

Lake County Labor Market and Workforce Analysis

**Prepared by
The Lake County Department of Job and Family Services**

**For
The Lake County Workforce Investment Board
Lake1Stop Career Center and the Lake County One-Stop
System Partners**

**Sponsored by
The Lake County Board of County Commissioners**

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Labor Force, Employment, and Unemployment

The United States experienced a mild recession in 2001, but the aftereffects on the job market persist in 2004. The recession has had a greater effect locally than statewide. While the labor force has continued to grow, local employment has not returned to pre-recession levels. Unemployment continues to increase, both in number and in rate, although not as drastically as during the recession. It appears that the causes of lingering and increasing unemployment and slow job growth are the result of structural changes in the economy, rather than just cyclical variations.

Labor Force

The labor force (employed plus unemployed persons) in the State of Ohio, Cleveland metropolitan area¹, and Lake County increased between 2000 and 2001; decreased in 2002; but increased in 2003 above 2000 levels. The recession's depressing effect on labor force participation was strongest in the Cleveland area and least significant for the State of Ohio.²

Employment

Employment in the State of Ohio, Cleveland area, and Lake County increased between 2000 and 2001 and decreased in 2002. The Cleveland area and Lake County suffered larger proportional loss of employment than did the State. The State rebounded in 2003 to employment above the 2000 level. However, employment in the Cleveland area and in Lake County in 2003 had not recovered to pre-recession levels.

Unemployment

Unemployed persons are those who are not working but are available for and actively seeking work. Unemployment in the State of Ohio, Cleveland area, and Lake County has increased each year since 2003. The unemployment rate in each of these locations has also increased each year since 2003. Again, Northeast Ohio and Lake County suffered larger proportional increases in unemployment than did the State as a whole. Lake County in particular saw more immediate and significant increases in unemployment.

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Ohio	4.0%	4.2%	5.7%	6.1%
Cleveland Area	4.4%	4.6%	6.6%	6.7%
Lake County	3.6%	4.2%	6.1%	6.3%

¹ "Cleveland metropolitan area", "Cleveland area", and "Northeast Ohio" refer throughout this document to the Cleveland-Lorain-Elyria Primary Metropolitan Statistical Area, which is made up of Lake, Ashtabula, Cuyahoga, Geauga, Lorain, and Medina Counties.

² Source: Ohio Department of Job and Family Services, Office of Workforce Development, Bureau of Labor Market Information, <http://lmi.state.oh.us/>. The Bureau of Labor Market Information is the source of all labor market data in this document, unless specifically noted otherwise.

Size of Labor Force, 2000 -- 2003

	<u>2000</u>	<u>2001</u>	<u>Change from Previous Year</u>		<u>2002</u>	<u>Change from Previous Year</u>		<u>2003</u>	<u>Change from Previous Year</u>	
			<u>Number</u>	<u>Percent</u>		<u>Number</u>	<u>Percent</u>		<u>Number</u>	<u>Percent</u>
Ohio	5,763,000	5,858,000	95,000	2%	5,847,000	-11,000	-0.2%	5,915,000	68,000	1%
Cleveland Area	1,117,100	1,125,300	8,200	1%	1,073,600	-51,700	-5%	1,127,200	53,600	5%
Lake County	124,600	126,400	1,800	1%	125,300	-1,100	-1%	127,000	1,700	1%

Number Employed, 2000 -- 2003

	<u>2000</u>	<u>2001</u>	<u>Change from Previous Year</u>		<u>2002</u>	<u>Change from Previous Year</u>		<u>2003</u>	<u>Change from Previous Year</u>	
			<u>Number</u>	<u>Percent</u>		<u>Number</u>	<u>Percent</u>		<u>Number</u>	<u>Percent</u>
Ohio	5,530,000	5,609,000	79,000	1%	5,515,000	-94,000	-1.7%	5,552,000	37,000	1%
Cleveland Area	1,068,200	1,073,600	5,400	1%	1,040,600	-33,000	-3%	1,051,600	11,000	1%
Lake County	120,100	121,200	1,100	1%	117,700	-3,500	-3%	118,900	1,200	1%

Number Unemployed, 2000 -- 2003

	<u>2000</u>	<u>2001</u>	<u>Change from Previous Year</u>		<u>2002</u>	<u>Change from Previous Year</u>		<u>2003</u>	<u>Change from Previous Year</u>	
			<u>Number</u>	<u>Percent</u>		<u>Number</u>	<u>Percent</u>		<u>Number</u>	<u>Percent</u>
Ohio	233,000	248,000	15,000	6%	332,000	84,000	34%	363,000	31,000	9%
Cleveland Area	49,000	51,700	2,700	6%	72,900	21,200	41%	75,600	2,700	4%
Lake County	4,500	5,300	800	18%	7,600	2,300	43%	8,000	400	5%

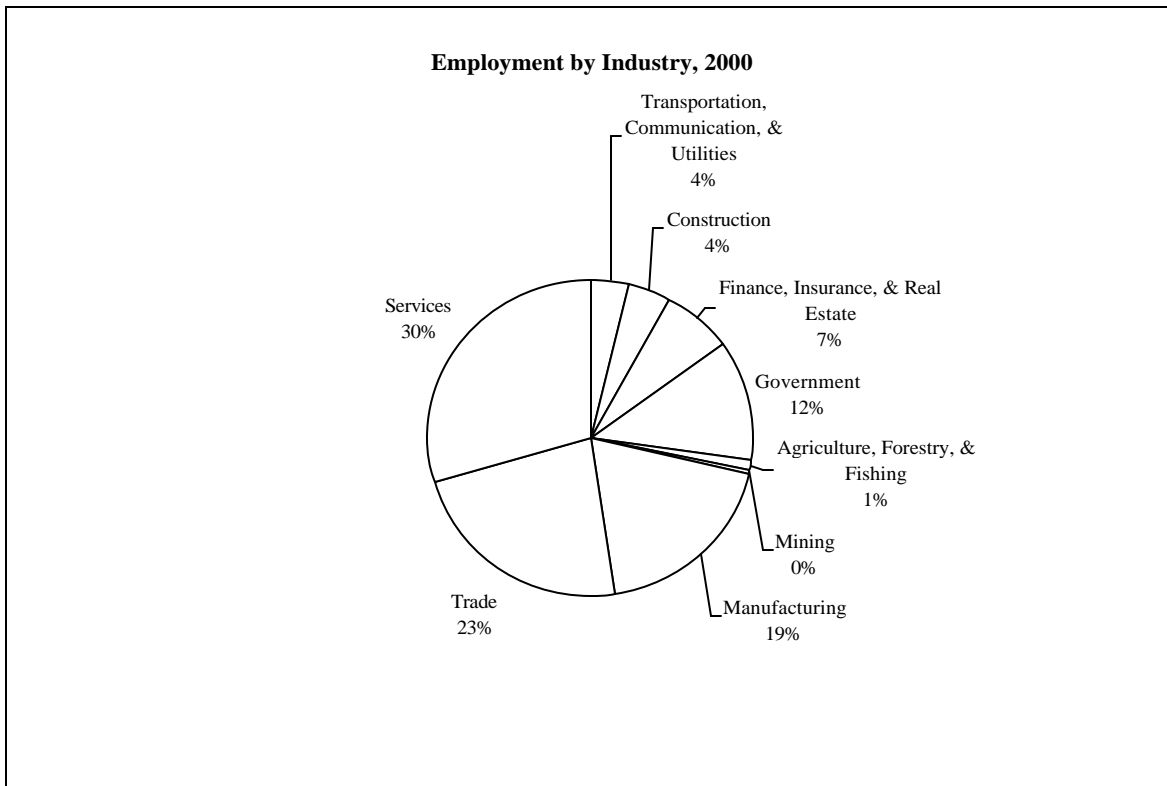
Employment Demand

Industry Employment³

Classification of industry refers to the nature of activities undertaken by economic enterprises. In other words, a review by industry indicates what goods or services are being made or provided by local enterprises/employers.

Overview: Employment⁴

In 2000, the three largest industrial divisions in the Cleveland metropolitan area were **services**, **trade**, and **manufacturing**. These three are expected to remain the largest divisions in 2010.



Note: percentages rounded.

Historically, manufacturing has been a major employer in the Cleveland area. It is expected to continue to comprise a significant part of the local economy, although much less dominant than in past years and projected to decline in employment.

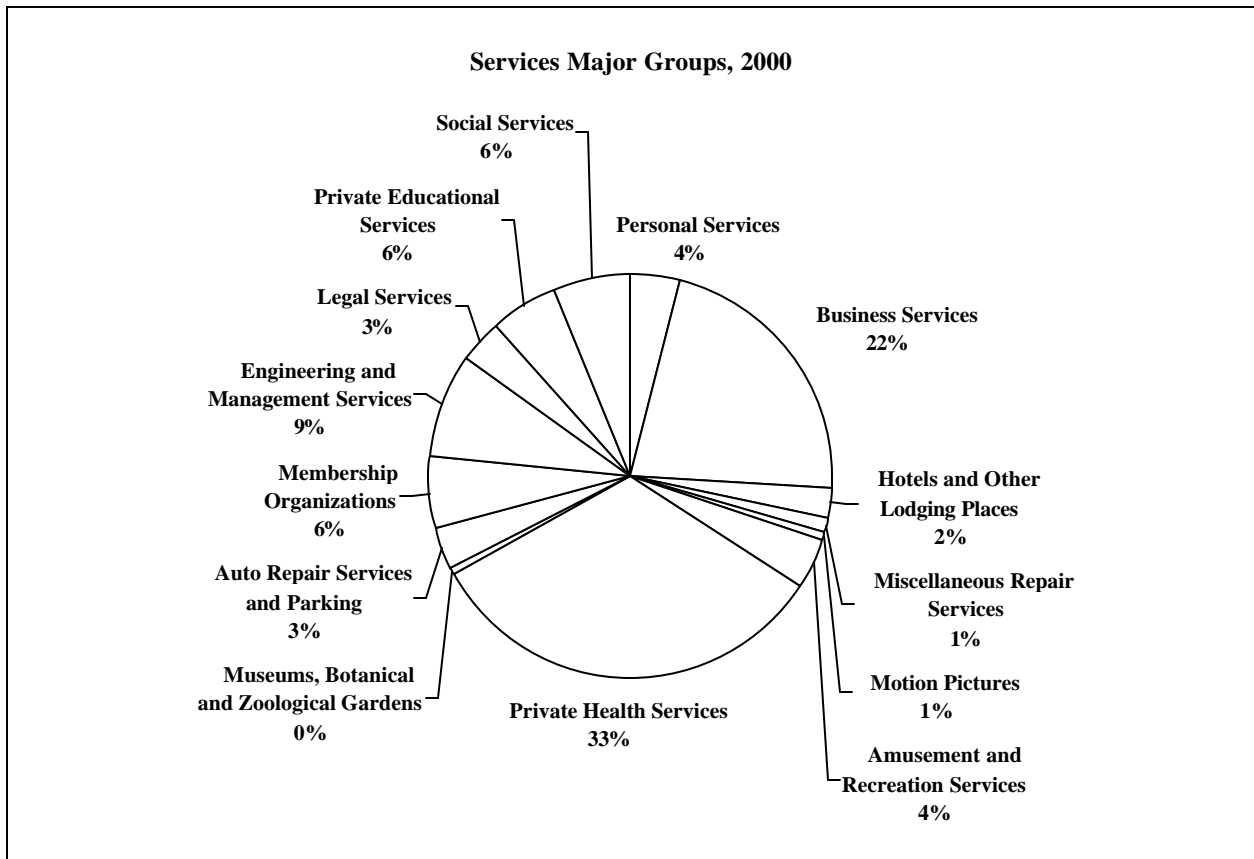
Nearly three-quarters of Cleveland area manufacturing employment is found in durable goods manufacturing. And, nearly three-quarters of local trade employment is found in retail trade.

