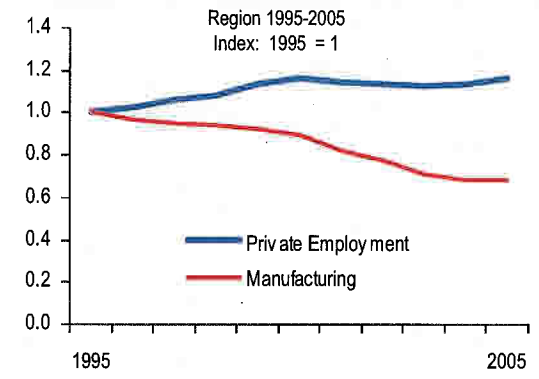
Centralina Region

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
Mfg 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.

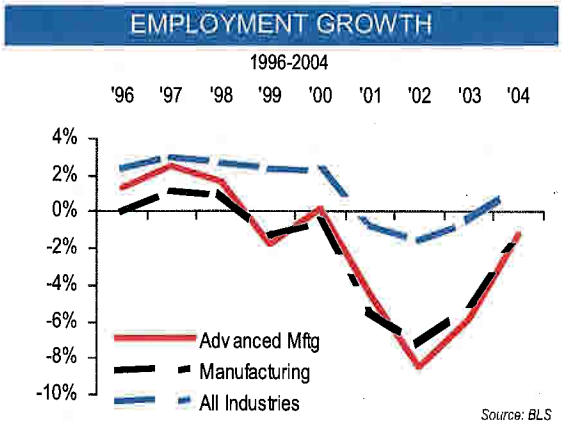
NAICS DEFINITION OF ADVANCED MANUFACTURING

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	Aii 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.		

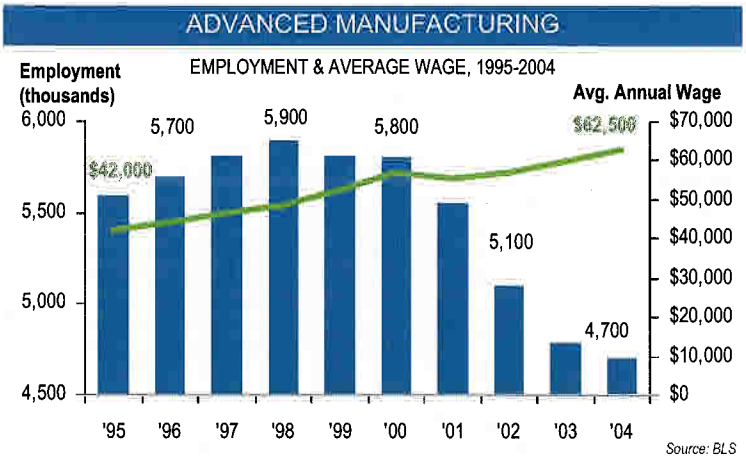
Source: Department of Commerce

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.



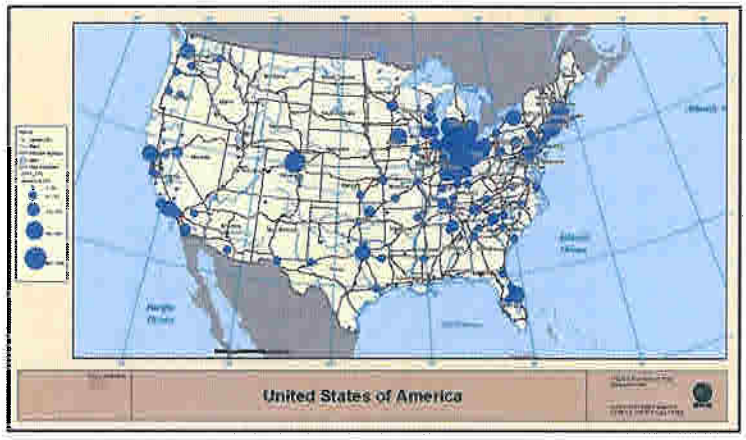
Despite the fluctuations in employment for the industry, average wages for advanced manufacturing have proved more resilient in variable economic environments. In the past decade, average wages for the industry have increased a substantial 49%. More importantly, as employment declined 19% from 2000 to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

