## **Cleveland State University** EngagedScholarship@CSU



**Urban Publications** 

Maxine Goodman Levin College of Urban Affairs

10-1-2012

# Manufacturing Brief 2012

Candi Clouse Cleveland State University, c.clouse@csuohio.edu

#### How does access to this work benefit you? Let us know!

Follow this and additional works at: https://engagedscholarship.csuohio.edu/urban\_facpub



Part of the <u>Urban Studies Commons</u>

#### Repository Citation

Clouse, Candi, "Manufacturing Brief 2012" (2012). Urban Publications. 0 1 2 3 659. https://engagedscholarship.csuohio.edu/urban\_facpub/659

This Report is brought to you for free and open access by the Maxine Goodman Levin College of Urban Affairs at EngagedScholarship@CSU. It has been accepted for inclusion in Urban Publications by an authorized administrator of EngagedScholarship@CSU. For more information, please contact library.es@csuohio.edu.

# Manufacturing



# Trends in manufacturing industries in Northeast Ohio

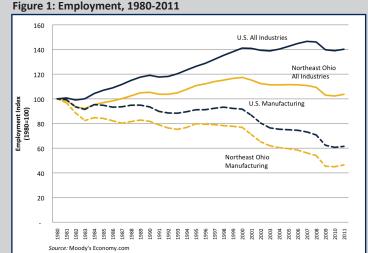
### **Manufacturing Rebound**

Manufacturing has always been synonymous with the Midwest and this legacy continues to be an important driver of the Northeast Ohio economy, especially post the latest recession. Despite declines over the past few decades, in 2011 manufacturing still accounted for 14.1% of employment in Northeast Ohio, 19.0% of gross regional product, and 23.4% of payroll. In 2011, manufacturing represented 253,312 jobs, \$35.5 billion in gross regional product, and \$3.6 billion in payroll.

Following the recent recession, which officially lasted from December 2007 to June 2009, Northeast Ohio did not recover as quickly as the remainder of the country. However, 2011 shows signs that the manufacturing sector in Northeast Ohio is gaining speed. Anecdotal signs show continued growth in the state as well, as evidenced by recent announcements from automakers that they would invest in their facilities in Ohio resulting in new or retained jobs.

#### **Employment**

Looking at all industries, there has been employment growth since 1980 in both NEO and the United States (Figure 1). However, the rate of growth at the national level has been faster than in NEO. A decline in NEO began in 2000 in manufacturing employment and in 2001 in total employment. Manufacturing employment declined through 2010 and begun to rebound slightly in



2011. Total employment in NEO declined each year except in 2005 until it also began to grow again in 2011. National employment dipped in 2008 and also began to rebound in 2011.

The manufacturing sector in both NEO and the United States has followed a similar path; however, the losses at the national level were consistently less extreme than at the regional level. Most recently, manufacturing employment in NEO and the U.S. dipped in 2006 and continued to fall until 2011. In general, 2011 has shown growth in manufacturing and non-manufacturing employment.

Total manufacturing employment in 2009 was 265,434 (Table 1). This decreased in 2010 to 243,161 (-8.4%), but increased in 2011 to 253,312 (4.2%). Of the 21 industries classified by 3-digit NAICS code, 17 lost employment between 2009 and 2010 and only six lost employment between 2010 and 2011. Only four industries decreased in both years: Beverage and Tobacco Products, Paper, Printing and Related Support Activities, and Furniture and Related Products.

#### **About this Brief**

This brief continues a series of publications that provide an overview of the trends in employment, gross regional product, and average wages for major manufacturing industries in Northeast Ohio. It offers a long-term analysis (1980 to 2011) of employment and gross regional product for the manufacturing sector as a whole, and a short-term analysis (2009) to 2011) of the specific industries that constitute the sector. Trends in Northeast Ohio are compared to trends in the United States and the state of Ohio.

Northeast Ohio is defined as the 18-county region that includes the Akron MSA (Portage and Summit Counties), half of the Canton-Massillon MSA (Stark County), the Cleveland-Elyria-Mentor MSA (Cuyahoga, Geauga, Lake, Lorain, and Medina Counties), the Mansfield MSA (Richland County), the Sandusky MSA (Erie County), the Youngstown-Warren MSA (Mahoning and Trumbull Counties), and six nonmetropolitan counties (Ashland, Ashtabula, Columbiana, Huron, Tuscarawas, and Wayne).