³ Prior to 2001, the Standard Industrial Classification (SIC) system was used as the standard in all establishment-based federal economic statistics to identify and report employment by industry. However, a new system, the North American Industry Classification System (NAICS), developed through a cooperative effort among the United States, Canada and Mexico, has replaced the SIC system and is being used for reporting data for 2001 and future years. This report contains both SIC and NAICS data. Each section will note which classification system is being used.

⁴ The 2000 and 2010 employment levels in this section are based on SIC.

To obtain a greater level of detail, industries can be broken down from “divisions” into “major groups”.

Because the Services division is composed of a number of diverse major groups, employment in the Services major groups is broken down and illustrated here. The largest major groups within the Services division are **private health services**, **business services** (including employment agencies and staffing services), and **engineering and management services**.



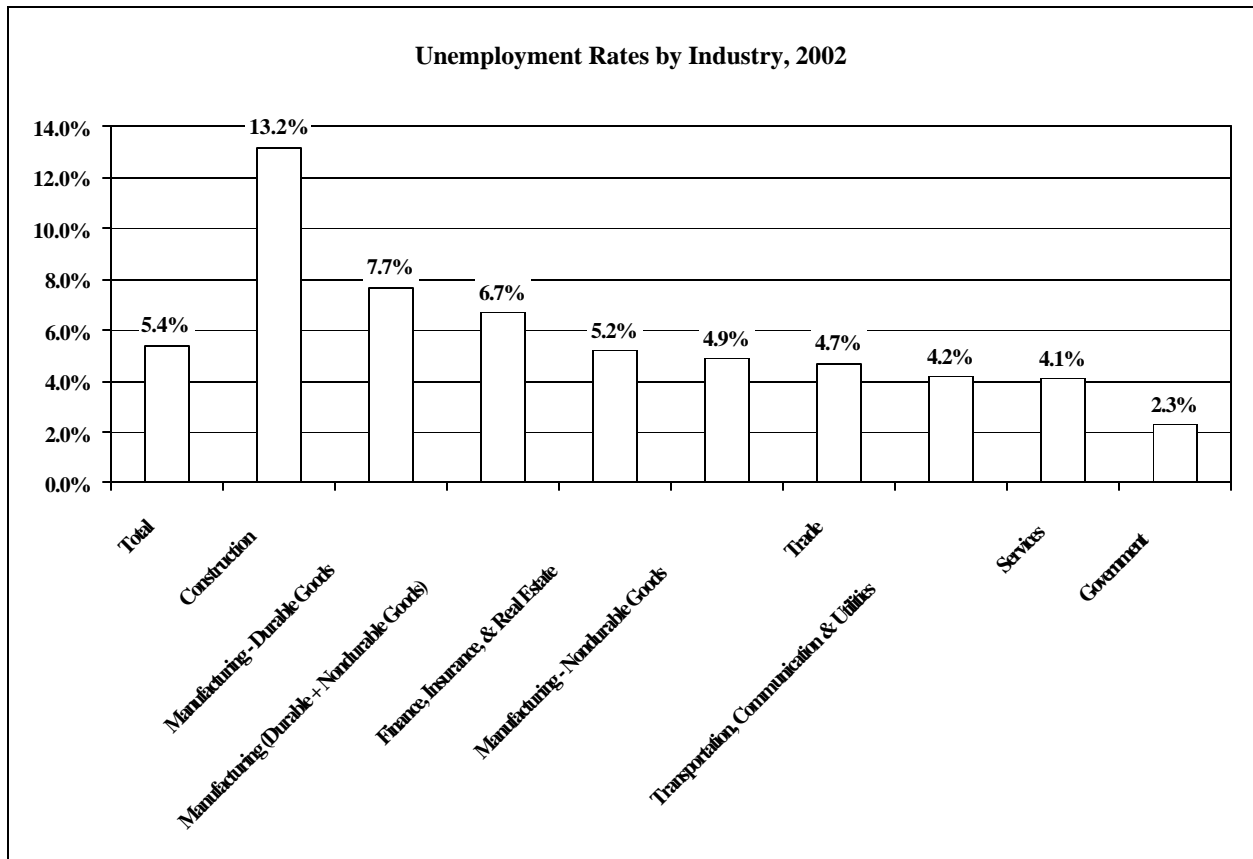
Note: percentages rounded.

Of all industry major groups, those with the highest levels of employment in 2000 were:

<u>Major Group</u>	<u>Number Employed</u>
Local Government (from Government division)	115,760
Health Services (from Services division)	112,180
Business Services (from Services division)	75,410
Eating & Drinking Places (from Trade division)	70,050
Wholesale Trade, Durable Goods (from Trade division)	48,220

Overview: Unemployment⁵

In 2002, the average overall unemployment rate in Northeast Ohio was 5.4%. The industry divisions with the lowest unemployment rates were **government, services, and transportation/communication/utilities**. The highest unemployment rates were found in construction, manufacturing (particularly in durable goods manufacturing), and finance/insurance/real estate.



Types of Employers⁶

In 2000, the vast majority (86%) of Lake County workers were private sector wage and salary employees. Of the remainder, about 10% were public sector (government) workers; 4% were self-employed; and less than 1% were unpaid family workers.

⁵ Source: U.S. Department of Labor, Bureau of Labor Statistics. http://www.bls.gov/opub/gp/pdf/gp02_28.pdf This information is based on the 1990 U.S. Census coding system, which in turn was based on the Standard Industrial Classification (SIC) system.

⁶ Ohio Department of Development, "Ohio County Indicators", August 2004, <http://www.odod.state.oh.us/research/FILES/S100.pdf>.

Historical Trends: Pre-Recession⁷

Between 1998 and 2000, the Cleveland area experienced slow job growth of 0.6% for the two-year period. A net of over 7,600 new jobs were created.

The key trends during this time period, organized by division and by major group, are shown below.

Division Trends, Pre-Recession

<u>Divisions Adding Most Jobs, 1998 -- 2000</u>	
<u>Division</u>	<u>Number of Jobs Added</u>
Services	12,010
Finance, Insurance, and Real Estate	6,800
Government	4,430
Construction	3,020

<u>Divisions With Highest Growth Rates, 1998 -- 2000</u>	
<u>Division</u>	<u>Growth Rate</u>
Finance, Insurance, and Real Estate	9.2%
Agriculture, Forestry, and Fishing	7.9%
Construction	7.0%

<u>Divisions Losing Jobs, 1998 -- 2000</u>		
<u>Division</u>	<u>Jobs Lost</u>	<u>Rate of Decline</u>
Manufacturing ⁸	2,320	1.0%
Wholesale Trade	1,610	2.2%
Mining	60	6.7%

⁷ 1998 and 2000 employment levels in this section are based on SIC.

⁸ Almost all job loss in manufacturing was from durable goods manufacturing.

Major Group Trends, Pre-Recession

<u>Major Groups Adding Most Jobs, 1998 -- 2000</u>	
<u>Group</u>	<u>Jobs Added</u>
Local Government ⁹ (from Government division)	3,820
Private Health Services (from Services division)	3,620
Non-Depository Institutions, i.e., finance companies and mortgage lenders (from Finance, Insurance, and Real Estate division)	2,390
Special Trade Contractors (from Construction division)	1,980

<u>Major Groups With Highest Growth Rates, 1998 -- 2000</u>	
<u>Group</u>	<u>Growth Rate</u>
Holding and Other Investment Offices (from Finance, Insurance, and Real Estate division)	44.5%
Security and Commodity Brokers (from Finance, Insurance, and Real Estate division)	43.6%
Amusement and Recreation Services (from Services division)	11.7%

<u>Major Groups Losing Most Jobs, 1998 -- 2000</u>	
<u>Group</u>	<u>Jobs Lost</u>
Industrial Machinery and Equipment (from Manufacturing division)	3,240
Wholesale Trade, Nondurable Goods (from Trade division)	1,760
Food Stores (from Trade division)	1,520
Primary Metals Industries (from Manufacturing division)	1,300
Utilities and Sanitary Services (from Transportation, Communication, and Utilities division)	1,140

<u>Major Groups with Highest Rates of Decline, 1998 -- 2000</u>	
<u>Group</u>	<u>Rate of Decline</u>
Petroleum and Coal Products (from Manufacturing division)	25.4%
Utilities and Sanitary Services (from Transportation, Communication, and Utilities division)	18.5%
Industrial Machinery and Equipment (from Manufacturing division)	8.8%
Wholesale Trade, Nondurable Goods (from Trade division)	7.5%

⁹ Within this group, 2,650 jobs, or nearly 70% of the local government jobs created, were in education.

Historical Trends: Post-Recession¹⁰

Industry trends from the period of 2000 – 2003 show the toll taken by the 2001 recession on local employment.

Overall, employment in the Cleveland area dropped by 65,000. Two-thirds of these jobs (43,500) were in manufacturing. As a result, employment in goods-producing industries, primarily manufacturing, decreased from 21% to 18% of the workforce.

Service-providing industries lost 18,600 jobs. The largest job losses occurred in:

- Professional and Business Services (-14,000);
- Trade, Transportation, and Utilities (-12,800); and
- Information (-2,700).

The only industrial sectors¹¹ to gain jobs between 2000 and 2003 were:

- **Educational and Health Services** (12,000 – over three-quarters of these new jobs were in health care);
- **Government** (1,400 – an increase of 4,200 jobs in local government offset declines in state and federal government employment); and
- **Financial Activities** (1,300).

The service-providing sectors with the largest proportional increase in employment were:

- **Educational and Health Services** (with most of the increase attributable to health care employment); and
- **Government** (primarily local government).

Post-recession trends for all industry sectors and key subsectors¹² are displayed in the following table.

¹⁰ 2000 and 2003 employment levels in this section are based on NAICS.

¹¹ In the NAICS system, a “sector” is equivalent to a “division” under SIC; i.e., the highest level of aggregation.

¹² A NAICS “subsector” is equivalent to a SIC “major group”; i.e., the second highest level of aggregation.

