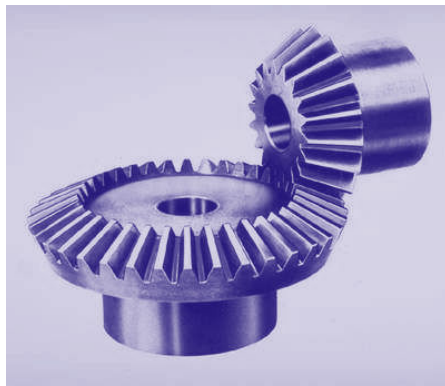


# ***Advanced Manufacturing Resources***

## **Lincoln County**



Excerpted from

Report 1: Manufacturing Landscape

Report 2: Environmental Scan

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Prepared for the Centralina Economic Development Commission in  
partnership with Centralina Council of Governments and  
Catawba Regional Council of Governments

## Centralina Region

### Overview

The study area encompasses 12 counties with a population of 2 million people. Over the past fifteen years the area has grown by 41.7%, outpacing the nation and both North and South Carolina. Residents enjoy an above average median household income, with strong historical growth.

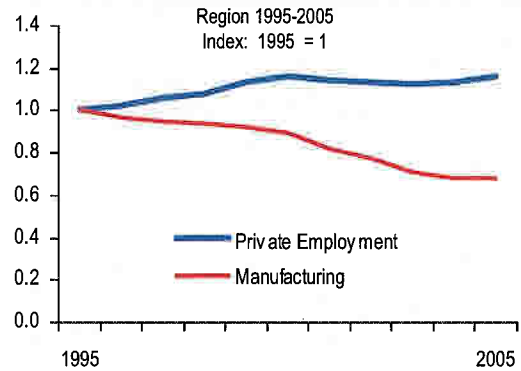
Educational attainment is on par with the nation and above the Carolinas, indicating that the area has access to a skilled workforce. The unemployment rate is low and has the potential to create a tight labor

supply should it drop any lower.

The combination of these characteristics lends itself to a high quality of life for residents.

The employment landscape has shifted significantly over the past 10 years in the 12 county area. From 1995 to 2005 manufacturing employment has declined by 60,000 or 32%. Much of this loss is concentrated in traditional manufacturing industries like textiles and fabric mills. Over the same period, total private employment added 112,000 or 15.8%. Growth in Professional Services and Financial Activities has accounted for much of this growth.

### EMPLOYMENT GROWTH



Source: BLS

### At a Glance

2005	Region	South Carolina	North Carolina	United States
Population	2.0 m	4.2 m	8.6 m	296 m
Pop Growth '90-'05	41.7%	21.3%	30.4%	19.1%
Median HH Income	\$49,800	\$40,900	\$43,300	\$46,300
Growth in HH Income '90-'05	64.5%	55.4%	62.5%	54.0%
% Bachelor's Degree or higher	27.5%	24.8%	25.3%	27.7%
% of Adults age 25-44	30.5%	27.9%	29.2%	28.2%
Unemployment rate	5.4%	6.8%	5.2%	5.1%
Private Employment	821,300	1.5 m	3.9 m	110.2 m
Emp. Growth 95-05	15.8%	13.3%	11.7%	13.8%
Manufacturing Emp.	127,200	262,000	566,600	14.2 m
Mftg Emp. Growth 95-05	-32.2%	-24.5%	-31.0%	-17.6%

## 2.1: Introduction to Advanced Manufacturing

Advanced Manufacturing is a broad term with various interpretations. For the purpose of this report, we consider advanced manufacturing to include any manufacturing sector that employs at least twice as many research and development employees than the average industry. Advanced manufacturing is generally a high-technology industry but is not always comparable with “high-tech manufacturing.” The underlying reason being that in advanced manufacturing, the emphasis is weighted more on the high-tech processes used in production rather than on the final output of high-tech products. Some of its major industry sectors include: computer equipment, electronics, auto assembly, aerospace, biotech, machinery, pharmaceuticals, and medical equipment and instruments. Other niche sectors that are linked to advanced manufacturing include automation and manufacturing technology; chemicals and advanced materials; computer and telecommunications hardware; electronics and components; engineering, and environmental testing and measurement; and photonics, optics, and lasers. Five of these industries will be examined in specific industry profiles later in this report.

Fundamentally, advanced manufacturing involves the implementation of innovative and revolutionary manufacturing techniques, while using highly automated manufacturing equipment that combines the very latest advancements in information technology, semiconductors, advanced materials, and new and more efficient organizational manufacturing processes. For example, accuracy and speed have remarkably improved due to computer numeric controls that have been installed to oversee the machining, forming, cutting, and molding phases of the manufacturing process. As a result, the use of highly automated machines and robots are being used for welding, painting, and material handling applications. Computer-aided Design (CAD), Computer-integrated Manufacturing (CIM), and optical monitoring are just a few of the processes that have revolutionized the industry, each improving quality control, lowering costs, reducing development timelines, and creating precision oriented assembly.