The largest increase in employment in the last year was in *Transportation Equipment* (16.4%). *Fabricated Metal Products* also saw an increase in employment (6.3%) and remains the largest industry in terms of employment, followed in size by *Machinery and Transportation Equipment*. All three of these industries saw declines between 2009 and 2010, but gained employment between 2010 and 2011. The share of manufacturing employment in the NEO economy was 14.4% in 2009. The share dipped to 13.6% in 2010, but rebounded slightly to 14.1% in 2011.

Three industries grew in employment in NEO and Ohio while they declined nationally: *Petroleum and Coal Products, Nonmetallic Mineral Products,* and *Chemicals* (Table 2). The only industry that increased nationally between 2010 and 2011 but declined in NEO was *Leather and Allied Products,* a tiny industry in NEO.

Table 2: Percent Change in Employment by Manufacturing Industry, 2010:Q1 to 2011:Q1

Industry	NEO	Ohio	U.S.
Transportation Equipment	16.4%	5.3%	3.3%
Textile Mills	7.2%	7.2%	1.4%
Fabricated Metal Products	6.3%	5.8%	5.2%
Wood Products	6.0%	0.3%	0.1%
Machinery	5.9%	6.4%	5.6%
Primary Metals	5.2%	5.4%	7.3%
Petroleum and Coal Products	5.1%	2.1%	-1.5%
Nonmetallic Mineral Products	3.4%	2.3%	-1.5%
Plastics and Rubber Products	3.3%	2.6%	2.8%
Computer and Electronic Products	2.7%	1.8%	0.5%
Textile Product Mills	2.1%	-2.3%	-0.7%
Electrical Equipment, Appliances, Components	2.0%	4.1%	2.2%
Food	1.3%	0.7%	1.1%
Chemicals	0.9%	0.1%	-0.9%
Miscellaneous Manufacturing	0.1%	1.3%	1.0%
Paper	-1.0%	0.0%	-1.3%
Beverage and Tobacco Products	-1.9%	0.4%	-1.0%
Printing and Related Support Activities	-4.3%	-3.3%	-2.9%
Leather and Allied Products	-7.4%	2.7%	5.2%
Furniture and Related Products	-15.7%	-9.4%	-2.0%
Apparel	-29.1%	-19.8%	-4.0%
Total Manufacturing	4.2%	3.0%	1.7%
Total All Industries	1.1%	1.3%	1.2%
Source: Quarterly Census of Employment and Wages	(QCEW)		

The manufacturing sector in NEO had an LQ of 1.5 in 2011, showing once again that manufacturing continues to be an economic driver in the region (Figure 2). Eleven manufacturing industries had LQs greater than 1.2. Of those 11, six industries had LQs greater than the entirety of the manufacturing sector. The largest of these LQs was in *Primary Metals* (LQ=3.7), followed by *Fabricated Metal Products; Plastics and Rubber Products; Machinery; Electrical Equipment, Appliances, Components;* and *Chemicals*. The LQs have remained relatively stable in the short-term.

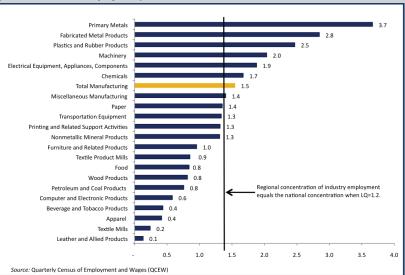
Table 1: Manufacturing Employment in NEO, 2009-2011