Employment by Industry, 2000 -- 2003

(in thousands)

	<u>2000</u>	<u>2003</u>	<u>Change</u>	
			<u>Number</u>	<u>Percent</u>
Total	1,175.20	1,110.20	-65.0	-5.5%
Goods Producing Industries	254.8	208.4	-46.4	-18.2%
Natural Resources, Mining, and Construction	47.7	44.9	-2.8	-5.9%
Manufacturing	207.1	163.6	-43.5	-21.0%
-Durable Goods	151.9	116.1	-35.8	-23.6%
-Nondurable Goods	55.2	47.5	-7.7	-13.9%
Service Providing Industries	920.4	901.8	-18.6	-2.0%
Trade, Transportation, and Utilities	220.5	207.7	-12.8	-5.8%
-Wholesale Trade	57.5	54.6	-2.9	-5.0%
-Retail Trade	129.2	119.5	-9.7	-7.5%
-Transportation, Warehousing, and Utilities	33.8	33.6	-0.2	-0.6%
Information	24.0	21.3	-2.7	-11.3%
-Publishing Industries, except Internet	9.9	8.7	-1.2	-12.1%
-Telecommunications	8.4	7.3	-1.1	-13.1%
Financial Activities	79.9	81.2	1.3	1.6%
-Finance and Insurance	62.1	64.2	2.1	3.4%
Professional and Business Services	147.2	133.2	-14.0	-9.5%
-Professional and Technical Services	57.6	54.2	-3.4	-5.9%
-Management of Companies and Enterprises	19.2	17.9	-1.3	-6.8%
-Administrative Support and Waste Services	70.3	61.1	-9.2	-13.1%
Educational and Health Services	157.2	169.2	12.0	7.6%
-Educational Services	24.0	26.3	2.3	9.6%
-Health Care and Social Assistance	133.2	142.9	9.7	7.3%
Leisure and Hospitality	96.8	95.2	-1.6	-1.7%
-Arts, Entertainment, and Recreation	15.7	15.3	-0.4	-2.5%
-Accommodation and Food Services	81.1	80.0	-1.1	-1.4%
Other Services	47.5	45.2	-2.3	-4.8%
Government	147.3	148.7	1.4	1.0%
-Federal Government	21.0	18.8	-2.2	-10.5%
-State Government	9.1	8.5	-0.6	-6.6%
-Local Government	117.2	121.4	4.2	3.6%

Effects of International Trade on Manufacturing Job Loss¹³

Job loss due to international trade has been responsible for a large number of lost manufacturing jobs in this area. Statewide, the number of workers certified under the federal Trade Adjustment Act (TAA) between January 1999 and January 2004 accounted for 19% of Ohio's net manufacturing job loss.

In the Cleveland metropolitan area, a total of 10,824 workers were certified as eligible for trade adjustment assistance benefits under TAA between 1995 and July 2004.

In that nine-year period, Lake County has had 16 companies employing 1,276 workers certified as eligible for the TAA program. **Lake County ranked 12th of all Ohio counties in numbers of job lost to trade** during this time. From October 2003 to July 2004, Lake County has had 495 workers certified. Two certified positions accounted for 332 of these layoffs. Royal Appliance Manufacturing Co., a maker of vacuums, laid off 168 employees due to the company's increased purchases of foreign products. Bard Endoscopic closed its facility and moved production to Mexico, discharging 164 employees.

Neighboring Cuyahoga County, which includes the city of Cleveland, had 6,150 workers from 49 companies certified as TAA eligible from 1995 – July 2004. From October 2003 to July 2004, Cuyahoga had 690 workers certified. In both time periods, **Cuyahoga County had the highest number of workers of any county in the State of Ohio laid off due to effects of international trade.** Seven establishments were certified after October 2003, three of which accounted for the majority of the layoffs. Metaldyne Driveline, which makes die cast transmission parts, was TAA-certified as a supplier and laid off 259 workers. Osborn Manufacturing Company, a maker of industrial brushes, laid off 215 workers when the company shifted production to Mexico. Van Dorn Demag Corporation, a maker of plastic injection molding machinery, laid off 121 workers due to rising levels of foreign imports.

Lorain County, part of the Cleveland metropolitan area, has also been hard hit by the effects of international trade. From 1995 to July 2004, Lorain County lost 14 companies with 3,138 workers, the **fourth highest level of any county in the State of Ohio.**

Trade-related closings and layoffs had much less impact in Ashtabula, Geauga, and Medina Counties, the remaining counties within the metropolitan area. These counties lost a combined total of seven companies employing 260.

¹³ Source of information on trade-related closings and layoffs is Policy Matters Ohio (Jon Honeck, Ph.D.), "International Trade and Job Loss in Ohio – An Update", October 2004, <http://www.policymattersohio.org/>

Projected Trends¹⁴

In the period of 2000 – 2010, the Cleveland area economy is expected to create more than 129,800 new jobs. The number of jobs is anticipated to rise by an average of 1.1% per year, from 1,228,510 in 2000 to 1,358,350 in 2010. The projections factor in fluctuations in the business cycle over the ten-year period.

Projected Trends: Divisions

In the goods-producing sector, the local economy is expected to experience selective growth and decline. Only **construction** is expected to add a significant number of jobs in the goods-producing sector. Increased productivity in the manufacturing sector will likely result in a slight decline in employment.

The services sector itself, led by business services and health, will account for over half of all job growth. The growth in **business services** is attributable to increased use of staffing firms. Increased demand for **health services**, fueled by the aging of the “baby boomer” generation, is responsible for the predicted growth of the health industry.

Large numbers of jobs are also projected in **retail trade, especially eating and drinking places, and local government, primarily in education.**

Services, construction, and finance/insurance/real estate are expected to post above-average growth. Trade, transportation/communication/utilities, government, and agriculture/ forestry/fishing are expected to increase employment, but at a below-average rate. Declines are forecast in manufacturing and mining employment.

Projected Trends: Major Groups

The major groups predicted to add the most new jobs in the Cleveland metropolitan area between 2000 and 2010 are:

<u>Group</u>	<u>Average Jobs Added per Year</u>
Business Services (from Services division)	2,536
Health Services (from Services division)	1,986
Local Government (from Government division)	1,148
Eating & Drinking Places (from Trade division)	942
Social Services (from Services division)	792

Major groups predicted to lose jobs in the Cleveland metropolitan area from 2000 to 2010 are:

<u>Group</u>	<u>Average Jobs Lost per Year</u>
Primary Metal Industries (from Mfg. division)	-401
Transportation Equipment (from Mfg. division)	-377
Industrial Equipment & Machinery (from Mfg. division)	-203
Electronic & Other Electrical Equipment (from Mfg. division)	-189
Printing & Publishing (from Mfg. division)	-121

Projected growth trends by division and major group are displayed in the following table.

¹⁴ 2000 employment and 2010 projected employment levels in this section are based on SIC.

Employment by Industry, 2000 – 2010

<u>Industry Title</u>	<u>Employment</u>		<u>Change</u>	
	<u>2000</u>	<u>2010 Proj.</u>	<u>Number</u>	<u>Percent</u>
Total Employment	1,228,510	1,358,350	129,840	10.6%
Agriculture, Forestry and Fishing	13,490	13,740	250	1.9%
Agricultural Production	6,620	5,510	-1,110	-16.8%
Agricultural Services	6,870	8,220	1,350	19.7%
Mining	840	700	-140	-16.7%
Construction	46,440	55,620	9,180	19.8%
General Building Contractors	9,810	12,100	2,290	23.3%
General Contractors, Except Bldg. Construction	4,500	5,190	690	15.3%
Special Trade Contractors	32,140	38,340	6,200	19.3%
Manufacturing	221,140	212,850	-8,290	-3.7%
Nondurable Goods Manufacturing	65,830	64,780	-1,050	-1.6%
Food and Kindred Products	6,300	6,280	-20	-0.3%
Apparel and Textile Products	1,210	1,130	-80	-6.6%
Paper and Allied Products	7,150	7,240	90	1.3%
Printing and Publishing	16,620	15,410	-1,210	-7.3%
Chemicals and Allied Products	17,630	17,860	230	1.3%
Petroleum and Coal Products	1,380	1,000	-380	-27.5%
Rubber and Misc. Plastics Products	15,250	15,610	360	2.4%
Durable Goods Manufacturing	155,310	148,070	-7,240	-4.7%
Furniture and Fixtures	1,910	1,900	-10	-0.5%
Stone, Clay and Glass Products	3,930	4,270	340	8.7%
Primary Metal Industries	20,050	16,040	-4,010	-20.0%
Fabricated Metal Products	39,320	40,020	700	1.8%
Industrial Machinery and Equipment	33,490	31,460	-2,030	-6.1%
Electronic and Other Electrical Equipment	15,430	13,540	-1,890	-12.2%
Transportation Equipment	22,120	18,350	-3,770	-17.0%
Instruments and Related Products	10,850	11,730	880	8.1%
Miscellaneous Manufacturing Industries	3,990	4,020	30	0.8%

Employment by Industry, 2000 – 2010

<u>Industry Title</u>	<u>Employment</u>		<u>Change</u>	
	<u>2000</u>	<u>2010 Proj.</u>	<u>Number</u>	<u>Percent</u>
Transportation, Communications & Utilities	46,040	50,460	4,420	9.6%
Railroad Transportation	1,900	1,520	-380	-20.0%
Local and Interurban Transit	3,190	4,440	1,250	39.2%
Trucking and Warehousing	11,260	12,060	800	7.1%
Air Transportation	9,890	12,130	2,240	22.6%
Transportation Services	4,040	4,560	520	12.9%
Communications	9,790	10,700	910	9.3%
Utilities and Sanitary Services	5,020	4,140	-880	-17.5%
Trade	267,570	295,190	27,620	10.3%
Wholesale Trade	69,960	75,370	5,410	7.7%
Wholesale Trade, Durable Goods	48,220	51,350	3,130	6.5%
Wholesale Trade, Nondurable Goods	21,750	24,020	2,270	10.4%
Retail Trade	197,600	219,820	22,220	11.2%
Bldg. Materials and Garden Supplies	8,040	8,980	940	11.7%
General Merchandise Stores	20,570	20,880	310	1.5%
Food Stores	26,050	27,370	1,320	5.1%
Auto Dealers and Service Stations	19,510	20,260	750	3.8%
Apparel and Accessories Stores	8,850	9,070	220	2.5%
Furniture and Home Furnishings Stores	9,070	10,710	1,640	18.1%
Eating and Drinking Places	70,050	79,470	9,420	13.4%
Miscellaneous Retail Stores	35,460	43,090	7,630	21.5%
Finance, Insurance & Real Estate	80,350	89,990	9,640	12.0%
Depository Institutions	25,410	26,480	1,070	4.2%
Nondepository Institutions	7,870	10,880	3,010	38.2%
Security and Commodity Brokers	4,950	5,470	520	10.5%
Insurance Agents, Brokers and Services	5,910	6,380	470	8.0%
Real Estate	13,590	14,830	1,240	9.1%
Holding and Other Investment Offices	3,280	3,790	510	15.5%