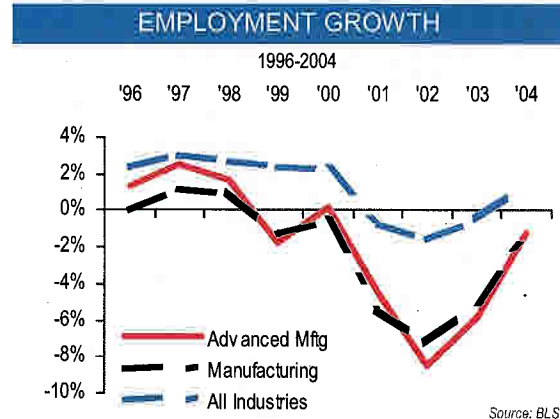
The advanced manufacturing industry was born from the ever-intensifying movement towards heightened global competitiveness and the battle for market share. With added countries opting for liberal international trade standards, advanced manufacturing processes are continuously becoming highly sophisticated and refined. Other major factors influencing the rapid pace of change in the industry are the increased demands for improved customer service, diversity of product offerings, improved product quality, quicker time-to-market new product cycles, and increased corporate profit margins. The specific 4-digit NAICS codes used to define Advanced Manufacturing are listed below.

NAICS DEFINITION OF ADVANCED MANUFACTURING			
NAICS	NAICS Description	NAICS	NAICS Description
3252	Resin, Synthetic Rubber, and Artificial and Synthetic Fibers Mfg.	3343	Audio and Video Equipment Mfg.
3254	Pharmaceutical and Medicine Mfg.	3344	Semiconductor and Other Electronic Component Mfg.
3256	Soap, Cleaning Compound, and Toilet Preparation Mfg.	3345	Navigational, Measuring, Electromedical, and Optical Media
3259	Other Chemical Product and Preparation Mfg.	3346	Mfg. And Reproducing Magnetic and Optical Media
3331	Agriculture, Construction, and Mining Machinery Mfg.	3353	Electrical Equipment Mfg.
3332	Industrial Machinery Mfg.	33599	All Other Electrical Equipment and Component Mfg.
3333	Commercial and Service Industry Machinery Mfg.	3361	Motor Vehicle Mfg.
332994	Ordnance & Accessories Mfg. - Small Arms Mfg.	3362	Motor Vehicle Body and Trailer
3336	Engine, Turbine, and Power Transmission Equipment Mfg.	3363	Motor Vehicle Parts Mfg.
3339	Other General Purpose Machinery Mfg.	3364	Aerospace Product and Parts Mfg.
3341	Computer and Peripheral Equipment Mfg.	3391	Medical Equipment and Supplies Mfg.
3342	Communications Equipment Mfg.		

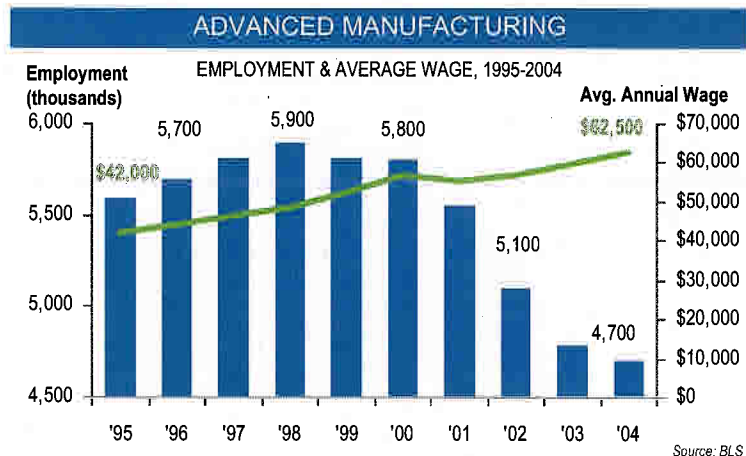
Source: Department of Commerce

## Historical Growth Trends

Employment growth in the advanced manufacturing industry has closely followed the manufacturing sector, as well as total industry employment, over the past 10 years. A modest decline in employment growth was seen from 1997 to 1999. In 2000, employment growth in advanced manufacturing experienced a brief upswing before embarking on a 2-year crash that coincided with the 2002 recession. However, the advanced manufacturing sector and the overall manufacturing industry have both rebounded nicely since the 2002 low. As of 2004, employment growth in the advanced manufacturing industry has returned to near 2000 levels. Employment growth should slow over the next few years; however, a less volatile, positive trend should emerge that will bring greater predictability and overall strength to the industry.



Despite the fluctuations in employment for the industry, average wages for advanced manufacturing have proved more resilient in variable economic environments. In the past decade, average wages for the industry have increased a substantial 49%. More importantly, as employment declined 19% from 2000 to 2004, average wages increased 10% during the same time period.



## 2.2: Trends in Advanced Manufacturing

### National Advanced Manufacturing Industry Cluster Distribution 2004

Similar to the overall manufacturing industry, the advanced manufacturing has also seen the majority of its concentration located in traditional manufacturing areas such as Detroit, parts of Ohio, Indiana, and along the east coast. Additionally, Denver, Dallas, and the Bay Area also have strong advanced manufacturing clusters due to the recent boom in high-technology manufacturing, such as pharmaceuticals and medical devices.



