laws must guarantee robust government enforcement, require certified payrolls, provide strong individual rights to action, and support partnerships with worker advocates to ensure that victims of wage theft know their rights and are willing to come forward. This is particularly important as the auto industry commonly uses temporary staffing firms, where wage theft and other workplace violations are more common. The enforcement policy used by Los Angeles County, where the unified school district partners with trade unions to help enforce the prevailing wage laws on district projects, is a good model to follow. Volunteers trained through the Los Angeles Joint Labor Compliance Monitoring Program are authorized to inspect work sites and talk to workers about compliance. Multnomah County, Oregon, is currently piloting a similar program on public works construction sites.

In addition, it is important to note that prevailing wage requirements flow through to subcontractors. Analogous structures will also be important in a manufacturing prevailing wage.

# Conclusion

By attaching prevailing wage standards to its investments in electric vehicle manufacturing, federal and state governments can ensure that America's auto industry continues to offer workers strong wages and a route to the middle class. Without such a policy, governments may end up subsidizing and speeding up the replacement of highquality jobs with lower quality ones.

A properly designed prevailing wage standard can ensure high standards while allowing workers and firms to compete based on a level playing field. As policymakers make investments in EV production, a prevailing wage policy can help ensure that the auto industry maintains high job quality standards. Federal and state governments can implement this policy as they invest in the green energy transition. Ultimately, there is great potential to ensure high standards for workers while promoting a new cleaner industry.

READ MORE ABOUT HOW DOMESTIC VEHICLE PRODUCTION WOULD SUPPORT HIGH-QUALITY AMERICAN JOBS.



REPORT

# Electric Vehicles Should Be a Win for American Workers

Sep 23, 2020 Katalan, Teerer Higgins, Bidisha Bhattacharyya,

# **Appendix**

## Median-based calculation for prevailing wage

When the modal wage is not used, the median is the "general rule" for Service Contract Act determinations, while a weighted average is used for Davis-Bacon and Related Acts determinations. For this alternative calculation, the authors chose the median. In the past, the DOL also used a median technique for establishing prevailing wages for federal manufacturing contracts under the Walsh-Healey Public Contracts Act.

Measures of central tendency are usually calculated based on survey data—although, as noted previously, union contracts can be used in modal calculations. Analysts at the Wage and Hour Division of the DOL issue wage determinations for SCA-covered occupations using publicly available data from the Occupational Employment and Wage Statistics (OEWS) and National Compensation Survey (NCS) datasets collected by the U.S. Bureau of Labor Statistics (BLS). The authors rely on the former dataset for calculating wages for assembly-line workers in the automotive industry and the latter for estimating the fringe benefits rate. DBA rates are calculated based on DOL surveys that are available upon request. Accordingly, the authors used the median hourly wage for the selected industry and occupation in the OEWS dataset as the central tendency wage.

To keep the prevailing wage determination based on the median as closely aligned as possible with the wages already earned by American autoworkers, the authors selected the predominant sector and occupation classification that covers workers assembling cars and trucks in the United States. The OEWS uses the North American Industrial Classification System (NAICS), which assigns every worker's job to a sector with a unique code. The NAICS code 3361 the authors selected for their example wage refers to "Motor Vehicle Manufacturing" and covers workers employed in assembling parts into completed consumer cars and trucks.<sup>®</sup> Occupations for both the OEWS and NCS datasets are also assigned codes developed by the BLS for different kinds of tasks, which separates, for instance, wages earned by workers employed on the assembly line and those doing clerical work but working at the same factory. The authors selected the BLS occupation code 51-2000, covering "Assemblers and Fabricators," to accurately reflect wages paid to workers on the assembly line. These categories are the best the authors could do with existing publicly available data but are not particularly detailed categories and may include many different types of workers that are not the best comparisons.

The choice of occupation and industry classification can also make a significant difference in the resulting wage determination, as selecting the wrong measure could drive down wages by including workers employed in nonautomotive sectors. For instance, a sector classification exists that would include workers currently assembling EV batteries, but it reflects wages in electrical equipment assembly rather than the auto sector. This makes it a less accurate measure for an EV battery wage determination because the classification also include workers assembling other types of batteries and electrical equipment, which have different—and far lower—wage standards, owing to the different supply chains involved.

codes also avoids dragging down wage determinations from the auto industry's heavy reliance on temporary workers, who are typically subjected to much lower labor standards, including lower wages, despite doing much the same work. NAICS has a separate industry classification code for temporary workers, meaning determinations based on OEWS data for the motor vehicle manufacturing industry reflect the market wage rates already paid to workers assembling cars in the United States.