Employment by Industry, 2000 – 2010

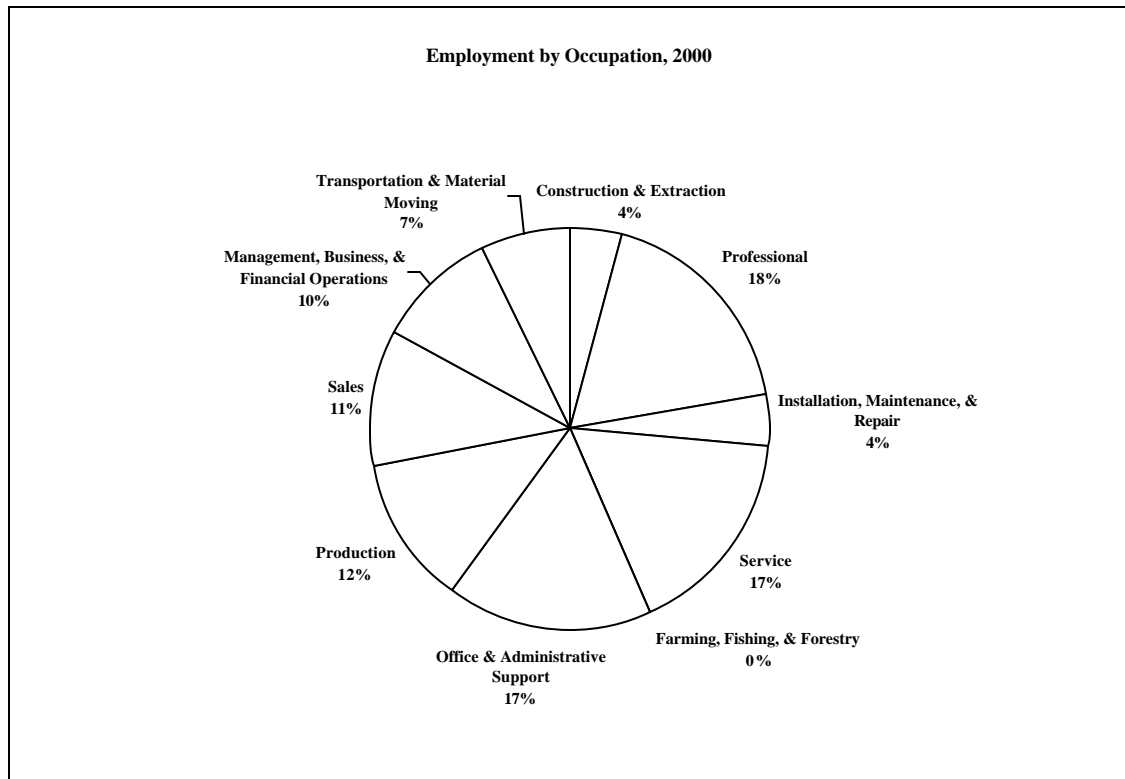
<u>Industry Title</u>	<u>Employment</u>		<u>Change</u>	
	<u>2000</u>	<u>2010 Proj.</u>	<u>Number</u>	<u>Percent</u>
Services	342,610	417,420	74,810	21.8%
Hotels and Other Lodging Places	8,140	9,230	1,090	13.4%
Personal Services	13,380	14,810	1,430	10.7%
Business Services	75,410	100,770	25,360	33.6%
Auto Repair Services and Parking	11,930	14,370	2,440	20.5%
Miscellaneous Repair Services	3,430	3,590	160	4.7%
Motion Pictures	2,720	2,470	-250	-9.2%
Amusement and Recreation Services	14,160	19,020	4,860	34.3%
Private Health Services	112,180	132,040	19,860	17.7%
Legal Services	10,990	14,390	3,400	30.9%
Private Educational Services	19,250	22,330	3,080	16.0%
Social Services	20,630	28,550	7,920	38.4%
Museums, Botanical and Zoological Gardens	1,330	1,670	340	25.6%
Membership Organizations	19,500	18,920	-580	-3.0%
Engineering and Management Services	29,150	34,450	5,300	18.2%
Government	144,130	154,850	10,720	7.4%
Federal Government	20,720	20,010	-710	-3.4%
U.S. Postal Service	8,120	8,100	-20	-0.2%
Federal Government, exc. P.O.	12,610	11,920	-690	-5.5%
State Government	7,650	7,590	-60	-0.8%
State Government Education	2,340	2,450	110	4.7%
State Government, except Educ. & Hospitals	5,130	5,020	-110	-2.1%
Local Government	115,760	127,240	11,480	9.9%
Local Government Hospitals	5,970	6,860	890	14.9%
Local Government Education	59,910	65,090	5,180	8.6%
Local Government, except Educ. & Hospitals	49,880	55,290	5,410	10.8%
Private Households	2,860	2,120	-740	-25.9%
Nonfarm Self-Employed & Unpaid Family Workers	63,050	65,430	2,380	3.8%

Occupational Employment

Classification by occupation refers to the duties performed by employees; in other words, what workers do as their jobs. The types of occupations, and number of jobs available in them, reflect the needs of local enterprises/employers to successfully produce goods or services. As a result, occupational employment depends upon industry employment.

Overview: Employment

The occupational divisions¹⁵ employing the most workers in the Cleveland area in 2000 were: **professional, service, and office and administrative support**. It is expected that these three groups will continue to lead labor market demand in 2010.

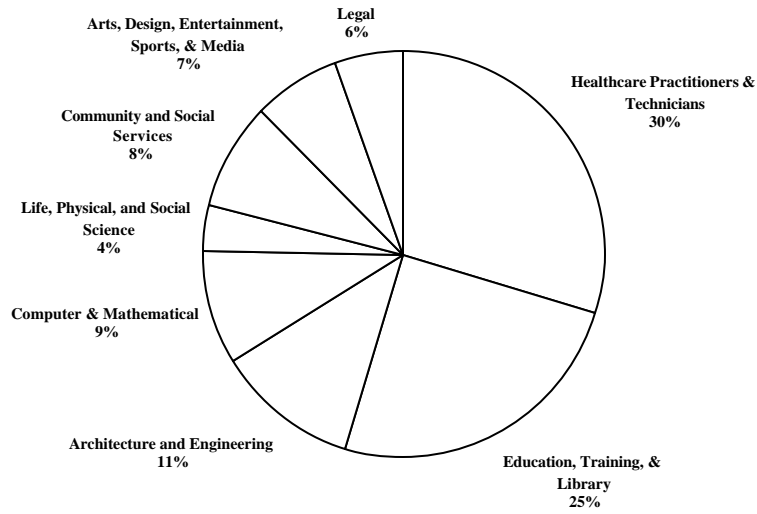


Note: percentages rounded.

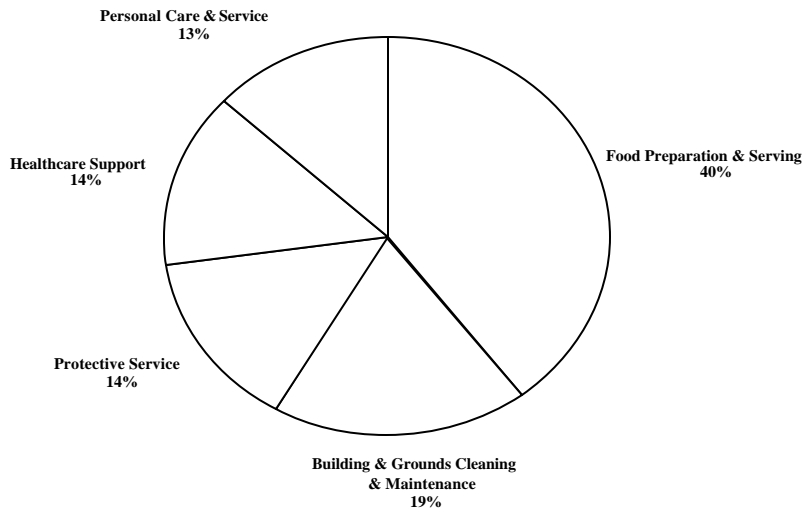
The professional and service divisions are composed of several distinctive major groups. **Education and health care** jobs dominate employment in the professional division, while **food preparation and serving** occupations account for the greatest number of service jobs. Please see the following charts.

¹⁵ Occupations are classified according to the Standard Occupational Classification (SOC) system. “Division” is not an official category or name within SOC; the highest level of aggregation is “major group”. However, “division” is used here to present a broad view of trends and simplify analysis.

Professional Employment, 2000



Service Employment, 2000



Note: percentages in both charts rounded.

When occupations are viewed at the “major group” level, the major groups which **employed the most workers** in 2000 were:

<u>Group</u>	<u>Number Employed</u>
Office and Administrative Support	204,360
Production	144,950
Sales	136,620
Transportation and Material Moving	89,360
Food Preparation and Serving	82,610

The **highest paying** major groups as of 2003 were:

<u>Group</u>	<u>Average Hourly Wage</u>
Legal	\$43.30
Management	\$40.34
Computer and Mathematical	\$28.54
Architecture and Engineering	\$26.89
Healthcare Practitioners and Technicians	\$26.19

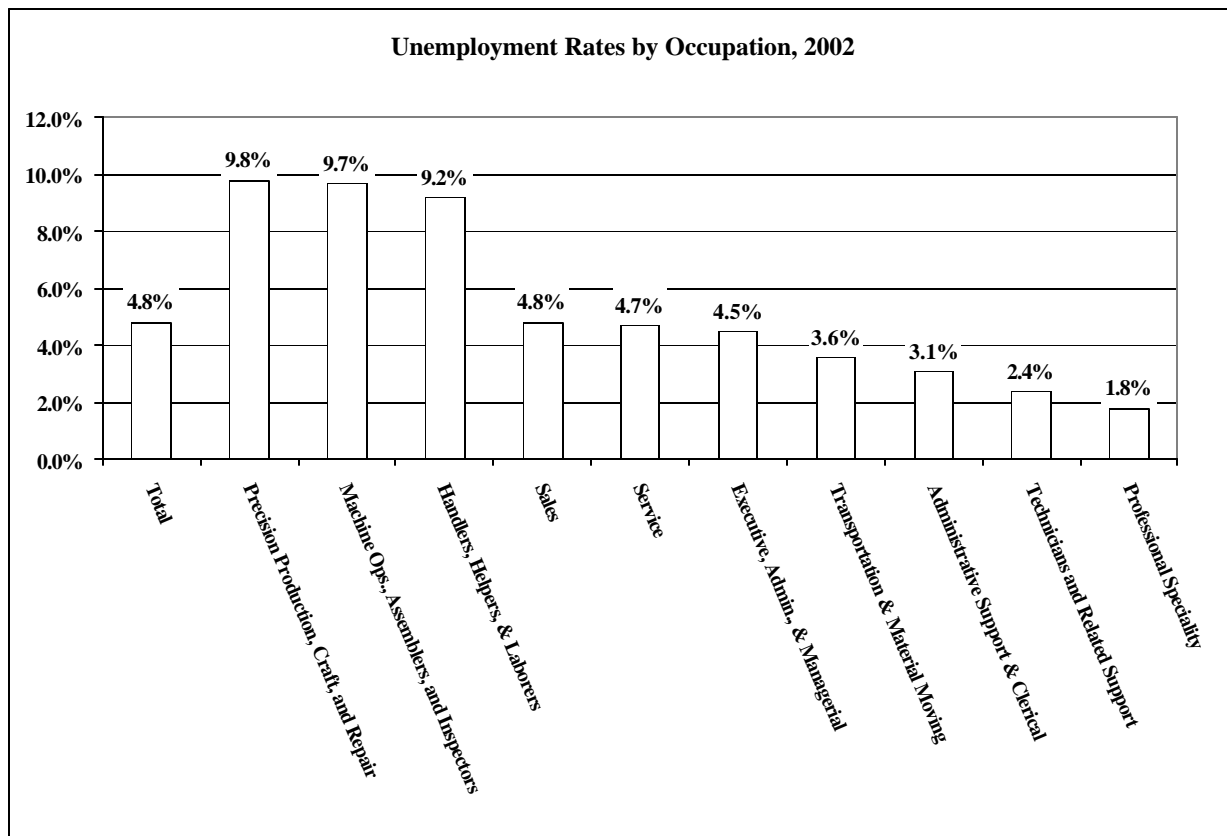
Overview: Unemployment¹⁶

During 2002 in the Cleveland metropolitan area, the average unemployment rate was 4.8%. The lowest unemployment rates were in the occupational groups of **professional specialty, technicians, and administrative support**. The highest unemployment rates were for precision production/craft/repair, machine operators, and handlers/laborers. Please see graph on following page.