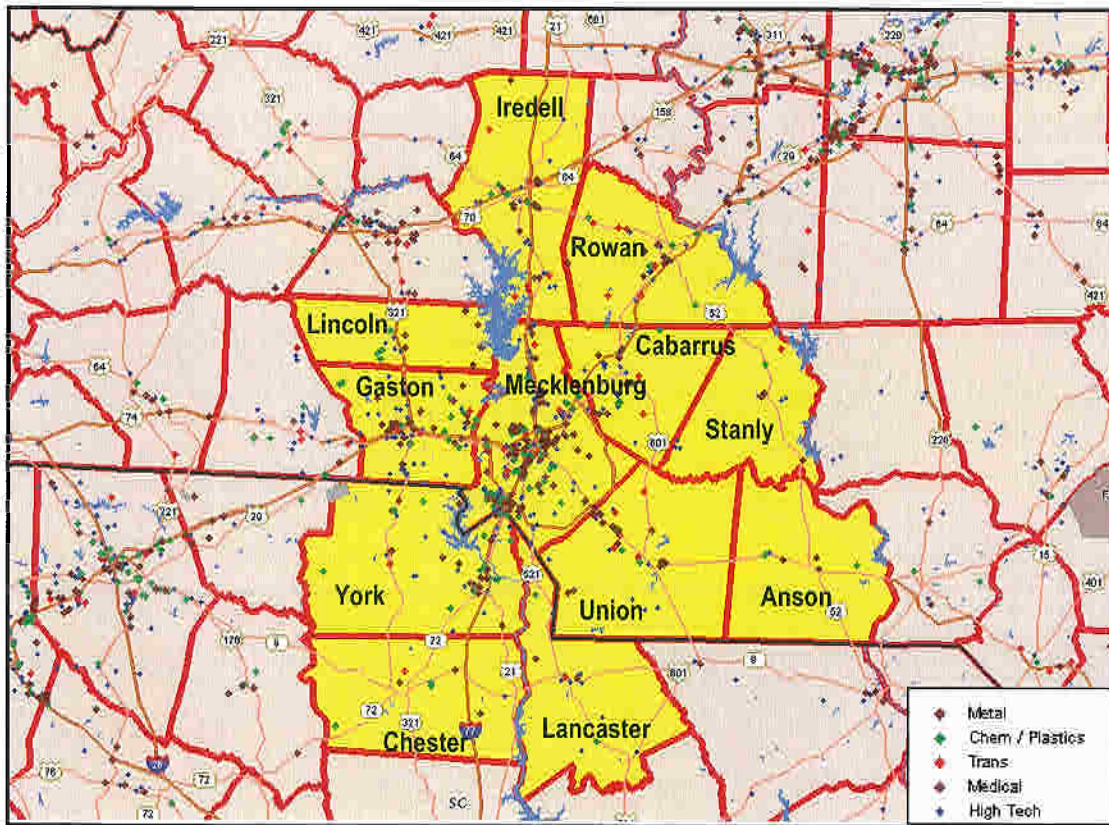
### National Advanced Manufacturing Industry Growth Distribution 1995-2004

However, growth in the advanced manufacturing industry is not emerging from the regions with the heaviest cluster concentrations, indicating a migration in the industry. Metropolitan areas such as Houston, Jacksonville, Southern California, parts of Kentucky, and Missouri are experiencing more substantial industry growth, most of which have a significantly reduced cost of business environment.



## Advanced Manufacturing Map

The following map outlines the twelve counties in the study area, with the colored dots representing companies within various advanced manufacturing industries. Judging from the concentration of colored dots, the regions strengths lie in transportation equipment, plastics, and metals manufacturing.



## Employment Projections

The following charts outline industry employment projections for the Centralina region and North Carolina. The region and state are projected to lose employment in the overall manufacturing industry, while gaining employment in service-oriented industries. A closer look at the manufacturing industry reveals that employment will increase in advanced manufacturing industries such as chemical, computer, plastics, and primary metal manufacturing. Projections are less promising for apparel, textile, and furniture manufacturing.

Employment Projections: Annualized Growth Rate From 2002 to 2012

Industry	North Carolina	Centralina	Mecklenburg County	Gaston County
Construction	1.8%	2.5%	2.7%	1.8%
Education and Health Services	2.4%	2.4%	3.0%	2.5%
Financial Activities	2.0%	1.2%	3.4%	1.8%
Goods-Producing	0.0%	0.3%	1.1%	-1.2%
Government	1.2%	1.0%	1.8%	2.1%
Information	1.9%	1.3%	2.4%	-0.3%
Leisure and Hospitality	2.2%	2.5%	3.5%	2.0%
Manufacturing	-0.5%	-0.4%	-0.1%	-1.6%
Natural Resources and Mining	-1.8%	-1.3%	-1.4%	-7.1%
Other Services (Except Government)	1.7%	1.9%	2.6%	2.0%
Professional and Business Services	3.0%	3.0%	3.7%	3.0%
Services-Providing	2.1%	2.2%	2.9%	1.9%
Trade, Transportation, and Utilities	1.7%	2.2%	2.0%	0.7%