Because the NCS dataset used to derive fringe benefits does not include median measurements, the authors instead use the mean in their nonmodal calculation. Additionally, as the NCS survey is sent to employers, the value of benefits is estimated as the cost to employers to provide them per employee. This is similar to processes for the SCA fringe benefit determination by which the benefit rate is derived from the BLS' Employment Cost Index summary of employer costs for employee compensation.

As noted previously, more senior and skilled auto assembly workers make significantly more than entry-level production workers. To highlight this higher prevailing wage rate for workers in a higher-skill job category in a similar occupation, the authors also report a top-earning hourly wage rate, which they calculate as the wage at the 75th percentile.

Based on this median methodology, the authors estimate that the minimum prevailing hourly compensation rate for EV battery workers would be \$36.54. Using the 2020 OEWS dataset, the authors found the median hourly wages for workers classified as assemblers and fabricators (BLS code 51-2000) in the motor vehicle manufacturing industry (NAICS code 3361) was \$23.01 (and the 75th percentile was \$28.65). The authors also estimated the fringe benefits rate using the hourly cost of benefits per worker to employers; because Wage and Hour Division analysts issue uniform SCA benefits determinations for all workers in a region, regardless of occupation, the authors similarly refer to the average benefits for manufacturing workers nationwide. Employers paid these workers an average of \$13.53 per hour in benefits. Since employers can simply pay workers the fringe benefits rate rather than offering benefits at that hourly dollar amount, the minimum prevailing hourly wage for EV battery workers would be \$36.54 per hour in total, which could rise to \$42.18 per hour for more senior and skilled employees.

These estimates, which fall well below the possible modal rates suggested by union contracts, as well as below what nonunion internal combustion engine powertrain workers make, demonstrate the risks of inaccurate prevailing wage determinations. Publicly available survey data are currently not particularly accurate for establishing EV prevailing wages. Much of the discrepancy is due to the lower value of benefits earned by manufacturing workers nationwide compared with autoworkers. While the typical unionized powertrain employee earns roughly \$28 per hour in benefits, NCS data indicate that a manufacturing worker earns an average of only \$13.53 hourly in benefits—less than half the rate in the auto industry. Because autoworkers cannot be disaggregated from the NCS data, the NCS benefits estimate is lowered by the inclusion of many employees working in manufacturing outside the auto sector, who are less likely to be unionized and therefore earn fewer benefits.<sup>50</sup> Furthermore, the wage estimates are also lower, although to a smaller degree. The modal estimate for wages was \$32 per hour. In the OEWS data, the median was \$23.01 per hour. Some of this difference is likely due to the broader category of workers included in the publicly available data. In addition, in the publicly available data the average hourly wage for workers (\$23.18) is higher than the median, indicating that a substantial number of workers earn above the median and suggesting that the median estimate could understate the modal rate.