Industry	2009	2010	2011	% Change 2009-2010	% Change 2010-2011
Fabricated Metal Products	56,246	49,977	53,101	-11.1%	6.39
Machinery	31,961	28,014	29,668	-12.3%	5.99
Transportation Equipment	25,661	23,795	27,695	-7.3%	16.49
Plastics and Rubber Products	21,698	21,286	21,989	-1.9%	3.39
Primary Metals	22,395	18,637	19,609	-16.8%	5.29
Chemicals	18,700	18,316	18,476	-2.0%	0.99
Food	16,633	17,053	17,273	2.5%	1.3%
Miscellaneous Manufacturing	11,709	10,753	10,767	-8.2%	0.19
Electrical Equipment, Appliances, Components	10,203	9,411	9,602	-7.8%	2.09
Printing and Related Support Activities	10,275	9,306	8,905	-9.4%	-4.39
Computer and Electronic Products	9,687	8,817	9,057	-9.0%	2.79
Paper	7,597	7,282	7,211	-4.1%	-1.09
Nonmetallic Mineral Products	7,264	6,484	6,702	-10.7%	3.49
Furniture and Related Products	6,598	5,590	4,710	-15.3%	-15.79
Wood Products	3,638	3,366	3,567	-7.5%	6.09
Textile Product Mills	1,439	1,363	1,392	-5.3%	2.19
Petroleum and Coal Products	1,268	1,180	1,240	-7.0%	5.19
Beverage and Tobacco Products	1,124	1,059	1,039	-5.8%	-1.99
Apparel	685	722	512	5.5%	-29.19
Textile Mills	599	692	742	15.6%	7.29
Leather and Allied Products	55	58	54	5.4%	-7.49
Total Manufacturing	265,434	243,161	253,312	-8.4%	4.29
Total All Industries	1,849,480	1,782,216	1,802,069	-3.6%	1.19
Source: Quarterly Census of Employment and Wag	es (QCEW)				

Overall, total employment grew slightly slower in NEO as it did in Ohio or the U.S. However, the manufacturing sector in NEO grew the fastest; manufacturing employment grew 4.2% in NEO between 2010 and 2011, but grew only 3.0% in Ohio and 1.7% nationally.

Manufacturing industries do not only count for a significant portion of the Northeast Ohio economy, but they also include many traded industries with high concentrations in Northeast Ohio as measured with location quotients. LQs measure the concentration of a given industry in an area relative to the concentration of that industry in the national economy. Industries with high location quotients (LQ>1.2) are considered to be part of the region's economic base that exports outside of the region to produce wealth within it. Industries with an LQ<1 are considered non-basic or population serving industries.

Figure 2: Northeast Ohio Manufacturing Location Quotients (Based on 2011:Q1 Employment)



#### **Manufacturing Establishments**

The number of total establishments, including both manufacturing and all non-manufacturing industries, in NEO has declined 7.6% between 2000 and 2011 with a loss of 7,897 establishments. The only growth over this time was in 2005 and 2006. Over the 2010 -2011 years, total establishment declined by 379, or 0.4%. The number of manufacturing establishments has continuously declined between 2000 and 2011 by 20.8% with a loss of 1,812 establishments. In 2000, there were 8,695 manufacturing establishments and in 2011 there were 6,883 manufacturing establishments in NEO. Between 2010 and 2011, NEO lost 55 manufacturing establishments, or 0.8%. Six industries added establishments between 2010 and 2011: Beverage and Tobacco Product Manufacturing (4 establishments); Wood Product Manufacturing (4 establishments); Chemical Manufacturing (4 establishments); Petroleum and Coal Products Manufacturing (3 establishments); Machinery Manufacturing (3 establishments); and Plastics and Rubber Products Manufacturing (2 establishments). The largest loss was 18 establishments in Nonmetallic Mineral Product Manufacturing.

Comparison among the regions within Northeast Ohio reveals that the largest losses between 2000 and 2011 were found in the Cleveland MSA (1,067 manufacturing establishments), although each MSA and the non-metro areas all lost establishments. Between 2010 and 2011, small gains were seen in the Canton, Mansfield, and Sandusky MSAs while other areas in the region lost manufacturing establishments. Ohio and the nation also experienced a decrease in manufacturing establishments between 2000 and 2011. The state lost 3,609 (19%) and the nation lost 68,469 (17%). Between 2010 and 2011, the state lost 165 (1%) of its manufacturing establishments and the nation lost 5,605 (2%).

#### **Manufacturing Establishments by Size**

The growth in manufacturing employment in NEO varied between 2010 and 2011 when examined by establishment size (Figure 3). Growth was seen in very small establishments that employed between 5 and 9 people (5.3%) and the various establishment sizes that employed more than 50 employees. The largest net gain in employment was in establishments with over 500 employees (4,423 jobs). Establishments with less than 5 employees lost 6.1% of their labor force; those with between 10 and 19 employees lost 4.6%; and those employing between 20 and 49 workers lost 0.1%.

