



The Perryman Group

The High Economic Costs of the Auto Workers Strike

Sept 2023

The United Auto Workers (UAW) union is in the midst of an unprecedented “stand-up strike” against the three major US auto manufacturers, presently shutting down US factories in Ohio, Michigan, and Missouri; idling 12,700 union workers; and disrupting other parts of the supply chain. These interruptions come at a time when the industry was just beginning to normalize in the aftermath of the pandemic. Given the scope of affected operations, the economic costs of the strike are high and could well increase substantially if the work stoppages are prolonged and expanded.

The union is demanding raises in the mid-30-percent range over the next four years in addition to a four-day workweek

and enhanced benefits. Although companies have offered notable compensation increases, there is still a significant gap between the two sides of the negotiations. One issue is that automakers are struggling to convert to producing more electric vehicles in a competitive manner, and the fear is that high labor costs (up to \$300,000 per worker per year along with generous pension benefits) will jeopardize future sustainability. At the same time, workers have seen real wages fall due to inflation, and are aware of corporate profitability.

Shutting down operations of the scope of these auto plants involves high costs to the local, state, and national economies. The Perryman Group estimated the costs

The Estimated Economic Costs of a Three-Week UAW Strike at Current Plants

Region	Total Expenditures	Gross Product	Personal Income	Job-Weeks*
Ohio	-\$531.5 m	-\$170.2 m	-\$107.0 m	-25,588
Missouri	-\$324.3 m	-\$103.7 m	-\$64.9 m	-15,593
Michigan	-\$286.6 m	-\$91.0 m	-\$57.5 m	-13,711
Remaining States	-\$146.6 m	-\$49.6 m	-\$27.6 m	-6,644
Total, United States	-\$1,289.0 m	-\$414.6 m	-\$257.0 m	-61,536

Source: US Multi-Regional Impact Assessment System, The Perryman Group

Notes: Monetary values in millions of 2023 US dollars. A job-week is one person working for one week, though it could be multiple individuals working partial weeks. Job-year values have been limited to the three-week strike period.

of a work stoppage lasting three weeks and found that the US economy would see losses of an estimated -\$414.6 million in gross product and more than -61,500 job-weeks of employment (including multiplier effects). Losses would be concentrated in the states where the facilities are located, but harms would spread across the country and involve a large spectrum of industries. (Note that transitory job losses are typically expressed in job-years, which is one person working for one year, though it could be multiple individuals working partial years. In this case, the employment losses are estimated during the assumed period of the strike and so expressed in job-weeks.)

If the strikes spread to other facilities or go on for longer than three weeks, the losses would be even higher. In a scenario where the situation involves a shutdown at

three plants for one week and then expands to involve six plants for another week, and then nine plants for a third week, economic costs escalate to -\$829.2 million in gross product and -123,100 job-weeks. A full strike against all of the domestic plants operated by General Motors, Ford, and Stellantis for two months would involve losses of almost -\$13.8 billion in gross product and -766,400 job-weeks.

Strikes involve substantial costs for the companies involved, their suppliers, and the economy as a whole. A prolonged interruption in automobile production could also exacerbate inflationary pressures. It is in the interest of both sides to come to an agreement that involves fair compensation for workers, but also allows companies to be competitive and survive. The longer the stoppages continue, the greater the harm.

The Estimated Economic Costs of a Three-Week UAW Strike at Current Plants on the United States

Industry	Expenditures	Gross Product	Personal Income	Job-Weeks*
Agriculture	-\$11.6 m	-\$3.4 m	-\$2.2 m	-487
Mining	-\$9.4 m	-\$2.3 m	-\$1.4 m	-116
Utilities	-\$41.5 m	-\$9.3 m	-\$4.1 m	-250
Construction	-\$11.6 m	-\$6.2 m	-\$5.1 m	-1,013
Manufacturing	-\$869.2 m	-\$197.7 m	-\$122.5 m	-25,372
Wholesale Trade	-\$46.4 m	-\$31.5 m	-\$18.1 m	-2,914
Retail Trade*	-\$89.5 m	-\$67.0 m	-\$39.0 m	-16,912
Transportation & Warehousing	-\$25.1 m	-\$16.8 m	-\$11.1 m	-2,141
Information	-\$14.2 m	-\$8.7 m	-\$3.7 m	-472
Financial Activities*	-\$85.7 m	-\$22.1 m	-\$9.2 m	-1,360
Business Services	-\$24.6 m	-\$14.9 m	-\$12.2 m	-2,095
Health Services	-\$20.3 m	-\$14.3 m	-\$12.1 m	-2,818
Other Services	-\$39.8 m	-\$20.4 m	-\$16.4 m	-5,585
Total, All Industries	-\$1,289.0 m	-\$414.6 m	-\$257.0 m	-61,536

Source: US Multi-Regional Impact Assessment System, The Perryman Group

Notes: Monetary values in millions of 2023 US dollars. A job-week is one person working for one week, though it could be multiple individuals working partial weeks. Job-year values have been limited to the three-week strike period.