Endnotes

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- Turner Cotterman, "The transition to electrified vehicles: Implications for the future of automotive manufacturing and worker skills and occupations," Carnegie Mellon University, PowerPoint presentation shared June 4, 2022, on file with authors; Turner Cotterman, "Technology transitions in the electricity and automotive sectors: Embracing political, social, and economic constraints" (Pittsburgh: Carnegie Mellon University, 2022), unpublished dissertation on file with authors.
- 2 The White House, "Building Resilient Supply Chains, Revitalizing American Manufacturing, and Fostering Broad-Based Growth" (Washington: 2021), available at https://www.whitehouse.gov/wp-content/uploads/2021/06/100-day-supply-chain-review-report.pdf; Travis County Commissioners Court, "Voting Session Agenda Request," available at https://www.kxan.com/wp-content/uploads/sites/40/2020/06/Item-18-Backup-6-23-2020.pdf (last accessed April 2022).
- 3 Kristin Dziczek, "What the D3-UAW contracts mean for U.S. auto manufacturing," Center for Automotive Research, January 16 2020, available at https://www.chicagofed.org//media/others/ /events/2020/auto-insights-conference/dziczek-uaw-contract-pdf.pdf?sc\_lang=en, pp. 8–14.
- 4 Karla Walter and others, "Electric Vehicles Should Be a Win for American Workers" (Washington: Center for American Progress, 2020), available at https://www.americanprogress.org/article/electric-vehicles-win-american-workers/.
- 5 W.E. Upjohn Institute for Employment Research, "Domestic Outsourcing in the Automotive Industry," available at https://www.upjohn.org/major initiatives/outsourcing\_impacts-usworkforce/research/automotive-industry (last accessed June 2022).
- 6 U.S. House of Representatives, "Chapter 16 Regional Rail Reorganization," available at https://uscode.house.gov/view.xhtml?path-/prelim@title45/chapter16&edition-prelim (last accessed June 2022).
- 7 U.S. Department of Labor, "Public Transit Employee Protections," available at https://www.dol.gov/agencies/olms/compliance-assistance/mass-transit-employee-protections (last accessed June 2022).
- 8 U.S. Bureau of Labor Statistics, "Automotive Industry: Employment, Earnings, and Hours," available at https://www.bls.gov/ag/tgs/agauto.htm (last accessed June 2022).
- 9 Colin McKerracher and others, "Electric Vehicle Outlook 2022" (New York: Bloomberg New Energy Finance, 2022), available at https://bnef.turl.co/story/eve-2022/page44.
- 10 The White House, "Fact Sheet: President Biden Announces Steps to Drive American Leadership Forward on Clean Cars and Trucks," Press release, August 5, 2021, available at https://www.whitehouse.gov/briefing-room/statements-releases/2021/08/05/fact-sheetpresident-biden-announces-steps-to-drive-american-leadership forward-on-clean-cars-andtrucks/.
- William Alan Reinsch and others, "The Impact of Rules of Origin on Supply Chains: USMCA's Auto Rules as a Case Study" (Washington: Center for Strategic and International Studies, 2019), available at https://www.wita.org/wp-content/uploads/2019/04//190403\_Scholl\_RulesofOrigin\_WEB\_v3.pdf.
- 12 Estimates vary, but a 2017 UBS study found the battery pack alone exceeded the cost of the entire internal combustion engine (ICE) powertrain at \$11,500, compared with \$6,800 for an ICE vehicle's complete powertrain. See Nic Lutsey and Michael Nicholas, "Update on electric vehicle costs in the United States through 2030" (Washington: International Council on Clean Transportation, 2019), available at https://thelcct.org/sites/default/files/publications//EV\_cost\_2020\_2030\_20190401.pdf.
- 13 Federal Consortium for Advanced Batteries, "National Blueprint for Lithium Batteries: 2021–2030" (Washington: 2021), available at https://www.energy.gov/sites/default/files/2021-06 /FCAB%20National%20Blueprint%20Lithium%20Batteries%200621\_0.pdf.
- 14 Infrastructure Investment and Jobs Act, Public Law 58, 117th Cong., 1st sess. (November 15, 2021), available at https://www.congress.gov/bill/117th-congress/house-bill/3684/titles.
- 15 Claire Ruchev "HS states lavish subsidies on carmakers for edge in FU race " Financial Times