Historical Trends

Note: Historical trends are not presented for occupations because employment by occupation is extrapolated from employment by industry by application of staffing patterns, rather than by survey or count. In addition, occupational information prior to 2000 was organized under the Occupational Employment Statistics (OES) classification system, rather than the current Standard Occupational Classification (SOC) system. Due to a number of significant differences in the systems, SOC occupations and occupational groups are not comparable to those in earlier analyses under OES.

¹⁶ Source: U.S. Department of Labor, Bureau of Labor Statistics. http://www.bls.gov/opub/gp/pdf/gp02_26.pdf
This information is based on the 1990 U.S. Census coding system, which in turn was based on the Standard Occupational Classification (SOC) system.



Projected Trends

Service and **professional** occupations, the two largest occupational divisions, are also the occupational divisions that are projected to add the most new jobs through 2010.

Professional and related occupations are expected to grow by 41,880 jobs, while service occupations are expected to add 32,090 jobs over the 2000-2010 period. **These two divisions--on opposite ends of the educational attainment and earnings spectrum—are expected to provide more than half of the total job growth.**

Close behind professional and related occupations in terms of growth is **construction and extraction** occupations, which is projected to grow 16.3%. Because of relatively lower employment in this division, only 8,500 new jobs will be added.

The other division expected to grow faster than the average is **management, business and financial** occupations.

Office and administrative support jobs are projected to grow much slower than the average, reflecting the continuing impact of office automation.

Production occupations are projected to decline, and installation, maintenance and repair occupations are projected to grow slower than average, due to continuing advances in technology, changes in production methods, and an overall decline in manufacturing employment.

Thirty percent of the 42,000 annual job openings in the local economy are expected to be generated by employment growth. The remaining seventy percent will result from the need to replace existing workers who will leave the labor force, usually upon retirement. Therefore, even declining occupations provide opportunities for employment, although job prospects are generally not as favorable as in growing occupations. There are also additional job openings, not estimated, resulting from turnover when an individual stays in the same occupation, but switches employers.

The major occupational groups predicted to add the most **new** jobs in the Cleveland metropolitan area between 2000 and 2010 are:

<u>Group</u>	<u>Annual Average Jobs Added</u>
Healthcare Practitioners and Technicians (from Professional division)	1,322
Sales	1,300
Office and Administrative Support	1,254
Food Preparation and Serving (from Service division)	1,005
Computer and Mathematical (from Professional division)	983

The major groups predicted to have the **most total job openings** (including both growth and replacement) in the Cleveland metropolitan area between 2000 and 2010 are:

<u>Group</u>	<u>Average Annual Job Openings</u>
Sales	5,605
Office and Administrative Support	5,571
Food Preparation and Serving (from Service division)	4,742
Production	3,351
Transportation and Material Moving	3,050

The following table displays data for all major occupational groups.

Employment by Occupation, 2000 – 2010

<u>Major Group</u>	<u>Number Employed, 2000</u>	<u>Projected (through 2010) Average Annual</u>		<u>Average Hourly Wage (2003)</u>
		<u>Growth Rate</u>	<u>Job Openings</u>	
Architecture & Engineering	24,730	0.1%	607	\$ 26.89
Arts, Design, Entertainment, Sports, & Media	14,630	1.3%	470	\$ 18.84
Buildings and Grounds	37,340	1.1%	1,140	\$ 10.53
Business & Financial Operations	45,420	1.2%	1,431	\$ 25.56
Community & Social Service	18,470	2.1%	722	\$ 16.81
Computer & Math	20,260	4.8%	1,171	\$ 28.54
Construction & Extraction	50,580	1.7%	1,775	\$ 20.89
Education, Training, & Library	55,300	1.4%	2,028	\$ 20.12
Farming, Fishing, & Forestry	2,030	-1.0%	63	\$ 10.98
Food Service	82,580	1.2%	4,832	\$ 8.29
Healthcare Practitioners & Technicians	65,790	2.0%	2,693	\$ 26.19
Healthcare Support	29,230	2.6%	1,249	\$ 10.84
Installation, Repair, & Maintenance	47,950	0.6%	210	\$ 17.82
Legal	12,310	2.0%	364	\$ 43.30
Life, Physical, & Social Science	7,380	1.7%	344	\$ 24.38
Management	72,950	1.0%	2,065	\$ 40.34
Office and Administrative Support	204,290	0.6%	5,962	\$ 13.65
Personal Care & Service	26,330	1.7%	1,193	\$ 9.35
Production	142,000	-0.2%	3,639	\$ 15.48
Protective Services	29,700	2.0%	1,488	\$ 16.58
Sales	136,530	1.0%	5,645	\$ 16.98
Transportation & Material Moving	87,950	1.0%	3,045	\$ 13.12

(Note: major group totals may vary from totals shown in other tables due to lack of available data for all occupational titles within the major group.)

Employment by Skill Level

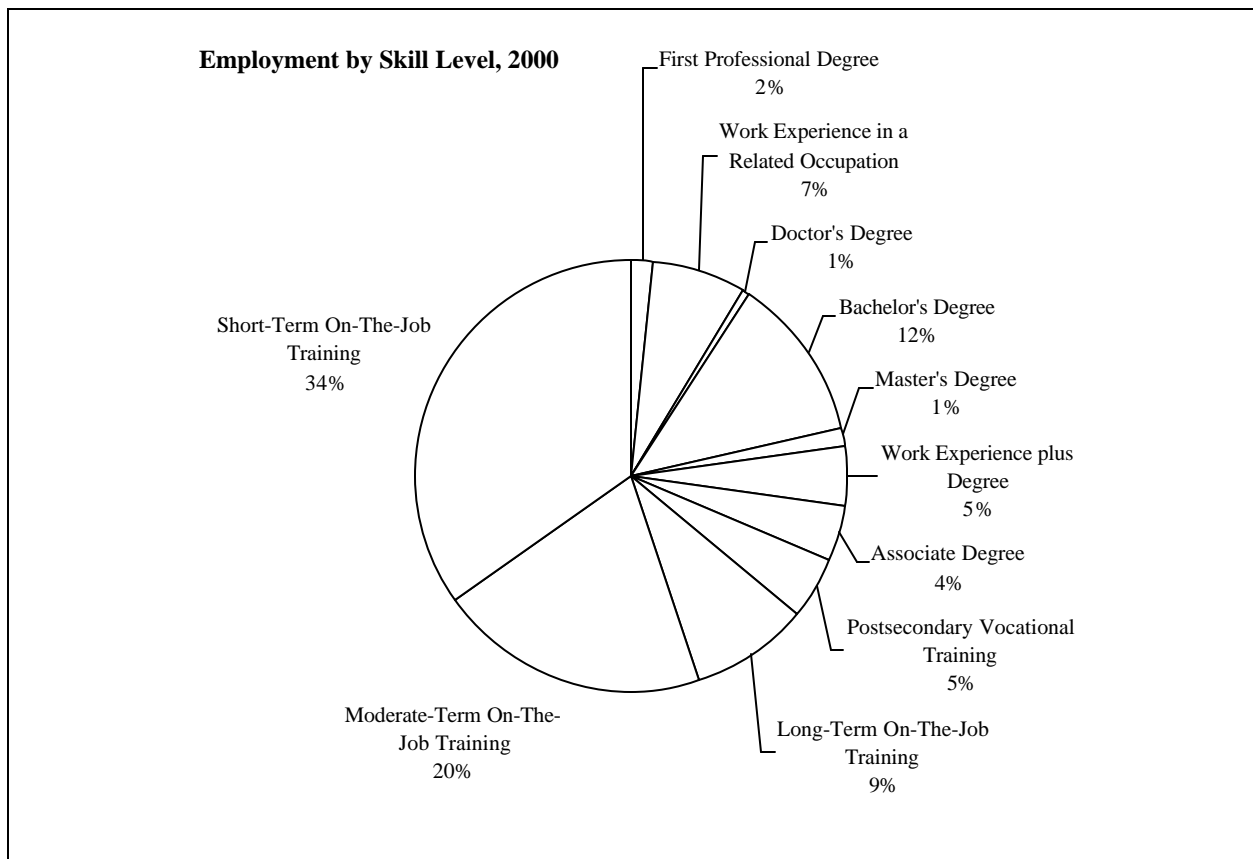
Classification System

The U.S. Department of Labor, Bureau of Labor Statistics, has developed a system of occupational training and education classifications. In this classification system of eleven categories, the education and training required reflects the manner in which **most workers become proficient** in that occupation and the **preferences of most employers**.

1. **First professional degree.** Occupations that require at least two years of full-time academic study beyond a bachelor's degree (for example, law, medicine, dentistry and clergy).
2. **Doctoral degree.** Occupations that require at least three years of full-time academic study beyond a bachelor's degree culminating in a doctoral degree.
3. **Master's degree.** Occupations that require the completion of a master's degree program which is usually one to two years beyond a bachelor's degree.
4. **Bachelor's or higher and some work experience.** Occupations that generally require work experience in an occupation requiring a bachelor's or higher degree. Most occupations in this category are managerial occupations that require work experience in a related non-managerial occupation.
5. **Bachelor's degree.** Occupations that require the completion of at least four but not more than five years of full-time academic study beyond high school resulting in a bachelor's degree.
6. **Associate degree.** Occupations that require the completion of at least two years of full-time academic study beyond high school.
7. **Post-secondary vocational education.** Occupations that require completion of vocational school training.
8. **Work experience.** Occupations that require skills obtained through work experience in a related occupation.
9. **Long-term on-the-job-training.** Occupations that require more than twelve months of on-the-job training or combined work experience and formal classroom instruction for workers to develop the skills needed for average job performance.
10. **Moderate-term on-the-job-training.** Occupations in which workers can develop average job performance after one to twelve months of combined on-the-job experience and informal training.
11. **Short-term on-the-job-training.** Occupations in which workers can develop skills needed after a short demonstration or up to one month of on-the-job experience and instruction.

