

Case Study: Workforce Attractions of Licking County, Ohio, for Machining-Related Occupations, Industries, and Businesses

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Executive Summary

- (A) The machining-related industries are dominated by businesses that employ significant numbers of **machinists (Standard Occupational Code, SOC, #51-4041) and computer-controlled machine tool operators (SOC #51-4011)**. As shown in the table of the occupational/industry employment distributions, **these two machining occupations are concentrated in the three industries of (i) Machine Shops (North American Industrial Classification System, NAICS, code #332710), (ii) Metalworking Machinery Manufacturing (NAICS #333500), and (iii) Motor Vehicle Parts Manufacturing (NAICS #336300)** - industries which included about one-third of the occupational employment of machinists and computer-controlled machine tool operators.
- (B) **The national staffing patterns for the machining-related industries of NAICS #332710 (machine shops), NAICS #333500 (metalworking machinery manufacturing), and NAICS #336300 (motor vehicle parts and machinery)**

highlighted machinists and computer-controlled machine tool operators, as well as the importance of general production workers, as critical labor inputs to the production functions of these manufacturing industries.

- (C) **The recent mean annual wages paid computer-controlled machine tool operators and machinists in the Columbus Metropolitan Statistical Area (including Licking County) were less than the U.S. and Ohio mean annual wages for these same occupations. It is noteworthy that almost half (i.e., 48.3%) of the “goods producing” workers in Licking County, Ohio, in 2010 by place of residence, received less than \$3,334.00 per month in earnings, making these workers potential sources of experienced labor supply for higher wage, manufacturing employers.**
- (D) **In terms of indicators of labor availability for the labor requirements of the machining-related industries, the labor shed map and supplemental tables documented substantial stocks of production workers for manufacturing industries in Licking County, Ohio.**
- (E) **The July, 2012, labor availability report from the Licking County One-Stop Center of the Ohio Department of Job and Family Services (ODJFS) showed sizable numbers of machining applicants registered with the ODJFS and seeking employment in Licking County, Ohio.**
- (F) **The Career-Technical Education Centers (C-TEC) of Licking County adult CNC machinist technology program is the only postsecondary precision production, metalworking training program operating in the Columbus Metropolitan Statistical Area (MSA), according to the National Center for Education Statistics (NCES) and the Integrated Postsecondary Education Data System (IPEDS). Hence, Licking County is unique in central Ohio with its CNC training program as part of the educational infrastructure of the county. With its CNC machinist technology faculty, curriculum, and student recruitment practices already established, Licking County has the training foundation in place on which to increase CNC training output as the need arises in response to economic development with machining-related businesses.**
- (G) **Since production occupations represent over 60% of the employment of machining-related industries, based on staffing patterns, the labor force statistics for Licking County provided useful indicators of potential labor supply, especially for semi-skilled and unskilled positions. In May, 2012, the Ohio Bureau of Labor Market Information estimated the Licking County, Ohio, unemployment rate at 6.4% (unadjusted), with 5,400 unemployed workers, and an employed workforce of 79,200.**
- (H) **The best indicator of the supply chain strength and support for machining-related businesses in the county is the large number of profitable machining companies presently located in Licking County. As shown in the county employer directory of manufacturing firms, Licking County presently is the home to more than 58 machining-related businesses.**

Definition of Machining-Related Occupations and Industries by Standard Occupational Classification (SOC) codes and North American Industrial Classification System (NAICS) codes

The machining-related industries are dominated by businesses that employ significant numbers of **machinists (Standard Occupational Code, SOC, #51-4041) and computer-controlled machine tool operators, metal and plastic (SOC #51-4011)**. As shown in the table below of the occupational/industry employment distributions, **these two machining occupations are concentrated in the following, three industries of (a) Machine Shops (North American Industrial Classification System, NAICS, code #332710), (b) Metalworking Machinery Manufacturing (NAICS #333500), and (c) Motor Vehicle Parts Manufacturing (NAICS #336300)** - industries which include about one-third of the occupational employment of machinists and computer-controlled machine tool operators.¹ **Hence, for the remainder of this case study, machining-related occupations and industries will be defined as the aforementioned, two occupations of SOC codes #51-4041 and #51-4011, and the three industries of NAICS codes #332710, #333500, and #336300.**