The Estimated Economic Costs of a Three-Week UAW Strike at Current Plants on Ohio, Missouri, and Michigan

	Expenditures	Gross Product	Personal Income	Job-Weeks*
OHIO				
Agriculture	-\$4.4 m	-\$1.3 m	-\$0.8 m	-185
Mining	-\$3.9 m	-\$1.0 m	-\$0.6 m	-49
Utilities	-\$15.0 m	-\$3.3 m	-\$1.5 m	-90
Construction	-\$5.1 m	-\$2.7 m	-\$2.2 m	-446
Manufacturing	-\$364.0 m	-\$80.7 m	-\$50.9 m	-10,414
Wholesale Trade	-\$19.6 m	-\$13.3 m	-\$7.7 m	-1,228
Retail Trade*	-\$37.7 m	-\$28.3 m	-\$16.5 m	-7,131
Transportation & Warehousing	-\$10.8 m	-\$7.2 m	-\$4.8 m	-919
Information	-\$5.9 m	-\$3.6 m	-\$1.5 m	-196
Financial Activities*	-\$29.0 m	-\$7.6 m	-\$3.2 m	-474
Business Services	-\$10.4 m	-\$6.3 m	-\$5.2 m	-890
Health Services	-\$8.7 m	-\$6.1 m	-\$5.2 m	-1,207
Other Services	-\$17.0 m	-\$8.7 m	-\$7.0 m	-2,360
Total, All Industries	-\$531.5 m	-\$170.2 m	-\$107.0 m	-25,588
MISSOURI				
Agriculture	-\$2.9 m	-\$0.8 m	-\$0.5 m	-122
Mining	-\$2.3 m	-\$0.6 m	-\$0.3 m	-28
Utilities	-\$8.0 m	-\$1.8 m	-\$0.8 m	-48
Construction	-\$3.0 m	-\$1.6 m	-\$1.3 m	-263
Manufacturing	-\$220.0 m	-\$48.5 m	-\$30.4 m	-6,227
Wholesale Trade	-\$12.0 m	-\$8.2 m	-\$4.7 m	-755
Retail Trade*	-\$23.5 m	-\$17.5 m	-\$10.2 m	-4,437
Transportation & Warehousing	-\$6.3 m	-\$4.2 m	-\$2.8 m	-533
Information	-\$3.7 m	-\$2.3 m	-\$1.0 m	-122
Financial Activities*	-\$20.6 m	-\$5.3 m	-\$2.2 m	-329
Business Services	-\$6.4 m	-\$3.9 m	-\$3.2 m	-547
Health Services	-\$5.4 m	-\$3.8 m	-\$3.2 m	-744
Other Services	-\$10.2 m	-\$5.2 m	-\$4.2 m	-1,436
Total, All Industries	-\$324.3 m	-\$103.7 m	-\$64.9 m	-15,593
MICHIGAN				
Agriculture	-\$2.2 m	-\$0.6 m	-\$0.4 m	-92
Mining	-\$1.9 m	-\$0.5 m	-\$0.3 m	-23
Utilities	-\$5.7 m	-\$1.3 m	-\$0.6 m	-35
Construction	-\$2.6 m	-\$1.4 m	-\$1.2 m	-230
Manufacturing	-\$202.7 m	-\$44.6 m	-\$28.1 m	-5,754
Wholesale Trade	-\$10.4 m	-\$7.0 m	-\$4.1 m	-653
Retail Trade*	-\$19.8 m	-\$14.9 m	-\$8.7 m	-3,745
Transportation & Warehousing	-\$5.7 m	-\$3.8 m	-\$2.5 m	-485
Information	-\$3.0 m	-\$1.9 m	-\$0.8 m	-101
Financial Activities*	-\$13.3 m	-\$3.9 m	-\$1.7 m	-257
Business Services	-\$5.6 m	-\$3.4 m	-\$2.8 m	-480
Health Services	-\$4.7 m	-\$3.3 m	-\$2.8 m	-652
Other Services	-\$8.8 m	-\$4.5 m	-\$3.6 m	-1,204
Total, All Industries	-\$286.6 m	-\$91.0 m	-\$57.5 m	-13,711

Source: US Multi-Regional Impact Assessment System, The Perryman Group

Notes: Monetary values in millions of 2023 US dollars. A job-week is one person working for one week, though it could be multiple individuals working partial weeks. Job-year values have been limited to the three-week strike period.