February 4, 2022, available at

- 16 U.S. Department of Energy, "Search Federal and State Laws and Incentives," Alternative Fuels Data Center, available at (last accessed April 2022).
- 17 The White House, "Building Resilient Supply Chains, Revitalizing American Manufacturing, and Fostering Broad-Based Growth."
- 18 Ibid., p. 120.
- 19 David Coffin and Jeff Horowitz, "The Supply Chain for Electric Vehicle Batteries," Journal of International Commerce and Economics (2018), available at
- 20 David Dayen, "Charge Time: Electric Car Workers Accuse Tesla of Low Pay and Intimidation," *The American Prospect*, April 10, 2017, available at
- 21 Margot Roosevelt and Russ Mitchell, "Black Tesla employees describe a culture of racism: 'I was at my breaking point'," Los Angeles Times, March 25, 2022, available at
- 22 Tara Law, "Tesla and Elon Musk's Tweet Violated Labor Laws Protecting Unions, Judge Rules," *Time*, September 29, 2019, available at
- **23** Joseph Guzman, "After Elon Musk re-opened Tesla's factory in defiance of lockdown, workers test positive for COVID-19," *The Hill*, June 9, 2020, available at
- 24 Niraj Chokshi, "Tesla Will Move Its Headquarters to Austin, Texas, in Blow to California," The New York Times, October 7, 2021, available at
- 25 Good Jobs First, "Subsidy Tracker Parent Company Summary: Tesla Inc.," available at (last accessed March 2022).
- 26 Travis County Commissioners Court, "Voting Session Agenda Request."
- 27 Amy K. Glasmeier, "Living Wage Calculator," available at (last accessed April 2022).
- 28 Tom Krisher and Kimberlee Kruesi, "Union, automakers headed for fight over battery plant wages," WKYC, April 16, 2021, available at

#### •

- 29 Jim Barrett and Josh Bivens, "The stakes for workers in how policymakers manage the coming shift to all-electric vehicles, Table 2" (Washington: Economic Policy Institute, 2021), available at
- 30 Karla Walter and others, "Electric Vehicles Should Be a Win for American Workers" (Washington: Center for American Progress, 2021), available at
- 31 Malkie Wall, David Madland, and Karla Walter, "Prevailing Wages: Frequently Asked Questions" (Center for American Progress, 2020), available at

### 32 Ibid.

33 Frank Manzo IV and Kevin Duncan, "An Examination of Minnesota's Prevailing Wage Law: Effects on Costs, Training, and Economic Development" (St. Paul, MN: Midwest Economic Policy Institute, 2018), available at

14 Auralia Class David Modland and Vaula Walter "Daising Wasse and Namerring Dav Cane With

- Aurena Gass, David Madiand, and Kana water, Kaising wages and Narrowing Pay Gaps with Service Sector Prevailing Wage Laws" (Washington: Center for American Progress, 2022), available at
- 35 Jill Manzo, Robert Bruno, and Frank Manzo IV, "State Prevailing Wages Laws Reduce Racial Income Gaps in Construction: Impacts by Trade, 2013-2015" (La Grange, IL: Illinois Economic Policy Institute, 2018), available at
- 36 Glass, Madland, and Walter, "Raising Wages and Narrowing Pay Gaps With Service Sector Prevailing Wage Laws."
- 37 Congressional Black Caucus, letter to Sean McGarvey, president of North America's Building Trade Unions, December 18, 2020, on file with authors; The Leadership Conference on Civil Rights, "Re: Notice of Proposed Rule – Updating Davis-Bacon and Related Acts Regulations," March 15, 2022, on file with authors.
- 38 While in *Wirtz v. Baldor Electric Co.* the U.S. Supreme Court struck down provisions in the Walsh-Healey Public Contracts Act of 1936 that allowed the federal government to set prevailing wages in contracted manufacturing industries, the court's decision pertained to how the federal government calculated wage rates, not the government's authority to set wage rates in manufacturing. JUSTICIA US Law, "*Wirtz v. Baldor Electric Company et al.*, 337 F.2d 518 (D.C. Cir. 1964)," available at

(last accessed June 2022); Robert S. Moss, "Committee on Public Contracts — Report Opposing Repeal of the Fulbright Amendment to the Walsh-Healey Act," *Administrative Law Bulletin* 7 (3) (1955): 120–125.

- 39 Lina Stepick and Frank Manzo, "The Impact of Oregon's Prevailing Wage Rate Law: Effects on Costs, Training, and Economic Development" (Eugene, OR: University of Oregon Labor Education and Research Center, 2021), available at
- 10 Michael Rubenstein, "Impact of the Maryland Living Wage" (Annapolis, MD: Department of Legislative Services, 2008), available at
- 11 Congress extended domestic content standards to funding for state and local government purchases of electric transit vehicles as part of the Fixing America's Surface Transportation Act of 2015, and state governments extend billions of dollars in subsidies to manufacturers who plan to build plants in the United States. Additionally, President Biden has directed federal agencies to work with domestic EV manufacturers to electrify the federal vehicle fleet. These content requirements could be extended to consumer EV rebates and tax incentives as well, as proposed in the Build Back Better Act of 2021. See Michaela D. Platzer and William J. Mallett, "Effects of Buy America on Transportation Infrastructure and U.S. Manufacturing" (Washington: Congressional Research Service, 2019), available at