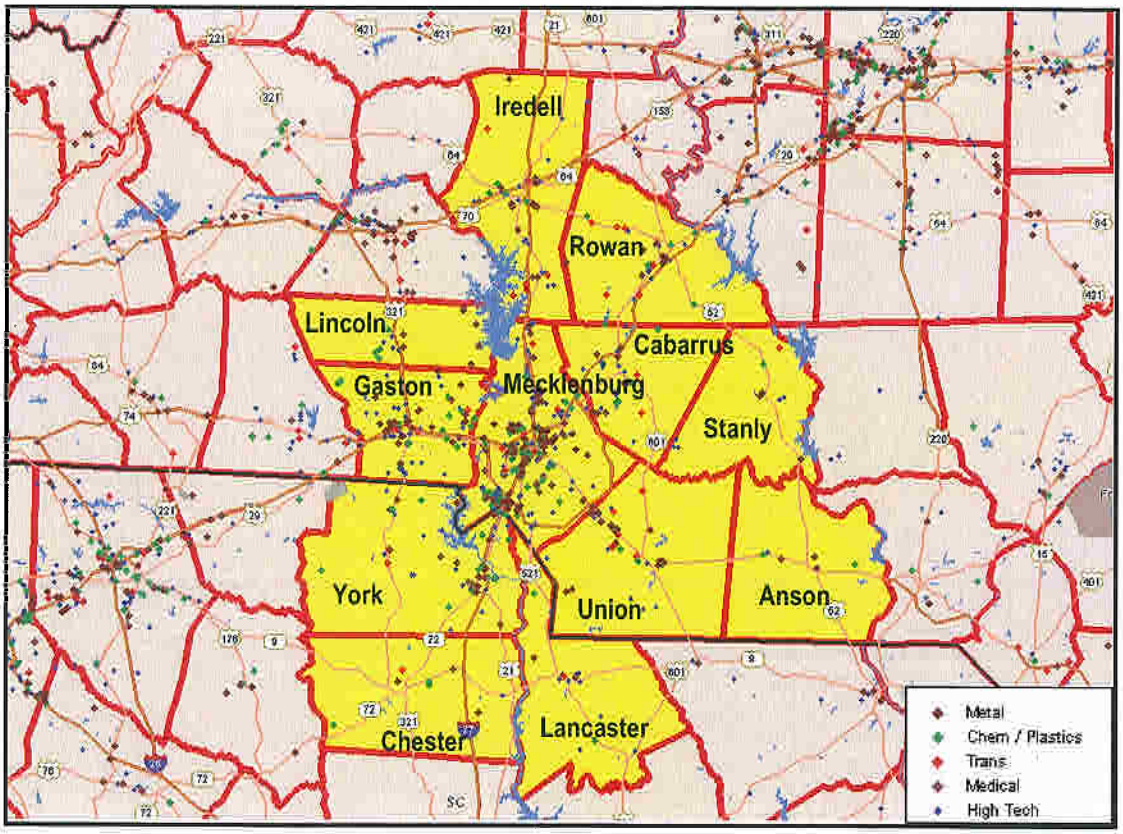


National Advanced Manufacturing Industry Growth Distribution 1995-2004

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 Mftg	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
15-0000	**Computer and Mathematical Occupations**	**20,940**	**1.11**	**$64,850**	**$66,370**	**97.7%**
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	108.5%
15-1099	Computer Specialists, All Other	300	0.39	$54,540	$62,930	86.7%
17-0000	**Architecture and Engineering Occupations**	**12,970**	**0.85**	**$57,730**	**$63,060**	**91.5%**
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	90.6%
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%
19-0000	**Life, Physical, and Social Science Occupations**	**5,090**	**0.69**	**$55,430**	**$57,550**	**96.3%**
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