METHODOLOGY

Direct effects of the strikes were based estimated on the facilities' operational patterns and the projected effects of a work stoppage on supplier networks. The total economic impact of these direct losses was then quantified. Any economic stimulus, whether positive or negative, leads to dynamic responses across the economy. The Perryman Group has developed complex and comprehensive models over the past four decades to measure these dynamic responses. The Perryman Group's US Multi-Regional Impact Assessment System has been used in hundreds of analyses for clients ranging from major corporations to government agencies and has been peer reviewed on multiple occasions. The impact system uses a variety of data

(from surveys, industry information, and other sources) to describe the various goods and services (known as resources or inputs) required to produce another good/service. This process allows for estimation of the total economic impact (including multiplier effects) of the proposed development. The models used in the current analysis reflect the specific industrial composition and characteristics of Texas.

Total economic effects are quantified for several key measures of business activity. Note that these measures are alternative means of expressing the same effects; they are not additive. Total expenditures (or total spending) measure the dollars changing hands as a result of the economic stimulus. Gross product (or output) is production of

goods and services that will come about in the area as a result of the activity. This measure is parallel to the gross domestic product numbers commonly reported by various media outlets and is a subset of total expenditures. Personal income is dollars that end up in the hands of people in the area; the vast majority of this aggregate derives from the earnings of employees, but payments such as interest and rents are also included. Job effects for transitory stimuli such as construction are typically expressed in job-years. A job-year is one person working for one year, though it could be multiple individuals working partial years (as is typical during construction projects). In this case, job losses are expressed in job-weeks during the strike period.

THE PERRYMAN GROUP



The Perryman Group is a focused team of analysts who know how to address complex economic information tasks and present our findings effectively.

Our in-house professionals bring expertise in **economics, finance, statistics, mathematics, real estate, valuation, systems analysis, engineering, technical communications, and marketing.** Dr. Ray Perryman, President and CEO, has 40 years of experience in developing systems, analyzing complex problems, and communicating effectively. We have considerable pride in what we do. Our enthusiasm is both unbridled and contagious; every day brings a new opportunity for us to tackle a different problem or create a product or service specifically tailored to our clients.

OUR SERVICES

IMPACT ASSESSMENT

We have developed and continually maintain an extensive set of economic impact evaluation models that can be applied in a variety of contexts.

EXPERT TESTIMONY

We help clients analyze and communicate complex information in common-sense terms through comprehensive, objective analyses and clear, concise expert reports and presentations.

FORECASTING

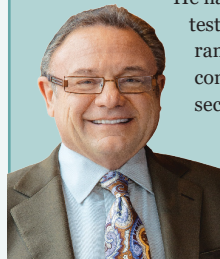
We are at the cutting edge of econometrics and other advanced statistical methods and have provided innovative approaches for many complex applications.

SPEECHES

Dr. Perryman addresses dozens of audiences throughout the world every year, catering to a wide variety of events.

M. RAY PERRYMAN, PH.D.

Dr. Perryman is the President and CEO of the Perryman Group and Distinguished Professor of Economic Theory and Method at the International Institute for Advanced Studies. Over the past 40 years, Dr. Perryman has helped recruit corporations providing tens of thousands of jobs through economic development work, resolved billion-dollar legal issues, and revamped public policy through impact assessments and other studies. His firm has measured economic impacts for corporate locations and expansions involving billions in investments, and his economic forecasts are used by corporations and government agencies alike.



He has provided economic analysis and expert testimony for civil litigation across a wide range of practice areas including antitrust and competition, intellectual property disputes, securities, and commercial and complex litigation. His work combines strong expertise in economic damages calculation, asset valuation, market analysis, and statistical methods and econometrics.

@PerrymanGroup

www.perrymangroup.com

/PerrymanGroup

info@perrymangroup.com

/in/ray-perryman

1.800.749.8705

For more information on **subscriptions, economic forecasts, or any of our other corporate services**, call **1.800.749.8705**.