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Business

Ohio Races to Retool for Electric Car Revolution

By JACK EWING

TOLEDO, Ohio — Erick Belmer has seen how tough the car business can be. He was working at a General Motors plant in Lordstown, Ohio, when it shut down in 2019, devastating the community.

Mr. Belmer, an industrial mechanic, got another job at a G.M. transmission factory in Toledo, but his commute is now 140 miles each way. His schedule gives him just a few hours with his family and a few hours of sleep.

Yet far from being bitter, Mr. Belmer says he is excited. G.M. is converting his factory to produce electric motors, part of an industrial transformation that will redefine manufacturing regions and jobs around the world.

G.M., Ford Motor and other car makers announced investments of more than \$50 billion in new factories in the United States last year, according to the Center for Automotive Research in Ann Arbor, Mich. All but a small fraction of that money was to build and retool plants for electric vehicles and batteries.

Mr. Belmer is one of thousands who will also have to pick up new skills. "It's going to be a little bit of a learning curve," he said at the Toledo factory. "But our guys are well equipped to handle this."

Mr. Belmer and Ohio are bellwethers of how the transition to electric vehicles will play out. G.M., Jeep, Honda Motor and parts makers employ many thousands of people across this state.

Ohio produces more internal combustion engines than any other state, making an adjustment to electric cars particularly urgent. Nearly 90,000 people work in Ohio for carmakers or parts suppliers, and several times that many are employed by businesses that serve those autoworkers and their families.

The changes are putting Ohio at the forefront of a new technology that is critical to fighting climate change. But some jobs will become obsolete, and some companies will go bankrupt. It's an open question whether the winners will outnumber the losers.



MADDIE McGARVEY FOR THE NEW YORK TIMES

A Honda electric-car battery factory in Marysville, Ohio. The rise of electric cars could be a boon or a bust for autoworkers in the state.

"This is the largest transition in our industry since its inception," said Tony Totty, the president of a United Auto Workers local that represents G.M. workers in Toledo.

Mr. Totty is optimistic about the members of his local. But he is worried about other colleagues whose jobs are tied to gasoline engines, he said.

There is "an expiration date on those facilities and those communities," Mr. Totty said.

Warren, in eastern Ohio, knows what happens when a carmaker leaves town. The city lost one-third of its population, about 20,000 people, since the 1970s, a process that accelerated after G.M. closed the factory in nearby Lordstown, which produced Chevrolet Cruze sedans, in 2019. Sales of that car had been fading as more Americans chose sport utility vehicles.

Even before that shutdown, auto production jobs had been declining. U.S. automakers and their parts suppliers employed about one million people at the end of 2018, down from more than 1.3 million in 2000. In the years before G.M. closed the Lordstown plant, it had reduced shifts and pared its work force.

"Our biggest export for the last 20 years has been talented young people," said Rick Stockburger, the president of Brite Energy Innovators, an organization in Warren that offers work space, advice and funding to start-ups.

Today, things are looking somewhat better. Ultium Cells, a joint venture of G.M. and LG Energy Solution, is ramping up production of batteries near the defunct factory.

Foxconn, a Taiwanese manufacturer, has taken over the old G.M. plant and plans to produce electric vehicles and tractors there. The complex will also house an "electric vehicle academy" established by Foxconn and Youngstown State University to train workers.

That surge in investment is helping to revive Warren's tidy but sleepy downtown. Doug Franklin, the mayor, who worked for G.M. in Lordstown, said he



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Erick Belmer said he was excited to work in a General Motors factory in Toledo, Ohio, that was converting to produce electric motors.

was pleased recently to step into a local restaurant where "nobody knew me, because we had so many new people."

Mr. Franklin represents the optimistic view — that an industrial renaissance is underway. The pandemic and the supply chain chaos that it caused have made companies leery of components produced far away. That experience, plus billions in federal subsidies approved by Democrats last year, motivated manufacturers to build vehicles, batteries and other components in the United States.

"We're seeing a new level of hope that I haven't seen in decades," Mr. Franklin said.

But community leaders in Warren are also aware that the transition comes with risks.

Hopes that the old plant will become a buzzing electric vehicle factory have not panned out, so far. G.M. sold the factory to Lordstown Motors, a fledgling electric pickup truck company that ran into trou-



Tony Totty, president of a U.A.W. local, is worried about colleagues tied to gasoline engines.

ble and resold the plant to Foxconn.

Executives at Foxconn, which has long assembled electronic devices but has little experience making cars, declined interview requests. It's not clear when the company will mass-produce electric vehicles in Lordstown, if ever.

The Rev. Todd Johnson, the pastor of the Second Baptist Church in Warren and a member of the City Council, worries that his mostly African American parishioners won't benefit from the new jobs.