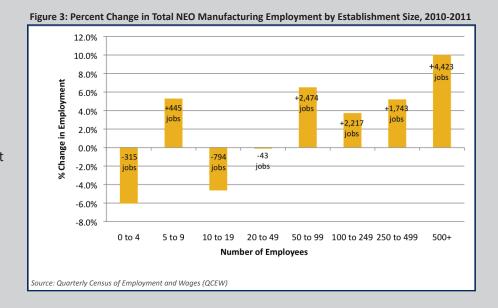
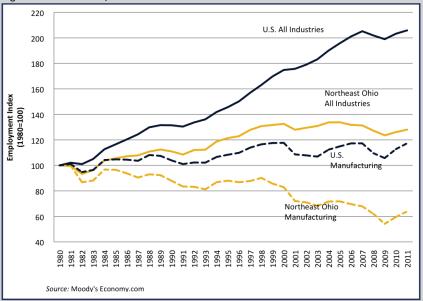


Table 3: Employment by Manufacturing Industry by Size of Employment, 2010-2011

Industry	Sm Establisi 0-9	hments	Medium Establishments 100-499		Large Establishments 500+	
	2010	2011	2010	2011	2010	2011
Fabricated Metal Product Manufacturing	27,153	29,278	12,575	13,228	10,249	10,595
Machinery Manufacturing	14,658	14,861	S	S	S	S
Plastics and Rubber Products Manufacturing	9,917	9,915	S	S	S	S
Chemical Manufacturing	7,083	7,118	6,537	6,343	4,696	5,014
Primary Metal Manufacturing	5,758	5,836	8,090	7,455	4,789	6,318
Miscellaneous Manufacturing	5,438	5,280	S	S	S	S
Printing and Related Support Activities	5,391	5,119	S	S	S	S
Transportation Equipment Manufacturing	4,700	4,733	10,317	11,335	8,778	11,627
Food Manufacturing	4,236	4,190	8,282	8,226	4,535	4,857
Nonmetallic Mineral Product Manufacturing	4,228	4,136	S	S	S	S
Computer and Electronic Product Manufacturing	3,858	3,479	S	S	S	S
Electrical Equipment and Appliance Mfg.	3,432	3,397	S	S	S	S
Paper Manufacturing	3,187	3,262	S	S	S	S
Wood Product Manufacturing	2,461	2,526	905	1,041	0	0
Furniture and Related Product Manufacturing	2,206	2,127	S	S	S	S
Beverage and Tobacco Product Manufacturing	605	699	S	S	S	S
Textile Product Mills	565	624	S	S	S	S
Petroleum and Coal Products Manufacturing	494	542	S	S	S	S
Apparel Manufacturing	382	389	S	S	S	S
Textile Mills	212	222	480	520	0	0
Leather and Allied Product Manufacturing	58	54	0	0	0	0
TOTAL MANUFACTURING	106,022	107,789	93,001	96,961	44,138	48,561
Note: S signifies that the data has been suppressed. Source: Quarterly Census of Employment and Wages (ES202)						

Of the 21 manufacturing industries, 15 experienced employment gains from 2010 to 2011, while only six lost employment. The *Transportation* Equipment industry saw moderate growth in small establishments (1%) and significant growth in medium and large establishments (10% and 32%, respectively) (Table 3). Employment in the Fabricated Metal Products industry grew 8% in small establishments, 5% in medium establishments, and 3% in large establishments. Employment in Primary Metals increased only 1% in small establishments, decreased 8% in medium establishments, and increased 32% in large establishments. Overall, small and medium establishments represented the majority of employment in the manufacturing sector. Large establishments represented only 19% of total manufacturing employment in 2011, while small establishments represented 43% and medium establishments accounted for 38%.

