West Michigan is home to one of the nation’s largest and most extensive manufacturing sectors. If you can dream it, we can make it. The region hosts industry leaders in metals, plastics, biopharmaceuticals, medical devices, production technology, automotive, office furniture and food processing.

Manufacturing currently accounts for 20 percent of all jobs in the region and remains the heart of West Michigan’s economy. During the economic downturn, when other communities abandoned manufacturing, West Michigan doubled-down. In 2009, manufacturing in West Michigan began an era of unprecedented job creation and investment, surpassing both state and national average year after year.
TALENT/WORKFORCE

2,615
TOTAL
ESTABLISHMENTS

158,516
TOTAL
MANUFACTURING JOBS

$75,111
AVERAGE
EARNINGS

15.9%
JOB GROWTH
(2013-2018)

DATA SOURCE:
Economic Modeling Specialists International (EMSI)

NOTABLE OCCUPATIONS

Machinists (51-4041): 5,244
Industrial Engineers (17-2112): 4,485
Tool and Die Makers (51-4111): 2,844
Production Supervisors (51-1011): 6,191
Production Assemblers (51-2098): 22,188

DATA SOURCE: ESI

SUPPLY CHAIN

NUMBER OF ESTABLISHMENTS (2018)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Establishments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal</td>
<td>563</td>
</tr>
<tr>
<td>Foundries</td>
<td>32</td>
</tr>
<tr>
<td>Plastics</td>
<td>108</td>
</tr>
<tr>
<td>Wood</td>
<td>112</td>
</tr>
<tr>
<td>Tool &amp; Die</td>
<td>122</td>
</tr>
<tr>
<td>Total</td>
<td>1,032</td>
</tr>
</tbody>
</table>

DATA SOURCE: ESI

EXPORTS

$9.0B
TOTAL EXPORTS (2017)

14.4%
SHARE OF METRO GDP (2017)

4.4%

DATA SOURCE:
Brookings Export Nation 2018
RECENT ECONOMIC GROWTH PROJECTS

<table>
<thead>
<tr>
<th>YEAR</th>
<th>COMPANY</th>
<th>JOBS</th>
<th>INVESTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>ADAC Automotive</td>
<td>50</td>
<td>$29.0 Million</td>
</tr>
<tr>
<td>2018</td>
<td>Medbio, Inc.</td>
<td>43</td>
<td>$3.5 Million</td>
</tr>
<tr>
<td>2017</td>
<td>Siliconature USA</td>
<td>26</td>
<td>$19.7 Million</td>
</tr>
<tr>
<td>2017</td>
<td>J-Star Motion Corp</td>
<td>122</td>
<td>$4.9 Million</td>
</tr>
<tr>
<td>2017</td>
<td>Litehouse Inc</td>
<td>77</td>
<td>$9.9 Million</td>
</tr>
<tr>
<td>2017</td>
<td>Agropur Natrel USA</td>
<td>62</td>
<td>$21.3 Million</td>
</tr>
</tbody>
</table>

MARKET ACCESS

With affordable easy access to most major markets and a robust infrastructure, West Michigan is an attractive location for companies of all sizes.

HIGHWAYS

An extensive system connects Greater Grand Rapids to major cities and transportation hubs throughout the Upper Midwest.

RAIL

As the country’s 12th largest rail system, Michigan is well served by regional hubs in Grand Rapids and Detroit and supported by an infrastructure detailed in our State Rail Plan. Michigan’s current Class I railroads include: Canadian National/Grand Trunk, Norfolk Southern Railway, CSX Transportation, and the Canadian Pacific Railway/Soo Line.

AIR

Cargo airlines servicing The Gerald R. Ford International Airport transport more than 40,000 tons of air cargo annually. Additionally, seven passenger airlines, including Allegiant Air, American Airlines, Delta Airlines, Frontier Airlines, Midwest Express, Southwest Airlines, and United Airlines, Delta Air Lines, and United Airlines provide 140 scheduled nonstop flights to 30 major market destinations every day.

DEEP WATER PORTS

The Great Lakes can be reached via the St. Lawrence Seaway and the U.S. Inland Waterway system of rivers. When connected, the complete system offers a marine highway through the heartland of the United States, providing access to population centers and manufacturing sites from the Gulf of Mexico to the Atlantic Coast. The West Michigan Port Operators port sites on the shores of West Michigan are positioned to connect Michigan Highway and Railroad infrastructure to this marine highway system, making these ports ideal candidates for manufacturing and food processing.
MANUFACTURING ESTABLISHMENTS & JOBS BY COUNTY

WEST MICHIGAN MANUFACTURING ESTABLISHMENTS AND JOBS

158,516
TOTAL JOBS

2,615
TOTAL ESTABLISHMENTS

COMPARABLE COMMUNITIES (BY MSA)

<table>
<thead>
<tr>
<th>COMMUNITY</th>
<th>2018 JOBS</th>
<th>2018 ESTABLISHMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allentown, PA</td>
<td>38,423</td>
<td>931</td>
</tr>
<tr>
<td>Birmingham, AL</td>
<td>38,816</td>
<td>1,195</td>
</tr>
<tr>
<td>Buffalo, NY</td>
<td>51,674</td>
<td>1,299</td>
</tr>
<tr>
<td>Grand Rapids, MI</td>
<td>117,797</td>
<td>1,878</td>
</tr>
<tr>
<td>Greenville, SC</td>
<td>57,922</td>
<td>1,151</td>
</tr>
<tr>
<td>Knoxville, TN</td>
<td>39,731</td>
<td>856</td>
</tr>
<tr>
<td>Rochester, NY</td>
<td>56,369</td>
<td>1,361</td>
</tr>
<tr>
<td>Tuscon, AZ</td>
<td>25,162</td>
<td>616</td>
</tr>
<tr>
<td>Tulsa, OK</td>
<td>54,372</td>
<td>1,441</td>
</tr>
<tr>
<td>Worcester, MA</td>
<td>41,960</td>
<td>1,087</td>
</tr>
</tbody>
</table>

NOTABLE WEST MICHIGAN MANUFACTURERS

ADAC Automotive
ALCOA
Amway
Bissell
Cargill
Haworth
Herman Miller
Kellogg's
Lacks Enterprises, Inc.
Steelcase
Wolverine Worldwide
AUTOMOTIVE MANUFACTURING

INDUSTRY STRENGTHS

ENGINEERING: Michigan employs more industrial and mechanical engineers than any other state. West Michigan ranked #3 for new engineering jobs and #2 for advanced manufacturing by Change the Equation.

INVESTMENT: Automakers and suppliers have invested $10.6 billion in Michigan since 2010 and continue to invest heavily in the state.

CENTRAL: 61 of the top 100 automotive suppliers to the world are headquartered in Michigan.

TOOL & DIE: Michigan hosts more automotive tool and die makers than any other state (1,089 establishments).

COLLABORATION: West Michigan’s Manufacturers Council is comprised of over 35 regional manufacturers working in collaboration to strengthen the industry in the area.