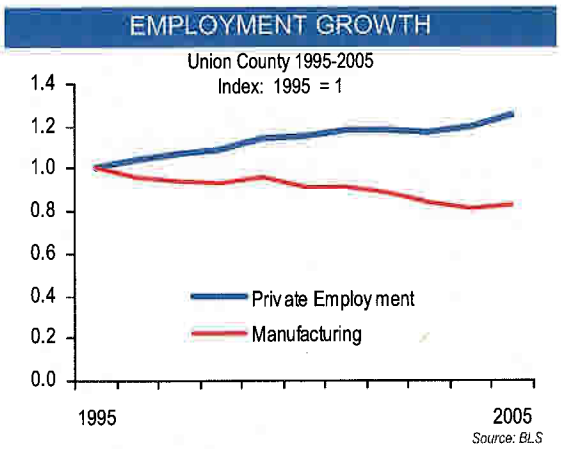
Charlotte MSA: Breakdown of Production Occupations

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	1.26	$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	$35,260	$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	$22,900	$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	$25,910	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

Union County, North Carolina

Union County is the fourth largest county in the study area with a population of 159,700. Over the past fifteen years the county has grown by 89.7%, far outpacing the region, state and nation. Residents enjoy an above average median household income, with strong historical growth trends. Educational attainment is below the state and nation, indicating that the area may have trouble finding skilled workers. The unemployment rate is 4.2% and could create a tight labor supply should it drop any lower. 30.8% of Union County residents are in the 25 to 44-age range, which is above the nation. Many business owners and entrepreneurs can be found in this demographic, making it critical to the economic vitality of a region. Typically, technology companies locate in regions that have 33% or more of their residents in this age group.



At a Glance

2005	Union County	Region	North Carolina	United States
Population	159,700	2.0 m	8.6 m	296 m
Pop Growth '90-'05	89.7%	41.7%	30.4%	19.1%
Median HH Income	$56,000	$49,800	$43,300	$46,300
Growth in HH Income '90-'05	80.9%	64.5%	62.5%	54.0%
% Bachelor's Degree or higher	22.8%	27.5%	25.3%	27.7%
% of Adults age 25-44	30.8%	30.5%	29.2%	28.2%
Unemployment rate	4.2%	5.4%	5.2%	5.1%
Private Employment	41,800	821,300	3.9 m	110.2 m
Emp. Growth 95-05	24.7%	15.8%	11.7%	13.8%
Manufacturing Emp	11,600	127,200	566,600	14.2 m
Mftg Emp. Growth 95-05	-17.0%	-32.2%	-31.0%	-17.6%

The chart above illustrates a gradual shift in manufacturing employment along side total private employment over the past ten years. From 1995 to 2005 manufacturing employment declined by 2,400 or 17%, just below the U.S. and well below the region and state. Overall manufacturing employment losses have been slowed by gains in machinery and plastics manufacturing. Over the same period, total private employment added 8,300 or 24.7%. The majority of this growth occurred in construction and professional and business services.