Source: Employment Security Commission of North Carolina

Employment Projections: Annualized Growth Rate From 2002 to 2012

Manufacturing Industry	North Carolina	Centralina	Mecklenburg County	Gaston County
Apparel Manufacturing	-9.3%	-6.9%	-6.7%	-12.8%
Beverage and Tobacco Product Manufacturing	-3.2%	-1.5%	-1.4%	1.8%
Chemical Manufacturing	1.0%	0.8%	0.0%	-0.5%
Computer and Electronic Product Manufacturing	0.3%	-1.4%	0.1%	3.1%
Electrical Equip., Appliance, and Component Mfg.	1.3%	2.5%	2.9%	5.2%
Fabricated Metal Product Manufacturing	1.3%	2.3%	-0.2%	0.0%
Food Manufacturing	1.0%	-0.3%	0.0%	-2.4%
Furniture and Related Product Manufacturing	-0.4%	-2.0%	-0.1%	1.2%
Leather and Allied Product Manufacturing	-4.0%	2.5%	-2.2%	-4.0%
Machinery Manufacturing	1.0%	0.3%	-0.1%	-4.7%
Miscellaneous Manufacturing	-0.1%	-0.5%	-2.8%	-7.4%
Nonmetallic Mineral Product Manufacturing	0.5%	0.3%	1.0%	-3.4%
Paper Manufacturing	-0.9%	2.4%	-0.1%	1.7%
Petroleum and Coal Products Manufacturing	-0.8%	-1.5%	-	-
Plastics and Rubber Products Manufacturing	1.4%	1.6%	0.2%	4.9%
Primary Metal Manufacturing	0.0%	1.2%	1.0%	-
Printing and Related Support Activities	-0.1%	-1.9%	-0.5%	-1.0%
Textile Mills	-6.0%	-5.3%	-5.9%	-9.7%
Textile Product Mills	-1.4%	-4.8%	-2.8%	-0.7%
Wood Product Manufacturing	0.9%	1.4%	5.6%	-0.2%

Source: Employment Security Commission of North Carolina

## Occupation Cluster Strength: Charlotte MSA

The subsequent two charts provide a detailed inventory of skilled workers relevant to advanced manufacturing in the Charlotte MSA. The cluster ratio provides an indication of the concentration of workers for a particular occupation relative to the national average. The Charlotte MSA is lacking research and development assets, as many of the occupations in computer, mathematics, engineering, and the sciences have low cluster ratios. However, the majority of production occupations exceed the national average, suggesting that the area can provide a sufficient supply of skilled laborers for the actual manufacturing of products. Wage rates are comparable to the U.S. and often below occupational averages.

Charlotte MSA: Breakdown of Computer, Mathematical, Architecture, Engineering, Life Sciences, and Physical Sciences Occupations

Occupation Code	Occupation Title	Occupation Employment	Occupation Cluster Ratio	Charlotte Mean Salary	U.S. Mean Salary	Wage Differential
<b>15-0000</b>	<b>Computer and Mathematical Occupations</b>	<b>20,940</b>	<b>1.11</b>	<b>\$64,850</b>	<b>\$66,370</b>	<b>97.7%</b>
15-1021	Computer Programmers	3,140	1.23	\$73,140	\$66,480	110.0%
15-1031	Computer Software Engineers, Applications	1,560	0.55	\$72,970	\$78,570	92.9%
15-1032	Computer Software Engineers	1,800	0.87	\$80,560	\$83,460	96.5%
15-1051	Computer Systems Analysts	4,260	1.33	\$70,980	\$69,470	102.2%
15-1071	Network and Computer Systems Administrators	2,020	1.20	\$63,020	\$62,300	101.2%
15-1081	Network Systems and Data Comm Analysts	1,540	1.36	\$69,520	\$64,080	108.6%
15-1099	Computer Specialists, All Other	300	0.39	\$54,540	\$62,930	86.7%
<b>17-0000</b>	<b>Architecture and Engineering Occupations</b>	<b>12,970</b>	<b>0.85</b>	<b>\$57,730</b>	<b>\$63,060</b>	<b>91.5%</b>
17-2041	Chemical Engineers	220	1.20	\$80,570	\$78,030	103.3%
17-2061	Computer Hardware Engineers	110	0.21	\$78,180	\$85,540	91.4%
17-2072	Electronics Engineers, Except Computer	450	0.52	\$68,570	\$78,620	87.2%
17-2081	Environmental Engineers	150	0.47	\$64,970	\$69,200	93.9%
17-2112	Industrial Engineers	980	0.82	\$63,240	\$67,820	93.2%
17-2131	Materials Engineers	40	0.30	\$57,740	\$70,700	81.7%
17-2141	Mechanical Engineers	890	0.63	\$68,790	\$69,480	99.0%
17-2199	Engineers, All Other	190	0.19	\$68,200	\$76,720	88.9%
17-3012	Electrical and Electronics Drafters	340	1.66	\$43,460	\$47,970	90.8%
17-3013	Mechanical Drafters	430	0.88	\$51,720	\$45,720	113.1%
17-3019	Drafters, All Other	50	0.35	\$37,340	\$47,300	78.9%
17-3023	Electrical and Electronic Engineering Technicians	1,360	1.22	\$45,870	\$47,920	95.7%
17-3024	Electro-Mechanical Technicians	110	1.01	\$52,090	\$43,930	118.6%
17-3025	Environmental Engineering Technicians	130	1.03	\$37,970	\$41,950	90.5%
17-3027	Mechanical Engineering Technicians	200	0.68	\$43,530	\$45,750	95.1%
17-3029	Engineering Technicians, Except Drafters	60	0.11	\$47,580	\$51,640	92.1%
<b>19-0000</b>	<b>Life, Physical, and Social Science Occupations</b>	<b>5,090</b>	<b>0.69</b>	<b>\$55,430</b>	<b>\$57,550</b>	<b>96.3%</b>
19-1031	Conservation Scientists	30	0.31	\$45,990	\$53,440	86.1%
19-2031	Chemists	560	1.11	\$58,660	\$62,400	94.0%
19-2041	Environmental Scientists and Specialists	340	0.76	\$47,060	\$56,280	83.6%
19-2042	Geoscientists, Except Hydrologists & Geographers	50	0.29	\$51,840	\$77,890	66.6%
19-3031	Clinical, Counseling, and School Psychologists	380	0.60	\$50,130	\$63,340	79.1%
19-4021	Biological Technicians	60	0.15	\$41,610	\$36,520	113.9%
19-4031	Chemical Technicians	730	1.85	\$39,860	\$40,040	99.6%
19-4091	Environmental Science and Protection Technicians	140	0.71	\$33,150	\$37,480	88.4%
19-4092	Forensic Science Technicians	80	1.21	\$45,150	\$47,560	94.9%
19-4093	Forest and Conservation Technicians	30	0.26	\$33,030	\$34,800	94.9%
19-4099	Life, Physical, and Social Science Technicians	110	0.26	\$35,690	\$44,260	80.6%