DATA SOURCE: EMSI

NOTABLE AUTOMOTIVE MANUFACTURING COMPANIES

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>COMMUNITY</th>
<th>EMPLOYEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gentex Corporation</td>
<td>Holland/Zeeland</td>
<td>5,800</td>
</tr>
<tr>
<td>Lacks Enterprises Inc</td>
<td>Kentwood, Cascade</td>
<td>2,800</td>
</tr>
<tr>
<td>Shape Corporation</td>
<td>Grand Haven</td>
<td>1,700</td>
</tr>
<tr>
<td>Challenge Manufacturing Co.</td>
<td>Coopersville</td>
<td>1,700</td>
</tr>
<tr>
<td>Ventra</td>
<td>Grand Rapids, Ionia</td>
<td>2,641</td>
</tr>
<tr>
<td>ADAC Automotive</td>
<td>Grand Rapids, Muskegon, Saranac</td>
<td>1,200</td>
</tr>
<tr>
<td>Magna Mirrors Newaygo Division</td>
<td>Newaygo</td>
<td>1,000</td>
</tr>
<tr>
<td>Yanfeng Global Automotive Interiors</td>
<td>Holland</td>
<td>1,000</td>
</tr>
<tr>
<td>Pridgeon and Clay, Inc.</td>
<td>Grand Rapids</td>
<td>960</td>
</tr>
</tbody>
</table>
AUTOMOTIVE MANUFACTURING CLUSTERS AND NOTABLE COMPANIES

Holland

Allegan

Portland

Hastings

Ionia

Greenville

Muskegon

Grand Haven

Ludington

Additional Automotive Companies

6
MEDICAL DEVICE MANUFACTURING

INDUSTRY STRENGTHS

**COLLABORATION:** West Michigan’s medical device consortium “MiDevice” is comprised of 28 leading medical device manufacturers and suppliers in Michigan. This group meets on a regular basis to discuss industry trends, share best practices, and collaborate on projects.

**SUPPLY CHAIN:** West Michigan hosts one of the most diverse material manufacturing supply chains in the U.S. From plastics and composite materials to exotic metals and embedded electronics, the region’s manufacturing community offers everything your company needs to succeed.

**INDUSTRY CONCENTRATION:** West Michigan hosts the highest concentration of medical device manufacturers in the state. As one of the fastest growing medical clusters in the Midwest, the region now employs over 20% of Michigan’s medical device professionals.

DATA SOURCE: EMSI

ABOUT MIDEVICE

MiDevice is the only Michigan-based organization dedicated to medical device design, development, manufacturing and distribution. The consortium works to speed the growth and development of medical devices by emphasizing and encouraging collaboration among members to meet overall product life cycle and supply chain needs. The goal is to build collaboration around core competencies, create opportunities to leverage these competencies, and ultimately grow the medical device industry in the region into a nationally recognized medical device cluster.

For more information, visit: midevice.org

### NOTABLE MEDICAL DEVICE MANUFACTURING COMPANIES

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>COMMUNITY</th>
<th>EMPLOYEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MedPlast GR</td>
<td>Grand Rapids</td>
<td>400</td>
</tr>
<tr>
<td>The Tech Group</td>
<td>Walker</td>
<td>363</td>
</tr>
<tr>
<td>Aspen Surgical</td>
<td>Caledonia</td>
<td>290</td>
</tr>
<tr>
<td>Intertek</td>
<td>Kentwood</td>
<td>250</td>
</tr>
<tr>
<td>Custom Profile, Inc.</td>
<td>Walker</td>
<td>238</td>
</tr>
<tr>
<td>Medbio, Inc.</td>
<td>Cascade Township</td>
<td>215</td>
</tr>
<tr>
<td>Firstronic LLC</td>
<td>Grand Rapids</td>
<td>190</td>
</tr>
<tr>
<td>Safari Circuits, Inc.</td>
<td>Otsego</td>
<td>185</td>
</tr>
<tr>
<td>Autocam Medical</td>
<td>Kentwood</td>
<td>160</td>
</tr>
</tbody>
</table>
## MEDICAL DEVICE MANUFACTURING

<table>
<thead>
<tr>
<th>SERVICES PROVIDED</th>
<th>NUMBER OF LOCAL COMPANIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Services</td>
<td>16</td>
</tr>
<tr>
<td>Medical Materials</td>
<td>11</td>
</tr>
<tr>
<td>Precision Components</td>
<td>17</td>
</tr>
<tr>
<td>Electronics</td>
<td>6</td>
</tr>
<tr>
<td>Contract Manufacturing</td>
<td>20</td>
</tr>
<tr>
<td>CNC Machining</td>
<td>10</td>
</tr>
<tr>
<td>Contract Assembly &amp; Packaging</td>
<td>15</td>
</tr>
<tr>
<td>Cleanroom Facilities</td>
<td>8</td>
</tr>
<tr>
<td>Sterilization</td>
<td>2</td>
</tr>
<tr>
<td>Motion Control</td>
<td>5</td>
</tr>
<tr>
<td>Process Systems</td>
<td>6</td>
</tr>
<tr>
<td>Testing &amp; Inspection</td>
<td>20</td>
</tr>
<tr>
<td>Packaging Materials</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KEY COMPETENCIES</th>
<th>NUMBER OF LOCAL COMPANIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>🌟 Concept</td>
<td>18</td>
</tr>
<tr>
<td>🖍 Design</td>
<td>22</td>
</tr>
<tr>
<td>🌟 Prototype</td>
<td>24</td>
</tr>
<tr>
<td>🎯 Validate</td>
<td>16</td>
</tr>
<tr>
<td>📦 Manufacture</td>
<td>22</td>
</tr>
<tr>
<td>🌠 Distribute</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INDUSTRY SPECIFIC CERTIFICATIONS</th>
<th>NUMBER OF LOCAL COMPANIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered with the FDA</td>
<td>81</td>
</tr>
<tr>
<td>ISO 13485 Certified</td>
<td>13</td>
</tr>
</tbody>
</table>
MEDICAL DEVICE MANUFACTURING
CLUSTERS AND NOTABLE COMPANIES

Additional Medical Device Companies

Ludington
Muskegon
Grand Haven
Holland
Allegan
Portland
Ionia
Greenville
Hastings

MEDICAL DEVICE MANUFACTURING
CLUSTERS AND NOTABLE COMPANIES

Additional Medical Device Companies
SECTOR OVERVIEW

9,711
TOTAL JOBS

0.56
LOCATION QUOTIENT

9.5%
JOB GROWTH (2013-2018)

296
TOTAL ESTABLISHMENTS

$78,299
AVERAGE EARNINGS

DATA SOURCE: EMSI

AEROSPACE & DEFENSE MANUFACTURING

INDUSTRY STRENGTHS

UNIVERSITY AND EDUCATION: West Michigan offers unique opportunities to partner with many of Michigan's most prestigious colleges and universities in the areas of aerospace engineering, technology and research.

SUPPLY CHAIN: West Michigan hosts one of the most diverse material manufacturing supply chains in the U.S. From plastics and composite materials to exotic metals and embedded electronics, the region's manufacturing community offers everything your company needs to succeed.

DEFENSE CONNECTIONS: The Michigan Defense Center (MDC) was created in 2006 with the mandate to target statewide defense and homeland security opportunities for Michigan businesses. The MDC works with Michigan manufacturers to identify and partner with strategic defense-oriented companies and resources throughout the state.

