

**MARKET ST**



**LIVE WORK GROW**

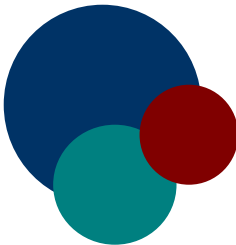
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## LIVE WORK GROW

*Market Street* brings original insights and clarity to the evaluation and revitalization of the places where people live, work and grow. Through honest and informed assessments, *Market Street* can equip you with the tools to create meaningful change. Our solutions merge our experience and expertise with the economic and social realities of our clients. *Market Street's* community clients are successful at creating stronger programs, increasing operational budgets, and creating new quality jobs that improve the quality of life in their communities.

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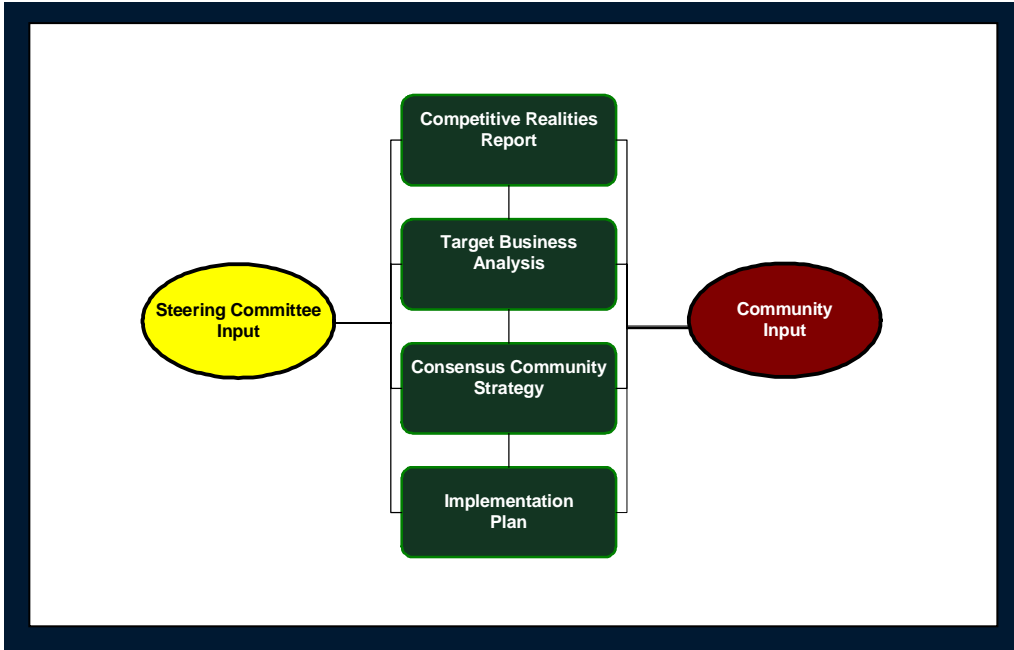
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# PROJECT OVERVIEW

Business and community leaders in Caldwell County have acknowledged that the New Economy is changing the dynamics of local competitiveness and job growth. Together with Caldwell 20/20, community leaders are embarking on the development of this *Consensus Community Strategy* – the first effort of its kind in Caldwell County – in order to identify opportunities for community growth, to strengthen local workforce opportunities, and cultivate local quality of life assets. This is another positive step on the road to optimizing the community’s ability to build a brighter future.

There are four key components of the Caldwell County community strategic planning process. Each is outlined in further detail on the facing page. The first phase, a *Competitive Realities Assessment*, has been completed and the *Report* is available on the project website ([www.lenoircaldwellstrategy.com](http://www.lenoircaldwellstrategy.com)). This *Target Business Analysis* is the second phase of the process to develop the *Strategy*.

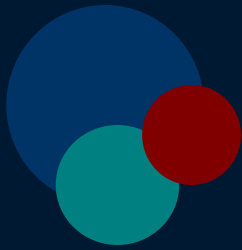


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The following is a brief description of the stages of this process.