Occupational Employment by Industry (Top 5 Industries) National								
SOC Code	Occupation	NAICS Code	Industry	Occupation Employment			Pct. of Total	
				2008	2018	Change	2008	2018
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	332710	Machine shops	22,740	23,990	5.5%	16.1%	15.9%
51-4011		336300	Motor vehicle parts manufacturing	13,990	13,310	-4.9%	9.9%	8.9%
51-4011		333500	Metalworking machinery manufacturing	11,230	13,150	17.1%	8.0%	8.7%
51-4011		336400	Aerospace product and parts manufacturing	8,020	7,810	-2.5%	5.7%	5.2%
51-4011		326100	Plastics product manufacturing	7,950	8,820	11.0%	5.6%	5.9%
51-4041	Machinists	332710	Machine shops	83,800	75,470	-9.9%	19.9%	18.8%
51-4041		561300	Employment services	29,680	36,670	23.6%	7.0%	9.1%
51-4041		333500	Metalworking machinery manufacturing	25,600	25,590	.0%	6.1%	6.4%
51-4041		336300	Motor vehicle parts manufacturing	21,080	17,110	-18.8%	5.0%	4.3%
51-4041		336400	Aerospace product and parts manufacturing	19,800	19,240	-2.8%	4.7%	4.8%

Source: Occupational Supply Demand System (OSDS) at www.occsupplydemand.org.

¹ Occupational Supply Demand System, Unit of Analysis **069B-13, METAL/PLASTIC MACHINE WORK**, Demand Display, at www.occsupplydemand.org.

Staffing Patterns and Critical Labor Inputs

The national staffing patterns (shown below) for the machining-related industries of NAICS #332710 (machine shops), NAICS #333500 (metalworking machinery manufacturing), and NAICS #336300 (motor vehicle parts and machinery) highlight machinists and computer-controlled machine tool operators, as well as the importance of general production workers, as critical labor inputs to the production functions of these manufacturing industries.²

U.S. Staffing Patterns based on 2008-2018 Projections Data
Industry Code: 332710 - Machine shops

Occupation Code ↑↓	Occupation Title ↑↓	2008 Pct of Est Emp ↑↓	2018 Pct of Proj Emp ↑↓
-510000	Production occupations	72.06%	72.52%
--514000	Metal workers and plastic workers	58.09%	58.29%
----514041	Machinists	30.24%	30.48%
-430000	Office and administrative support occupations	10.51%	10.19%
----514030	Machine tool cutting setters, operators, and tenders, metal	9.84%	8.51%
----514010	Computer control programmers and operators	9.26%	10.64%
----514011	Computer-controlled machine tool operators, metal and plastic	8.2%	9.68%

Source: Ohio Bureau of Labor Market Information , and the U.S. Bureau of Labor Statistics at www.ohiolmi.com/asp/staffing/ShowStaff.asp?sort=C5_D&go=2.

² Ohio Bureau of Labor Market Information (LMI), Ohio Department of Job and Family Services (ODJFS), and the U.S. Bureau of Labor Statistics (BLS), industry/occupational employment distribution (i.e., staffing pattern), at www.ohiolmi.com/asp/staffing/ShowStaff.asp?sort=C5_D&go=2.

U.S. Staffing Patterns based on 2008-2018 Projections Data
Industry Code: 333500 - Metalworking Machinery Manufacturing

Occupation Code ↑↓	Occupation Title ↑↓	2008 Pct of Est Emp ↑↓	2018 Pct of Proj Emp ↑↓
-510000	Production occupations	65.25%	65.49%
--514000	Metal workers and plastic workers	49.56%	49.58%
----514041	Machinists	13.35%	13.49%
-430000	Office and administrative support occupations	10.76%	10.44%
----514111	Tool and die makers	9.94%	10.05%
----514030	Machine tool cutting setters, operators, and tenders, metal	9.48%	8.39%
---111300	Management, business, and financial occupations	7.59%	7.61%
----152900	Professional and related occupations	7.46%	7.61%
----514010	Computer control programmers and operators	7.17%	8.12%
-170000	Architecture and engineering occupations	6%	6.18%
----514011	Computer-controlled machine tool operators, metal and plastic	5.85%	6.93%

Source: Ohio Bureau of Labor Market Information (LMI), and the U.S. Bureau of Labor Statistics (BLS) at www.ohiolmi.com/asp/staffing/ShowStaff.asp?sort=C5_D&go=2.