Source: Bureau of Labor Statistics

## Occupation Cluster Strength Continued: Charlotte MSA

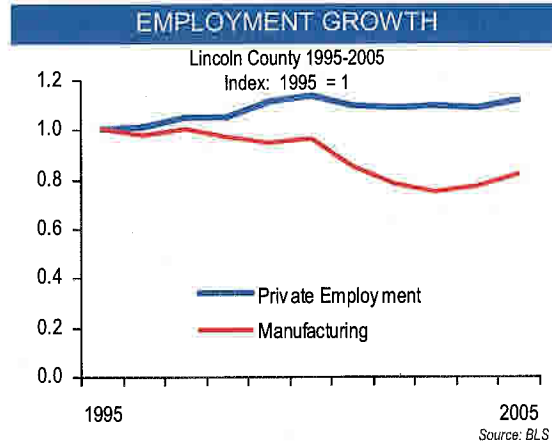
### Charlotte MSA: Breakdown of Production Occupations

Occupation Code	Occupation Title	Occupation Employment	Occupation Cluster Ratio	Charlotte Mean Salary	U.S. Mean Salary	Wage Differential
51-0000	Production Occupations	76,220	1.16	\$29,860	\$29,480	101.3%
51-1011	First-Line Managers of Production Workers	5,570	1.28	\$49,750	\$48,290	103.0%
51-2023	Electromechanical Equipment Assemblers	310	0.91	\$28,410	\$27,960	101.6%
51-2041	Structural Metal Fabricators and Fitters	670	1.14	\$31,640	\$31,180	101.5%
51-2092	Team Assemblers	11,620	1.46	\$25,400	\$25,780	98.5%
51-2099	Assemblers and Fabricators, All Other	770	0.48	\$36,130	\$29,300	123.3%
51-4011	Computer-Controlled Machine Tool Operators	970	1.16	\$33,870	\$31,830	106.4%
51-4012	Numerical Tool and Proc Control Programmers	120	1.11	\$35,280	\$43,320	81.4%
51-4021	Extruding and Drawing Machine Setters, Operators	830	1.43	\$31,110	\$28,370	109.7%
51-4022	Forging Machine Setters, Operators	210	0.91	\$37,030	\$29,500	125.5%
51-4023	Rolling Machine Setters, Operators	260	1.03	\$33,310	\$30,950	107.6%
51-4031	Cutting, & Press Machine Setters, Operators	2,190	1.32	\$27,210	\$27,240	99.9%
51-4032	Drilling and Boring Machine Tool Setters	360	1.31	\$32,930	\$30,730	107.2%
51-4034	Lathe and Turning Machine Tool Setters	350	0.76	\$35,250	\$32,910	107.1%
51-4035	Milling and Planing Machine Setters	190	0.99	\$30,330	\$32,150	94.3%
51-4041	Machinists	3,040	1.30	\$33,960	\$35,000	97.0%
51-4051	Metal-Refining Furnace Operators and Tenders	170	1.58	\$37,050	\$33,850	109.5%
51-4072	Molding, Coremaking, & Casting Machine Setters	1,280	1.27	\$27,180	\$26,490	102.6%
51-4081	Multiple Machine Tool Setters	500	0.79	\$33,750	\$31,460	107.3%
51-4111	Tool and Die Makers	340	0.53	\$41,800	\$44,640	93.6%
51-4121	Welders, Cutters, Solderers, and Brazers	2,140	0.95	\$32,390	\$32,220	100.5%
51-4122	Welding, Soldering, and Brazing Machine Setters	310	1.08	\$29,440	\$32,760	89.9%
51-4191	Heat Treating Equipment Setters, Operators	280	1.65	\$35,320	\$30,810	114.6%
51-4192	Lay-Out Workers, Metal and Plastic	30	0.42	\$33,540	\$34,060	98.5%
51-4193	Plating and Coating Machine Operators	240	0.94	\$28,730	\$28,480	100.9%
51-4194	Tool Grinders, Filers, and Sharpeners	130	1.01	\$27,800	\$31,820	87.4%
51-5023	Printing Machine Operators	1,220	1.02	\$34,780	\$32,100	108.3%
51-6011	Laundry and Dry-Cleaning Workers	1,400	1.01	\$17,710	\$18,290	96.8%
51-6021	Pressers, Textile, Garment, and Related Materials	640	1.25	\$18,090	\$17,980	100.6%
51-6052	Tailors, Dressmakers, and Custom Sewers	260	1.47	\$22,990	\$24,800	92.3%
51-6062	Textile Cutting Machine Setters, Operators	260	1.78	\$21,420	\$22,400	95.6%
51-6063	Textile Knitting and Weaving Machine Operators	940	3.26	\$22,590	\$23,800	94.9%
51-6064	Textile Winding and Drawing Out Machine Operators	2,730	8.43	\$21,400	\$23,260	92.0%
51-6099	Textile, Apparel, and Furnishings Workers	260	1.73	\$19,520	\$23,280	83.8%
51-7011	Cabinetmakers and Bench Carpenters	710	0.93	\$24,560	\$27,290	90.0%
51-7041	Sawing Machine Operators	180	0.47	\$22,220	\$24,030	92.5%
51-7042	Woodworking Machine Operators	560	0.96	\$21,160	\$24,090	87.8%
51-8091	Chemical Plant and System Operators	440	1.13	\$37,390	\$45,830	81.6%
51-9011	Chemical Equipment Operators and Tenders	460	1.54	\$39,830	\$39,560	100.7%
51-9061	Inspectors, Sorters, Samplers, and Weighers	4,340	1.34	\$29,560	\$31,560	93.7%
51-9081	Dental Laboratory Technicians	290	1.02	\$35,170	\$33,810	104.0%
51-9111	Packaging and Filling Machine Operators	3,280	1.24	\$23,990	\$24,580	97.6%
51-9191	Cementing and Gluing Machine Operators	90	0.56	\$28,160	\$25,310	108.7%
51-9195	Molders, Shapers, and Casters	180	0.74	\$23,960	\$25,250	94.9%
51-9199	Production Workers, All Other	350	0.18	\$28,510	\$27,190	104.9%