; Bushey, "US states lavish subsidies on carmakers for edge in EV race"; The White House, "Fact Sheet: President Biden Signs Executive Order Catalyzing America's Clean Energy Economy Through Federal Sustainability," Press release, December 8, 2021, available at

; Energy Innovation Policy and Technology LLC, "Electric Vehicle Incentives in the Build Back Better Act: Provisions Will Save Consumers Money, Boost U.S. Manufacturing, And Protect Public Health," November 2021, available at

12 Office of Energy Efficiency and Renewable Energy, "Cost and Price Metrics for Automotive Lithium-Ion Batteries," U.S. Department of Energy, February 2017, available at

13 Kevin C. Brown, "A tale of two systems," Remapping Debate, December 21, 2011, available at

-- -

- 14 Claire Bushey, "US states lavish subsidies on carmakers for edge in EV race."
- 15 Vehicle Technologies Office, "FOTW #1217, December 20, 2021: Thirteen New Electric Vehicle Battery Plants Are Planned in the U.S. Within the Next Five Years," U.S. Department of Energy, December 20, 2021, available at
- 16 Moreover, studies show that prevailing wage reductions reduce bid participation by union contractors. See Kevin Duncan and Jeffrey Waddoups, "Unintended Consequences of Nevada's Ninety-Percent Prevailing Wage Rules," *Labor Studies Journal* 45 (2) (2020): 166–185, available at
- <sup>17</sup> U.S. Government Accountability Office, "Service Contract Act: Wage Determination Process Could Benefit from Greater Transparency, and Better Use of Violation Data Could Improve Enforcement" (Washington: 2005), available at
- 18 Cotterman, "The transition to electrified vehicles: Implications for the future of automotive manufacturing and worker skills and occupations"; Cotterman, "Technology transitions in the electricity and automotive sectors: Embracing political, social, and economic constraints."
- 19 Ibid.
- 50 This may also occasionally occur under the Service Contract Act. "Locality may also be defined as, for example, a city, a State, or, under rare circumstances, a region, depending on the actual place or places of contract performance, the geographical scope of the data on which the determination was based, the nature of the services being contracted for, and the procurement method used." See Legal Information Institute, "29 CFR § 4.54 Locality basis of wage and fringe benefit determinations.," available at (last accessed June 2022).
- 31 See, for example, Casetext, "Mitchell v. Covington Mills," available at (last accessed June 2022).
- '2 "This interpretation—that the definition of first choice for the term 'prevailing wage' should be an actual wage rate that is most widely paid—has now been shared across administrations for over 85 years." See U.S. Department of Labor, "Updating the Davis-Bacon and Related Acts Regulations," *Federal Register* 87 (2022): 15698, available at
- 53 Daniel Costa and Ron Hira, "H-1B visas and prevailing wage levels" (Washington: Economic Policy Institute, 2020), available at
- 54 U.S. Department of Labor, "Updating the Davis-Bacon and Related Acts Regulations."
- 35 Karla Walter, Malkie Wall, and Alex Rowell, "A How-To Guide for Strengthening State and Local Prevailing Wage Laws" (Washington: Center for American Progress, 2020), available at
- <sup>56</sup> "The prevailing rate of wages paid to individuals covered under this Act shall not be less than the rate that prevails for work of a similar character on public works in the locality in which the work is performed under collective bargaining agreements or understandings between employers or employer associations and bona fide labor organizations relating to each craft or type of worker or mechanic needed to execute the contract or perform such work, and collective bargaining agreements or understandings successor thereto, provided that said employers or members of said employer associations employ at least 30% of the laborers, workers, or mechanics in the same trade or occupation in the locality where the work is being performed." See Illinois General Assembly, "(820 ILCS 130/) Prevailing Wage Act," available at (last accessed June

2022). A recent amendment further provides that "if the prevailing rates of wages and fringe benefits cannot reasonably and fairly be applied in any locality because no such agreements or

understandings exist, the Department of Labor shall determine the rates and fringe benefits for the same or most similar work in the nearest and most similar neighboring locality in which such agreements or understandings exist." Affected parties who wish to challenge the established rate—because they believe that the government calculations are based on inaccurate assumptions of industrywide collective bargaining rates—must submit competent evidence substantiating their allegations.