U.S. Staffing Patterns based on 2008-2018 Projections Data
Industry Code: 336300 - Motor vehicle parts manufacturing

Occupation Code ↑↓	Occupation Title ↑↓	2008 Pct of Est Emp ↑↓	2018 Pct of Proj Emp ↑↓
-510000	Production occupations	63.35%	62.94%
--514000	Metal workers and plastic workers	25.62%	24.83%
--512000	Assemblers and fabricators	24.78%	25.04%
----512092	Team assemblers	16.06%	16.35%
---152900	Professional and related occupations	8.57%	9.16%
--519000	Other production occupations	8.5%	8.57%
-170000	Architecture and engineering occupations	7.29%	7.84%
----514030	Machine tool cutting setters, operators, and tenders, metal	6.65%	5.81%
-530000	Transportation and material moving occupations	6.52%	6.22%
---111300	Management, business, and financial occupations	6.23%	6.3%
-430000	Office and administrative support occupations	6.09%	5.9%
-490000	Installation, maintenance, and repair occupations	6.08%	6.47%
--537000	Material moving occupations	5.93%	5.63%
--172000	Engineers	5.28%	5.78%

--499000	Other installation, maintenance, and repair occupations	4.77%	5.14%
----512099	Assemblers and fabricators, all other	4.59%	4.59%
----499040	Industrial machinery installation, repair, and maintenance w	4.53%	4.91%
----514031	Cutting, punching, and press machine setters, operators, and	4.04%	3.63%
----514041	Machinists	3.87%	3.85%
----519061	Inspectors, testers, sorters, samplers, and weighers	3.6%	3.59%
-110000	Management occupations	3.59%	3.5%
----519190	Miscellaneous production workers	3.48%	3.47%
----511011	First-line supervisors/managers of production and operating	3.42%	3.41%
--511000	Supervisors, production workers	3.42%	3.41%
----514120	Welding, soldering, and brazing workers	3.29%	3.28%
--435000	Material recording, scheduling, dispatching, and distributing	3.01%	2.85%
----514010	Computer control programmers and operators	2.73%	3.14%
----514011	Computer-controlled machine tool operators, metal and plastic	2.57%	3%

Source: Ohio Bureau of Labor Market Information (LMI), and the U.S. Bureau of Labor Statistics (BLS) at www.ohiolmi.com/asp/staffing/ShowStaff.asp?sort=C5_D&go=2.

Occupational Wage Trends for U.S., Ohio, and the Columbus Metropolitan Statistical Area (MSA) for Machining-Related Occupations

Within central Ohio (including Licking County), the occupational wage rates for the critical occupations of machinists and computer-controlled machine tool operators appear competitive, as documented in the following wage data tables.³

Wage Trends (Mean) National												
SOC Code	Occupation	Mean Annual Wage					Change 2006 to 2010	Relative Standard Error of the Mean Annual Wage				
		2006	2007	2008	2009	2010		2006	2007	2008	2009	2010
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$32,820	\$33,690	\$34,520	\$35,570	\$35,890	9.4%	0.5%	0.4%	0.5%	0.5%	0.5%
51-4041	Machinists	\$35,810	\$36,370	\$37,490	\$38,940	\$39,780	11.1%	0.3%	0.4%	0.4%	0.4%	0.3%

Note: Relative Standard Error (RSE) is a measure of the reliability of a statistic; the smaller the relative standard error, the more precise the estimate.

Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS), and the Occupational Supply Demand System (OSDS), at www.occsupplydemand.org.

Wage Trends (Mean) Ohio												
SOC Code	Occupation	Mean Annual Wage					Change 2006 to 2010	Relative Standard Error of the Mean Annual Wage				
		2006	2007	2008	2009	2010		2006	2007	2008	2009	2010
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$32,110	\$33,450	\$34,380	\$35,660	\$35,060	9.2%	1.4%	1.3%	1.3%	1.2%	1.5%
51-4041	Machinists	\$34,620	\$34,810	\$35,840	\$37,200	\$38,620	11.6%	1.1%	1.0%	0.8%	1.4%	1.8%

Note: Relative Standard Error (RSE) is a measure of the reliability of a statistic; the smaller the relative standard error, the more precise the estimate.

Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS), and the Occupational Supply Demand System (OSDS), at www.occsupplydemand.org.

