

# VOICE OF BUSINESS

# Transportation, infrastructure drive economic growth



Chris Kershner President and CEO Dayton Area Chamber of Commerce

If you ask anyone in the Dayton region how long it takes to drive somewhere, the answer is usually the same, "about 20-30 minutes." This ease of travel and efficiency is point of pride when the community is recruiting and retaining business invest-

Whether your business relies on commuting employees, customer travel, supply delivery or product distribution, the Dayton area provides one of the most optimal geographic return on investments than anywhere else in the world. Over the past 20 years there has been over \$1.2 billion invested in our local infrastructure network, fixing major bottlenecks like I-75 through downtown Dayton, Rt. 35 congestion, a new interchange at I-75/Austin Rd. and improvements to support our booming logistics industry. Even with these wins, strategic infrastructure investments can't stop, we need to stay on top of our game continue to ensure the Dayton region is the most efficient locations to do business.

The Dayton Area Chamber of Commerce released its top transportation and infrastructure priorities that continue to position our region as a business friendly investment. Topping the infrastructure priority list are projects like a new interchange at I-675/ Grange Hall Rd. This interchange is integral to supporting Wright-Patterson Air Force Base and private sector defense contrac-

#### **CHAMBER ENHANCES CAREERS OF REGION'S WOMEN BUSINESS LEADERS**

As we wrap up Women's History Month, the Dayton Area Chamber of Commerce is proud to celebrate and support women business leaders all year long though our tailored professional development program: Empower.

The Dayton Area Chamber of Commerce has provided enhanced leadership and professional development programming for nearly 50 years with the legacy program of Leadership Dayton, then Empower, Executive Women's Council and newly launched, Gen D Ignite for early career professionals.

For the past five years, the chamber has supported the career growth of local talent by identifying and removing barriers to executive leadership for women business leaders. Empower, a 10-month cohort, blends professional business coaching with innovative curriculum and problem solving, designed exclusively for mid-to upper-level management women business leaders. It guides participants as they identify their own leadership strengths, values and goals, while empowering them to eliminate barriers to

tors as it will provide new and improved ingress and egress to WPAFB, relieve community congestion at peak travel times and make WPAFB more attractive to future USDOD investments

Additionally, the I-675/ Wilmington Pike interchange needs increased capacity because of the exponential growth that the area surrounding the interchanged has experienced. Another key transportation investment area continues to be the logistics and light industrials areas surrounding the Dayton International Airport. Since 2015, companies like P&G, Energizer, Chewy, Crocs, Amazon and General Pet Supply have launched operations

The simple reason for

in this area.

their investments: the ability to get product out the door and in customer hands quickly. Continued infrastructure investments in this area will ensure that the current \$2.5 billion impact of our logistics industry continues to

Coming down the track is a potential opportunity that the Chamber is closely monitoring. The

Chamber recently supported the Ohio Rail **Development Commis**sion's funding application for a feasibility study to review the potential commuter Amtrak expansion that will include stops Dayton, Cincinnati, Columbus and Cleveland. As the Administration conducts a feasibility study, our business community will be at the table to review routes, schedules, costs and efficiencies.

Now is the time to continue investing in these key transportation and infrastructure projects in the Dayton region. With continued transportation leadership and partnerships from our Congressional delegation and our state and local transportation leaders, our region will ensure that we continue to have this strong economic development advantage for years to come.

Chris Kershner is the CEO and President of the Dayton Area Chamber of Commerce.

#### **TECHNOLOGY**

## EVs are taking off, but when will battery recycling follow?

Niraj Chokshi and **Kellen Browning** 

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Benjamin Reynaga used power tools to hack his way into a beat-up hybrid Honda Fit at an auto dismantling plant at the edge of the Mojave Desert until he reached the most important part of the car: its lithium-ion battery.

The vehicle itself was set to be crushed, but the battery would be treated with care. It would be disassembled nearby and then sent to Nevada, where another company, Redwood Materials, would recover some of the valuable metals inside.