NOTABLE AEROSPACE AND DEFENSE MANUFACTURING COMPANIES

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>COMMUNITY</th>
<th>EMPLOYEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arconic, Inc.</td>
<td>Whitehall</td>
<td>2,350</td>
</tr>
<tr>
<td>GE Aviation</td>
<td>Cascade Twp</td>
<td>1,100</td>
</tr>
<tr>
<td>Hutchinson Antivibration Systems Inc.</td>
<td>Grand Rapids</td>
<td>850</td>
</tr>
<tr>
<td>Parker Hannifin Corporation, Fluid Connectors Group</td>
<td>Otsego, Norton Shores</td>
<td>565</td>
</tr>
<tr>
<td>L-3 Avionics Systems</td>
<td>Cascade Twp</td>
<td>479</td>
</tr>
<tr>
<td>Thierica, Inc</td>
<td>Grand Rapids</td>
<td>350</td>
</tr>
<tr>
<td>Woodward, Inc.</td>
<td>Zeeland</td>
<td>290</td>
</tr>
</tbody>
</table>
FOOD PROCESSING MANUFACTURING

INDUSTRY STRENGTHS

ACCESS TO WATER: Michigan is surrounded by over 9,679 miles of freshwater shoreline and borders four of the five Great Lakes. West Michigan hosts several large scale wastewater treatment facilities with excess capacity throughout the region. In Grand Rapids alone, businesses have access to over 61.1 million gallons per day (MGD) with over 10 MGD excess capacity, ideal for food processing.

FOOD CHAIN: West Michigan’s agribusiness sector produces one-third of Michigan’s total agricultural sales, contributing to $1.5 billion to the regional economy. The sector is among the most productive and diverse regions in a state that is second only to California in its agricultural diversity.

UNIVERSITY PARTNERSHIPS: The Michigan State University Product Center was established to improve economic opportunities in the Michigan agriculture, food and natural resource sectors. The Product Center provides assistance in developing and commercializing high value, consumer-responsive products and businesses in the agriculture and natural resource sectors. The Product Center is your key to the front door of MSU’s vast and varied technical expertise, research, outreach, and educational service.

DATA SOURCE: EMSI

NOTABLE FOOD PROCESSING MANUFACTURING COMPANIES

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>COMMUNITY</th>
<th>EMPLOYEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roskam Baking Co.</td>
<td>Cascade, Kentwood</td>
<td>2,090</td>
</tr>
<tr>
<td>Kellogg’s Snacks</td>
<td>Wyoming, Grand Rapids</td>
<td>1000</td>
</tr>
<tr>
<td>Hearthside Foods</td>
<td>Kentwood, Grand Rapids</td>
<td>830</td>
</tr>
<tr>
<td>Peterson Farms</td>
<td>Shelby</td>
<td>800</td>
</tr>
<tr>
<td>Michigan Turkey Producers</td>
<td>Wyoming</td>
<td>780</td>
</tr>
<tr>
<td>Founders Brewing Co</td>
<td>Grand Rapids</td>
<td>650</td>
</tr>
<tr>
<td>Request Foods Inc.</td>
<td>Holland</td>
<td>600</td>
</tr>
<tr>
<td>Coca-Cola Distribution, L.L.C.</td>
<td>Grand Rapids</td>
<td>498</td>
</tr>
<tr>
<td>Gerber Products Company</td>
<td>Fremont</td>
<td>466</td>
</tr>
<tr>
<td>Country Fresh LLC</td>
<td>Wyoming</td>
<td>400</td>
</tr>
<tr>
<td>Indian Summer Cooperative Inc</td>
<td>Ludington</td>
<td>400</td>
</tr>
</tbody>
</table>
FURNITURE MANUFACTURING

INDUSTRY STRENGTHS

INDUSTRIAL DESIGN: West Michigan is a premier design center with many of the world’s leading office furniture designers graduating from Grand Rapids-based Kendall College of Art and Design and other local universities.

SUPPLY CHAIN: West Michigan hosts one of the most diverse material manufacturing supply chains in the U.S. From plastics and composite materials to exotic metals and embedded electronics, the region’s manufacturing community offers everything your company needs to succeed.

FURNITURE HERITAGE: Since the early 1800s, Grand Rapids and West Michigan have been the epicenter for furniture craftsmanship, design and innovation. That heritage of craftsmanship is still alive and well in the 150+ furniture companies and 225 suppliers in the region today.

NOTABLE FURNITURE MANUFACTURING COMPANIES

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>COMMUNITY</th>
<th>EMPLOYEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herman Miller, Inc.</td>
<td>Zeeland</td>
<td>3,621</td>
</tr>
<tr>
<td>Steelcase, Inc.</td>
<td>Grand Rapids</td>
<td>3,500</td>
</tr>
<tr>
<td>Haworth Inc.</td>
<td>Holland</td>
<td>2,000</td>
</tr>
<tr>
<td>Knape &amp; Vogt Manufacturing Co.</td>
<td>Grand Rapids</td>
<td>750</td>
</tr>
<tr>
<td>Work Furniture Group</td>
<td>Kentwood</td>
<td>450</td>
</tr>
<tr>
<td>Nucraft</td>
<td>Comstock Park</td>
<td>370</td>
</tr>
<tr>
<td>Irwin Seating Company</td>
<td>Walker</td>
<td>300</td>
</tr>
<tr>
<td>Structural Concepts Corporation</td>
<td>Muskegon</td>
<td>293</td>
</tr>
<tr>
<td>Genesis Seating</td>
<td>Cascade Township</td>
<td>287</td>
</tr>
<tr>
<td>Davidson Plyforms</td>
<td>Grand Rapids</td>
<td>250</td>
</tr>
<tr>
<td>American Seating Company</td>
<td>Grand Rapids</td>
<td>250</td>
</tr>
<tr>
<td>Comfort Research</td>
<td>Grand Rapids</td>
<td>220</td>
</tr>
</tbody>
</table>
REGIONAL SUPPLY CHAIN

FROM ADVANCED METALS AND PLASTICS, TO WOOD, CASTINGS AND THE TOOLING THAT MAKES IT ALL HAPPEN, WEST MICHIGAN IS YOUR SINGLE SOURCE FOR MANUFACTURING SUCCESS.

The region has some of the nation’s largest industry concentrations in metals, plastics, biopharmaceuticals, medical devices, production technology, automotive, office furniture and food processing.

<table>
<thead>
<tr>
<th>NAICS CODE</th>
<th>SUPPLY CHAIN SECTOR</th>
<th>2018 JOBS</th>
<th>2018 ESTABLISHMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3261</td>
<td>Plastics</td>
<td>11,167</td>
<td>108</td>
</tr>
<tr>
<td>332</td>
<td>Metal</td>
<td>19,742</td>
<td>563</td>
</tr>
<tr>
<td>321</td>
<td>Wood</td>
<td>3,009</td>
<td>112</td>
</tr>
<tr>
<td>3315</td>
<td>Foundries</td>
<td>5,529</td>
<td>32</td>
</tr>
<tr>
<td>33351</td>
<td>Metalworking Machinery Mfg</td>
<td>8,739</td>
<td>242</td>
</tr>
<tr>
<td>3344</td>
<td>Electronic Component Mfg</td>
<td>6,227</td>
<td>19</td>
</tr>
<tr>
<td>4841</td>
<td>General Freight Trucking</td>
<td>9,204</td>
<td>420</td>
</tr>
<tr>
<td>4238</td>
<td>Machinery &amp; Equipment Merchant Wholesalers</td>
<td>4,811</td>
<td>285</td>
</tr>
<tr>
<td>4244</td>
<td>Grocery Product Merchant Wholesalers</td>
<td>5,092</td>
<td>101</td>
</tr>
</tbody>
</table>

DATA SOURCE: EMSI
PLASTICS PRODUCT MANUFACTURING

Primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting.