Figure 4: Gross Product, 1980-2011



#### **Gross Regional Product**

Gross domestic product (GDP) in the U.S. has more than doubled since 1980 (Figure 4). At the same time, gross regional product (GRP) in NEO only increased by 28%. In addition, while the gross product derived from manufacturing grew 17% in the U.S. since 1980, it decreased in NEO by 36%. As the economy began to rebound in 2009, all industries saw growth in the region and the nation. National manufacturing GDP grew by 7% between 2009 and 2010 and by 4% between 2010 and 2011. NEO's manufacturing GRP outpaced the nation, however, growing 10% between 2009 and 2010 and another 7% between 2010 and 2011. Of the 21 industries that comprise the manufacturing sector, only two saw a decrease in GRP between 2009

and 2010 in NEO: Printing and Related Support Activities (-1.9%) and Apparel (-0.8%). Apparel also decreased in GRP between 2010 and 2011 (-16.9%), as did Beverage and Tobacco Products (-7.2%) and Petroleum and Coal Products (-6.2%) (Table 4). The majority of the other manufacturing industries saw growth from 2010 to 2011, with the largest percent change in GRP being in Primary Metals (15.8%). Fabricated Metal Products saw the largest dollar increase in GRP with an increase of \$730,979. The share of GRP from manufacturing in the NEO economy was 16.7% in 2009. This share grew to 18% in 2010 and 19% in 2011.

Table 5: Percent Change in Gross Product by Manufacturing Industry, 2010: Q1 to 2011: Q1

Industry, 2010: Q1 to 2011: Q1	NEO	Ohio	U.S.
Primary Metals	15.8%	15.8%	11.3%
Machinery	11.9%	10.2%	8.0%
Fabricated Metal Products	11.6%	10.9%	8.6%
Computer and Electronic Products	9.9%	5.7%	7.0%
Transportation Equipment	9.4%	7.5%	5.8%
Miscellaneous Manufacturing	9.3%	7.6%	4.1%
Textile Mills	6.3%	4.5%	2.1%
Leather and Allied Products	6.2%	5.8%	3.9%
Electrical Equipment, Appliances, Components	6.1%	6.1%	6.2%
Plastics and Rubber Products	5.6%	3.8%	0.1%
Wood Products	4.6%	4.7%	0.1%
Furniture and Related Products	3.9%	5.2%	4.5%
Chemicals	3.8%	1.6%	-0.3%
Nonmetallic Mineral Products	3.4%	3.0%	1.6%
Textile Product Mills	3.4%	4.5%	4.2%
Food	3.1%	3.1%	1.2%
Paper	3.0%	5.4%	0.6%
Printing and Related Support Activities	0.4%	-0.3%	-1.9%
Petroleum and Coal Products	-6.2%	-7.4%	3.9%
Beverage and Tobacco Products	-7.2%	-1.6%	0.9%
Apparel	-16.9%	-4.9%	-0.4%
Total Manufacturing	7.3%	5.5%	4.1%
Total All Industries	1.6%	0.5%	1.3%
Source: Quarterly Census of Employment and Wages (	QCEW)		

Table 4: Gross Regional Product in NEO, 2009-2011 (in thousands of \$)

Industry	2009	2010	2011	% Change 2009-2010	% Change 2010-2011
Fabricated Metal Products	5,750,575	6,307,856	7,038,835	9.7%	11.6%
Chemicals	4,401,971	5,141,510	5,338,761	16.8%	3.8%
Transportation Equipment	3,108,574	3,565,521	3,901,363	14.7%	9.4%
Machinery	2,396,985	2,609,922	2,921,570	8.9%	11.9%
Food	2,451,739	2,633,050	2,714,358	7.4%	3.1%
Primary Metals	1,957,359	2,146,498	2,486,706	9.7%	15.8%
Electrical Equipment, Appliances, Components	2,236,645	2,315,071	2,455,199	3.5%	6.1%
Plastics and Rubber Products	1,815,690	1,982,228	2,092,587	9.2%	5.6%
Miscellaneous Manufacturing	1,123,238	1,206,338	1,318,966	7.4%	9.3%
Petroleum and Coal Products	1,264,208	1,348,582	1,264,505	6.7%	-6.2%
Paper	793,983	891,606	918,673	12.3%	3.0%
Computer and Electronic Products	746,635	810,800	890,814	8.6%	9.9%
Nonmetallic Mineral Products	564,250	627,052	648,449	11.1%	3.4%
Printing and Related Support Activities	622,003	609,996	612,536	-1.9%	0.4%
Furniture and Related Products	316,194	334,278	347,238	5.7%	3.9%
Wood Products	224,641	237,530	248,560	5.7%	4.6%
Beverage and Tobacco Products	168,234	169,595	157,357	0.8%	-7.2%
Textile Product Mills	70,808	75,393	77,952	6.5%	3.4%
Textile Mills	56,205	56,657	60,203	0.8%	6.3%
Apparel	31,623	31,385	26,096	-0.8%	-16.9%
Leather and Allied Products	5,807	6,131	6,512	5.6%	6.2%
Total Manufacturing	30,107,367	33,107,000	35,527,238	10.0%	7.3%
Total All Industries	180,404,848	184,108,588	186,993,728	2.1%	1.6%
Source: Moody's Economy.com					