Source: Bureau of Labor Statistics

## Lincoln County, North Carolina

Lincoln County is a mid sized county in the study area with a population of 69,500. Over the past fifteen years the county has grown by 38.1%, outpacing both the state and nation, but not the region. Residents earn an above average median household income relative to the state, with strong historical growth trends. Educational attainment is below the state and nation, indicating that the area may have difficulty finding skilled workers. The unemployment rate is 5.7%, which is slightly above the other benchmarks but still low from a historical perspective. 28.5% of Lincoln County residents are in the 25 to 44-age range, which is almost identical to the nation.



The chart above illustrates a shift in manufacturing employment relative to total private employment. From 1995 to 2005 manufacturing employment declined by 1,300 or 17.6%, equal to the U.S. and far below the region and state. Overall manufacturing employment losses have been slowed by gains in machinery and fabricated metal product manufacturing. Over the same period, total private employment added 1,800 or 12%. Growth in Construction and Leisure and Hospitality accounted for much of this growth.

### At a Glance

2005	Lincoln County	Region	North Carolina	United States
Population	69,500	2.0 m	8.6 m	296 m
Pop Growth '90-'05	38.1%	41.7%	30.4%	19.1%
Median HH Income	\$45,800	\$49,800	\$43,300	\$46,300
Growth in HH Income '90-'05	59.5%	64.5%	62.5%	54.0%
% Bachelor's Degree or higher	14.3%	27.5%	25.3%	27.7%
% of Adults age 25-44	28.5%	30.5%	29.2%	28.2%
Unemployment rate	5.7%	5.4%	5.2%	5.1%
Private Employment	16,400	821,300	3.9 m	110.2 m
Emp. Growth 95-05	12.0%	15.8%	11.7%	13.8%
Manufacturing Emp	6,200	127,200	566,600	14.2 m
Mfg Emp. Growth 95-05	-17.6%	-32.2%	-31.0%	-17.6%

## Cluster Strength: Lincoln County, North Carolina

Lincoln County's top six clusters are a mix of low and high tech manufacturing industries; all of which are strong clusters for the region as well. Of the county's 15 top industry clusters, none are in professional business services or research related industries, which could make it difficult to support further growth in advanced manufacturing.

Employment by Industry: Lincoln County, North Carolina

NAICS	Description	1995	2000	2003	2005	Growth 95 to 05	Growth 00 to 05	Growth 03 to 05
10	Total All Industries	14,637	16,735	16,083	16,399	12.0%	-2.0%	2.0%
101	Goods-Producing	8,418	8,637	7,257	7,916	-5.0%	-8.3%	9.1%
1011	Natural Resources and Mining	115	123	99	122	6.1%	-0.8%	23.2%
1012	Construction	722	1,242	1,435	1,550	114.7%	24.8%	8.0%
1013	Manufacturing	7,581	7,272	5,722	6,243	-17.6%	-14.2%	9.1%
102	Service-Providing	6,218	8,098	8,826	8,483	36.4%	4.8%	-3.9%
1021	Trade, Transportation, and Utilities	2,949	3,538	3,687	3,443	16.8%	-2.7%	-6.6%
1022	Information	153	165	156	170	11.1%	3.0%	9.0%
1023	Financial Activities	425	570	500	505	18.8%	-11.4%	1.0%
1024	Professional and Business Services	707	1,302	1,377	786	11.2%	-39.6%	-42.9%
1025	Education and Health Services	766	992	1,198	1,182	54.3%	19.2%	-1.3%
1026	Leisure and Hospitality	926	1,179	1,365	1,785	92.8%	51.4%	30.8%