The plant where Reynaga works, in Adelanto, California, is at the front lines of what auto industry experts, environmentalists and the Biden administration believe could be an important part of a global shift to electric vehicles: recycling and reusing metals like cobalt, lithium and nickel. If batteries past their prime supply the ingredients for new ones, electric cars, trucks and vans would become more affordable and environmentally sustainable.

"We're just getting ready," said Nick Castillo, who manages the plant for LKQ Corp. The facility mostly dismantles gasoline vehicles but is preparing to take apart more hybrid and electric vehicles. "We know it's eventually going to take over. It's going to be the future."

Sales of electric cars and trucks are taking off, and the auto and battery industries are investing billions of dollars to upgrade and build factories. These cars could help address climate change, but batteries pose their own problems. Raw materials can be hard to mine, are often found in countries with poor human rights records and require processing that leaves behind noxious waste.

Fortunately, those battery ingredients are also highly reusable. And now a race is on to collect and recycle used lithium-ion batteries. Venture capitalists, automakers and energy companies are pouring money into dozens of startup recycling companies in North America and Europe.

"We're weaning our entire society off of fossil and carbon-intensive fuels; we can't underestimate the scale of that challenge," said Gavin Harper, a research fellow at the University of Birmingham in England, who studies battery recycling. "The demand is going to be so enormous."

But for all the optimism, this new business faces a daunting challenge: Few batteries will be available to recycle for a decade or more. Tesla, which dominates the electric vehicle business, began selling cars in 2008 and until 2017 sold fewer than 100,000 cars a year. There are other sources to recycle today, including



Many companies are eager to recycle lithium-ion batteries but it could be a decade before enough become available. GABRIELLA ANGOTTI-JONES / THE NEW YORK TIMES

hybrids and consumer electronics, but the supply is limited and collection can be challenging.

That has left recycling companies in a difficult position. They need to invest in factories, machinery and workers or risk losing ground to competitors. But if they invest too quickly, they could run out of money before lots of aging batteries arrive at their loading docks.

"You have people that are just burning through money, because you don't have the feedstock to be able to make the material to sell," said Eric Frederickson, the managing director of operations for Call2Recycle, a nonprofit program that helps recyclers find old batteries.

The companies also have to figure out how to find, collect and dismantle batteries. They have to work with many dismantlers, scrap yards and nonprofit groups. And because batteries are prone to fires and packaged and built differently from model to model, taking them apart can be complicated

and dangerous. Among companies recycling batteries, Redwood stands out. The company was founded by JB Straubel, a former top Tesla executive. and has raised more than \$1 billion from investors, it said. Redwood sees itself primarily as a producer of battery materials – made from recovered or mined metals and has established recycling partnerships with Ford Motor, Toyota, Volkswagen and Volvo. Redwood also recycles scrap from a battery plant run by Panasonic and Tesla, near Reno, Nevada.

On a flat, dusty tract of land near that plant, Redwood is building out a 175acre campus. There, the company recovers metal from old batteries and produces materials for new ones. Redwood announced in December that it would spend at least \$3.5 billion on another campus in South Carolina, in a region of the country that is fast becoming a hub for battery and electric vehicle production.

Other businesses are focused solely on recycling. Li-Cycle, a Canadian company founded in 2016 by two former engineering consultants – Ajay Kochhar and Tim Johnston – is building several plants.

At collection centers in Alabama, Arizona, New York and Ontario, the company breaks down batteries and manufacturing scrap. In its plant in Rochester, New York, a conveyor belt ferries materials up one story before dropping them into a vat where they are shredded while submerged in a proprietary chemical solution

to prevent fires. The resulting pieces are separated, and Li-Cycle then harvests a granular substance, known as black mass, which is processed into its component metals elsewhere. But Li-Cycle plans a total capital investment of about \$485 million to build a facility, also in Rochester, to turn the substance into battery-grade lithium, cobalt and nickel.

Battery recycling is still relatively new in North America, but more mature companies abroad could provide a hint of what's to come. In China, for example, there are many recyclers but a shortage of material.