KEY INDUSTRIES SUPPLIED

- Automotive
- Medical Device
- Furniture
- Aerospace
- Consumer Goods
- Construction

CORE COMPETENCIES

• MOLDING
  - Traditional Injection Molding
  - Hydraulic
  - Hybrid-hydraulic
  - Multi-shot
  - Gas Assist
  - Insert
  - 3D Suction Blow
  - Thin Wall
  - Applique
  - Urethane/Urethan Foam
  - Precision Optics & Lenses
  - Stack

• INJECTION MOLD TOOLING
  - Mold Design
  - Mold Building
  - Micro Tooling
  - Two Shot Tooling
  - Prototype Tooling

• MACHINING
  - Computer Numerical Control
  - Electrical Discharge Machining
  - Engraving

SECTOR OVERVIEW

11,167
TOTAL JOBS

2.85
LOCATION QUOTIENT

10.8%
JOB GROWTH (2013-2018)

108
TOTAL ESTABLISHMENTS

$63,847
AVERAGE EARNINGS

$3.3B
TOTAL SALES (2018)

DATA SOURCE: EMSI
ELECTRONIC COMPONENT MANUFACTURING

This industry consists of companies that manufacture printed circuit assemblies, electronics assemblies, or modules. These products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

KEY INDUSTRIES SUPPLIED

<table>
<thead>
<tr>
<th>Automotive</th>
<th>Alternative Energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Device</td>
<td>Consumer Goods</td>
</tr>
<tr>
<td>Furniture</td>
<td>Construction</td>
</tr>
<tr>
<td>Aerospace</td>
<td>Defense</td>
</tr>
</tbody>
</table>

CORE COMPETENCIES

• PRINTED CIRCUIT BOARD (PCB)
  - Electronic Assembly Design
  - Automated Processes
  - Automated SMT Production
  - Surface Mount
  - Through-Hold and Semi-Automated Through-Hole Assembly
  - Mixed Technology Assemblies
  - Wire Bonding
  - Wafer Probing and Lensing
  - Board-Level
  - Restriction of Hazardous Substances (RoHS) Compliant or Leaded
  - Conformal Coating
  - Box Build

• ADDITIONAL CAPABILITIES
  - Test Development
  - Functional Test
  - In-Circuit Test
  - Final Systems Test
  - Electronic/Microelectronics
  - Software Design/Programming/Engineering
  - Labeling
  - Packaging
  - Shipping

DATA SOURCE: EMSI
FABRICATED METAL PRODUCT MANUFACTURING

This sector includes companies which transform metal into intermediate or end products other than machinery, computers and electronics, and metal furniture, or treat metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together.

KEY INDUSTRIES SUPPLIED

- Automotive
- Alternative Energy
- Medical Device
- Consumer Goods
- Furniture
- Construction
- Aerospace
- Defense
- Appliance

CORE COMPETENCIES

- **CUSTOM ROLL FORMING**
  - Bending/Forming
  - Piercing (pre, mid, post) and notching
  - Forging
  - Stamping
  - State-of-the-art CNC bending

- **WELDING CAPABILITIES**
  - Automated Robotic Welding
  - Laser Welding
  - Induction Welding
  - Seam Welding
  - Metal Inert Gas (MIG) Welding
  - Tungsten Inert Gas (TIG) Welding
  - Panel Spot Welding
  - Multi-Head Spot Welding
  - Stud Gun Welding
  - Rotary Transfer Machining
  - Precision Secondary Machining
  - Laser Cutting
  - Turret Punching

- **MACHINING CAPABILITIES**
  - Precision Turning
  - Precision Grinding
  - Gear Manufacturing
  - Hardcoating
  - Flow Coating
  - Paint and Laser Etch
  - Dip Coating
  - Functional Coatings
  - Electrostatics
  - Piano Black High Glass
  - Two Tone Masking
  - Fine Line Masking
  - Electrodeposition Paint Systems
  - Zinc Phosphate Pretreatment
  - Black Cathodic Epoxy
  - Decorative Finishes

**SECTOR OVERVIEW**

- **TOTAL JOBS**
  - 19,742

- **LOCATION QUOTIENT**
  - 1.73

- **JOB GROWTH (2013-2018)**
  - 1.7%

- **TOTAL ESTABLISHMENTS**
  - 563

- **AVERAGE EARNINGS**
  - $65,427

- **TOTAL SALES (2018)**
  - $6.5B
METALWORKING MACHINERY MANUFACTURING

These companies are primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

KEY INDUSTRIES SUPPLIED

- Automotive
- Aerospace
- Furniture
- Construction
- Defense
- Appliance
- Medical Device
- Agriculture

CORE COMPETENCIES

- TOOL AND DIE MAKERS
  - Molds
    - Stack Molds
    - Blow Molds
    - Injection Molds
    - Compression Molds
    - Structural Foam Molds
  - Dies
    - Transfer Dies
    - Line Dies
    - Metal Stamping Dies
    - Progressive Dies
    - Liquid Impact Forming Dies
  - Tool and Die Services
    - Die Simulation
    - 3D CAD Modeling
    - Die Design Services
    - Die Repair
    - Part Validation
    - CNC Machine Metal Stamping Dies Components
    - Wire EDM
    - Metrology
    - Laser Trimming
    - Prototyping
    - Volume Production Stamping

SECTOR OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>8,739</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL JOBS</td>
<td></td>
</tr>
<tr>
<td>8.73</td>
<td></td>
</tr>
<tr>
<td>LOCATION QUOTIENT</td>
<td></td>
</tr>
<tr>
<td>13.1%</td>
<td></td>
</tr>
<tr>
<td>JOB GROWTH (2013-2018)</td>
<td></td>
</tr>
<tr>
<td>242</td>
<td></td>
</tr>
<tr>
<td>TOTAL ESTABLISHMENTS</td>
<td></td>
</tr>
<tr>
<td>$82,698</td>
<td></td>
</tr>
<tr>
<td>AVERAGE EARNINGS</td>
<td></td>
</tr>
<tr>
<td>$1.5 B</td>
<td></td>
</tr>
<tr>
<td>TOTAL SALES (2018)</td>
<td></td>
</tr>
<tr>
<td>DATA SOURCE: EMSI</td>
<td></td>
</tr>
</tbody>
</table>
REGIONAL MANUFACTURING RESOURCES

MICHIGAN MANUFACTURING TECHNOLOGY CENTER – WEST (THE CENTER-WEST)

For over 20 years, The Center-West has delivered objective, high-quality manufacturing and technical support to small/medium-sized manufacturers. The Center-West supports the global competitiveness of manufacturers throughout the region’s 13 counties. Offering training solutions in business growth, lean, quality operations, people and sustainability, The Center-West is the partner West Michigan manufacturers rely on time and time again.

MANUFACTURERS COUNCIL

Convened in 1989, The Right Place/The Center-West Manufacturers Council is dedicated to the business success of the region’s manufacturing industry. The council’s vision is to be the regional forum for advancing manufacturing success in West Michigan. Members work together in a collaborative environment to promote, facilitate, enable and advocate for advancing a “best-in-class” manufacturing sector.

SUPPLY CHAIN MANAGEMENT COUNCIL

The Supply Chain Management Council is dedicated to supporting the competitiveness of West Michigan manufacturers by promoting best practices in integrated supply chain management. Members of the Supply Chain Management Council have a collective vision to be the Integrated Supply Chain Management hub enhancing the West Michigan economy.

COLLEGES AND UNIVERSITIES

The West Michigan region is home to more than 20 colleges and universities educating over 85,000 students. This strong educational network provides the Grand Rapids business community with a pipeline of highly skilled talent and deep resources for training and development.
TALENT & WORKFORCE

REGIONAL OVERVIEW

A workforce of 815,000+ available today and a pipeline of future talent coming from over 20 area colleges, universities and workforce development programs. That’s how West Michigan is ensuring you have the workforce support companies need to succeed in the region.