37 Minnesota Department of Labor and Industry, "Prevailing-Wage FAQs," available at (last accessed December 2020); Office of the Revisor of Statutes, "2021 Minnesota Statutes, \$177.42,"

available at (last accessed June 2022). "Prevailing hours of labor' are the hours of labor per day and per week worked within the area by a larger number of workers of the same class than are employed within the area for any other number of hours per day and per week."

38 Note also that the federal government looks directly to collective bargaining agreements when setting prevailing wages for grants issued by the National Endowment for the Arts and the National Endowment for the Humanities. See U.S. Department of Labor, "Labor Standards on Projects or Productions Assisted by Grants from the National Endowments for the Arts and Humanities," *Federal Register* (53) (120) (1988): 23541, available at

. Connecticut

requires prevailing wages for certain service workers: "Prevailing rate of wages' means the hourly wages paid for work performed within the city of Hartford under the collective bargaining agreement covering the largest number of hourly nonsupervisory employees employed within Hartford County in each classification established by the Labor Commissioner under subsection (e) of this section, provided the collective bargaining agreement covers no less than five hundred employees in the classification." Connecticut General Statutes, "Chapter 557: Employment Regulation, §31-57f," available at (last accessed June 2022).

- 59 U.S. Department of Labor, "Davis-Bacon and Related Acts (DBRA) Frequently Asked Questions."
- 30 Ibid. Note also that "analysts generally set a universal fringe benefit rate that employers must pay to all workers in a specific geographic area regardless of their occupational class." See U.S. Government Accountability Office, "Service Contract Act: Wage Determination Process Could Benefit from Greater Transparency, and Better Use of Violation Data Could Improve Enforcement."
- For example, production data from Wards Intelligence suggest that just under half of the vehicles assembled in the United States produced at unionized facilities, Ford, General Motors, and Stellantis, whose workers are represented by the United Auto Workers, accounted for 52 percent of domestic auto production. See Wards Intelligence, "Wards Automotive Yearbook 2021" (Southfield, MI: 2022), on file with authors; American Automotive Policy Council, "Domestic Consumption & Production," available at

#### (last accessed June 2022).

- 32 Dziczek, "What the D3-UAW contracts mean for U.S. auto manufacturing."
- **33** SAM.gov, "Service Contract Act WD # 1977-0225," available at (last accessed April 2022).
- 34 Dziczek, "What the D3-UAW contracts mean for U.S. auto manufacturing," pp. 8 and 14.
- 35 llinois.gov, "Cook County Prevailing Wage Rates posted on 7/15/2019," available at

(last accessed June 2022).

For example the prevailing wage for building construction general laborer in New York city is \$40.65 in wages and \$28.85 in benefits. SAM.gov, "Davis-Bacon Act WD # NY20220003," available at (last accessed June 2022).

37 SAM.gov, "Davis-Bacon Act WD # MI20220001," available at

/1---- 1 T---- 1

(last accessed June 2022).

**38** SAM.gov, "Davis-Bacon Act WD # AL20220074," available at (last accessed June 2022).

39 Dziczek, "What the D3-UAW contracts mean for U.S. auto manufacturing," pp. 8 and 14.

70 U.S. Department of Labor, "Frequently Asked Questions Pertaining to the Issuance of Wage Determinations Under the McNamara-O'Hara Service Contract Act (SCA) of 1965, as Amended," available at

. Davis-Bacon wage determinations are also updated, with rates derived from negotiated rates updated on an annual basis. See U.S. Department of Labor, "Davis-Bacon Wage Determinations," available at

(last accessed June 2022). Proposed regulations seek to make other Davis-Bacon updates more frequent. See U.S. Department of Labor, "Updating the Davis-Bacon and Related Acts Regulations."