1. **Competitive Realities:** This *Report* demonstrated the current realities of Caldwell County's demographic trends, economic structure, and its overall business climate (including education and workforce development, infrastructure, business costs and capacity, and quality of life). This *Report* helped develop a shared understanding among project stakeholders of Caldwell County's challenges and opportunities.
2. **Stakeholder Input Process:** To gather the perspectives of community members and project stakeholders, several avenues were utilized including individual interviews and focus groups as well as an online survey. Information was gathered about various aspects of Caldwell County's overall competitiveness and quality of life. A *Stakeholder Input Summary* will be provided prior to the *Community Consensus Strategy*.
3. **Target Business Analysis:** This document presents an analysis of quantitative and qualitative research in order to determine priority target industry sectors for Caldwell 20/20 to pursue. It includes an analysis of current business concentrations and an assessment of Caldwell County's current workforce development capacity for each sector.
4. **Community Consensus Strategy:** The *Strategy* will utilize all previously collected research to provide a blueprint for Caldwell 20/20's immediate and long-term goals. This document will integrate existing local plans and strategies relevant to the recommended goals, objectives, and specific action steps needed for the community to realize its preferred future.
5. **Implementation Plan:** The final document in this process will assist Caldwell 20/20 in prioritizing action steps, assessing key implementation entities, building timelines and researching current and potential funding sources.

At the end of this process, Caldwell 20/20 and its partners will have a *Strategy* focused on addressing the community's needs and leveraging opportunities, and the action steps and implementation guidelines necessary to achieve success.



## INTRODUCTION

Caldwell County is truly in an evolutionary period. Traditional job opportunities in manufacturing that provided the community with stability and vitality for generations have declined due to cheaper labor costs overseas. At the same time, new opportunities have appeared in services and technology based business sectors. However, the demands of occupations in these sectors (in terms of educational training and skills needed) differ from those in technical trades. This “skills gap” has created a certain level of anxiety within the community’s workforce. Most interview and focus groups participants commented on the so-called “negative community self-esteem” these economic challenges have brought about.

While there have been significant challenges (as were identified in the *Competitive Realities* report and through focus groups, interviews and the on-line survey), Caldwell County also has *many* assets it can use to leverage economic growth and diversification. These include:

- A strong quality of life and beautiful natural resources with the proven ability to attract families and retirees from high-cost markets in Virginia, Florida, New York, and California.
- An experienced manufacturing workforce.
- World-class workforce development resources at Caldwell Community College and Technical Institute with programming for high school students, young adults, professionals, and displaced workers.
- K-12 schools with consistently strong student performance despite a large increase in the percentage of economically disadvantaged students.
- Easy interstate access and improved transportation infrastructure with the construction of a new transload facility.
- A highly regarded hospital with several specialty care areas.
- Close proximity to Hickory-Catawba County, a population and jobs center which is experiencing growth.

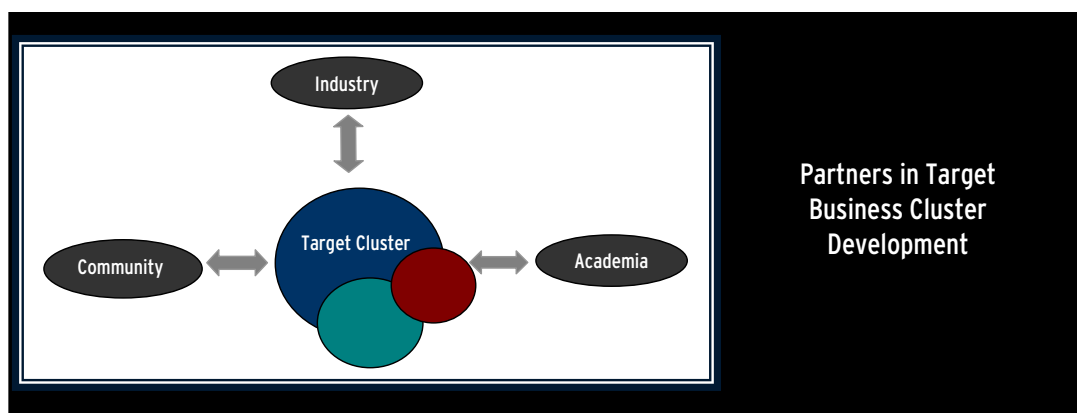
The objective of this *Target Business Analysis* is to identify industry groups on which to focus economic development efforts in order to stabilize, grow, and diversify Caldwell County’s economy. In this document, the terms “target,” “cluster,” and “target sector” describe the same concept: an industry group grown through

retention/expansion, entrepreneurship/small business development and recruitment efforts.