Source: Bureau of Labor Statistics

### TOP 15 INDUSTRY CLUSTERS IN LINCOLN COUNTY, 2005



Bureau of Labor Statistics

## Manufacturing Cluster Strength: Lincoln County, North Carolina

Lincoln County is one of the few counties to experience growth in manufacturing in the near term. Over the past two years manufacturing employment has grown 9.1%, while services actually decreased 3.9%. Some of Lincoln County's strongest manufacturing clusters are textiles, chemicals, machinery, and furniture manufacturing. Based on recent employment growth, some of the County's promising industries include nonmetallic mineral product, fabricated metal product, and machinery manufacturing. Lincoln County offers an inexpensive manufacturing workforce, as the average wage is only 69.3% of the national average.

Lincoln County, North Carolina

NAICS	Description	2005	Cluster Ratio	03 to 05	00 to 05	95 to 05	Local Avg Wage	US Avg Wage	Wage Differential
10	Total All Industries	18,399	1.0	2.0%	-2.0%	12.0%	\$27,770	\$39,617	70.1%
31-33	Mfg	6,243	3.0	9.1%	-14.2%	-17.6%	\$33,649	\$48,538	69.3%
313	Textile Mills	1,191	36.5	-10.8%	-47.8%	-56.7%	\$24,026	\$33,593	71.5%
3131	Fiber, Yarn, & Thread Mills	265	35.0	-44.0%	-	-	\$19,502	\$30,370	64.2%
3132	Fabric Mills	485	31.0	-18.6%	-57.7%	-70.0%	\$24,105	\$34,666	69.5%
3133	Textile & Fabric Finishing & Fabric Coating Mills	215	22.8	-19.2%	-	-	\$29,985	\$34,406	87.2%
313312	Textile & Fabric Finishing (except Broadwoven Fabric)	215	62.2	-19.2%	-	-	\$29,985	\$32,691	91.7%
321	Wood Product Mfg	162	2.0	-	-	-	\$28,778	\$33,370	86.2%
323	Printing & Related Support Activities	20	0.2	-9.1%	-45.9%	-52.4%	\$22,423	\$39,890	56.2%
323110	Commercial Lithographic Printing	4	0.1	-63.6%	-	-	\$22,240	\$42,464	52.4%
325	Chemical Mfg	300	2.3	-4.8%	-	-	\$47,623	\$71,009	67.1%
326	Plastics & Rubber Products Mfg	96	0.8	-	-	-	\$37,455	\$39,321	95.3%
327	Nonmetallic Mineral Product Mfg	223	3.0	23.9%	19.3%	153.4%	\$38,904	\$43,032	90.4%
3273	Cement & Concrete Product Mfg	190	5.4	11.8%	-	-	\$40,517	\$42,593	95.1%
332	Fabricated Metal Product Mfg	1,821	8.1	19.1%	1.4%	43.2%	\$42,860	\$41,219	104.0%
3327	Machine Shops; Turned Product; & Screw, & Bolt Mfg	39	0.8	-18.8%	-7.1%	18.2%	\$32,960	\$40,106	82.2%
333	Machinery Mfg	353	2.1	27.9%	31.2%	59.0%	\$38,149	\$50,934	74.9%
337	Furniture & Related Product Mfg	1,276	15.2	6.4%	2.0%	-22.1%	\$27,484	\$32,568	84.4%
3371	Household & Institutional Furniture & Kitchen Cabinet Mfg	1,253	22.1	24.9%	24.3%	-15.3%	\$27,636	\$30,449	90.8%
3372	Office Furniture (including Fixtures) Mfg	23	1.2	-88.3%	-90.6%	-85.5%	\$19,248	\$37,967	50.7%
339	Miscellaneous Mfg	98	1.0	55.6%	50.8%	-	\$30,456	\$43,919	69.3%

Source: Bureau of Labor Statistics

Total Population, 2003	67,851
Total Households, 2003	25,738
Average Age, 2003	37.7

**Educational Attainment, 2003**

Less than High School	12,993
High School	14,559
Associates Degree	9,677
Some College	2,555
Bachelor's Degree	4,308
Graduate Degree	1,511
SAT score, county average	981
SAT score, state average	1001

**Income, 2003**

Median Household Income	\$44,346
Per Capita Income	\$20,127

**Employment by Industry, 2003**

Agriculture, Mining	240
Construction	287
FIRE	429
Manufacturing	6,344
Public Administration	552
Retail Trade	4,053
Wholesale Trade	657
Services	5,902
Transportation, Warehousing	1,875

**Labor Force**

Population, age 16+	53,145
Unemployment Rate	6.60%

Lincoln County is a place where things are still made. Where skilled workers know how to use their hands as well as their heads. Where business, industry and distribution exist comfortably side by side with quality small town, country and lakeside living. Where traffic doesn't roar by but interstates are just down the road. Where big city amenities are nearby but urban sprawl doesn't yet intrude.

