Northeast Ohio is the 15th-largest market in the United States, driving nearly 40% of Ohio’s economy. At $42.6 billion, manufacturing accounts for 20% of Northeast Ohio’s gross domestic product (GDP). This Quarterly Economic Review explores the evolution of the manufacturing sector in Northeast Ohio, and was done in partnership with the Manufacturing Advocacy and Growth Network (MAGNET).

ACROSS NORTHEAST OHIO:

270,000+
manufacturing workers

46,200
ANNUAL JOB OPENINGS:
manufacturing occupations

Manufacturing is a
$42.6 billion
industry

RAYCO MANUFACTURING
Rayco is a leading manufacturer of forestry and environmental equipment located in Wooster, Ohio. In 2018, Team NEO and JobsOhio provided assistance to the company in the recruitment and hiring of 50 new employees.

See inside for more details on how Team NEO and JobsOhio worked with Rayco.

Quarterly Economic Review
FEBRUARY 2020
Quarterly Economic Indicators
18 Counties of Northeast Ohio
Technology Drives Manufacturing’s Momentum

Advances in technology and processes are changing the face of manufacturing in Northeast Ohio. As efficiencies improve, doors are opening to new opportunities for this evolving industry.

The Industrial Internet of Things (IIoT) is one of the strongest forces driving manufacturing in our region. IIoT offers manufacturers the opportunity to gain a competitive advantage within their own companies while collectively advancing the growth trajectory of manufacturing. As reported in the Smart Manufacturing IIoT Roadmap, IIoT could potentially have an incremental economic impact on GRP of up to $13 billion annually by 2025.

$Largest Manufacturing Subsectors by GDP: 2019$

<table>
<thead>
<tr>
<th>Subsector</th>
<th>Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer &amp; Electronic Product</td>
<td>$7.0</td>
</tr>
<tr>
<td>Electrical Equipment; Appliance; &amp; Component</td>
<td>$6.0</td>
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<tr>
<td>Plastics &amp; Rubber Products</td>
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<tr>
<td>Petroleum &amp; Coal Products</td>
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<tr>
<td>Primary Metal</td>
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<tr>
<td>Food</td>
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</tr>
<tr>
<td>Machinery</td>
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</tr>
<tr>
<td>Transportation Equipment</td>
<td>$4.0</td>
</tr>
<tr>
<td>Fabricated Metal Product</td>
<td>$4.0</td>
</tr>
<tr>
<td>Chemical</td>
<td>$3.0</td>
</tr>
</tbody>
</table>

$42.6 Billion GDP Represents Diverse Subsectors

Manufacturing in Northeast Ohio encompasses a broad range of subsectors. Among the top subsectors in terms of output are chemical at more than $6.76 billion, fabricated metal product at $6.13 billion and transportation equipment at $4.58 billion.

Source: Moody’s Economy.com

$Productivity Continues on Upward Trend$

Technology enables workforces to be increasingly productive. In fact, productivity per worker was 50% higher in 2019 than in 2001. Advances in technology are also helping to make manufacturing a more appealing career choice for younger generations as they come in to replace retiring baby boomers. Thanks to automation, they have a broader range of positions to choose from and can make a greater, more meaningful impact on the region’s economy.

Source: Moody’s Economy.com
Largest Sectors of Manufacturing Employment: 2019

Fabricated Metal Product Subsector Employs the Most

Representing 53,400 jobs, the fabricated metal product subsector employs more workers than any other manufacturing subsector in the region. Other traditional subsectors topping the list include machinery, with 34,000 employees, and transportation equipment, with 30,600. The strength of subsectors such as food manufacturing (20,800 employees), and computer and electronic product (9,500 employees), reflect the growing diversity of the goods being produced here.

Source: Moody’s Economy.com

Manufacturing Sectors with the Highest Export Concentration: 2019

Exports Play an Important Role in Economic Growth

Exports, manufactured goods produced in Northeast Ohio but sold outside the region, are vital to the flow of new dollars into the economy. Subsectors including primary metal, fabricated metal product, plastics and rubber products, and machinery boast the highest concentrations of exported goods among all manufacturing subsectors.

Subsector concentration levels are represented by a Location Quotient, which compares Northeast Ohio to the 20 largest U.S. metros on the basis of headquarters employment. An LQ of 1.0 represents the average for the U.S. as a whole. An LQ of 1.5 represents a 50% higher export concentration in our market relative to the U.S., while an LQ of 0.5 reflects a concentration that is 50% lower. LQs above 1.0 generally represent subsectors that are exporting goods or services from a region.

Source: Moody’s Economy.com
Manufacturers Hire More Laborers and Material Movers than Other Titles

Looking at employment by title or function, traditional roles such as laborers, material movers, truck drivers and assemblers/fabricators continue to be important to manufacturing companies. Computer control programmers and operators make the top 10 list as well, indicating the need for technological talent.