The economic development strategy of targeting identified business sector opportunities began with the recognition that businesses can develop into interconnected groups of related sectors. The connections among businesses develop over time because the local economy offers the infrastructure, geography, workforce, and other related factors that provide a competitive advantage in the field. Ultimately, groupings of businesses within related sectors increase business productivity due to the following factors:

- Complementary relationships that benefit companies in the interconnected group;
- Exposure to competitors that raises expectations, product quality, and worker motivation;
- Access to suppliers and workers;
- Access to relevant public and private institutions; and
- Contact with a flow of specialized information about other companies within the group (i.e. effective business strategies, performance measures, etc.).

To effectively pursue target business development, it is important for local economic developers to bring all relevant stakeholders to the table to identify issues and opportunities they may face in their efforts. Many “best practice” examples of target development include a mix of players and partners including university, workforce development liaisons, k-12 leadership, downtown merchants, health care providers, small business incubators, city/county governments, and the local chamber of commerce. Specific strategies for developing the recommended targets and engaging relevant partners will be outlined in the *Consensus Community Strategy*.



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*Market Street* considers research presented in previous reports, recent employment and wage trends, and stakeholder input when determining priority local targets. Other criteria are also considered, including:

- Does Caldwell County have a significant presence in this target sector, in terms of employment quantity or concentration?
- Does the target sector have good growth prospects nationally?
- Is there wealth creation potential in the target sector, in terms of high wages and advancement opportunities?
- Is the existing workforce prepared to take jobs in this target sector?
- Do the targets, as a whole, provide opportunities for a broad range of constituents in Caldwell County?
- Does the mix of targets help to bolster job and wealth creation, and economic diversification?
- Are there existing local assets that give Caldwell County a competitive edge in this target area?

*Market Street* identified the following as the most promising target clusters for Caldwell 20/20 and its partners to pursue. Ultimately, these targets were selected because they provide job opportunities for a wide range of income and skill levels and contribute to a stronger, more diversified local economy.

- **Advanced Manufacturing**
- **Logistics**
- **Health Care**
- **Corporate, Professional, and Data Services**

In addition, *Market Street* has identified two special opportunity areas that bring benefits to the local economy. **Retiree Attraction and Green Industries** should be pursued with the understanding that both can enhance local vitality. However, *Market Street* does not feel these areas warrant equivalent investment of fiscal and personnel resources as Caldwell County's four recommended sectors.

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## Methodology

Identifying specific target business sectors requires both *quantitative* and *qualitative* research. A quantitative examination of indicators, like wages paid or local employment compared to national averages, determines the magnitude and impact of specific business sectors.

These data are collected according to North American Industry Classification System's (NAICS) codes from the U.S. Bureau of Labor Statistics' (BLS) Quarterly Census of Employment Wages and (in some cases) the Census Quarterly Workforce Indicators. *Market Street* used the most recent available data. NAICS classifies businesses into sectors similar to the now defunct Standard Industrial Classification (SIC) code system, but in categories more closely aligned with today's service-oriented economy. Twenty different divisions represent the broadest (two-digit) NAICS codes, which were used in analyzing employment in potential target clusters. These divisions and their corresponding NAICS codes are:

Division	NAICS Code
Forestry, Fishing, Hunting, & Agriculture Support	11
Mining	21
Utilities	22
Construction	23
Manufacturing	31-33
Wholesale Trade	42
Retail Trade	44-45
Transportation & Warehousing	48-49
Information	51
Finance & Insurance	52
Real Estate & Rental & Leasing	53
Professional, Scientific, & Technical Services	54
Management of Companies & Enterprises	55
Admin., Support, Waste Management & Remediation Svcs.	56
Educational Services	61
Health Care & Social Assistance	62
Arts, Entertainment & Recreation	71
Accommodation & Food Services	72
Other Services (except public administration)	81
Public Administration	92

