

Beyond the Vehicle: Detroit Must Seize Its New Mobility Opportunity

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For more than a century, the Detroit Region has helped define what mobility means.

The automotive industry built an extraordinary concentration of engineering talent, manufacturing expertise, research capacity and supply chain knowledge here. Those strengths continue to make the Detroit Region one of the world's most important centers for designing and building vehicles.

But the definition of mobility is expanding.

Software-defined vehicles, autonomous systems, connected infrastructure, advanced air mobility and other emerging technologies are changing both what moves and how it moves. At the same time, the technologies behind mobility increasingly overlap with aerospace, defense, artificial intelligence and advanced manufacturing.

For the Detroit Region, this shift presents an opportunity to build on what we already do exceptionally well.

Our automotive expertise is not a legacy to move beyond. It is the foundation for what comes next.

A Broader Definition of Mobility

For generations, the word mobility meant one thing in the Detroit Region: automotive. Today, with electrification and automation transforming every mobility sector, the distinction between these sectors is smaller than ever.

The Global Epicenter of Mobility's [Future Mobility Technology Study](#) points toward a future that includes battery electric and software-defined vehicles, autonomous systems, hydrogen technologies, connected infrastructure, unmanned aerial systems and advanced manufacturing.

What connects these technologies is their need for many of the same capabilities the Detroit Region has developed over decades: complex engineering, systems integration, precision manufacturing and the ability to move products from concept to production, at scale.

Put more simply, this region knows how to develop, engineer and manufacture things that move.

That expertise can increasingly translate across markets. A manufacturer that has spent decades solving complex automotive engineering challenges may have capabilities relevant to aerospace, defense, drone, maritime and rail as well. A supplier experienced in advanced manufacturing may find new opportunities in autonomous systems. Software, cybersecurity and artificial intelligence capabilities developed for next-generation vehicles can have applications well beyond transportation.

This broader definition of mobility gives the Detroit Region an opportunity to expand its economy while continuing to strengthen its core automotive industry.

Diversification Is About Growth and Resilience

Diversification can sometimes be interpreted as a retreat from automotive. We see it differently.

The goal is not to abandon automotive. It is to use the capabilities built through automotive leadership as a foundation for growth into adjacent sectors, strengthening resilience while defining the next generation of mobility.

Automotive will remain fundamental to the Detroit Region's economy and identity. Maintaining our leadership requires continuing to support the manufacturers, suppliers, engineers and innovators that make this ecosystem globally competitive.

At the same time, the Region's companies have a unique chance for their existing capabilities to create new opportunities in adjacent markets. That is particularly important for small and midsize manufacturers whose businesses can be heavily exposed to the cycles of a single industry.

The question is not simply, "What other industries can we enter?" It is, "Where do the capabilities we already possess give us a competitive advantage?"

That distinction matters. That approach can strengthen individual companies while making the regional economy more resilient to changes in markets, technologies and demand.

What Manufacturers Are Seeing

The need for resilience is already visible among manufacturers navigating changing mobility markets.

The University of Michigan Economic Growth Institute works with small and midsize manufacturers seeking opportunities in advanced industries. Ashlee Breitner, managing director of EGI's Advanced Diversification Industries program, said many smaller automotive suppliers are thinking carefully about how closely their future should be tied to a single market.

"They know what their product is for the future or they know how they want to change their business model," Breitner said. "But they don't know how to sell to a different type of advanced mobility market beyond automotive."

Breitner said expanding the definition of mobility can help the region "better position our economy across multiple sectors," including aerospace, defense, energy and advanced manufacturing.

That does not mean every automotive supplier should enter every emerging market. Companies need to understand where their existing expertise, products and production capabilities translate into real opportunities. For some, that may mean an adjacent market. For others, it may mean adopting new technology or changing

how they sell capabilities they already possess.

That kind of transformation is already visible in the Detroit Region. In Wixom, [dSPACE](#) has applied technology developed for automotive testing and autonomous vehicle development to one of the world's most demanding autonomous driving environments. Its AUTERA AutoBox serves as the central computing platform for vehicles competing in the Indy Autonomous Challenge, bringing together software, sensing, systems integration and validation capabilities with deep roots in the automotive industry.

