



ADVANCED MANUFACTURING

MICHIGAN
PURE OPPORTUNITY.



WHY MICHIGAN

As industries adapt, advanced manufacturing is playing an increasingly critical role in developing the solutions of the future. The automotive industry laid the groundwork for Michigan's manufacturing prowess, and now other sectors are leveraging this expertise.

From the state's **strong defense and aerospace sectors** to its **growth in advanced materials like plastics, lightweight carbons and machinery manufacturing for automation and robotics**, Michigan's continued innovation is changing the way things are made in the 21st Century.

Developing innovative, high-tech products of the future requires a highly skilled workforce – and Michigan, once again, meets the mark. With the **fifth largest advanced manufacturing workforce** in the U.S.¹, coupled with the **highest concentration of engineers and designers**² and a skilled trades workforce that consistently ranks in the **top 10** nationally,³ Michigan has the technological know-how to leverage the latest high-tech discoveries.

In addition, the state's business-friendly climate, favorable tax structure and its access to the North American market makes it a natural fit for advanced manufacturing facilities. Michigan is home to **18 commercial airports** and numerous international crossings with Canada, offering various channels for businesses to move goods throughout the state, nation and world.

By leveraging Michigan's strong manufacturing heritage, premier location, robust business climate, favorable tax structure and abundance of top talent, the state is well-positioned to lead the manufacturing industry of today into the advanced manufacturing of the future.



MICHIGAN ECONOMIC
DEVELOPMENT CORPORATION

SOURCES:

1. Emsi, 2019.4 (QCEW, Non-QCEW, and Self-Employed) 2. Emsi 2019.2 (QCEW, Non-QCEW, and Self-Employed). (NAICS 541330) 3. Emsi, 2019.2 (QCEW, Non-QCEW, and Self-Employed) 4. Michigan Defense Center 5. McKinsey Industry Analysis 6. PricewaterhouseCoopers. (July 2019). 2019 Aerospace Manufacturing Attractiveness Rankings: Geographic assessment for aerospace manufacturing investments. 7. Emsi, 2019.4 (QCEW, Non-QCEW, and Self-Employed) 8. Ibid 9. Ibid 10. Emsi, 2019.4 (QCEW, Non-QCEW, and Self-Employed) 11. Muro, M. (August 14, 2017). "Where the robots are." Brookings Institution.

DID YOU KNOW: DEFENSE

- Michigan has a strong history as the "Arsenal of Democracy," with more than **3,000 businesses** serving the defense industry.⁴
- Michigan has the highest military vehicle production in the U.S. with **37% of total contracts** in the country.⁵
- Michigan ranks **No. 4** in the nation and first in the Midwest for aerospace manufacturing attractiveness.⁶

ADVANCED MATERIALS

- Michigan has the **third largest advanced materials workforce** in the nation.⁷
- Nearly 45,000 workers were employed in advanced materials industries in Michigan in 2019, making employment in these industries almost **130% more concentrated in the state** than the national average.⁸
- Michigan's employment in the advanced materials industries has grown faster than the U.S. as a whole over the last five years and is expected to further **outpace national growth** going forward.⁹
- Lightweight Innovations for Tomorrow and Institute for Advanced Composites Manufacturing Innovations research facilities in Michigan are unlocking the next phase of demand for plastics.

INDUSTRY 4.0

- Michigan has more than **13,000 workers** employed in industries related to Industry 4.0 and automation, the most in the nation.¹⁰
- Because the automotive industry is a leader in the adoption of industrial robots, Michigan has the **most industrial robots** in use out of any U.S. state (28,000+), making up a 12% share of the U.S. total.¹¹
- As automation, robotics and additive manufacturing become increasingly powerful, Michigan is an active leader in integrating these innovative technologies into its every day manufacturing processes.