<table>
<thead>
<tr>
<th>NOTABLE OCCUPATIONS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Machinists</td>
<td>51-4041</td>
</tr>
<tr>
<td>Industrial Engineers</td>
<td>17-2112</td>
</tr>
<tr>
<td>Tool &amp; Die Makers</td>
<td>51-4111</td>
</tr>
<tr>
<td>Production Supervisors</td>
<td>51-1011</td>
</tr>
<tr>
<td>Production Assemblers</td>
<td>51-2098</td>
</tr>
</tbody>
</table>

LABOR FORCE
832,429

AREA COLLEGES & UNIVERSITIES
20

STEM JOBS
83,985

JOB GROWTH
2013–2018
15.9%

UNIONIZATION RATES
PRIVATE INDUSTRY UNION MEMBERSHIP BY PERCENTAGE

DATA SOURCE: Georgia State University, unionstats.gsu.edu

DATA SOURCE: EMSI
# TOP MANUFACTURING OCCUPATIONS

<table>
<thead>
<tr>
<th>MANUFACTURING OCCUPATION</th>
<th>JOBS (2013)</th>
<th>JOBS (2018)</th>
<th>% CHANGE</th>
<th>% OF TOTAL INDUSTRY JOBS</th>
<th>MEDIAN HOURLY EARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assemblers and Fabricators, All Other, Including Team Assemblers</td>
<td>19,320</td>
<td>22,188</td>
<td>15%</td>
<td>20%</td>
<td>$13.70</td>
</tr>
<tr>
<td>Laborers and Freight, Stock, and Material Movers, Hand</td>
<td>12,836</td>
<td>16,535</td>
<td>29%</td>
<td>15%</td>
<td>$13.15</td>
</tr>
<tr>
<td>General and Operations Managers</td>
<td>7,781</td>
<td>8,779</td>
<td>13%</td>
<td>8%</td>
<td>$47.92</td>
</tr>
<tr>
<td>Maintenance and Repair Workers, General</td>
<td>6,988</td>
<td>7,884</td>
<td>13%</td>
<td>7%</td>
<td>$17.57</td>
</tr>
<tr>
<td>Packers and Packagers, Hand</td>
<td>5,930</td>
<td>6,888</td>
<td>16%</td>
<td>6%</td>
<td>$10.51</td>
</tr>
<tr>
<td>Inspectors, Testers, Sorters, Samplers, and Weighers</td>
<td>5,325</td>
<td>6,796</td>
<td>28%</td>
<td>6%</td>
<td>$14.42</td>
</tr>
<tr>
<td>Packaging and Filling Machine Operators and Tenders</td>
<td>5,299</td>
<td>6,426</td>
<td>21%</td>
<td>6%</td>
<td>$13.90</td>
</tr>
<tr>
<td>First-Line Supervisors of Retail Sales Workers</td>
<td>6,309</td>
<td>6,400</td>
<td>1%</td>
<td>6%</td>
<td>$16.98</td>
</tr>
<tr>
<td>First-Line Supervisors of Production and Operating Workers</td>
<td>5,252</td>
<td>6,191</td>
<td>18%</td>
<td>6%</td>
<td>$27.80</td>
</tr>
<tr>
<td>Helpers--Production Workers</td>
<td>4,997</td>
<td>5,569</td>
<td>11%</td>
<td>5%</td>
<td>$11.52</td>
</tr>
<tr>
<td>Machinists</td>
<td>4,635</td>
<td>5,244</td>
<td>13%</td>
<td>5%</td>
<td>$18.41</td>
</tr>
<tr>
<td>Industrial Truck and Tractor Operators</td>
<td>4,415</td>
<td>5,125</td>
<td>16%</td>
<td>5%</td>
<td>$15.30</td>
</tr>
<tr>
<td>Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers</td>
<td>3,441</td>
<td>4,632</td>
<td>35%</td>
<td>4%</td>
<td>$14.27</td>
</tr>
<tr>
<td>Industrial Machinery Mechanics</td>
<td>3,436</td>
<td>4,616</td>
<td>34%</td>
<td>4%</td>
<td>$22.15</td>
</tr>
<tr>
<td>Industrial Engineers</td>
<td>3,259</td>
<td>4,485</td>
<td>38%</td>
<td>4%</td>
<td>$35.23</td>
</tr>
<tr>
<td>Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic</td>
<td>3,716</td>
<td>4,124</td>
<td>11%</td>
<td>4%</td>
<td>$14.46</td>
</tr>
<tr>
<td>Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic</td>
<td>2,745</td>
<td>3,900</td>
<td>42%</td>
<td>4%</td>
<td>$14.19</td>
</tr>
<tr>
<td>Welders, Cutters, Solderers, and Brazers</td>
<td>2,907</td>
<td>3,693</td>
<td>27%</td>
<td>3%</td>
<td>$16.85</td>
</tr>
<tr>
<td>Tool and Die Makers</td>
<td>2,679</td>
<td>2,844</td>
<td>6%</td>
<td>3%</td>
<td>$24.00</td>
</tr>
<tr>
<td>Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic</td>
<td>1,786</td>
<td>2,578</td>
<td>44%</td>
<td>2%</td>
<td>$14.57</td>
</tr>
<tr>
<td>Industrial Production Managers</td>
<td>2,145</td>
<td>2,441</td>
<td>14%</td>
<td>2%</td>
<td>$48.97</td>
</tr>
<tr>
<td>Production Workers, All Other</td>
<td>1,602</td>
<td>2,422</td>
<td>51%</td>
<td>2%</td>
<td>$15.54</td>
</tr>
<tr>
<td>Computer-Controlled Machine Tool Operators, Metal and Plastic</td>
<td>1,979</td>
<td>2,303</td>
<td>16%</td>
<td>2%</td>
<td>$19.57</td>
</tr>
</tbody>
</table>

**DATA SOURCE:** EMSI
With talent as the number one issue for businesses today, West Michigan has a network for workforce development and training resources to ensure your company’s success in the region.

**SCHOOL OF WORKFORCE DEVELOPMENT**

The GRCC School of Workforce Development is committed to serving West Michigan through offering high quality degrees, certificates, and training for the workplace. The school offers over 50 degrees and certificates that equip our students with the relevant knowledge, skills and abilities to perform successfully in their chosen career path. Many of these programs and courses transfer to our partner educational institutions so employees can continue their education.