³ U.S. Department of Labor, Bureau of Labor Statistics (BLS), and the Occupational Supply Demand System (OSDS), at www.occsupplydemand.org, 069B-13 METAL/PLASTIC MACHINE WORK Unit of Analysis, Demand Indicators.

Wage Trends (Mean) Columbus, Ohio, Metropolitan Statistical Area (including Licking County)												
SOC Code	Occupation	Mean Annual Wage					Change 2006 to 2010	Relative Standard Error of the Mean Annual Wage				
		2006	2007	2008	2009	2010		2006	2007	2008	2009	2010
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$30,370	\$31,460	\$33,230	\$31,790	\$33,950	11.8%	2.5%	2.5%	3.4%	4.0%	4.8%
51-4041	Machinists	\$35,090	\$35,120	\$35,230	\$36,180	\$38,450	9.6%	1.5%	1.4%	1.6%	2.9%	2.7%

Note: Relative Standard Error (RSE) is a measure of the reliability of a statistic; the smaller the relative standard error, the more precise the estimate.

Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS), and the Occupational Supply Demand System (OSDS), at www.occsupplydemand.org.

As noted in the preceding tables, **the recent mean annual wages paid computer-controlled machine tool operators and machinists in central Ohio (including Licking County) were less than the U.S. and Ohio mean annual wages for these same occupations.**⁴

Licking County, Ohio, Labor Shed Map for “Goods Producing” Workers by Place of Residence, and Supplementary Tables

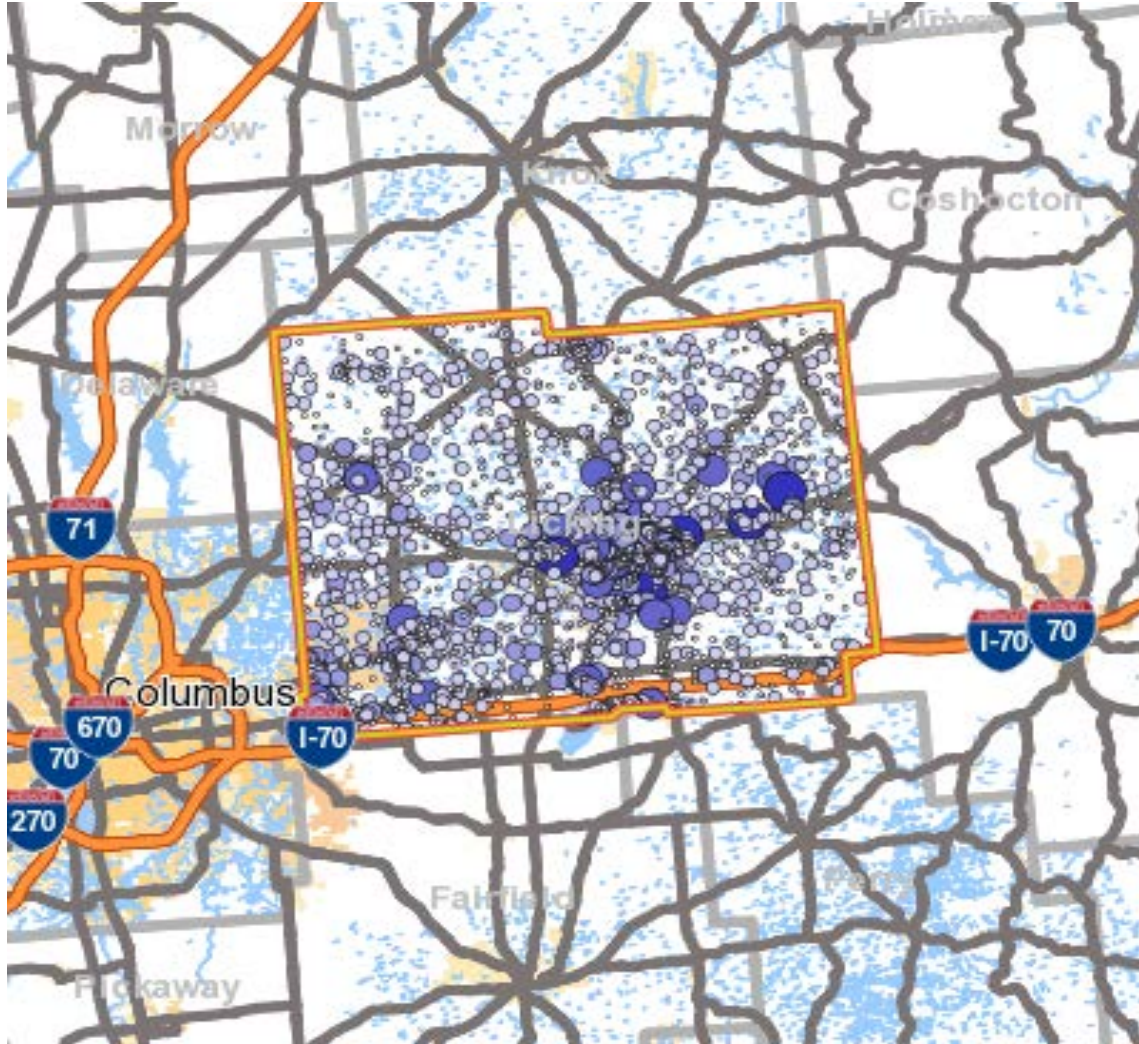
In terms of the labor requirements of the machining-related industries, the following **labor shed map and supplemental tables** document substantial stocks of production workers for manufacturing industries in Licking County, Ohio.⁵