Cluster Strength: Union County, North Carolina

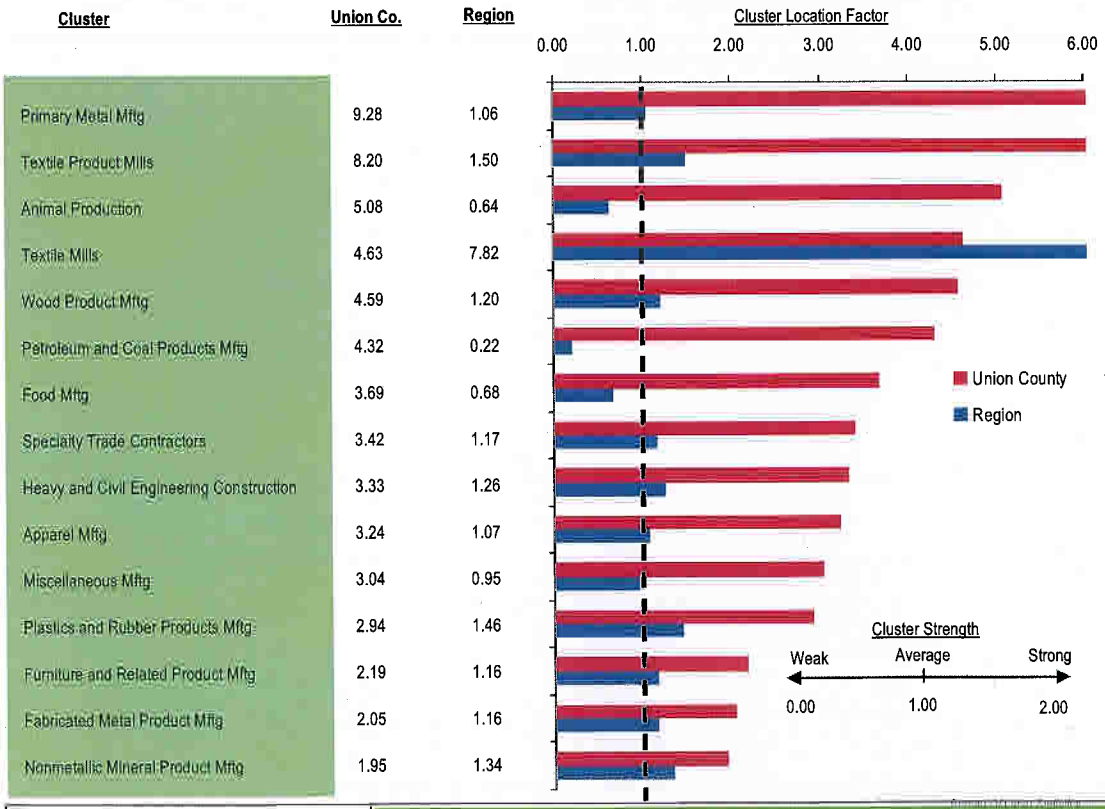
12 of Union County's top 15 clusters are a mix of low and high tech manufacturing industries; most of which are strong clusters for the region as well. Of the County's 15 top industry clusters, none are in professional business services or research related industries, which could make it difficult to support further growth in advanced manufacturing. Union County's employment base is quickly shifting towards service industries, as financial activities and professional and business services have experience strong growth over the past ten years.

Employment by Industry: Union 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	33,477	38,624	39,255	41,760	24.7%	8.1%	6.4%
101	Goods-Producing	19,501	20,638	19,803	20,442	4.8%	-0.9%	3.2%
1011	Natural Resources and Mining	466	621	671	672	44.2%	8.2%	0.1%
1012	Construction	5,102	7,305	7,402	8,200	60.7%	12.3%	10.8%
1013	Manufacturing	13,933	12,712	11,730	11,570	-17.0%	-9.0%	-1.4%
102	Service-Providing	13,976	17,986	19,452	21,318	52.5%	18.5%	9.6%
1021	Trade, Transportation, and Utilities	6,505	8,487	8,097	8,276	27.2%	-2.5%	2.2%
1022	Information	461	375	324	292	-36.7%	-22.1%	-9.9%
1023	Financial Activities	900	871	952	1,052	16.9%	20.8%	10.5%
1024	Professional and Business Services	1,682	2,739	3,099	4,057	141.2%	48.1%	30.9%
1025	Education and Health Services	1,640	1,986	2,856	2,778	69.4%	39.9%	-2.7%
1026	Leisure and Hospitality	2,041	2,465	2,968	3,409	67.0%	38.3%	14.9%