The School of Workforce Development partners directly with numerous companies throughout West Michigan to provide training for their incumbent employees as well as programs that focus on strengthening the pipeline to provide new talent for the workplace.

grcc.edu/schoolofworkforcedevelopment

**BUILDING A BETTER TALENT SYSTEM**

Business leaders across West Michigan came together in 2010 to form TALENT 2025. The organization is supported by more than 70 business leaders representing over 75,000 employees and a wide variety of industries across 13 West Michigan counties. The goal of this CEO-led effort is to dramatically improve the quality and quantity of the region’s talent to meet increasingly more complex and diverse workforce needs. Regional collaboration among all stakeholders in the talent system will ensure that our region is globally competitive with a greater quality of life for all.

talent2025.org

**WORKFORCE TRAINING PROGRAM**

Montcalm Community College offers workforce education courses at its Greenville and Sidney campuses to meet the needs of the business community. Courses include FANUC, Baxter, CNC, GD&T and computer skills. Employees can take scheduled courses to advance their skills and provide more services to employers. MCC also offers online training with a variety of vendors providing access to more than 1,000 courses.

montcalm.edu/workforce-training

**A FORCE FOR MICHIGAN JOB MAKERS.**

The Michigan Works! system is on the front lines meeting the talent demands of local employers, responding to the unique needs of each community. Made-up of 25 regional Michigan Works! Agencies, the system focuses on the needs of job makers and developing talent for the 21st Century economy.

michiganworks.org

**YOUR LAUNCH PAD FOR NEW JOBS, CAREERS, & TALENT**

Pure Michigan Talent Connect is a collaborative effort that serves as the state’s labor exchange system. It’s a launch pad for new jobs, careers and talent as an online marketplace connecting Michigan’s job seekers and employers, linking all public and private stakeholders who support Michigan’s workforce.

mitalent.org
INTERNATIONAL & EXPORTS

AT A GLANCE

$9.0B
TOTAL EXPORTS (2017)

RANK 39TH OF 100

55,730
TOTAL EXPORT
SUPPORTED JOBS

RANK 40TH OF 100

4.6%
ANNUALIZED GDP

RANK 9TH OF 100

14.4%
SHARE OF METRO GDP (2017)

RANK 8TH OF 100

4.4%
ANNUALIZED EXPORT

DATA SOURCE: Brookings Export Nation 2018

EXPORTS

10 LARGEST INDUSTRIES BY VALUE OF EXPORTS

Motor Vehicle Parts
$1,876.99 Million

Misc. General Purpose Machinery
$455.76 Million

Aircraft Products & Parts
$1,867.61 Million

Industrial Machinery
$242.02 Million

Precision Instruments
$251.4 Million

Office Furniture Products
$254.55 Million

Cleaning Products
$239.69 Million

Household Appliances
$372.2 Million

Plastics
$352.51 Million

Grain & Oilseed Products
$500.12 Million

DATA SOURCE: Brookings Export Nation 2018
INTERNATIONAL ECONOMIC DEVELOPMENT PROJECTS (2017–2018)

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>INTERNATIONAL OWNERSHIP</th>
<th>JOBS</th>
<th>PAYROLL</th>
<th>INVESTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremis North America</td>
<td>Belgium</td>
<td>2</td>
<td>$225,157</td>
<td></td>
</tr>
<tr>
<td>J-Star Motion Corporation</td>
<td>China</td>
<td>122</td>
<td>$5,600,000</td>
<td>$4,895,000</td>
</tr>
<tr>
<td>Kawasaki Precision Machinery</td>
<td>Japan</td>
<td>4</td>
<td>$133,120</td>
<td>$500,000</td>
</tr>
<tr>
<td>Magna Mirrors Newaygo Division</td>
<td>Canada</td>
<td>48</td>
<td>$2,096,640</td>
<td>$45,066,251</td>
</tr>
<tr>
<td>Siliconature USA</td>
<td>Italy</td>
<td>26</td>
<td>$2,971,800</td>
<td>$19,700,000</td>
</tr>
<tr>
<td>Viking Corp</td>
<td>Germany</td>
<td>50</td>
<td>$2,366,000</td>
<td>$18,000,000</td>
</tr>
<tr>
<td>Agropur Natrel USA</td>
<td>Canada</td>
<td>62</td>
<td>$2,554,396</td>
<td>$21,300,000</td>
</tr>
<tr>
<td>Poultry Management Systems, Inc.</td>
<td>Germany</td>
<td>48</td>
<td>$1,508,312</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>VNA Corporation</td>
<td>Germany</td>
<td>4</td>
<td>$323,980</td>
<td>$25,000</td>
</tr>
<tr>
<td>Auvesy GmbH &amp; Co KG</td>
<td>Germany</td>
<td>3</td>
<td>$312,624</td>
<td>$154,980</td>
</tr>
</tbody>
</table>

NOTABLE INTERNATIONAL COMPANIES

With more than 130 international companies, West Michigan is home to one of the most diverse markets in the nation. West Michigan companies make everything from cell phone components to software.

**GERMANY**

- **Benteler Automotive Corp**
  Automotive tubular steel products manufacturer

- **Bosch Emissions Systems**
  Fuel systems for large vehicles, military and locomotive

- **Siemens**
  Electrical engineering and electronics business.

- **Suspa Inc.**
  Manufacturer of gas springs, dampers, and adjustment systems

**CHINA**

- **Dicastal North America**
  Aluminum wheel manufacturer for automotive industry

**SOUTH KOREA**

- **LG Chem**
  Rechargeable batteries for electronics and autos

**CANADA**

- **Magna Mirrors**
  Automotive interior and exterior mirrors and door handles

**ITALY**

- **INglass**
  Design and fabrication of rotative, multicolor, and multicomponent molds for automotive lighting

**ISRAEL**

- **Plasan Carbon Composites**
  Carbon composite parts manufacturing for aerospace and automotive industry

**FRANCE**

- **Gerber Products Company**
  Baby food and related products

- **Hutchinson Corporation**
  Mechanical rubber goods manufacturer

**LUXEMBOURG**

- **Dematic Corp**
  Engineering company specializing in material handling system automation
Located between Chicago and Detroit, West Michigan is a growing region of more than 1.5 million people and counting. At its core is the thriving and vibrant city of Grand Rapids, the second largest city in the state.

With a strong business climate and exceptionally high quality of life, it is no surprise businesses and talent are flocking to the region. More than 130 international companies are located here, as well as four of Forbes Largest Private Companies. The region is home to the global headquarters of industry leaders like Amway, Steelcase, Herman Miller, Haworth, BISSELL, Wolverine Worldwide, and more.

There is an energy pulsating from West Michigan that is felt throughout the Midwest. Our business and community leaders have set in motion an unprecedented level of growth and investment, cementing our place as a world-class center for advanced manufacturing, life science and medical devices, food processing, and technology.

QUICK FACTS

• #1 Top States for Auto Manufacturing Jobs – Michigan Bureau of Labor Statistics
• #1 Mid-Sized Metro for Economic Growth Potential – Grand Rapids Business Facilities Magazine
• #1 America’s Hottest Zip Code – Grand Rapids, 49505 Realtor.com
• #2 Top Destinations for Millennials – Grand Rapids National Association of Realtors
• Fastest Growing Economy in the U.S. – Grand Rapids Forbes and Headlight Data
• Top Places to Live in the U.S. U.S. News & World Report
• “Superstar” Cities in the US – Grand Rapids Reuters

DATA SOURCE: EMSI

CENTERS OF EXCELLENCE

• Smart Manufacturing
• Life Sciences & Medical Devices
• Food Processing & Agribusiness
• Information Technology & Communications

13-COUNTY REGION OVERVIEW

• Total Population (2018): 1,606,562
• Growth Rate for Previous 5 Years: 3.8%
• Jobs (2018): 832,429
• Average Earnings (2018): $57,279
• Gross Regional Product (2018): $80.2B
## COMPETITIVENESS REPORTS