Mr. Johnson, whose parents worked for G.M., encourages young people to study subjects like robotics and coding, and has led after-church trips to a science and technology center in nearby Youngstown.

"There are going to be opportunities coming," he said, "and I desperately don't want to see the next generation of our children miss out."

One pressing question is what will happen to people whose skills are no longer needed.

G.M. is dealing with that issue at the Toledo factory, Toledo Propulsion Systems, which makes transmissions that electric cars won't need. The automaker has committed to retraining the Toledo workers to make electric motors, and to investing \$760 million to convert assembly lines at the plant.

If anything, G.M. will need more workers, said Eric Gonzales, the executive director of the factory, as it replaces gasoline models with electric cars. "We're taking the employees with us."

The G.M. factory in Toledo will show whether established automakers can compete with Tesla, the fast-growing automaker that can focus all of its resources on electric vehicles because that's all it makes. Established carmakers need to keep earning money from internal combustion vehicles while ramping up a new technology that is not yet profitable.

G.M. has an advantage, Mr. Gonzales said, because it has factories equipped with sprinkler systems, high-voltage power and other essentials. "We already have the four walls here with the infrastructure," he said, speaking above the din of clanking machinery. "Somebody new, they have very expensive capital costs."

Other auto executives prefer to start fresh. Volkswagen's new Scout Motors unit looked at sites in Ohio and other states to produce electric pickup trucks and S.U.V.s, but chose to build a \$2 billion factory in South Carolina.

It's cheaper and easier to build from scratch, said Scott Keogh, the chief executive of Scout. "You're not juggling this classic dynamic of a legacy internal combustion engine plant where you need to inject a new electric vehicle," he said.

Ohio is in intense competition with other states to attract investment. But Midwestern states, including Michigan, Indiana and Illinois, have been less successful than states in the South where Republican political leaders have courted investment aggressively — even as they denounce the Democratic policies that helped create the boom.

Since 2020, automakers have announced investments of \$51 billion in electric vehicle and battery production in the South, compared with \$31 billion in states in the Great Lakes region, according to the Center for Automotive Research.



Eric Gonzales, the executive director of G.M.'s Toledo factory, says the plant will need at least as many workers as it has today, as it replaces its gasoline models with electric ones.

Southern states tend to have lower labor costs, in part because most auto plants there are not unionized. This could pose a problem for the United Auto Workers and President Biden, who want the switch to electric vehicles to create more high-paying union jobs. It could well be that most of the new electric car and battery jobs will end up in the South, where unions face political opposition, and not



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Workers placing batteries in hybrid vehicles at the Honda plant in Marysville, Ohio.

in the Midwest, where unions have political clout — and where most of the jobs lost in combustion engine vehicles once were.

Ohio has some things going for it. In March, Honda Motor said it would convert one of two assembly lines at its decadesold plant in Marysville, near Columbus, to build electric vehicles. Honda, a Japanese company, is also building a battery factory about an hour away, in Jeffersonville, with LG Energy Solution.

In Ohio, Honda employs more than 14,000 people making cars and motors, and the company's plans will show whether electric vehicles, which require fewer parts than gasoline cars, will create or destroy jobs.

For the next several years, the transition will probably create jobs as carmakers make both gasoline and electric vehicles. Bob Nelson, the executive vice president of American Honda Motor, noted that, at the moment, there was a shortage of skilled labor. "We're going to need everybody," he said in Marysville, where Honda makes Accord sedans.

What happens later is less certain.

"When you don't have the complexity that we're used to, with engines and transmissions and mufflers and radiators and exhaust systems and all those components that aren't going to be there anymore," said Bruce Baumhower, the president of a United Auto Workers local that represents employees of auto suppliers in Ohio, "it makes me wonder what's left."

Dana Incorporated, based in Maumee, near Toledo, is also grappling with that question. Dana's employees — more than 40,000 of them — make axles, drive shafts and other parts. Electric vehicles need axles but typically do not need long drive shafts because the motors can be placed close to the wheels.

James Kamsickas, Dana's chief executive, has spent time in China and has been struck by the proliferation of electric vehicles there. Recognizing the threat to some of Dana's products, Mr. Kamsickas acquired several firms with expertise in electric motors and other technology.

Dana now offers axles with electric motors built in, saving weight and energy, and it has deployed its expertise in gaskets to make equipment for cooling elec-



James Kamsickas, right, Dana's chief executive, has acquired several firms with expertise in electric motors and other technology.

triccar batteries that G.M. plans to use. Most of Dana's orders are for products related to electric vehicles.

Ohio's economic future hinges on whether other companies make similar leaps. "You don't have a choice," Mr. Kamsickas said. "Sooner or later, you'd be a melting iceberg."

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