⁴ *Ibid.*

⁵ U.S. Census Bureau, *OnTheMap* Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2010), at <http://onthemap.ces.census.gov>.

Licking County, Ohio, Home Area Profile Report: Workers in the "Goods Producing" Industry Class -

Count Share
Total Primary Jobs 10,666 100.0%



Source: U.S. Census Bureau, *OnTheMap* Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2010), at <http://onthemap.ces.census.gov>.

Licking County, Ohio, Home Area Profile Report: Workers in the "Goods Producing" Industry Class, Detailed Tables Supplementing the Licking County Labor Shed Map -

Total Primary Jobs

	2010	
	Count	Share
Total Primary Jobs	10,666	100.0%

Jobs by Worker Age

	2010	
	Count	Share
Age 29 or younger	1,463	13.7%
Age 30 to 54	7,008	65.7%
Age 55 or older	2,195	20.6%

Jobs by Earnings

	2010	
	Count	Share
\$1,250 per month or less	1,067	10.0%
\$1,251 to \$3,333 per month	4,087	38.3%
More than \$3,333 per month	5,512	51.7%

Jobs by NAICS Sector for the "Goods Producing" Division

	2010	
	Count	Share
Agriculture, Forestry, Fishing and Hunting	291	2.7%
Mining, Quarrying, and Oil and Gas Extraction	122	1.1%
Utilities	0	0.0%
Construction	2,809	26.3%
Manufacturing	7,444	69.8%
Wholesale Trade	0	0.0%
Retail Trade	0	0.0%
Transportation and Warehousing	0	0.0%
Information	0	0.0%
Finance and Insurance	0	0.0%
Real Estate and Rental and Leasing	0	0.0%
Professional, Scientific, and Technical Services	0	0.0%
Management of Companies and Enterprises	0	0.0%
Administration & Support, Waste Management and Remediation	0	0.0%
Educational Services	0	0.0%
Health Care and Social Assistance	0	0.0%
Arts, Entertainment, and Recreation	0	0.0%
Accommodation and Food Services	0	0.0%
Other Services (excluding Public Administration)	0	0.0%
Public Administration	0	0.0%

Jobs by Worker Race

	2010	
	Count	Share
White Alone	10,202	95.6%
Black or African American Alone	246	2.3%
American Indian or Alaska Native Alone	27	0.3%
Asian Alone	110	1.0%
Native Hawaiian or Other Pacific Islander Alone	4	0.0%
Two or More Race Groups	77	0.7%

Jobs by Worker Ethnicity

	2010	
	Count	Share
Not Hispanic or Latino	10,535	98.8%
Hispanic or Latino	131	1.2%

Jobs by Worker Educational Attainment

	2010	
	Count	Share
Less than high school	875	8.2%
High school or equivalent, no college	3,766	35.3%
Some college or Associate degree	2,989	28.0%
Bachelor's degree or advanced degree	1,573	14.7%
Educational attainment not available (workers aged 29 or younger)	1,463	13.7%

Jobs by Worker Sex

	2010	
	Count	Share
Male	8,129	76.2%
Female	2,537	23.8%

Source: U.S. Census Bureau, *OnTheMap* Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2010), at <http://onthemap.ces.census.gov>
Notes:

1. Race, Ethnicity, Educational Attainment, and Sex statistics are beta release results and only available for 2009 and 2010 data.
2. Educational Attainment is only produced for workers aged 30 and over.