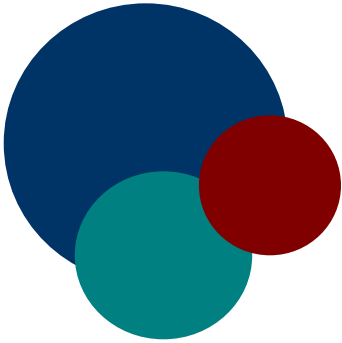
Within each major sector grouping (two-digit level) are business sectors classified into increasingly specific categories, down to the six-digit level NAICS code. In recommending target business sectors, *Market Street* used more specific sector classification codes when appropriate, and where data were available. Due to BLS non-disclosure policy, data are sometimes suppressed, or only ranges of employment size are listed if the information provided would compromise the identity of a particular employer. This occurs more often as the sectors become more detailed (at the 3-digit or 4-digit NAICS level versus the 2-digit level). Targets can cut across multiple NAICS classification categories, and *Market Street's* goal in identifying targets was to be specific enough to clearly understand the focus of the target, but also to be broad enough so that the target was not limited and confined to a small number of opportunities.

An important quantitative term used in this report is *location quotient* (LQ). A location quotient is a ratio representing the strength of a particular local business sector in relation to the national average. It is represented formulaically as:

$$LQ = \frac{\text{(Local Employment in Sector/Total Local Employment)}}{\text{(National Employment in Sector/Total National Employment)}}$$

If a location quotient is *greater* than 1.0, the area has a larger share of employment in that sector than the nation. The higher the LQ, the more concentrated the level of local employment compared to its U.S. equivalent. LQs provide insight into a community's economic structure and its level of industrial diversity. If one or two sectors dominate local employment, slowdowns in these industries may decimate an area's economy.

Conversely, if a location quotient is *less* than 1.0, this indicates a smaller local share of employment than the nation. Just because a sector has a location quotient below 1.0 does not preclude it from being a target sector for the community. Similarly, an LQ over 1.0 does not automatically mean the community should aim for that sector. A number of factors, including national trends, local support services, and regional clusters, contribute to the viability of a local industry group.



## Target Industry Sectors

## Advanced Manufacturing

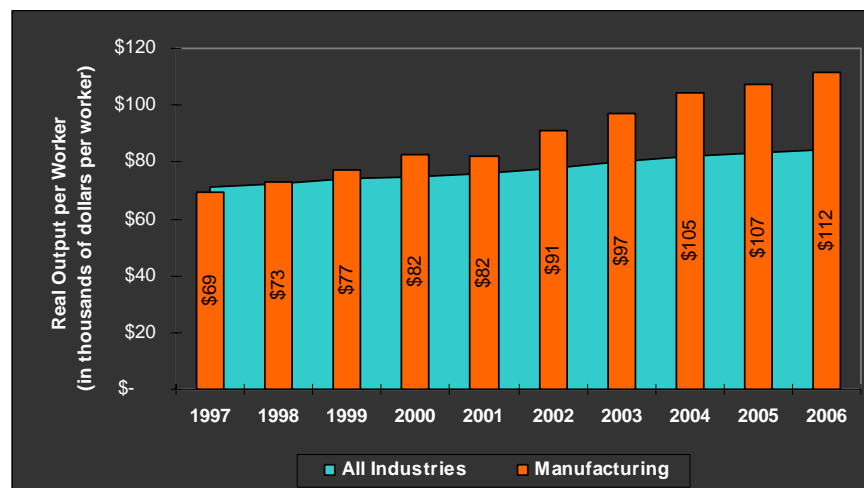
### Sector Description and Trends

While many commodity manufacturing firms have shuttered their U.S. plants or outsourced employment overseas to remain competitive with low-cost foreign enterprises, others have retooled domestic plant operations, streamlined manufacturing processes, and invested in the latest technologies to remain competitive on U.S. soil. Workers at these plants have been forced to “upskill” in order to operate this state-of-the-art machinery, or risk being left behind as the domestic manufacturing sector continues its march towards greater and greater productivity.

The future of manufacturing in Caldwell County – as it is elsewhere in the U.S. – must be focused on the value-added manufacturing processes that enable domestic companies to compete effectively. While several products made in Caldwell County may be considered commodity products, the way in which these products are manufactured is through highly technical, advanced processes utilizing complex, computer-guided plant equipment.