Source: Bureau of Labor Statistics

TOP 15 INDUSTRY CLUSTERS IN UNION COUNTY, 2005



Manufacturing Cluster Strength: Union County, North Carolina

A closer look at the manufacturing industry in Union County reveals that the county's strengths lie in primary metals, textile product, industrial machinery, and medical equipment manufacturing. Several of these clusters are losing strength, as employment shifts to other manufacturing industries or to service industries. However, Union County is one of few counties to increase employment in textile product mills in the past two years. Emerging clusters in the county that have recently experienced strong positive growth include coating, turned products, and electronic product manufacturing. Both overall wages and manufacturing wages in the county are well below the national average, making the area competitive from a cost perspective.

Union 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	41,760	1.0	6.4%	8.1%	24.7%	$31,456	$39,617	79.4%
31-33	Mftg	11,570	2.2	-1.4%	-9.0%	-17.0%	$37,839	$48,538	78.0%
311	Food Mftg	2,061	3.7	-12.0%	-	-	$26,105	$35,127	74.3%
3116	Animal Slaughtering & Processing	1,964	10.3	-12.9%	-	-	$25,629	$28,460	90.1%
313	Textile Mills	384	4.6	-12.1%	-35.4%	-65.9%	$28,236	$33,593	84.1%
313311	Broadwoven Fabric Finishing Mills	215	18.9	-4.4%	-18.6%	-40.3%	$28,166	$33,238	84.7%
314	Textile Product Mills	529	8.2	60.8%	-	-	$26,273	$29,451	89.2%
315	Apparel Mftg	319	3.2	-15.8%	-47.1%	-71.4%	$17,681	$28,301	62.5%
321	Wood Product Mftg	970	4.8	29.2%	26.1%	39.0%	$35,187	$33,370	105.4%
322	Paper Mftg	112	0.6	-37.8%	-37.8%	-	$30,477	$50,749	60.1%
323	Printing & Related Support Activities	54	0.2	-64.2%	-69.8%	-82.2%	$29,536	$39,890	74.0%
323110	Commercial Lithographic Printing	19	0.2	11.8%	-	-	$38,404	$42,464	90.4%
323114	Quick Printing	15	0.6	36.4%	-	-	$29,900	$32,783	91.2%
324	Petroleum & Coal Products Mftg	183	4.3	-	-	-	$38,870	$83,139	46.8%
325	Chemical Mftg	256	0.8	-26.6%	-43.7%	-23.1%	$45,043	$71,009	63.4%
326	Plastics & Rubber Products Mftg	892	2.9	-7.7%	-14.3%	11.4%	$46,155	$39,321	117.4%
326199	All Other Plastics Product Mftg	242	1.9	-12.6%	-14.5%	54.1%	$42,074	$36,161	116.4%
327	Nonmetallic Mineral Product Mftg	371	1.9	-13.5%	-12.9%	-2.6%	$36,191	$43,032	84.1%
3273	Cement & Concrete Product Mftg	79	0.9	-8.1%	-	-	$44,466	$42,593	104.4%
331	Primary Metal Mftg	1,637	9.3	-	-	-	$53,771	$51,376	104.7%
332	Fabricated Metal Product Mftg	1,176	2.1	-0.8%	-31.6%	-25.2%	$37,534	$41,219	91.1%
3323	Architectural & Structural Metals Mftg	323	2.2	-2.7%	-27.3%	-15.2%	$40,602	$38,436	105.6%
332322	Sheet Metal Work Mftg	141	3.6	-5.4%	-36.8%	-23.4%	$41,653	$38,504	108.2%
3327	Machine Shops; Turned Product; & Screw, & Bolt Mftg	262	2.0	17.5%	18.0%	57.8%	$36,732	$40,106	91.6%
3328	Coating, Engraving, Heat Treating, & Allied Activities	34	0.6	61.9%	-	-	$23,066	$36,110	63.9%
333	Machinery Mftg	671	1.5	-1.9%	28.1%	21.6%	$49,651	$50,934	97.5%
3332	Ind Machinery Mftg	283	6.1	-4.1%	52.2%	112.8%	$45,478	$56,956	79.8%
3335	Metalworking Machinery Mftg	137	1.8	17.1%	75.6%	37.0%	$42,438	$46,413	91.4%
334	Computer & Electronic Product Mftg	199	0.4	16.4%	29.2%	-	$49,868	$76,285	65.4%
335	Electrical Equip, Appliance, & Component Mftg	171	1.0	-52.9%	-74.2%	-67.3%	$35,794	$46,381	77.2%
3353	Electrical Equip Mftg	56	1.0	-75.9%	-	-	$41,034	$49,193	83.4%
336	Transportation Equip Mftg	216	0.3	-26.8%	-31.9%	-44.6%	$45,233	$56,930	79.5%
337	Furniture & Related Product Mftg	469	2.2	-7.1%	-14.3%	14.1%	$26,986	$32,568	82.9%
337110	Wood Kitchen Cabinet & Countertop Mftg	361	5.7	21.5%	-	-	$28,381	$31,587	89.8%
339	Misc Mftg	747	3.0	21.7%	28.1%	22.5%	$42,820	$43,919	97.5%
3391	Medical Equip & Supplies Mftg	656	5.7	-	-	-	$45,075	$50,700	88.9%