Overview

In 2000, the training level category employing the highest proportion of Cleveland metropolitan area workers was short-term on-the-job training (34%), followed by moderate-term on-the-job training (20%).

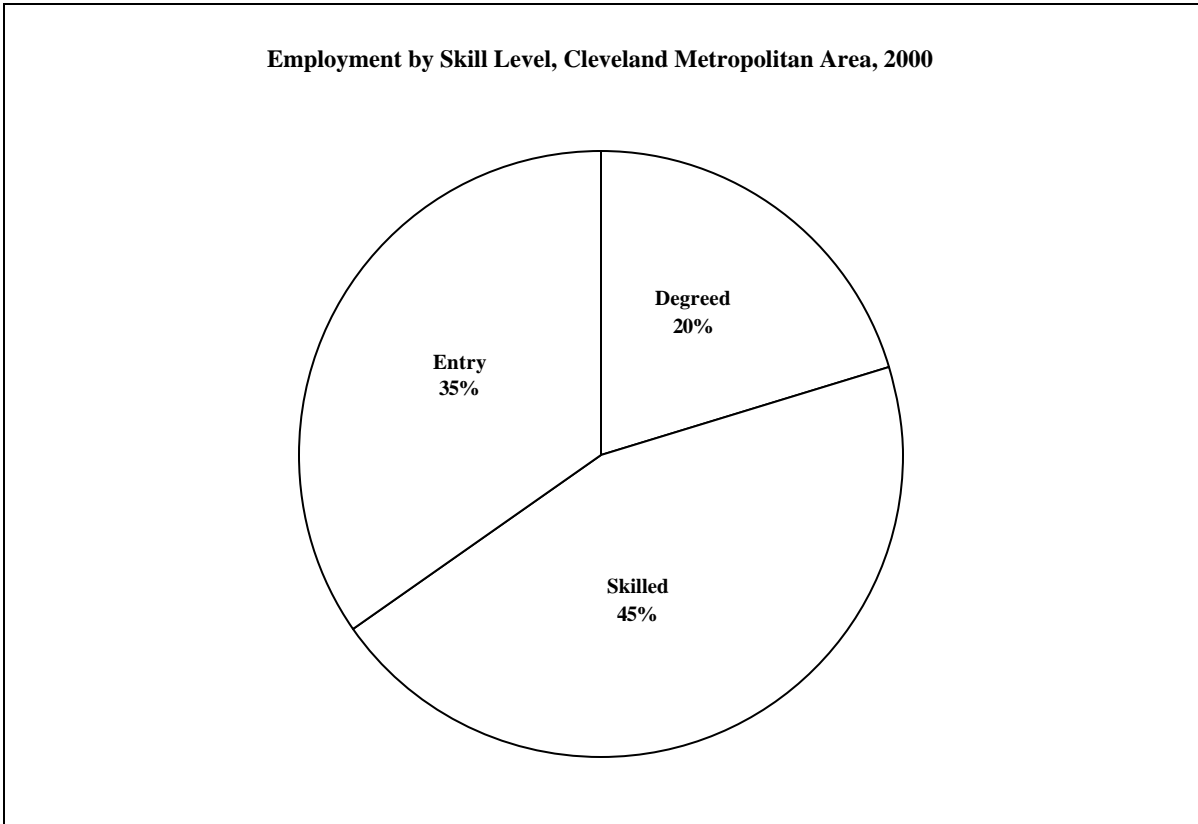


Note: percentages rounded.

To identify trends more easily, these eleven categories can be regrouped into three:

- 1. Degreed:** Includes categories of bachelor's degree, bachelor's degree or higher and some work experience, master's degree, doctoral degree, and first professional degree.
- 2. Skilled:** Includes categories of associate degree, postsecondary vocational training, work experience in a related occupation, long-term on-the-job training, and moderate-term on-the-job training.
- 3. Entry:** Includes category of short-term on-the-job training.

Please see the following chart distributing workers by these three categories.



Note: percentages rounded.

As demonstrated above, four-fifths of the area’s workers hold jobs which do not require a bachelor’s degree; slightly under three-quarters do not require formal education and credentialing above the high school graduate level. Over one-third work at entry-level jobs having the lowest skill level requirements.

Historical Trends

Between 1996 and 2000, the proportion of skilled workers rose significantly, from 39% to 45% of the workforce. Almost 73,000 positions were added to the skilled category.

The categories of degreed and entry workers declined as percentages of the employed. The largest decline was in the entry category, which dropped from 39% to 35%, affecting over 50,000 positions.

	<u>1996</u>		<u>2000</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Degreed	268,230	22%	245,530	20%
Skilled	473,830	39%	546,700	45%
Entry	472,890	39%	421,700	35%

Projected Trends

Projected employment needs for 2010 will **favor workers with formal educational credentials**, while reducing opportunities for those with skills acquired on the job. Employment in jobs requiring **associate and bachelor's degrees** is expected to increase as a share of the total workforce. On the other hand, employment in jobs requiring moderate term on-the-job training is anticipated to decrease as a share of total employment.

<u>Employment by Skill Level, 2000</u>					
<u>Level</u>	<u>Training Category</u>	<u>Actual 2000</u>		<u>Projected 2010</u>	
		<u>Number</u>	<u>Percent of Total Employed</u>	<u>Number</u>	<u>Percent of Total Employed</u>
1	First Professional Degree	18,630	2%	22,390	2%
2	Doctor's Degree	6,070	1%	7,210	1%
3	Master's Degree	14,200	1%	16,690	1%
4	Work Experience plus Bachelor's Degree	56,320	5%	63,370	5%
5	Bachelor's Degree	150,130	12%	171,070	13%
	Subtotal DEGREED	245,350	20%	280,730	21%
6	Associate Degree	51,040	4%	62,670	5%
7	Postsecondary Vocational Training	56,300	5%	63,440	5%
8	Work Experience in a Related Occupation	85,760	7%	92,250	7%
9	Long-Term On-The-Job Training	106,310	9%	114,350	9%
10	Moderate-Term On-The-Job Training	247,290	20%	260,450	19%
	Subtotal SKILLED	546,700	45%	593,160	44%
11	Short-Term On-The-Job Training				
	Subtotal ENTRY	421,700	35%	468,890	35%

Occupational Distribution of Skills

Degreed Jobs

The most job openings for positions requiring a minimum of a bachelor's degree are found in the following occupational areas:

- **Management;**
- **Education, training, and library ;** and
- **Business and financial operations .**

Nearly one-quarter of all degreed job openings are in management.

Other occupational areas in which degreed jobs dominate are community and social service; legal; computer and math; and life, physical, and social sciences.

About 8,250 degreed job openings are anticipated per year, with an above-average growth rate of 1.4%. Average hourly wage for degreed positions is \$31.81.

Skilled Jobs

The most job openings for skilled workers are found in the following occupational areas:

- **Production;**
- **Construction and extraction;** and
- **Healthcare practitioners and technicians.**

Nearly one-quarter of all skilled job openings are in the production field.

Other occupational areas in which skilled jobs dominate are farming, fishing, and forestry; installation, repair, and maintenance; and protective services.

About 15,546 skilled job openings are anticipated per year, with a below-average growth rate of 0.8%. Average hourly wage for skilled positions is \$17.70.

Entry Jobs

The most job openings for entry positions are found in the following occupational areas:

- **Administrative support;**
- **Sales;**
- **Transportation and material moving ;** and
- **Food service .**

Over one-quarter of all entry job openings are in the administrative support field.

Other occupational areas in which entry jobs dominate are buildings and grounds, and healthcare support.

About 18,340 entry job openings are anticipated per year, with a growth rate at the average level of 1.1%. Average hourly wage for entry positions is \$10.49.

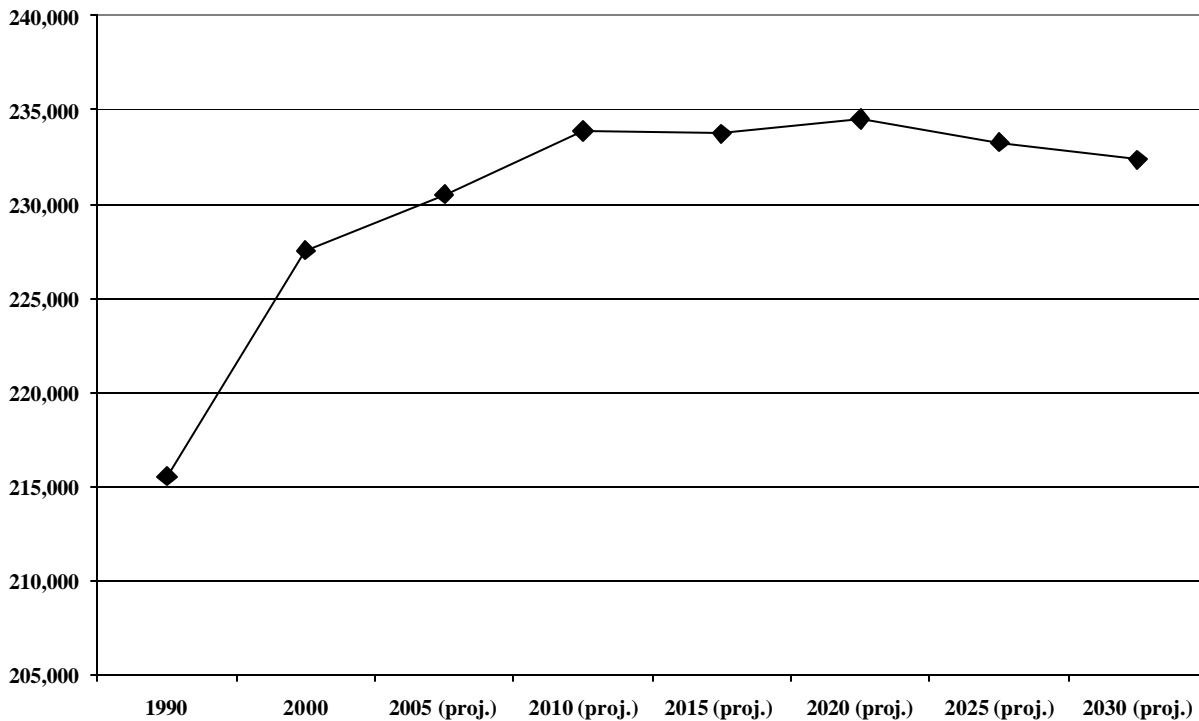
Worker Supply

General Population¹⁷

Lake County's total population in 2000 was 227,511. This represents an increase of 12,012, or 6%, since 1990.