Though millions of U.S. manufacturing jobs have been lost since 2000, this trend has not coincided with a decline in domestic manufacturing output, as shown in the following chart. The commonly misunderstood reality of today’s U.S. manufacturing sector is that productivity enhancements have actually *increased* output despite declines in employment.

**U.S. Real Output per Worker (in thousands of dollars per worker), 1997-2006**

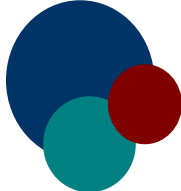


Source: Federal Reserve Bank of San Francisco "Center for the Study of Innovation and Productivity"

Therefore, advanced manufacturing firms that survive and thrive through the adoption of best-practice technologies and production processes are a viable near- and longer-term target for local officials to pursue. In the second quarter of 2007, advanced manufacturers provided over 6.5 million U.S. jobs, paying an average annual wage of \$48,457.

The following chart also includes key U.S. data for the defined sub-sectors of the advanced manufacturing target and location factors of firms within these sub-sectors. Lenoir-Caldwell County's advanced manufacturing target builds on the strong capacity of existing companies and workers focused on manufacturing products using modern processes, equipment, and materials. Despite local job losses, manufacturing jobs still account for nearly one third of all jobs in Caldwell County. Many community's manufacturers have adapted to changes in the economy and global labor market by shifting their product offerings and through increased specialization and customization of products.

### Advanced Manufacturing



- NAICS definition for Lenoir-Caldwell County's target:
  - 321 Wood product manufacturing
  - 326 Plastics and rubber product manufacturing
  - 331 Primary metal manufacturing
  - 332 Fabricated metal product manufacturing
  - 335 Electrical equipment and appliance manufacturing
  - 336 Transportation equipment manufacturing
  - 337 Furniture and related product manufacturing
  - 339 Miscellaneous manufacturing
  
- Total U.S. employment in the above NAICS sub-sectors is 6.54 million, as of the second quarter of 2007
- The national average annual pay of these sectors is \$48,457
  
- Typical Location Factors:
  - ✓ Close proximity to customers, suppliers, and markets
  - ✓ Non-union workforce
  - ✓ Available skills-trained production workers
  - ✓ Proximity to transportation infrastructure
  - ✓ Vacant, large sites available for development
  - ✓ Low cost of industrial power

## Employment Assets

Caldwell County has a local manufacturing presence for many high-profile corporations as well as many smaller local and regional manufacturing companies that produce a variety of consumer goods. It is important to note that while the community's legacy has been in furniture manufacturing, the presence of other firms - like Carolina Precession Components (industrial machinery), BeoCare (textiles/medical), NEPTCO (coatings), Bemis (packaging), VX Aerospace (composites) - indicates that Caldwell County has diversified its presence of advanced manufacturers. A significant furniture sub-sector remains with companies like McCreary Modern, Fairfield Chair, Broyhill, Bernhardt, and others.

As of the second quarter of 2007, the community's total employment in manufacturing is 7,542 – over 5,000 of which are in the advanced manufacturing target. Average annual wages within the target's sub-sectors range from \$28,155 to \$41,460.

**Caldwell County: Advanced Manufacturing, Q2 2007**

NAICS Code and Sector Name	Caldwell County						U.S.	
	Q2 2007 Emp	# Emp Change Q2 05- Q2 07	% Emp Change Q2 05 - Q2 07	Q2 2007 Wages	Wage Change Q2 05- Q2 07	Q2 2007 LQ	Emp Change Q2 05-Q2 07	Q2 2007 Wages
NAICS 321 Wood product mfg	484	-84	-15%	\$30,372	\$3,061	4.64	-7%	\$34,736
NAICS 326 Plastics and rubber products mfg	738	-150	-17%	\$34,616	\$3,872	4.88	-6%	\$41,605
NAICS 331 Primary metal mfg	ND	ND	ND	ND	ND	ND	-2%	\$54,745
NAICS 332 Fabricated metal product mfg	54	-8	-12%	\$29,464	-\$224	0.17	2%	\$44,367
NAICS 335 Electrical equipment and appliance mfg.	ND	ND	ND	ND	ND	ND	-1%	\$49,814
NAICS 336 Transportation equipment mfg	203	ND	ND	\$41,460	ND	0.54	-3%	\$61,527
NAICS 337 Furniture and related product mfg	3,386	-2,673	-44%	\$28,155	\$3,200	31.75	-6%	\$35,143
NAICS 339 Miscellaneous mfg	236	161	212%	\$32,928	\$1,476	1.84	-1%	\$47,626
NAICS 31-33 Manufacturing	7,542	-3,314	-31%	\$29,454	\$2,273	2.71	-2%	\$51,717
Total, all industries	27,179	-2,808	-9%	\$28,306	\$1,087	1.00	3%	\$42,657