Comparison among manufacturing industries in NEO, Ohio, and the U.S. revealed that *Primary Metals* experienced the largest growth over the last year in all three geographic areas (Table 5). Although they traded rankings, the next two largest industries in all three regions were also growing: *Machinery* and *Fabricated Metal Products*. Only one industry, *Apparel*, declined in all three areas, with NEO taking the hardest hit (-16.9%). However this is the second smallest industry in NEO. *Chemicals* performed the best in NEO; *Chemicals* increased by 3.8% in NEO and by 1.6% in Ohio, in contrast to a small decline nationally of 0.3%. *Petroleum and Coal Products* (which saw an increase in employment) and *Beverage and Tobacco Products* saw increases nationally, but not in NEO or Ohio.

Overall, gross product grew faster in NEO than in Ohio and the U.S. Additionally, between 2010 and 2011, manufacturing gross product grew faster in NEO (7.3%) than in Ohio and the U.S., which increased by 5.5% and 4.1%, respectively.

#### **Average Wage**

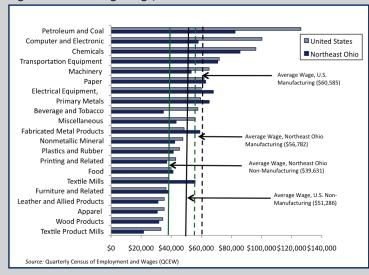
The average wage for non-manufacturing jobs in the nation was \$51,286 in 2011 (Figure 5). The average wage for non-manufacturing jobs in NEO was \$39,631, which was 29% lower than the national average wage (\$11,655). In the manufacturing sector, the average wage was \$60,585 in the United States and \$56,782 in NEO, a difference of only 7% (\$3,803). A comparison of manufacturing and non-manufacturing jobs in NEO shows that manufacturing jobs paid on average \$17,151 more than all other jobs (43%).

The manufacturing industry with the highest average wage in the U.S. was *Petroleum and Coal Products* (\$126,108). *Computer and Electronic Products* also had an average wage over \$100,000 in the U.S. (\$100,268). In Northeast Ohio, the two highest paid industries were *Chemicals* (\$85,665) and *Petroleum and Coal Products* (\$82,416). The lowest average wage in both the U.S. and NEO was in Textile Product Mills.

Table 6: Manufacturing Employment by County, 2009:Q1 to

2011:Q1		2011	Change 2009- 2011	% Change 2009- 2011	2011 Manufacturing Share of Total Employment
Ohio		625,916	-34,203	-5.2%	12.9%
Northeast Ohio		253,312	-12,122	-4.6%	14.1%
Akron MSA		37,773	-2,662	-6.6%	12.7%
	Portage	9,696	15	0.2%	19.7%
	Summit	28,077	-2,676	-8.7%	11.39
Canton-Massillon MSA		23,827	-1,934	-7.5%	16.29
	Stark	23,827	-1,934	-7.5%	16.29
Cleveland-Elyria-Mentor	MSA	117,983	-7,803	-6.2%	12.5%
	Cuyahoga	67,939	-4,863	-6.7%	10.19
	Geauga	6,691	-926	-12.2%	21.99
	Lake	18,969	-1,310	-6.5%	21.09
	Lorain	15,860	-732	-4.4%	17.49
	Medina	8,524	28	0.3%	15.5%
Mansfield MSA		8,787	-1,139	-11.5%	17.49
	Richland	8,787	-1,139	-11.5%	17.49
Sandusky MSA		5,438	707	14.9%	16.49
	Erie	5,438	707	14.9%	16.49
Youngstown-Warren-Boa	ardman MSA	21,722	1,451	7.2%	13.39
	Mahoning	8,223	-327	-3.8%	8.79
	Trumbull	13,499	1,777	15.2%	19.4%
Non-Metro Counties		37,782	-742	-1.9%	22.49
	Ashland	3,048	-183	-5.7%	18.49
	Ashtabula	6,367	-101	-1.6%	21.79
	Columbiana	5,355	-251	-4.5%	18.5%
	Huron	5,714	254	4.7%	29.5%
	Tuscarawas	6,801	-139	-2.0%	20.79
	Wayne	10,498	-324	-3.0%	25.29