"They have too much capacity and too few batteries to recycle," said Hans Eric Melin, who founded Circular Energy Storage, a consulting firm that specializes in the market for old lithium-ion batteries. "I think that's exactly the situation that we will face in both Europe and North America.'

It could take many years for recycling to become a thriving industry in the United States. Relatively few electric vehicles are on the road and most are new. Smartphones, laptops and other electronics also contain lithium-ion batteries, but they are difficult to collect and there are not enough to meet the growing needs of the auto industry.

But lawmakers and environmental groups want recycling to take off quickly to cut carbon emissions, protect the nation from an overreliance on foreign producers and promote the safe disposal of batteries.

### Johnson

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ers easy whether I am dealing with engineering, quality or the shop floor.

JMS, which started with just one employee – Johnson – now employs 10 people in various roles with plans to add to that number this year with new products and projects coming online.

Johnson said JMS was never supposed to be a livelihood for him. Prior to starting the company, he was "happily employed" as the leader of the machining division for Unison Industries (then Elano), a part of GE Aviation.

"I made race car components in my spare time as a hobby and to support my own auto racing endeavors," he said. "One day someone asked if I could make a production part for them. I shrugged my shoulders and

said, 'Sure, why not?" Johnson said he had taken on a close friend as a business partner and they moved



Tom Johnson is the owner of Johnson Manufacturing Systems in West Carrollton and the company is celebrating 20 years in business. JIM NOELKER / STAFF

into a small rented space and worked in the evenings.

"Then one day I woke up, realized I had customers, employees, and a manufacturing facility and couldn't have two full-time careers," he said. "So I made the choice, took the chance, and although the path hasn't always been easy, I have never regretted making the leap.'

JMS expanded in 2016. "We'd outgrown our facility and needed elbow room,"

Johnson said. "With the help of Mike Lucking from the economic development office of West Carrollton and an ED/ GE grant from Montgomery County, we were able to almost double our footprint to approximately 16,000 square feet."

The company anticipates that with new customers with 'exciting new projects," it likely will be expanding again within a couple of years, John-

### **Flexible**

continued from D1

Culp voted to approve a final development plan for the first phase of the development, a 230,000-square-foot facility that will be the first of six buildings. Company officials estimate it will be completed in 2024 and create 100 new jobs.

Trustee Vice President Terry Posey Jr. said he abstained from the vote because he represented NorthPoint in a matter earlier this year in Canal Winchester before the company's proposal came to the Miami Twp. Board of Trust-

'Really, in the Dayton market, there's small space and gigantic space," Morris said. This is space that can be subdivided into workable space for office and warehouse and manufacturing that I think will bring new, exciting opportunities into our region and those jobs and those people are going to need places to shop, eat, drink and live, and so I think that'll be good for the town-

Chris Kershner, president and CEO of the Dayton Area Chamber of Commerce, said the project is reflective of the demand in the Dayton market for light industrial and efficient interstate access.

"Our region has a strong value proposition for these types of development,' Kershner told Dayton Daily News. "Being located less than a mile from I-75/Austin Road Interchange and having access to a skilled Dayton area workforce is a recipe for success."

Tawana Jones, Montgomery County's director of community and economic development, said NorthPoint Development has been "a strong advocate for construction in the region for several years" and that county officials are excited to see its

newest project underway. "There continues to be a demand for business expansion in Montgomery

County," Jones said. "This new development fits well with the existing amenities and aligns with Miami Twp.'s development plans."

Morris said the property was the "most ideal" spot for such a project, given its proximity to both Interstate 75 and Interstate 675,

After constructing an extension to Washington Church Road, NorthPoint will hand it over to Miami and Washington townships for long-term maintenance.

Morris said the project wouldn't have happened without Miami Twp. Administrator Chris Snyder joining forces with former Washington Twp. Administrator Jesse Lytle.

"Interestingly enough, Washington Church Road is evenly divided between our two townships, so if we can't get those government entities working together, this project doesn't happen," he said.

Contact this reporter at eric. schwartzberg@coxinc.com.