Source: U.S. Bureau of Labor Statistics and U.S. Census Bureau  
ND=Not disclosed due to employer privacy issues

Note: The most current disclosed data were used (Q3 2006) to estimate figures for NAICS 336. This data was not disclosed in the other quarters leading up to and including Q2 2007.

Between Q2 2005 and Q2 2007, the Hickory metro area lost 4,844 jobs in manufacturing, of which 3,314 were located in Caldwell County. Despite local job losses, wages in advanced manufacturing sub-sectors have increased during this time, pointing to increased productivity and specialization within the industry. It is important to note that, within the metro area, most of the target's sub-sectors made employment gains in the past two years.

### Hickory-Lenoir-Morganton MSA: Advanced Manufacturing, Q2 2007

NAICS Code and Sector Name	Hickory MSA					U.S.	
	Q2 2007 Emp	# Emp Change Q2 05- Q2 07	% Emp Change Q2 05- Q2 07	Q2 2007 Wages	Q2 2007 LQ	Emp Change Q2 05- Q2 07	Q2 2007 Wages
NAICS 321 Wood product mfg	1,359	-74	-5%	\$ 32,720	2.21	-7%	\$34,736
NAICS 326 Plastics and rubber products mfg	3,422	68	2%	\$ 36,780	3.84	-6%	\$41,605
NAICS 331 Primary metal mfg	616	356	137%	\$ 50,678	1.15	-2%	\$54,745
NAICS 332 Fabricated metal product mfg	1,981	179	10%	\$ 36,870	1.08	2%	\$44,367
NAICS 335 Electrical equipment and appliance mfg.	3,998	114	3%	\$ 47,224	7.95	-1%	\$49,814
NAICS 336 Transportation equipment mfg	1,813	127	8%	\$ 43,955	0.88	-3%	\$61,527
NAICS 337 Furniture and related product mfg	20,132	-3,398	-14%	\$ 32,081	32.08	-6%	\$35,143
NAICS 339 Miscellaneous mfg	523	168	47%	\$ 29,435	0.69	-1%	\$47,626
NAICS 31-33 Manufacturing	49,856	-4,844	-9%	\$ 34,490	3.05	-2%	\$51,717
Total, all industries	159,937	-476	0%	\$ 31,640	1.00	3%	\$42,657

Source: U.S. Bureau of Labor Statistics and U.S. Census Bureau  
 ND=Not disclosed due to employer privacy issues

Note: The most current disclosed data were used (Q3 2006) to estimate figures for NAICS 326. This data was not disclosed in the other quarters leading up to and including Q2 2007.

It will be incumbent upon local economic developers to work closely with Caldwell County's manufacturers to help stem job loss through retention and to work to facilitate expansion where opportunities are identified. Additionally, Caldwell County must leverage the region's growing manufacturing employers for expansion and recruitment leads. Because so many local people are employed in manufacturing, serving this strong existing business sector should continue to be a key focus of economic development efforts.

## Workforce Requirements and Support Services

The majority of U.S. manufacturing jobs continue to be in production occupations, but other workers are in professional occupations (including scientists), office and administrative support, or sales. Training for certain production occupations can occur on the job, with a high school diploma the only prerequisite education level. More technical jobs often require a certificate, Associate's, or even a Bachelor's degree. A Bachelor's degree is typically a minimum requirement for more advanced scientific or engineering-based jobs within the manufacturing sector, with even higher-level positions requiring a master's or Ph.D. At all levels, workers are often encouraged to earn certifications in specific fields of study.