Population growth in Lake County peaked in the 1950s and continued to increase at a high level in the 1960s. Trends since then have been **of slower growth**. Projections are for **stabilization and an eventual decline in the population level**.

Lake County Population, 1990 --2030



¹⁷ Source of all information in this section unless otherwise noted: Ohio Department of Development, "Ohio County Indicators", August 2004, <http://www.odod.state.oh.us/research/FILES/S100.pdf>, and "Ohio County Profiles" for Lake County, <http://www.odod.state.oh.us/research/files/S0/Lake.pdf>.

Migration

Net migration¹⁸ in Lake County for the period of 1989-2002 was a **negative 1,891**, indicating that any population growth was due to expansion of current residents' families, rather than new individuals moving into Lake County.

As a comparison to Lake County's migration rate, the net migration rates for counties in the Cleveland metropolitan area are presented below. Lake County appears to be following the trend of more urbanized counties such as Cuyahoga and Lorain, rather than rural counties becoming suburbanized such as Ashtabula, Geauga, and Medina.

<u>Migration, Counties in Cleveland Metropolitan Area, 1989 -- 2002</u>			
<u>County</u>	<u>Net Flow</u>	<u>County</u>	<u>Net Flow</u>
Medina	+22,054	Lake	-1,891
Gauga	+3,473	Lorain	-3,873
Ashtabula	+420	Cuyahoga	-134,995

Age

In 2000, Lake County's population had a median age of 38.6 years, an increase from the 1990 level of 34.3 years. **Over half the 2000 population was between ages 25 – 64, the prime age group for labor force participation.** The greatest proportion of the population (30%) was in the 25-44 year old age group. The next largest (25%) was in the age 45-64 year old age group.

The young adult population of ages 18-24 years made up 7% of the total. Other populations were:

<u>Age</u>	<u>Percent of Total</u>
Under 6 years	7%
6 to 17 years	17%
65 years and over	14%

¹⁸ Net migration is calculated by subtracting out-migrants from in-migrants. Migration occurs when there is a change of usual residence between clearly defined geographical units (i.e., the State of Ohio and the 88 counties within the state.) Source: Ohio Department of Development, "Ohio County Indicators", August 2004, <http://www.odod.state.oh.us/research/FILES/S100.pdf> .

Trends for the period of 1990 – 2015 indicate that, although the total number of persons age 25-64 has been increasing, a large cohort of older workers (45 and older) is approaching traditional retirement age. The number of younger workers (25-44) is declining. Further, the number of children (age 0-14) is expected to decline. These circumstances indicate **significant replacement needs with insufficient lack of supply in coming years.**

Individuals age 75 and over will increase in number. Although these persons are not expected to be part of the labor supply, they will **increase employment needs** by their requirements for **additional health, social, and personal services.**

The reduction in the number of children (0-14) may result in **reduced employment need** for workers in fields such as **child care and education.**

Age: Youth and Senior Labor Forces

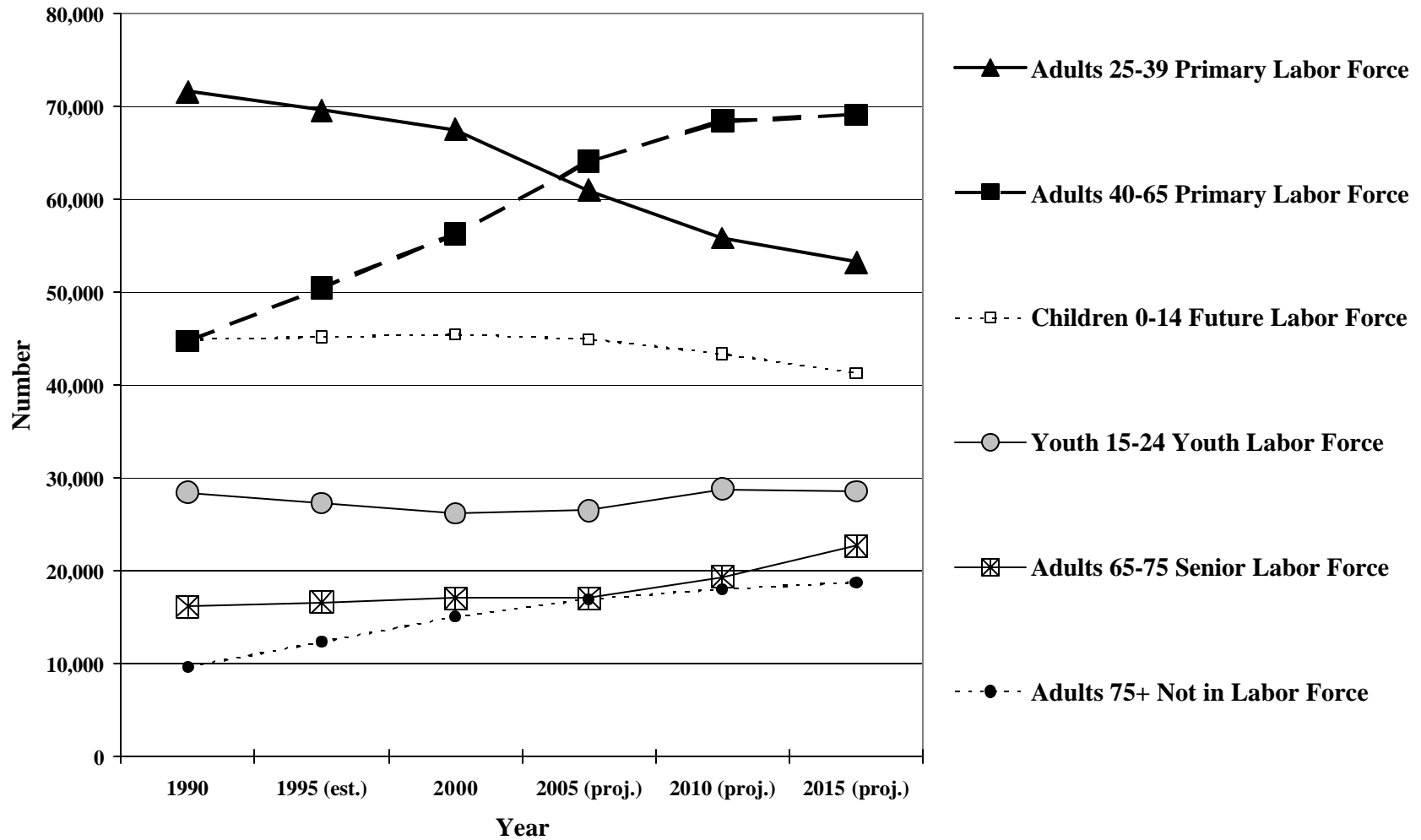
Youth and senior workers can be distinguished from workers in the prime labor force. Members of both groups **may be more likely to enter into employment arrangements other than “traditional” (full-time, health insurance benefits, relative stability)** for differing reasons.

Workers in the youth labor force (age 15-24) may be full-time students seeking part-time, temporary, or seasonal work or may be new entrants into the full-time labor force. In either case, youth may lack academic and/or experience credentials for other than entry-level employment. **The size of the potential youth labor force is expected to increase slightly.**

Workers in the senior labor force (age 65-74) are those employed past the traditional retirement age. Due to recent economic conditions and changes in Social Security retirement ages, many persons in or approaching this age group are continuing full-time work in order to maintain economic self-sufficiency and health benefits. Others in this age group choose to work for additional income and/or personal satisfaction. **The size of the potential senior labor force is expected to increase at a rising rate.**

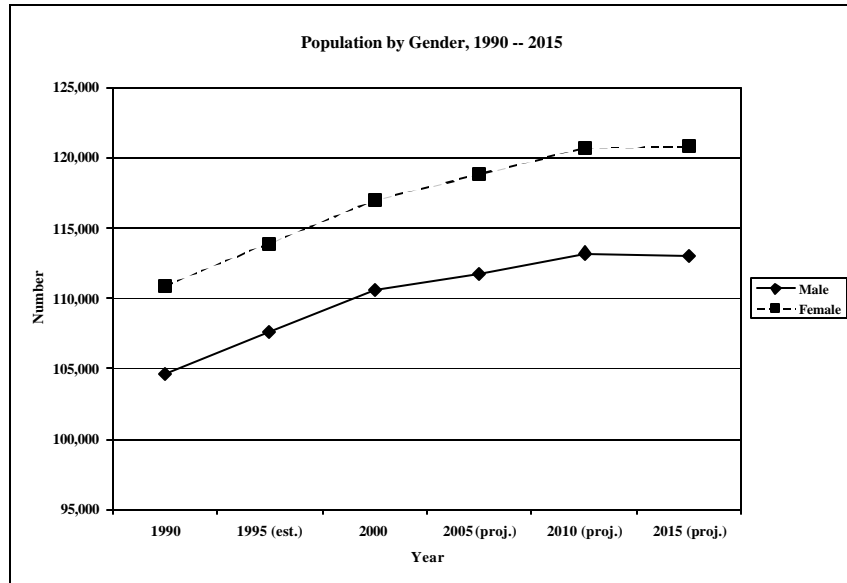
The following graph shows the trends of the Lake County’s population by age.

Lake County Population Trends, 1990-2015



Gender

In 2000, the gender distribution of Lake County's population was 49% male (110,550), and 51% female (116,970). By 2015, the distribution is projected to shift to 48% male (112,970), and 52% female (120,770).



Racial/Ethnic Groups

In 2000, the racial/ethnic composition of Lake County was predominantly white. Total minority population was 5.6% of the total, well below the State average of 16.0%.

Trends since 1990 show a percentage decrease in white population, and percentage increases in most minority populations. The Hispanic population, in particular, more than doubled, going from 0.7% of the total population in 1990 to 1.7% in 2000. The Hispanic school enrollment in the Painesville City School District increased from about 3% to about 30% in a five-year period.¹⁹

<u>Lake County Population by Race, 2000</u>								
	<u>White</u>	<u>African-American</u>	<u>Native American</u>	<u>Asian</u>	<u>Pacific Islander</u>	<u>Other</u>	<u>Two or More Races</u>	<u>Hispanic (may be of any race)</u>
Number	217,041	4,527	251	2,048	41	1,505	2,098	3,879
Percent	95.4%	2.0%	0.1%	0.9%	0.0%	0.7%	0.9%	1.7%

¹⁹ Dr. Michael Hanlon, Superintendent, Painesville City Schools.

Income

The personal per capita income for Lake County residents in 2002 was \$30,860, above the Ohio average of \$29,125. Lake County ranked eighth of Ohio’s 88 counties in the amount of personal income, indicating a **high income and standard of living** for county residents.