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>REPORT</th>
<th>RANKING</th>
<th>METHODOLOGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area Development</td>
<td>Leading Locations Report (2015)</td>
<td>#15/394</td>
<td>Area Development ranked 394 MSAs across 21 economic and work force indicators. These 21 indicators were pulled from 7 data sets (sub-categories) originating from four sources: Bureau of Labor Statistics, Bureau of Economic Analysis, U.S. Census American Community Survey and Moodys’s Analytics.</td>
</tr>
<tr>
<td>CNBC</td>
<td>America’s Top States for Business (2019)</td>
<td>#24/50</td>
<td>Index based on 64 measures of competitiveness developed with input from business groups including the Center for Regional Economic Competitiveness.</td>
</tr>
<tr>
<td>CNBC</td>
<td>Cost of Doing Business (2019)</td>
<td>#27/50</td>
<td>Index assessed competitiveness of each state’s tax climate, as well as state-sponsored incentives that can lower the cost of doing business. Also considered cost of wages, as well as rental costs for office and industrial space.</td>
</tr>
<tr>
<td>SBE Council</td>
<td>Best and Worst State Tax Systems for Entrepreneurship and Small Business (2017)</td>
<td>#13/50</td>
<td>Index pulls together 26 different tax measures, and combines those into one tax score for each state.</td>
</tr>
<tr>
<td>Tax Foundation</td>
<td>State Business Tax Climate Index (2019)</td>
<td>#13/50</td>
<td>Index built on over 100 variables of five components: individual income tax, sales tax, corporate income tax, property tax and unemployment tax.</td>
</tr>
<tr>
<td>Business Facilities</td>
<td>2019 Metro Rankings Report (Mid-Sized Metros)</td>
<td>#1</td>
<td>Business Facilities’ Metro Rankings Report takes a look at the hot topics in economic development on the city level, including job growth, economic growth potential, tech opportunities and more. Grand Rapids was named as the No.1 mid-sized metro for economic growth potential in the 2019 edition.</td>
</tr>
<tr>
<td>Reuters</td>
<td>Superstar Cities</td>
<td>#20/378</td>
<td>Ranking of 378 metropolitan areas by how their share of national employment changed from 2010 to 2017. Data for the study was sourced by Reuters from the Bureau of Labor Statistics (BLS).</td>
</tr>
</tbody>
</table>
COST OF DOING BUSINESS

TAX INFORMATION

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>TAX RATE</th>
<th>DETAILED INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Income Tax</td>
<td>4.25%</td>
<td>Michigan’s personal income tax system consists of a flat rate of 4.25% of an individual’s or household’s income.</td>
</tr>
<tr>
<td>Corporate Income Tax</td>
<td>6%/4.25%</td>
<td>Michigan’s corporate income tax system consists of a flat rate of 6% of taxable income of firms structured as C corporations. Income for other business entities flows through to the owners’ personal income taxes and is taxed at a flat income tax rate of 4.25%.</td>
</tr>
<tr>
<td>Sales and Use Taxes</td>
<td>6%</td>
<td>Michigan levies a 6% general sales and use tax on purchases by consumers on tangible goods. Businesses pay the same 6% sales/use tax rate when purchasing consumer goods.</td>
</tr>
<tr>
<td>Gasoline/Fuel Tax</td>
<td>$0.39/gallon</td>
<td>Michigan’s gasoline tax stands at 39.1¢, while its cigarette tax stands at $2.</td>
</tr>
<tr>
<td>Personal Property Tax</td>
<td>phased out</td>
<td>Michigan began phasing out its Personal Property Tax (PPT) for most businesses in 2014. Timing of the phase out depended on the value of the personal property and when it was purchased. All first-owner purchases after 2012 became 100% exempt beginning 2016.</td>
</tr>
<tr>
<td>State Essential Services</td>
<td>0.24%-0.09%</td>
<td>Beginning January 1, 2016, a new state tax known as the state essential services assessment (SESA) was levied, replacing the current personal property tax. Funds collected are used to support the costs of local police, fire, ambulance, and jail services. The SESA will be imposed on the personal property that is now exempt from the personal property tax. The SESA will be computed on the acquisition cost of taxable property at a declining millage rate scale over time.</td>
</tr>
<tr>
<td>Real Property Taxes</td>
<td>$49.20 per $1,000 (average) 4.92% (average)</td>
<td>Michigan is one of the 37 states that collect property taxes at both the state and local levels. Both real property (fixed property; principally land &amp; buildings) and personal property (movable property; belongings exclusive of land &amp; buildings) are assessed at 50% of current true cash value. The average non-homestead property tax rate was 49.20 mills, or $49.20 per $1,000 of assessed property. Industrial personal property is exempt from the 24 mills for schools, and commercial personal property is exempt from 12 mills. Inventory, special tooling, and pollution control equipment are exempt from property taxes. Special Tooling Property Tax Exemption - Michigan exempts special tooling from all property taxes. “Special Tooling” includes tools, dies, jigs, fixtures, and patterns that are used to manufacture a product which could not be used to manufacture another product without substantial modification to the device. Industrial Personal Property Tax Relief - Certain types of tangible property used by manufacturers directly in the industrial process are exempt from Michigan’s sales and use tax. Eligible exempt property includes machinery, equipment and energy used in an industrial process. Industrial processing includes but is not limited to production or assembly, research &amp; development, engineering, remanufacturing and storage of in-process materials.</td>
</tr>
</tbody>
</table>
TAX EXEMPTIONS FOR MICHIGAN COMPANIES

Various sales and property tax exemptions in Michigan can reduce business tax liability for a variety of companies. Businesses should consider discussing the tax exemptions outlined below with their tax preparer, CPA or tax attorney.

SALES TAX EXEMPTIONS FOR INDUSTRIAL PROCESSING

Certain types of tangible property used by manufacturers directly in the industrial process are exempt from Michigan’s sales and use tax. Eligible exempt property includes machinery, equipment, and energy used in an industrial process. Industrial processing includes but is not limited to production or assembly, research & development, engineering, remanufacturing and storage of in-process materials.

SALES TAX EXEMPTION FOR ENERGY USED IN INDUSTRIAL PROCESSING

Energy used in the manufacturing process, such as natural gas, electricity, and propane, is exempt from the sales tax. Anytime a sales tax exemption is claimed for energy used directly in manufacturing, the company (buyer) must have that specific energy usage metered separately or must have a clearly drawn-up plan with the energy provider (seller) to separate the exempt versus the non-exempt energy usage. Most energy providers have staff that can assist with the specific questions regarding exemption claims for energy usage.

POLLUTION CONTROL TAX EXEMPTIONS

Air and industrial water pollution control facilities are exempt from sales, use and property taxes in Michigan. A facility refers to any machinery, equipment, structure, part or accessory used for the primary purpose of controlling or disposing of air or industrial water pollution. The Michigan Department of Environmental Quality (DEQ) is responsible for determining what property is eligible.

PROPERTY TAX EXEMPTION FOR SPECIAL TOOLING

Michigan exempts special tooling from all property taxes. “Special Tooling” includes tools, dies, jigs, fixtures and patterns, which are used to manufacture product which could not be used to manufacture another product without substantial modification to the device.

INVENTORY TAX EXEMPTION

In the State of Michigan, there is no inventory tax, no matter where you locate. All inventory is exempt from state and local taxes.
BROWNFIELD REDEVELOPMENT AUTHORITY (PA 381)

Brownfield Redevelopment Authority (BRA) can be used to develop and implement Brownfield projects. A BRA is a resource that may use Tax Increment Financing (TIF) as a tool for property redevelopment.

COMMUNITY DEVELOPMENT BLOCK GRANT

The Community Development Block Grant (CDBG) program is a federal grant program utilizing funds received from the US Department of Housing and Urban Development (HUD). Each year, Michigan receives approximately $30 million in federal CDBG funds, out of which various projects are funding through the state.