- 71 Walter, Wall, and Rowell, "A How-To Guide for Strengthening State and Local Prevailing Wage Laws."
- 72 W.E. Upjohn Institute for Employment Research, "Domestic Outsourcing in the Automotive Industry."

73 Los Angeles Unified School District, "Joint Compliance Monitoring Program: Los Angeles Unified School District and All Work Preservation Groups: Rules of Engagement (Fiscal Year 2021-22)," available at

(last accessed June 2022); City of Los Angeles, "Labor Compliance Manual" (Los Angeles: 2014), available at

- 74 Don McIntosh, "Union volunteers help enforce laws against construction wage theft on Multnomah County projects," NorthWest Labor Press, February 18, 2020, available at
- 75 For example, to ensure subcontractor compliance it may be necessary to include rules that require a certain percentage of the total content be made by workers earning the prevailing wage.

'6 U.S. Department of Labor, "Frequently Asked Questions Pertaining to the Issuance of Wage Determinations Under the McNamara-O'Hara Service Contract Act (SCA) of 1965, as Amended," available at

(last accessed June 2022).

17 U.S. Department of Labor, "Davis-Bacon and Related Acts (DBRA) Frequently Asked Questions."

78 Rudolf Modely, James R. Patton Jr., and Gerard D. Reilly, "Problem Child Among Labor laws— The Walsh-Healey Act," *Duke Law Journal* 1963 (2) (1963): 205–268, available at

- 79 Note that wage determinations for contracts covered by Davis-Bacon rely on survey data collected by the Department of Labor instead of public datasets. For more details on how determinations are made, see U.S. Government Accountability Office, "Service Contract Act: Wage Determination Process Could Benefit from Greater Transparency, and Better Use of Violation Data Could Improve Enforcement"; U.S. Government Accountability Office, "Davis-Bacon Act: Methodological Changes Needed to Improve Wage Survey" (Washington: 2011), available at
- **30** U.S. Department of Labor, "Prevailing Wage Resource Book: Davis-Bacon Surveys," available at (last accessed June 2022).
- 31 OEWS does not publicly report five- or six-digit codes within the 3361 motor vehicle manufacturing classification, though the Department of Labor may have this level of detail or could potentially collect it for prevailing wage calculations.
- 32 Workers in industries under the NAICS classification code 3359—which covers "Other

Electrical Equipment and Component Manufacturing" and includes batteries, among a range of other electronic devices—earn a median wage of \$16.90 per hour, due to the concentration of jobs in this classification in the electronics rather than the auto industry.

- 33 W.E. Upjohn Institute for Employment Research, "Domestic Outsourcing in the Automotive Industry."
- 34 National Employment Law Project, "Temp Workers Demand Good Jobs: Survey reveals poverty pay, permatemping, deceptive recruitment practices, and other job quality issues" (New York: 2022), available at
- **35** Although temporary workers are separated out for sake of these calculations, they would still be required to receive minimum prevailing wage compensation under this proposal.
- 36 While analysts at the Department of Labor have discretion in selecting a measure for prevailing fringe benefits rate, they issue uniform fringe benefits determinations for all workers in a locality, irrespective of occupation, based on employer cost for compensation. See U.S. Government Accountability Office, "Service Contract Act: Wage Determination Process Could Benefit from Greater Transparency, and Better Use of Violation Data Could Improve Enforcement."
- 37 U.S. Department of Labor Wage and Hour Division, "2021 Service Contract Act Health and Welfare Fringe Benefit," July 16, 2021, available at

; U.S. Department of Labor, "Frequently Asked Questions Pertaining to the Issuance of Wage Determinations Under the McNamara-O'Hara Service Contract Act (SCA) of 1965, as Amended."

- 38 U.S. Government Accountability Office, "Service Contract Act: Wage Determination Process Could Benefit from Greater Transparency, and Better Use of Violation Data Could Improve Enforcement."
- 39 U.S. Bureau of Labor Statistics, "Employer Costs for Employee Compensation Historical Supplementary Tables: Supplemental table 2. Private manufacturing industry workers, by occupational group," available at (last accessed June 2022).
- **30** Jim Barrett and Josh Bivens, "The stakes for workers in how policymakers manage the coming shift to all-electric vehicles" (Washington: Economic Policy Institute, 2021), available at

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