Personal income increased by 14.7% between 1997 and 2002, below the state average of 18.4%. And, Lake County dropped in rank from fifth highest to eighth highest among Ohio’s counties during the same time period. These are indicators that **Lake County may have lagged behind other areas in economic growth.**

Household, family, and personal income for Lake Countians with various income sources are detailed below:

<u>Lake County Income Levels, 1999²⁰</u>		
<u>Type of Income</u>	<u>Percent of Families</u>	<u>Annual Income</u>
<u>Median Household Income</u>		\$48,763
- Mean Income of Households with Earnings		\$58,061
- Mean Income of Households with Retirement Income		\$14,571
- Mean Income of Households with Social Security Income		\$12,416
- Mean Income of Households with Supplemental Security Income		\$7,017
- Mean Income of Households with Public Assistance Income		\$2,894
<u>Median Family Income</u>		\$57,134
<u>Percent of Family with Income:</u>		
- Less than \$15,000	4%	
- \$15,000 -- \$24,999	7%	
- \$25,000 -- \$49,999	29%	
- \$50,000 -- \$74,999	28%	
- \$75,000 -- \$99,999	16%	
- \$100,000 to \$149,999	11%	
- \$150,000 and over	4%	
<u>Per Capita Income</u>		\$23,160
<u>Median Earnings For:</u>		
Male Full-Time Year-Round Workers		\$40,916
Female Full-Time Year-Round Workers		\$28,434

²⁰ U.S. Census, 1990: Summary provided by Ohio Data Users Center, 1993.

Educational Attainment

Lake County residents age 25 and over in 2000 had the following levels of educational achievement:

<u>Lake County Educational Attainment, 2000</u>			
(Persons age 25 and Over)			
<u>Attainment</u>	<u>Number</u>	<u>Percent of Total, 2000</u>	<u>Percent of Total, 1990</u>
-			
No High School Diploma	21,219	14%	19%
High School Graduate	53,726	34%	36%
Some College, No Degree	37,135	24%	21%
Associate Degree	10,452	7%	6%
Bachelor's Degree	22,871	15%	12%
Master's Degree or Higher	10,774	7%	5%

Trends since 1990 show that the percentages of least skilled residents are decreasing, and that the proportions of residents with at least some postsecondary education, at all credentialing levels, are increasing.

It appears the **county's level of educational attainment is closely aligned to the demands of the labor market**, and the county is **probably exporting talent**, in that :

- 22% of residents have **bachelor's or higher degrees**, and the current job openings projected for this skill level in the Cleveland metropolitan area are 20%.
- 7% of residents have **associate degrees**, and the current job openings projected for this skill level in the Cleveland metropolitan area are 4%.

Labor Force

Total²¹

The Lake County labor force was 123,182 in 2000, with a labor force participation rate of 68.8%. The labor force participation rate measures the percentage of the total population who are either employed or are unemployed, but available for and actively seeking work. It excludes the retired, small children, institutionalized, persons with disabilities rendering them unable to work, and persons choosing not to work.

The 2000 labor force participation rate was slightly above the 1990 level of 68.4%. Labor force participation rates may fluctuate with the economic cycle, due to “discouraged workers” (who have stopped actively seeking work due to perceptions of current unavailability).

Commuting Patterns

Net Commuting Flow²²

In 1990, 27.4% of persons working in Lake County (regardless of county of residence) commuted into Lake County from a different county of residence. By 2000, the percentage of in-commuters increased to 29.2%.

In 1990, 40.9% of working Lake Countians (regardless of county of employment), commuted out of Lake County into another county for work. By 2000, the percentage of out-commuters decreased to 37.6%.

Net commuting flow decreased from -19,961 in 1990 to -13,361 in 2000. Likewise, the net flow as a percent of total commuters has decreased from -29.3% to -18.8%. This indicates that, **while more people still outcommute than incommute** to Lake County (which is typical of most Ohio counties), Lake County is becoming **less dependent on other counties for employment and income for its residents**.

Commuting Transportation Methods²³

In 2000, the vast majority (83%) of employed Lake County residents drove alone to work. About 9% carpooled; 2% used public transportation; 2% walked; and less than 1% used some other form of transportation. About 3% worked at home. Average commute time was about 23 minutes.

²¹ Information is from the 1990 and 2000 U.S. Censuses for Lake County.

²² Commuting flow information is from the Bureau of Labor Market Information, Ohio Department of Job and Family Services, previously cited.

²³ Commuting transportation method information is from the Ohio Department of Development, “Ohio County Indicators”, August 2004, previously cited.

Gender²⁴

The female labor force was 58,116 in 2000, and had a labor force participation rate of 62.4%. This was an increase from the 1990 rate of 59.6%. **Although still below male labor force participation (75.7% in 2000), female labor force participation continues to increase as a long-term trend.**

In 1990, **females had a lower unemployment rate than males.** This trend was verified and more pronounced in 2002 in the Cleveland metropolitan area.

Female workers are found in **office and administrative occupations** in a proportion significantly above their presence in the total workforce. This type of work requires medium to entry skills and has a below-average pay rate. Unemployment is below average, and is the lowest for occupational groups that do not typically require a minimum of an associate or bachelor degree as an entry credential.

Other occupational groups in which females are employed in above-average proportions, though to a much lesser degree, are **professional specialty** and **service**.

Professional specialty occupations require high skills and provide above-average pay, as well as having the lowest unemployment rate of all occupational groups.

Service occupations tend to be low-skill and are the lowest paid, but have an unemployment rate slightly less than average.

The occupational groups of sales and technicians have gender distributions closest to labor force representation, with a slight tilt to females in both groups.

Sales occupations register around average in terms of skill level requirements and pay, but include extreme opposites on the skill/pay spectrum. Unemployment of sales workers is at an average rate, possibly reflecting the same diversity of jobs in this group.

Technical occupations are high-skilled, often requiring associate or bachelor degrees, and pay above average, with amount depending on the technical specialty. Technicians' unemployment rate is the second lowest of all groups.

Males dominate occupations in **precision production/craft/repair**. Other occupations in which males are employed in above-average proportions are **executive/managerial, machine operators/assemblers/inspectors, transportation/material moving, and handlers/laborers**.

Precision production/craft/repair jobs are skilled and provide the highest pay for work that does not typically require a bachelor's degree as an entry credential. This class of jobs, however, is subject to the highest unemployment rate of all work groups.

²⁴ Occupational trends by gender and racial-ethnic groups are based on the 1990 U.S. Census of Lake County and data from the U.S. Department of Labor, Bureau of Labor Statistics, for the Cleveland metropolitan area in 2002. http://www.bls.gov/opub/gp/pdf/gp02_25.pdf

Executive and managerial jobs have the highest skill requirements and highest pay of all occupational groups. The unemployment rate of executives and managers is slightly below average.

Machine operators, transportation, and handler groups are at the low end of the skill/pay spectrum. Unemployment rates for machine operators and handlers are among the highest of all occupations. Transportation and material moving workers, however, enjoy a below-average unemployment rate.

Females worked for services industry employers at a significantly higher proportion than their labor force representation. Other industry divisions in which females tended to concentrate were finance/insurance/real estate and trade.

Males were found in above-average concentrations in goods-producing divisions, construction and manufacturing, as well as in transportation/communication/utilities and government.

Racial/Ethnic Groups

The Lake County African-American labor force was 1,661 in 1990, and had a labor force participation rate slightly below average, at 67.0%. A slightly higher labor force participation rate of 68.2% was reported in 2002 for African-Americans in the Cleveland metropolitan area. In both census years, **African-American unemployment was significantly higher than average**. In Lake County during 1990, African-American unemployment was reported as 12.0%, more than twice the average of 4.6%. During 2002 in the Cleveland metropolitan area, African-American unemployment was 8.5%, compared to an average rate of 5.0%.

African-Americans work in the following occupations in proportions above their presence in the total workforce: **service, machine operators /assemblers /inspectors, transportation/material moving/, and handlers/ laborers**. Again, these occupational groups are low-skill and pay low or below-average wages. Unemployment rates for machine operators and handlers are among the highest of all occupations. Service and transportation/material moving workers, however, experience below-average unemployment rates.

Whites are found working in above-average proportions in **executive/managerial, professional specialty, and precision production/craft/repair** occupational groups, representing higher skills and pay at both the skilled and degreed levels. Professional workers have the lowest of all groups' unemployment rate. Executives are unemployed at a rate slightly below average. Production/craft/repair workers, however, have the highest unemployment rate (more than twice the average), and are sharply gender-segregated in favor of males.

Technical jobs are proportionately distributed between African-Americans and whites. Technical occupations are high-skilled, often requiring associate or bachelor degrees, and pay above average, with amount depending on the technical specialty. Technicians' unemployment rate is the second lowest of all groups.

The sales and office/administrative support groups have racial group distributions close to labor force representation, with a slight tilt to African-Americans in both groups.

Sales occupations register around average in terms of skill level requirements and pay, but include extreme opposites on the skill/pay spectrum. Unemployment of sales workers is at an average rate, possibly reflecting the same diversity of jobs in this group.

Office/administrative support work is sharply gender-segregated in favor of females, requires medium to entry skills, provides a below-average pay rate, but experiences the lowest unemployment rate of occupational groups that do not typically require a minimum of an associate or bachelor degree as an entry credential.

African-Americans work at above-average rates in the industrial divisions of **transportation/communication/utilities, trade, services, and government.**

Whites are concentrated in the divisions of **construction and manufacturing.**

Lake County's Hispanic²⁵ labor force was 747 in 1990 and had a labor force participation rate above average, at 71.4%. **Hispanic unemployment** was 8.3%, **close to twice the average, although significantly lower than African-American unemployment at that time** in Lake County.

Hispanic workers are found in proportions above their labor force representation in office/administrative support, service, precision production/craft/repair, and machine operators/ assemblers/ inspectors. Hispanics are employed in disproportionately small numbers in these occupational areas: executive/managerial, professional specialty, technical, sales, transportation/material moving, and handlers/laborers.

It appears Hispanic workers are clustered in entry to skilled level positions, while participating at less than an average rate in some of the lower-skilled and paid work groups. More striking, however, is the low Hispanic participation in high-skill, high-pay occupations usually requiring degree-level academic credentials.

Hispanic employment is found at levels significantly exceeding their labor force representation in the industry divisions of **manufacturing and finance/insurance/real estate.** Hispanics are under-represented in all other industrial divisions: construction, trade, government, and particularly in services and transportation/communication/utilities.

²⁵ Hispanics may be of any race and are not a category counted to determine "total" population by race. For example, a person may be counted in both the "white" and "Hispanic" categories. Race and Hispanic origin are determined by self-identification.

Youth

Most (81%) of Lake County youth ages 16 – 19 in 1990 were attending school. About 11% were high school graduates and 8% were dropouts.

For all Lake County youth ages 16-19, the labor force participation rate was 60.0%. However, this rate varied significantly depending on youths' educational status and attainment.

<u>Educational Attainment /Status</u>	<u>Labor Force Participation Rate</u>
Enrolled in School	68.4%
High School Graduates	89.0%
School Dropouts	61.9%

The overall youth unemployment rate was 11.4%, more than twice the average. Again, this rate showed large differences among youth depending on educational status and attainment.

<u>Educational Attainment /Status</u>	<u>Unemployment Rate</u>
Enrolled in School	11.2%
High School Graduates	6.9%
School Dropouts	22.2%