It is noteworthy that almost half (i.e., 48.3%) of the “goods producing” workers in Licking County, Ohio, in 2010 by place of residence, received less than \$3,334.00 per month in earnings, making these workers potential sources of experienced labor supply for higher wage, manufacturing employers.⁶

⁶ *Ibid.*

Indicators of Labor Availability for Machining-Related Occupations in Licking County, Ohio

Registered Machining Applicants with Public Employment Service, Seeking Employment in Licking County

For specific indicators of labor supply for machinists and computer-controlled machine tool operators (metal and plastic), the July, 2012, labor availability report from the Licking County One-Stop Center of the Ohio Department of Job and Family Services (ODJFS) showed sizable numbers of machining applicants registered with the ODJFS and seeking employment in Licking County, Ohio.⁷

AVAILABLE JOB SEEKERS CURRENTLY SEEKING EMPLOYMENT IN LICKING COUNTY			
Source: Licking County One-Stop Center, Ohio Department of Job and Family Services.			
(Note: SCOTI currently reports a total of 11,327 job seekers seeking employment in Licking County. Report run date 7/5/12.)			
Job Code	Job Title	Summary of Job Title	Available Job Seekers
51-4011.00	Computer-Controlled Machine Tool Operators, Metal and Plastic	Operate computer-controlled machines or robots to perform one or more machine functions on metal or plastic work pieces. Sample of reported job titles: Computer Numerical Control Operator (CNC Operator), Computer Numerical Control Machinist (CNC Machinist), Machine Operator, Computer Numerical Control Lathe Operator (CNC Lathe Operator), Computer Numerical Control Machine Operator (CNC Machine Operator), Computer Numerical Control Mill Operator (CNC Mill Operator), Production Worker, Brake Press Operator, Computer Numerical Control Set Up Technician (CNC Set Up Technician), Computer Numerical Control Set-Up Operator (CNC Set-Up Operator)	25
51-4041.00	Machinists	Set up and operate a variety of machine tools to produce precision parts and instruments. Includes precision instrument makers who fabricate, modify, or repair mechanical instruments. May also fabricate and modify parts to make or repair machine tools or maintain industrial machines, applying knowledge of mechanics, mathematics, metal properties, layout, and machining procedures. Sample of reported job titles: Machinist, Tool Room Machinist, Machine Operator, Machine Repair Person, Machinist Tool and Die, Automation Technician, Gear Machinist, Maintenance Specialist, Set-Up Machinist, Utility Operator	111

CNC Machining Technology Adult Training Graduates from the Career-Technical Education Centers (C-TEC) of Licking County, Ohio

In addition to the registered applicants with the public employment service (that is, the ODFJS), the Career-Technical Education Centers (C-TEC) of Licking County produced 7 postsecondary graduates in FY 2011 (the most recent year for which completions data are

⁷ Murphy, Windy, Employment Specialist, Licking County One-Stop Center, Ohio Department of Job and Family Services, Labor Availability Report, July, 2012.

available) from their **Computer Numerically Controlled (CNC) Machinist Technology/CNC Machinist** adult training program (Classification of Instructional Programs, CIP, code 48.0510).⁸ **The C-TEC adult CNC machinist technology program is the only postsecondary precision production, metalworking training program operating in the Columbus Metropolitan Statistical Area (MSA),** according to the National Center for Education Statistics (NCES) and the Integrated Postsecondary Education Data System (IPEDS).⁹ **Hence, Licking County is unique in central Ohio with its CNC training program as part of the educational infrastructure of the county.** With its CNC machinist technology faculty, curriculum, and student recruitment practices already established, Licking County has the training foundation in place on which to increase CNC training output as the need arises in response to economic development with machining-related businesses.

Labor Force Data for Licking County

Since production occupations represent over 60% of the employment of machining-related industries, based on staffing patterns (see pages 4-7), the labor force statistics for Licking County provide useful indicators of potential labor supply, especially for semi-skilled and unskilled positions.