In Caldwell County, there are a variety of certificate and Associate's degree options. However, opportunities to earn advanced manufacturing related degrees at the Bachelor's or Master's level are limited.

- *Caldwell Community College and Technical Institute* offers certificate and Associate's degree programs in mechanical engineering technology and electronic engineering technology. The college also has curricula in heavy equipment and transportation technology, industrial management technology, industrial systems technology, and machining technology. However, some of these certificate and Associate degree programs are currently inactive. CCC&TI offers apprenticeship programs and focused industrial training, both of which are customized to meet the workforce needs of local manufacturers.
- *Appalachian State University* offers Bachelor's degrees in industrial design and physics and Master's degree programs in engineering physics and industrial technology.
- *Lenoir-Rhyne College* offers Bachelor's degrees in physics and pre-engineering.

Advanced manufacturing firms require a range of skill levels, from low-skilled production workers to engineers involved in research and development. An educated and skilled workforce is the strongest competitive edge a community can offer to manufacturers. Manufacturing firms are increasingly faced with difficulty finding sufficient skilled production workers. According to a 2007 study conducted by the National Association of Manufacturers, 20 percent of small to mid-size domestic manufacturers (employing up to 2,000 workers) cite retaining or training employers as their number one concern.<sup>1</sup>

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<sup>1</sup> Morrison, Joanne. “

Because the sector has increased productivity and, at the same time, has become more specialized, firms are able to produce more with fewer workers. As reported by *USAToday* in late 2006, “Innovation in the manufacturing sector means that the jobs require greater skills than ever before. According to an analysis by the [Federal Reserve Bank of New York], employment in high-skilled manufacturing jobs rose 37%, or by 1.2 million jobs, from 1983 to 2002. At the same time, low-skilled factory jobs dropped 25%, or by approximately 2 million workers.”<sup>2</sup> Meeting the labor demands of local manufacturers is a challenge many communities are facing nationwide.

### **Issues and Opportunities**

With plant closures and layoffs at furniture and other manufacturers, Caldwell County has shed approximately 2,753 jobs in advanced manufacturing since the second quarter of 2005. Despite this, manufacturing jobs still account for 28 percent of local jobs, proving how vital these jobs and businesses continue to be for the local community. The majority of manufacturing job loss within the Hickory metro area has been within Caldwell County’s furniture sub-sector. Growth within six of the eight advanced manufacturing sub-sectors in the metro area point to potential opportunities for Caldwell County.

Local advanced manufacturing businesses’ retention efforts need to be strengthened by assisting them with identifying competitive challenges and working to address them. For example, wood suppliers and component manufacturers that formerly served large furniture manufacturers have adapted by supplying wood components for the construction industry. There may be greater opportunities for Caldwell County to assist manufacturers making such transitions. They can also serve as the key conduit between the manufacturing “demand” side (employers) and the “supply” side (workers and training resources) in the constant struggle to maintain a high level of workforce competitiveness.

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<sup>2</sup> Hagenbaugh, Barbara. (December 5, 2006). U.S. Manufacturers Getting Desperate for Skilled Labor. *USAToday*.

Support should not be limited to only large and medium-sized firms in Caldwell County. Ensuring that small business persons and entrepreneurs in this target business sector are aware of the supportive resources available to grow their business should also be a primary local concern. By maximizing the capacity of its local firms, Caldwell County can leverage these companies in the recruitment of outside advanced process manufacturing prospects – both domestic and foreign.

Finally, local officials must make connections between the state’s manufacturing training and research institutions and existing local employers to grow employment in the highly competitive advanced manufacturing sector. Because it is extremely difficult for U.S. communities – even smaller areas like Caldwell County – to compete with countries such as China on cost, local firms must maintain their commitment to integrating the latest-available technology and process-improvements into their manufacturing operations.

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# LOGISTICS

## Sector Description and Trends

Advances in technology have spawned new ways of doing business and reduced the virtual distance between people, even when the physical distance is great. Such technologies have not only created a demand for advanced logistical services, but have also redefined the logistics sector itself. No longer is logistics merely the transport of a product from one point to another by various modes of transportation; the sector has grown increasingly focused on *supply-chain management*. This includes technology services that manage and optimize the entire process from the point when an order is entered, to the time the customer receives it. Due to revolutionary technological advances, logistics support activities now include scheduling, fleet management, network optimization, and other supply-chain management-related processes.