Source: Bureau of Labor Statistics

CHARLOTTE USA.

Total Population, 2003	146,692
Total Households, 2003	51,660
Average Age, 2003	35.3
Educational Attainment, 2003	
Less than High School	18,632
High School	28,944
Associates Degree	19,510
Some College	6,709
Bachelor's Degree	14,488
Graduate Degree	5,202
SAT score, county average	1008
SAT score, state average	1001
Income, 2003	
Median Household Income	$53,795
Per Capita Income	$23,359
Employment by Industry, 2003	
Agriculture, Mining	814
Construction	915
FIRE	923
Manufacturing	12,220
Public Administration	838
Retail Trade	10,028
Wholesale Trade	2,049
Services	11,365
Transportation, Warehousing	4,304
Labor Force	
Population, age 16+	110,712
Unemployment Rate	4.90%

Contact Information

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Companies are moving to Union County to take advantage of its hardworking, well-educated workforce, large tracts of land and a pro-business environment. Adjacent to Charlotte and Interstate 485, Union County has become so attractive it is the 18th fastest growing county in the nation and has surpassed all others in both Carolinas. With assets such as the Monroe Regional Airport, Union Regional Medical Center, and South Piedmont Community College, Union County is a premier location for business in the Charlotte Region.

The productivity and competitive labor force, exceeding 70,000, utilizes the innovative curriculum offered by the South Piedmont. A degree program in Metallurgy, one of only two in the nation, demonstrates the college's eagerness to adapt to the needs of industry. Monroe Regional Airport continues to improve in order to serves our industries with recent taxiway improve-ments and a planned runway extension to 7,000 feet.

Union Regional Medical Center is continuing to build upon its reputation as a technologically advanced regional healthcare campus. The recent $47 million expansion of its Outpatient Diagnostic Treatment Facility, Cancer Treatment Center, and radiation therapy services, allows our citizens access to advanced healthcare here at home. Wingate University will also play a significant role in our developing Medical Cluster with the additional of their new $6 million School of Pharmacy. Finally, a local development group has announced plans for a 430,000 square foot medical park that will generate nearly 800 jobs and $65 million in capital investment.