Source: Moody’s Economy.com

NEO Projects 46,200 Annual Job Openings in Manufacturing and Related Occupations

As reported in Team NEO’s 2019 Aligning Opportunities in Northeast Ohio report, manufacturing continues to offer the region production job opportunities of great variety and volume. Projections include 46,200 job openings annually across a wide range of subsectors, both in production and supporting roles.

Source: Moody’s Economy.com
Below is a sampling of recent manufacturing development projects across the region.

**BWX Technologies Invests $130 Million in Northeast Ohio Plants**
In February 2019, BWX Technologies Inc. (BWXT) officially kicked off its $80 million, four-year capital expansion project at its Barberton, Ohio, manufacturing facility. More than 80 new hires will work at the expanded facility, which will house the latest technology for engineering and developing nuclear energy components and services. This investment is part of a $130 million commitment from BWXT that also includes expansion of its Euclid, Ohio, site.

**Tap Packaging Expands in Cleveland to Accommodate Growth**
The Chilcote Company, doing business as Tap Packaging, a leading designer and manufacturer of paperboard packaging solutions, has committed to growing in Northeast Ohio, including adding 26 new positions to its existing workforce of 120. The expansion comes as the company experiences market growth resulting from its significant investment in innovative digital technology.

**Consolidated Precision Products Corp. Announces Expansion**
In July 2019, Consolidated Precision Products Corp. (CPP), a leading manufacturer of highly engineered castings and subassemblies primarily for the commercial aerospace and defense markets, announced it will open a new, 135,000-square-foot advanced manufacturing facility in Euclid, Ohio. This expansion will result in the creation of more than 120 new manufacturing and engineering jobs.

**Morgan Truck Body Announces New Orrville Plant**
In July 2019, Morgan Truck Body LLC, North America’s largest manufacturer of light- and medium-duty truck bodies, announced plans to expand its manufacturing footprint in Northeast Ohio in Orrville. This plant, formerly occupied by Volvo and most recently JLG, will provide 210,000 square feet of production, office and warehouse space, allowing Morgan to produce 4,000 dry freight and refrigerated truck bodies annually, to support both retail and fleet customers. The company expects to hire approximately 140 employees.

**Next Generation Films Pledges 100 New Jobs in Lexington**
In October 2019, Next Generation Films Inc. (NEXT), a leading manufacturer of custom-blown specialty film used primarily in the food packaging industry, committed to growing in Richland County. With this most recent $40 million expansion, the company plans to construct a 110,000-square-foot building on its 140-acre campus to accommodate a new, high-speed film production line. The expansion will result in the creation of 100 new positions and the retention of more than 600 jobs.

**Hendrickson Grows in Canton**
Hendrickson, a global designer and manufacturer of suspension systems and components for heavy-duty trucks and trailers, plans to invest $50.6 million in a new truck axle plant that will employ 300 at a former 327-acre Stark County farm-turned-industrial park. As part of its new plant expansion, Hendrickson commits to retaining its 235 employees at its testing facility on Industrial Place Southeast in the city of Canton.
Northeast Ohio offers programs to address the manufacturing talent gap. Below are a couple of examples of how the ecosystem collaborates to support manufacturers.

**MANUFACTURING TALENT SUPPORT**

**JobsOhio and Team NEO Talent Acquisition Services - Rayco Manufacturing**

In 2018, Rayco announced plans to increase production at its Wooster plant, resulting in the creation of 50 new jobs. To assist the company in the recruitment of candidates for high-demand occupations including welders, fabricators, assemblers and machinists, JobsOhio Talent Acquisition Services were deployed.

To assist the company in growing its workforce in a tight labor market, JobsOhio provided:

- **Materials**
  - Photography
  - Pop-up banner
  - Recruitment handout
  - Video/Video snippets
  - Truck signage

- **Job boards**
  - Monster/Indeed
  - Programmatic campaign
  - Optimized job postings

Rayco attributes much of its success to its highly skilled and productive workforce. As a premier manufacturer of forestry and environmental equipment, the company continues to meet and exceed its growth objectives.

**Workforce Connect Manufacturing Sector Partnership**

Led by a dedicated team of 14 manufacturing executives, the Workforce Connect Manufacturing Sector Partnership is tackling a talent gap in manufacturing in our region that has persisted. Over 2000 open positions exist in manufacturing, a sector of our economy that employs almost 1 in 5 residents and indirectly drives almost half of our region’s GDP. Seeded by the Workforce Funders Group and facilitated by MAGNET and the Greater Cleveland Partnership as co-intermediaries, the sector partnership is working to aggregate the needs and voice of industry.