INDUSTRIAL PROPERTY TAX ABATEMENT (PA 198)

Industrial property tax abatements provide incentives for eligible businesses to make new investments in Michigan. These abatements encourage Michigan manufacturers to build new plants, expand existing plants or renovate aging plants. High technology operations are also eligible for the abatement.

MICHIGAN BUSINESS DEVELOPMENT PROGRAM

The Michigan Business Development Program is an incentive program available from the Michigan Strategic Fund (MSF), in cooperation with the Michigan Economic Development Corporation (MEDC). The program is designed to provide grants, loans or other economic assistance to businesses for highly competitive projects in Michigan that create jobs and/or provide investment.
MICHIGAN BUSINESS GROWTH FUND LOAN PARTICIPATION PROGRAM
The Michigan Loan Participation Program participates with lenders to finance diversification projects when faced with eligible borrower companies whose projected cash flows are considered speculative by the lender.

MICHIGAN COLLATERAL SUPPORT PROGRAM
The Michigan Collateral Support Program supplies cash collateral accounts to lending institutions to enhance the collateral coverage of borrowers. To qualify, a business must be engaged with a private lender for the purpose of acquiring a commercial extension of commercial credit and must exhibit a collateral shortfall according to the lender’s analysis.

MICHIGAN COMMUNITY REVITALIZATION FUND
The Michigan Community Revitalization Program (CRProgram) is designed to promote community revitalization that will accelerate private investment in areas of historical declining values, contribute to Michigan’s reinvention as a vital, job generating state, foster redevelopment of functionally obsolete or historic properties, reduce blight, and protect natural resources of this state. The program is designed to provide grants, loans, or other economic assistance for eligible investment projects in Michigan.

PERSONAL PROPERTY TAX RELIEF IN DISTRESSED COMMUNITIES (PA 328)
Personal Property Tax Relief in Distressed Communities allows distressed communities, county seats and certain border county communities to abate personal property taxes on new investments made by eligible businesses.

PURE MICHIGAN BUSINESS CONNECT
Pure Michigan Business Connect (PMBC) is a public-private initiative that introduces Michigan companies to opportunities that help them grow and expand. By participating in the program, companies receive: business assistance at little to no cost; access to a new business-to-business (B2B) network; and find new customers while also leveraging procurement resources to increase their supply chain.

SKILLED TRADES TRAINING FUND (STTF)
The STTF provides competitive awards for employerresponsive-training that enhances talent, productivity, and employment retention, while increasing the quality and competitiveness of Michigan’s businesses. The STTF ensures Michigan’s employers have access to the talent they need to compete and grow, and individuals have the skills they need for in-demand jobs.

SESA EXEMPTION PROGRAM
Under the State Essential Services Assessment (SESA) Exemption Program, companies may qualify for a SESA exemption or alternative SESA when investing more than $25 million in personal property. SESA exemptions are equal to 100% of the SESA amount for a period of years. Alternative SESAs are equal to a 50% exemption for a period of years. Terms will be determined by a formal review, including: level of investment, amount of jobs created, level of wages, and connection to Michigan suppliers.

GOOD JOBS FOR MICHIGAN
The Good Jobs for Michigan legislation created new tools that encourage transformational, large-scale projects in Michigan. Through this program, the state may authorize state withholding tax capture revenues of up to 50 or 100 percent for up to five or 10 years, depending on the average annual wage and the number of certified new jobs created by the authorized business.
GERALD R. FORD INTERNATIONAL AIRPORT (GRR)

General Information
• The airport operates three runways:
  – Main East/West runway – 150 ft. wide x 10,000-ft. long
  – Parallel East/West runway – 100 ft. wide x 5,000-ft. long
  – North/South runway – 150 ft. wide x 8,501 ft. long
• The airport covers nearly 3,200 acres (over five square miles).
• The airport’s passenger terminal building is just over 352,125 square feet; with over 170,000 square feet open to the public.
• The airport operates its own police, fire, and maintenance departments.
• There are two concourses and 15 gates in the passenger terminal building.

PASSENGER AIR TRAVEL
Gerald R. Ford International Airport is served by five passenger airlines with 140 daily scheduled nonstop flights to and from 30 major market destinations.
• Approximately 9,000 travelers pass through Gerald R. Ford International Airport each day.
• 3.3 Million passengers traveled through Gerald R. Ford International Airport in 2018.
• Gerald R. Ford International Airport is the 79th busiest commercial airport in the nation and the second busiest airport in Michigan.

FREIGHT AIR
• Two cargo airline serves Gerald R. Ford International Airport.
• More than 249,435 pounds of air cargo pass through Gerald R. Ford International Airport each day, more than 125 tons per day!
• More than 91 million pounds of air cargo passed through Gerald R. Ford International Airport in 2017.

OTHER/MISCELLANEOUS INFORMATION
• More than 1,800 people work at the airport, the majority being employed by airport tenants.
• The airport generates $3.1 billion in economic output for the West Michigan region.
• Gerald R. Ford International Airport is managed and operated by the Kent County Department of Aeronautics.
• The Gerald R. Ford International Airport Board is a seven-member body appointed by the Kent County Board of Commissioners with responsibility for policy setting and general oversight of the airport.
• The airport is financially self-supporting and receives no funding from property taxes, general funds, or special taxes. Airport operations and improvements generate local net airport revenue, rather than spend valuable tax dollars.
• GFIA’s capital requirements are met through various sources including earned surpluses, revenue bonds, passenger facility charges, and grants under the federal Airport Improvement Program and the Michigan state aviation grant program. Operational requirements are met through rates and charges assessed to airport tenants and airport patrons for the use of airport services and facilities.
HIGHWAYS

An extensive system connects Greater Grand Rapids to major cities and transportation hubs throughout the Upper Midwest. Drive distances/times include:

- **Columbus, OH**: 321 Miles, 5:00
- **Detroit, MI**: 157 Miles, 2:22
- **Toronto, Canada**: 361 Miles, 5:38
- **Cleveland, OH**: 307 Miles, 4:33
- **Dayton, OH**: 310 Miles, 4:52
- **Columbus, OH**: 321 Miles, 5:00
- **Indianapolis, IN**: 294 Miles, 4:27
- **Chicago, IL**: 179 Miles, 2:47
- **Milwaukee, WI**: 270 Miles, 4:17
- **St. Louis, MO**: 447 Miles, 6:46

GRAND RAPIDS FOREIGN TRADE ZONE

Foreign-Trade Zone #189 was established on January 15, 1993 by the Kent-Ottawa-Muskegon Foreign-Trade Zone Authority (KOM-FTZ) to offer FTZ benefits to West Michigan businesses.

Located near the Gerald R. Ford International Airport (GRR), FTZ #189 is available for West Michigan businesses shipping products to and from foreign countries.
As the country’s 12th largest rail system, Michigan is well served by regional hubs in Grand Rapids and Detroit and supported by an infrastructure detailed in our State Rail Plan. A federally designated high speed rail corridor, served by Amtrak, connects Grand Rapids to Chicago.

Current Class 1 railroads include:

- **Canadian National/Grand Trunk**
- **Norfolk Southern Railway**
- **CSX Transportation**
- **Canadian Pacific Railway/Soo Line**

### DEEP WATER PORTS

The Great Lakes can be reached via the St. Lawrence Seaway and the U.S. Inland Waterway system of rivers. When connected, the complete system offers a marine highway through the heartland of the United States, providing access to population centers and manufacturing sites from the Gulf of Mexico to the Atlantic Coast. The port sites on the shores of West Michigan are positioned to connect Michigan highway and railroad infrastructure to this marine system, making these ports ideal candidates for manufacturing and food processing.