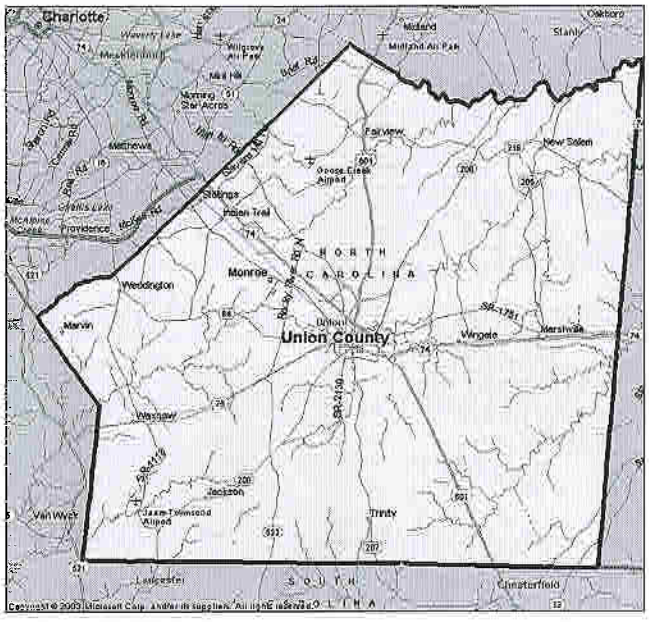
Evidenced by the increase in population and record capital investment, Union County has earned its reputation as a "Great Place to Live and Work."

Major Employers

Company	Major Product	Employees
Tyson Foods Inc.	Puulrty Slaughtering, Dressing & Processing	1,300
Allvac	Secondary Smelting& Refiing of Nonferrous Metals	1,100
Wampler Foods Inc.	Poultry Slaughtering, Dressing & Processing	725
Consolidated Metco	Aluminum Die Castings	600
Charlotte Pipe & Foundry Co.	Plastic Pipe	500
Perfect Fit Furnishings	Housefurnishings: Textile	450

CHARLOTTE USA.

UNION COUNTY, NC



Announced Jobs & Investments	
Jobs annouced, 2003	620
Total investment announced, 2003	$59,700,000

Accessibility	
Nearest Major City	Charlotte
Distance to Nearest Major City (miles)	26 miles
Nearest Commercial Airport	Douglas International
Runway Length	10,000 ft.
Distance to Nearest Airport	25 miles
Nearest Interstate	I-85
Distance to Nearest Interstate (miles)	17 miles
Nearest Deepwater Port	Port of Charleston
Distance to Nearest Deepwater Port	206 miles
Foreign Trade Zone Accessibilty	Yes
Population within 50 mile radius, 2003	1,957,560

Development Capacity	
Wastewater Treatment Capacity Available	Yes
Natural Gas Available	Yes

Taxes, Sales & Services	
Property Taxes/$100 value	$0.530
Gross Retail Sales (Mil $, May 03)	$129.2
Gross Retail Sales (Mil. $, FY 01-02)	$1,403.2
Number of Physicians, 2002	128
Population/Physician ratio, 2002	1,063
Population/RN ratio, 2002	230
Population/Dentist ratio, 2002	5,442

Source: NC Department of Commerce, 2003

Average Weekly Wage	2003
Agriculture, Forestry, Fishing	$711
Utilities	$804
Construction	$583
Manufacturing	$638
Wholesale Trade	$733
Retail Trade	$466
Transportation & Warehousing	$674
Information	$726
Finance & Insurance	$379
Real Estate & Rental & Leasing	$566
Professional & Technical Services	$568
Management of Companies & Enterprises	$798
Administrative & Waste Services	$390
Educational Services	$439
Health Care & Social Assistance	$673
Accommodation & Food Services	$195
Public Administration	$700
Average Weekly Wage	*$615*

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	34
Private Schools	7
School Disticts	1
Colleges & Universities	1

Climate	
Annual Mean Temp.	60.6F
Annual Mean High Temp.	72.2F
Annual Mean Low Temp.	49F

Advanced Manufacturing Resources

Feedback Form

Name: _____

County: _____

Does this report adequately cover the advanced manufacturing industry in your County?

Yes No

If no, what should be added or amended?

_____

_____

_____

_____

We appreciate your input.

Please tear out this page and return via fax to the CEDC at 704-347-4710.

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