The manufacturers set a vision to become the manufacturing education capital of the U.S. by investing to unlock a diverse and skilled workforce. Three core strategies were developed, which were then broken down into 6 action teams. These action teams are comprised of over 25 manufacturing companies, over 30 workforce agencies, education partners, and philanthropic entities. The action teams are currently coordinating the launch of pilot activities to solve specific gaps or recruit specific target populations, including high school students, individuals returning to the workforce from incarceration, and seasonal employees looking to transition into the great career paths in manufacturing. There are also initiatives underway to recruit instructors from industry to support our education partners, as well as engage more companies in earn-and-learn programs to upskill their incumbent workers.
Northeast Ohio boasts a variety of sites, both urban and rural, ideal for manufacturing operations. Here is a sampling of our most competitive sites:

**Airport West Industrial Park**
- **Address:** 1750 Airport West Road, Mansfield, Richland County
- **Total Developable Acres:** 70 acres (60 contiguous acres)
- **For Sale:** $15,000 per acre
- **Zoning:** Industrial
- [Visit](www.jobsohio.com/site-selection/airport-west/)

**Cuyahoga Valley Industrial Center**
- **Address:** I-77 & Pershing Avenue, Cleveland, Cuyahoga County
- **Total Developable Acres:** 40 acres
- **For Sale:** $125,000 per acre
- **Zoning:** Heavy Industrial

**North Central Ohio Industrial Park**
- **Address:** Furniture Parkway, Norwalk, Huron County
- **Total Developable Acres:** 102 acres (84 contiguous acres)
- **For Sale:** $19,000 per acre
- **Zoning:** Heavy Manufacturing
- [Visit](www.jobsohio.com/site-selection/north-central-ohio-industrial-park/)

**Canton Ohio GO Site**
- **Address:** Sterlite Drive, Navarre, Stark County
- **Total Developable Acres:** 288 acres
- **For Sale:** $75,000 per acre
- **Zoning:** Industrial
- [Visit](rightsites.teamneo.org/sold/300-acres)

To view more options, or for more information, visit [rightsites.teamneo.org](rightsites.teamneo.org).
TOTAL EMPLOYMENT GROWS YEAR-OVER-YEAR

Total employment averaged 1.955 million workers in Q2 2019, up more than 6,700 jobs year-over-year.

Source: Quarterly Census of Employment and Wages (QCEW). This is the most current reliable data available for total jobs in Northeast Ohio.

CONSTRUCTION SECTOR SEES YEAR-OVER-YEAR GROWTH

In Q2 2019, the construction sector added almost 2,700 jobs year-over-year, with about 80,000 total workers. At nearly 268,800 jobs, the manufacturing sector lost 970 jobs, while the services sector added almost 4,000 workers year-over-year.

Source: Quarterly Census of Employment and Wages (QCEW). This is the most current reliable data available for total jobs in Northeast Ohio.

NEO YEAR-OVER-YEAR UNEMPLOYMENT RATE CONTINUES TO IMPROVE

The unemployment rate for Northeast Ohio averaged 4.1% in Q2 2019. This represents an improvement as compared with Q2 2018, when the unemployment rate was 4.9%, and Q2 2017, when it was 5.5%. The state of Ohio averaged 3.7%, while the U.S. averaged 3.5%, in Q2 2019.

Source: Current Population Survey (CPS), a survey of 60,000 households nationwide.
Moody's Economy.com is projecting Northeast Ohio’s GRP to grow 2.3% in 2018 to reach $238.5 billion. Projections are continuously updated and subject to change for up to 18 months.

Source: Moody’s Economy.com

In Q1 2019, the vacancy rate for industrial space is at 3.5%, while the vacancy rate for office space is at 7.0%.

Source: CoStar

This graph shows the status of Utica shale wells originally permitted, drilled and in production for each quarter. Since Q4 2012, when tracking began, 3,000 total permits have been issued, of which 2,042 have been drilled. Of those drilled, 1,043 are currently in production in the state.

Source: Ohio Department of Natural Resources
Team Northeast Ohio uses a number of data sources for the Regional Economic Review. One of the primary sources is Moody’s Economy.com (economy.com) data for Northeast Ohio. Moody’s Economy.com county-level output, employment and payroll historical data are estimated from several publicly available sources and are summarized into the Team NEO regional footprint. It is important to understand data provided by Economy.com are estimates of economic activity.

Team NEO also uses data from federal and state sources as part of this report. We rely heavily on data from the U.S. Bureau of Labor Statistics (bls.gov) and Ohio’s Labor Market Information (lmi.state.oh.us) for information on wages, unemployment and both general and industry-specific employment.

Industrial and office real estate data for this edition were derived from the CoStar Group. Due to market limits within the CoStar database, historic trend data for the Team NEO region are reflective of 14 of the 18 counties forming the regional footprint. These counties include: Ashtabula, Cuyahoga, Erie, Geauga, Huron, Lake, Lorain, Mahoning, Medina, Portage, Richland, Stark, Summit and Trumbull.

For a complete list of funders, visit teamneo.org/investors.

Team NEO is a private, nonprofit economic development organization accelerating business growth and job creation throughout the 18 counties of Northeast Ohio. As the designated JobsOhio Network Partner, we align and amplify local economic development efforts in Northeast Ohio’s 18-county region; we conduct research and data analysis to inform local conversations and influence solutions; we market Northeast Ohio as a region; and we work to increase access to jobs, education and training for the region’s 4.3 million people. For more information, visit teamneo.org.