Regional programs are also helping more manufacturers explore where their capabilities can take them. The [Michigan Auto Supplier Transition Program](#), or MAST-P, is designed to help small manufacturers connected to Michigan's automotive supply chain strengthen their businesses and pursue opportunities in emerging markets including electric vehicles, aerospace, defense, clean energy and advanced manufacturing.

These examples demonstrate two sides of the opportunity: companies applying automotive expertise in new mobility environments and regional partners creating pathways for more manufacturers to do the same.

The workforce supporting those companies will also need to evolve.

Breitner said technical skills such as digital literacy, AI, automation, robotics and cybersecurity will become increasingly important. But companies also need workers with durable skills such as communication and problem solving, particularly as technologies and market requirements continue to change.

One of the larger challenges is keeping workforce development from falling behind technology development.

Too often, Breitner said, a technology advances and organizations then begin determining how to train people to work with it. A more competitive approach would bring industry, academia and workforce development closer together while technologies are still emerging.

"If we can bring those two timelines together," Breitner said of technology and workforce development, "I think that's going to help us stay ahead."

That challenge will become more important as AI moves deeper into mobility and manufacturing. AI will not exist as a standalone technology within these companies. It will influence engineering, production, operations and business models.

Preparing for that change requires more than adopting new tools. It requires building the talent, infrastructure and organizational capabilities to use them effectively.

Turning Regional Strength into Regional Strategy

The Detroit Region enters this period of change with advantages few places can replicate.

We are home to one of the world's most significant automotive industry clusters, backed by deep engineering

and manufacturing talent, globally connected supply chains and major research institutions. Michigan is home to four R1 research universities: Michigan State University, Michigan Technological University, the University of Michigan and Wayne State University.

Across the region, companies and institutions are also building capabilities in software, AI, automation and other technologies that will shape the future of mobility.

Examples of that transformation are already emerging across the Detroit Region. [SMT Automation](#) has worked to build on its automotive expertise while pursuing opportunities in aerospace and other mobility markets. The company has strengthened its quality systems and pursued aerospace certification as part of that diversification strategy.

At the same time, emerging mobility technologies are creating opportunities beyond transportation. Novi-based [IonDynamics Energy](#) has developed mobile energy storage and charging technology initially suited to mobility applications that can also provide flexible power for construction, events, emergency response and other uses where permanent infrastructure may be impractical.

Together, the companies demonstrate how the boundaries between industries are becoming less distinct. Automotive capabilities can open doors to new mobility markets, while technologies developed around mobility can create opportunities far beyond transportation.

The future of mobility will increasingly be shaped by the intersection of hardware and software, manufacturing and data, and established industries and emerging markets. That makes collaboration across the Detroit Region more important, not less.

Industry, academia, workforce organizations, government and economic development partners need a shared understanding of where mobility is headed and what companies need to compete.

That includes supporting the automotive companies that remain the foundation of our economy. It includes helping manufacturers identify viable opportunities in adjacent markets. It means developing the digital and physical infrastructure required for emerging technologies. And it means preparing workers for new capabilities while preserving the manufacturing knowledge that distinguishes this region from competitors around the world.

This work is already taking shape across the region through efforts to connect industry with emerging technologies, help manufacturers diversify into adjacent markets and align workforce development with the capabilities companies will need next. The opportunity is to connect those efforts into a broader regional strategy rather than pursue them in isolation.

Building From Strength

The Detroit Region doesn't need to reinvent itself to lead the future of mobility. It needs to build on the strengths no other region can match.

For more than a century, automotive leadership has given the Detroit region capabilities that are difficult to



reproduce: engineering at extraordinary scale, deep manufacturing knowledge, complex supply chains and generations of people who understand how to turn ideas into products.

Those capabilities remain essential to automotive. Increasingly, they are also valuable across a much larger technology economy.

The opportunity before us is to protect and strengthen that foundation while expanding where it can take us.

That means embracing a broader definition of mobility without losing sight of the industry that built this region's leadership. It means giving manufacturers more pathways to grow. It means developing technology and talent together rather than treating them as separate challenges. And it means working across organizational and industry boundaries to compete as one region.

The goal is a Detroit Region that remains a global epicenter of mobility while becoming stronger across the technologies and industries that will define mobility in the decades ahead.

Detroit helped define the first century of modern mobility. Now we have the opportunity to define what comes next.