Civilian Labor Force Estimates ¹⁰ For: Licking County, Ohio				
Year	Civilian Labor Force	Employment	Unemployment	Unemployment Rate
Jan-2012	84,000	77,300	6,700	8.0
Feb-2012	84,500	77,800	6,800	8.0
Mar-2012	84,300	78,000	6,300	7.5
Apr-2012	84,100	78,400	5,700	6.8
May-2012	84,600	79,200	5,400	6.4

Indicators of Robust Supply Chains for Machining-Related Businesses in Licking County, Ohio

The best indicator of the supply chain strength and support for machining-related businesses in the county is the large number of profitable machining companies presently located in Licking County. As shown below in the county employer directory of manufacturing firms, Licking County presently is the home to more than 58 machining-related businesses. The following business directory of machining-related firms in Licking County provides live links to the employer information about the company contact person, street and mailing address, telephone number and website address, business description and primary industry, employment size class, and map to the business location in Licking County.¹¹

⁸ Integrated Postsecondary Education Data System (IPEDS), National Center for Education Statistics (NCES), U.S. Department of Education, *College Navigator* at www.nces.ed.gov/collegenavigator.

⁹ *Ibid.*

¹⁰ Ohio Bureau of Labor Market Information (LMI) at www.ohiolmi.com/asp/laus/LAUS.asp

¹¹ Employer Locator at www.acinet.org/acinet/employerlocator/EmpLocatorByKeyword.asp?nodeid=18&action=keyword.

Licking County Employer Directory to Businesses in the Industries of Employment Concentration for Computer-Controlled Machine Tool Operators and Machinists.¹²

State – Ohio; Region - Columbus, OH MSA; Cities - **Reynoldsburg, Heath, Hebron, Newark, Pataskala**; Industry Sector – Manufacturing; Industry Subsector - Machinery Manufacturing; Industry Group - **Commercial and Service Industry Machinery Manufacturing**.

Displaying Employers 1-3 of 3

Employer Name	Address	City
Environmental Closure Systems	Killin Ct	Reynoldsburg, OH
Gemco Machine & Tool Inc	Decrow Ave	Newark, OH
I G Brenner Co	E North St	Newark, OH

State – Ohio; Region - Columbus, OH MSA; Cities - **Reynoldsburg, Heath, Hebron, Newark, Pataskala**; Industry Sector – Manufacturing; Industry Subsector - Machinery Manufacturing; Industry Group - **Other General Purpose Machinery Manufacturing**.

Displaying Employers 1-8 of 8

Employer Name	Address	City
Advanced Fuel Systems Inc	PO Box 89	Reynoldsburg, OH
American Power Hoist	E Mill St	Pataskala, OH
Ash Machine Co	Morse Rd Sw	Pataskala, OH
Cimco Technologies	Mount Vernon Rd	Newark, OH
Daifuku America Corp	Tussing Rd	Reynoldsburg, OH
Full Service Supply	Bear Hollow Rd Se	Heath, OH
GPAX Inc	Lancaster Ave	Reynoldsburg, OH
Wren Industrial Storage Equip	Harrison St	Pataskala, OH

¹² *Ibid.*

State – Ohio; Region - Columbus, OH MSA; Cities - **Hebron, Reynoldsburg, Newark**; Industry Sector – Manufacturing; Industry Subsector - Plastics and Rubber Products Manufacturing; Industry Group - **Plastics Product Manufacturing**.
 Displaying Employers 1-10 of 10

Employer Name	Address	City
Accufilm	N High St	Hebron, OH
Bayer Material Science LLC	O Neill Dr	Hebron, OH
Constar International Inc	O Neill Dr	Hebron, OH
Cptechologies Inc	Taylor Rd Sw	Reynoldsburg, OH
K & B Dream Designs LLC	E Main St # 110	Reynoldsburg, OH
Molding Technologies Inc	N High St	Hebron, OH
Precision Polymers	Americana Pkwy	Reynoldsburg, OH
Rep Source LLC	Cypress St Sw	Reynoldsburg, OH
Resinoid Engineering Corp	O Neill Dr	Hebron, OH
Sabo Co	Hoover Rd Ne	Newark, OH

State – Ohio; Region - Columbus, OH MSA; Cities - **Newark, Heath, Hebron, Pataskala, Reynoldsburg**; Industry Sector – Manufacturing; Industry Subsector - Fabricated Metal Product Manufacturing; Industry Group - **Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing**.
 Displaying Employers 1-10 of 10