Figure 5: 2011 Average Wage, 2011



Overall, the average manufacturing wage between 2009 and 2011 increased by \$2,723 in the U.S. (5.9%); \$1,536 in Ohio (3.7%); and \$2,030 in NEO (5.1%). Over the past three years, only one manufacturing sector in the U.S., *Chemicals*, decreased in average wage (-0.9%). Two industries in Ohio saw decreases in average wage: *Textile Mills* (-1.8%) and *Petroleum and Coal Products* (-4.9%). But in NEO, five industries experienced declines in average wage over this time period: *Textile Mills* (-7.3%); *Apparel* (-6.4%); *Beverage and Tobacco Products* (-5.0%); Food (-3.4%); and *Textile Product Mills* (-0.7%). Each of these industries has a location quotient under 1.2.

#### **Sub-Regional Manufacturing Employment**

In 2011, 12.9% of Ohio's employment was based in manufacturing (Table 6). In Northeast Ohio, 14.1% of employment was manufacturing-based. Of the six metropolitan statistical areas (MSAs) examined, four had a higher share of manufacturing employment than all of NEO; the MSAs with shares lower than NEO were the two largest, more diversified areas: Akron and Cleveland-Elyria-Mentor.

In the Cleveland-Elyria-Mentor MSA, which represented 47% of the employment in NEO, declines occurred in four out of

five counties between 2009 and 2011. Geauga County lost the largest percent (-12.2%); Cuyahoga County, the largest manufacturing employer, lost 6.7%; Lake County lost 6.5%; and Lorain County lost 4.4%. Medina County's employment remained fairly flat. However, between 2010 and 2011, the only county that lost manufacturing employment was Geauga (2.5%), while all others gained 2% or more.

The Akron MSA is the second largest MSA in NEO, representing about 15% of manufacturing employment. Summit County lost 2,676 manufacturing jobs (-8.7%) between 2009 and 2011 while Portage County remained relatively flat. Both Portage and Summit Counties gained manufacturing employment between 2010 and 2011.

Finishing out the region between 2009 and 2011, the Canton-Massillon MSA lost 7.5% of its manufacturing employment, the Mansfield MSA lost 11.5%, the Sandusky MSA gained 14.9%, and the Youngstown-Warren-Boardman MSA gained 7.2%. The non-metro counties saw a decrease in manufacturing employment of 1.9%. Between 2010 and 2011 all regions saw growth in manufacturing employment: the Canton MSA grew by 5.5%, the Mansfield MSA grew by 3.5%, the Sandusky MSA grew by 8.7%, the Youngstown MSA grew by 14.9%, and the non-metro counties grew by 3.5%.



NONPROFIT ORGANIZATION U.S. POSTAGE

PAID

PERMIT NO. 118 CLEVELAND OHIO



This brief is sponsored by the Manufacturing Advocacy and Growth Network (MAGNET) with additional financial support from the U.S. Economic Development Administration. MAGNET supports, educates, and champions manufacturing in Ohio and is a voice for the region's manufacturers. Since its creation in 1984, MAGNET has assisted thousands of manufacturers through its business consulting, product development, and business incubation programs. From 2008 to 2012, MAGNET has helped Ohio manufacturers achieve \$540 million in increased or retained sales and \$79 million in cost savings while investing \$173 million in their operations and creating or retaining 6,264 jobs.

This brief is produced by the Center for Economic Development at Cleveland State University's Maxine Goodman Levin College of Urban Affairs. To contact the Center for Economic Development, call (216) 687-3984 or email ced@csuohio.edu. An electronic version of this brief (in PDF format) is available on the Center for Economic Development website http://urban.csuohio.edu/economicdevelopment.