Lincoln County provides the perfect environment for business. The county boasts a highly responsive infrastructure. From a strong business retention and expansion program to an extensive selection of prime business parks, up to 600 acres, and free-standing locations, Lincoln County is the perfect locality for all types of business.

Because of Lincoln County's superior business climate, the county is rapidly being recognized as a manufacturing and distribution hub with a growing automotive sector. Companies are taking advantage of Lincoln County's low tax rate, available skilled labor, commitment to learning and no labor unions. Along with Lincoln County's high quality of life, the county has become attractive to a diversity of international and domestic companies.

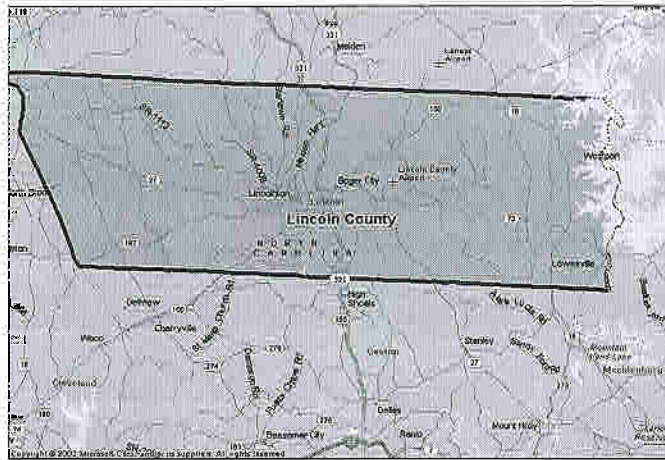
From location to quality of life, Lincoln County, North Carolina is the perfect place for living and the perfect place for working.


**Contact Information**

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**Major Employers**

<u>Company</u>	<u>Major Product</u>	<u># Employees</u>
RSI Home Products, Inc.	Vanities & culture marble counter tops, cabinets, etc	988
The Timken Company	Tapered roller bearings & package bearing wheel assembly	790
Robert Bosch Tool Corporation	Hand tools & power tool accessories	512
Blum, Inc.	Cabinet & furniture hardware	410
Cochrane Furniture	Furniture (bedroom, dining & upholstery)	400
R-Anell Custom Homes Inc.	Mfg. housing, modular & commercial	353
Mohican Mills	Tricot, circular and lace knit products	350
La-Z-Boy Inc.	Upholstered recliners & incline groups	320
LeeBoy - Rosco Manufacturing	Asphalt & road machinery	290
McMurray Fabrics, Inc.	Specialty fabrics	200



<b>Average Weekly Wage</b>	<b>2003</b>
Agriculture, Forestry, Fishing	\$310
Utilities	\$776
Construction	\$459
Manufacturing	\$602
Wholesale Trade	\$664
Retail Trade	\$367
Transportation & Warehousing	\$663
Information	\$601
Finance & Insurance	\$658
Real Estate & Rental & Leasing	\$417
Professional & Technical Services	\$485
Management of Companies & Enterprises	\$687
Administrative & Waste Services	\$511
Educational Services	\$386
Health Care & Social Assistance	\$499
Accommodation & Food Services	\$194
Public Administration	\$724
<b>Average Weekly Wage</b>	<b>\$606</b>

**Announced Jobs & Investments**

Jobs announced, 2003	12
Total investment announced, 2003	\$18,400,000

**Accessibility**

Nearest Major City	Charlotte
Distance to Nearest Major City (miles)	35 miles
Nearest Commercial Airport	Douglas International
Runway Length	10,000 ft.
Distance to Nearest Airport	30 miles
Nearest Interstate	I-85
Distance to Nearest Interstate (miles)	17 miles
Nearest Deepwater Port	Port of Charleston
Distance to Nearest Deepwater Port	242 miles
Foreign Trade Zone Accessibility	Yes
Population within 50 mile radius, 2003	2,406,823

**Development Capacity**

Wastewater Treatment Capacity Available	Yes
Natural Gas Available	Yes

**Taxes, Sales & Services**

Property Taxes/\$100 value	\$0.620
Gross Retail Sales (Mil \$, May 03)	\$54.3
Gross Retail Sales (Mil. \$, FY 01-02)	\$553.7
Number of Physicians, 2002	61
Population/Physician ratio, 2002	1,095
Population/RN ratio, 2002	264
Population/Dentist ratio, 2002	4,771

Source: NC Department of Commerce, 2003

**Unemployment Insurance**

New Employers (per \$100)	1.2%
Deficit Employers (max rate)	5.7%
Minimum Tax Rate	0.0%
Average Tax Rate	0.4%
Taxable Base	\$15,900

**Inventory Tax**

Finished Goods	none
Raw Materials	none
Goods in Process	none
Mat'l consumed in Mfg.	none

**Sales Tax, General**

State	4.5%
Local	2.5%

**Sales Tax, Special Provisions**

Electricity	3.0%
Natural Gas	3.0%
Manufacturing Fuels	1.0%
Manufacturing Equipment	1.0%
Telecommunications Service (intrastate)	6.0%

**Education**

Public Schools	20
Private Schools	2
School Districts	1
Colleges & Universities	0

**Climate**

Annual Average Temp.	61F
Annual Average High Temp.	71F
Annual Average Low Temp.	51F