Employer Name	Address	City
Ashcraft Machine & Supply	Wilson St	Newark, OH
B B & H Tool Co	Taylor Rd Sw	Reynoldsburg, OH
DS Specialists	Sharon Glyn Dr	Newark, OH
Fredrick Welding & Machining	Americana Pkwy	Reynoldsburg, OH
Jett Industries Inc	Grant St	Newark, OH
Martie Machine Co	W Woodfield	Pataskala, OH
Newark Production Machining	Lambs Ln	Newark, OH
Ray-Bar Machine Co	Benley	Hebron, OH
Willis Machine Works	Westgate Dr	Newark, OH
Zealer Machine Inc	National Rd Sw	Reynoldsburg, OH

State – Ohio; Region - Columbus, OH MSA; Cities - **Heath, Hebron, Newark, Pataskala, Reynoldsburg**;
 Industry Sector – Manufacturing; Industry Subsector - Transportation Equipment Manufacturing; Industry Group - **Motor Vehicle Manufacturing**.
 Displaying Employers 1-1 of 1

Employer Name	Address	City
Farber Specialty Vehicles	Americana Pkwy	Reynoldsburg, OH

State – Ohio; Region - Columbus, OH MSA; Cities - **Heath, Hebron, Newark, Pataskala, Reynoldsburg**; Industry Sector – Manufacturing; Industry Subsector - Transportation Equipment Manufacturing; Industry Group - **Motor Vehicle Parts Manufacturing**.
 Displaying Employers 1-3 of 3

Employer Name	Address	City
Arvin Meritor Inc	Hebron Rd	Heath, OH
Hendrickson Auxiliary Axle Sys	N High St	Hebron, OH
Sunfield Inc	Enterprise Dr	Hebron, OH

State – Ohio; Region - Columbus, OH MSA; City – **Hebron**; Industry Group - **All Other Fabricated Metal Product Manufacturing**.
 Displaying Employers 1-2 of 2

Employer Name	Address	City
DC Metal Works Inc	Beaver Run Rd Sw	Hebron, OH
Ohio Metal Technology Inc	John Alford Pkwy	Hebron, OH

State – Ohio; Region - Columbus, OH MSA; City – **Newark**; Industry Group - **Aerospace Product and Parts Manufacturing**.
 Displaying Employers 1-1 of 1

Employer Name	Address	City
Goodrich Sensors & Intgrd Syst	Irving Wick Dr W	Newark, OH

State – Ohio; Region - Columbus, OH MSA; Cities - **Newark, Heath, Hebron, Pataskala, Reynoldsburg**; Industry Group - **All Other Miscellaneous Manufacturing**.
 Displaying Employers 1-16 of 16

Employer Name	Address	City
Allstars Signs LLC	Hebron Rd	Heath, OH
Allstars Signs LLC	W Main St	Newark, OH
Branham Sign Co Inc	Cypress St Sw	Reynoldsburg, OH
Composix	Sisal St	Newark, OH
Dr Signs	Hebron Rd	Newark, OH
Enzyme Industries Inc	James Pkwy	Heath, OH
Gale Industries Inc		Pataskala, OH
IBP Loose Fill Mfg	O Neill Dr	Hebron, OH
Power Corp Sign Products Inc	Swansea Rd	Newark, OH
R Sign Shop & Screen Printing	Community Dr	Pataskala, OH
Renosol Seating LLC	N High St	Hebron, OH
Sign Man of Ohio	Cherry Valley Rd	Newark, OH
Signs Now	Buckeye Ave # F	Newark, OH
Starburst Vinyl Graphics	Fairview Rd	Newark, OH
T S Tech USA Corp	E Broad St	Reynoldsburg, OH
THK Mfg of America Inc	N High St	Hebron, OH

State – Ohio; Region - Columbus, OH MSA;
 City – **Newark**; Industry Group - **Electroplating, Plating, Polishing, Anodizing, and Coloring**.
 Displaying Employers 1-4 of 4

Employer Name	Address	City
Aawards Trophies & Plaques	Westgate Dr	Newark, OH
Anomatic Corp	Tamarack Rd	Newark, OH
Newark Electro Plating Inc	E Harrison St	Newark, OH
Ogilbee Originals	Lesley Rd	Newark, OH