Present technology allows businesses to track the location of individual vehicles via satellite and global positioning systems (GPS), and use refrigerated units to provide computerized feedback on specific operational times and temperatures. Advanced in-house technology and hand-held wireless devices in the field also greatly streamline inventory-maintenance operations. An effective logistics-services network is a necessity for manufacturing, wholesale, and other companies involved with shipment of goods.

Due to U.S. manufacturers' and retailers' reliance on the nation's logistics services network, the logistics sector is expected to remain strong. According to the U.S. Bureau of Transportation Statistics' 2006 annual report, demand for transportation-related goods and services represented over 10 percent of the U.S. economy in the year 2004. Purchases of transportation-related goods and services comprised 10.5 percent of the Gross Domestic Product (GDP) in 2003, or \$1.2 trillion.<sup>3</sup> In the second quarter of 2007, logistics provided 8.75 million U.S. jobs, paying an average annual wage of \$52,723.

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<sup>3</sup> U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics 2006*. April 2006. Accessed online 8 September 2006. <[http://www.bts.gov/publications/national\\_transportation\\_statistics/2006](http://www.bts.gov/publications/national_transportation_statistics/2006)>.

The following chart shows the national employment growth projections from the U.S. Bureau of Labor Statistics (BLS) between 2006 and 2016. During this period, all logistics sub-sectors are expected to experience growth. While the warehousing and storage and support activities sub-sectors are projected to experience rapid growth in the coming years, other logistics sub-sectors are expected to grow at or slightly below total job growth nationwide.

### National Growth Projections for Logistics

Sector Name and NAICS Code	Projected U.S. Job Growth 2006-2016	
	Percent	Number of New Jobs
<i>Wholesale Trade (42)</i>	7%	428,500
<i>Transportation and Warehousing (48-49)</i>	11%	496,200
Truck transportation (484)	11%	157,700
Support activities for transportation (488)	17%	97,000
Warehousing and storage (493)	23%	149,500
<i>Total Non-Agriculture Employment</i>	11%	15,050,100

Source: U.S. Bureau of Labor Statistics. Career Guide to Industries. 2008-2009 Edition.


One issue that affects the profitability of firms within the logistics sector is oil prices. In 2005, oil was priced at \$60 per barrel; in March 2008, oil prices reached \$107 per barrel. Drastic price increases at the fuel pump affect families' retail spending and the bottom-line of logistics employers. According to the American Trucking Association, "For the first time, carriers in some cases are [reporting] that fuel costs are exceeding labor costs."<sup>4</sup> These costs are tied into product pricing, and passed back to consumers. The trend in fuel costs is also creating a shift to rail transportation as a cost competitive alternative. Despite the challenges increased fuel prices bring, growth in the logistics sector is expected to remain strong.

<sup>4</sup> Gilmore, Dan. (March 13, 2008). Supply Chain and \$200 Oil. *Supply Chain Digest*. Accessed online at: <http://www.scdigest.com/assets/FirstThoughts/08-03-13.php?cid=1547>

Caldwell County logistics target is comprised of rail and road transportation, support activities, and warehousing firms. Additionally, in order to develop a true “vertical” cluster, Caldwell County’s logistics target also includes wholesale trade activities. These firms have the responsibility to distribute products, a process that can only be achieved with the help of the logistics firms that move products to and from the wholesalers.

The following chart also includes key U.S. data for the included sectors and locational factors of firms within the targeted sectors.

### Logistics



- NAICS definition for Caldwell County’s target:
  - 423 Merchant wholesalers, durable goods
  - 424 Merchant wholesalers, non-durable goods
  - 425 Electronic markets and agents and brokers
  - 484 Truck transportation
  - 488 Support activities for transportation
  - 493 Warehousing and storage
- Examples:
  - Wholesalers of books, automotive parts, office equipment
  - Wholesalers of groceries, alcoholic beverages, flowers
  - Agents, brokers, online business-to-business markets
  - Freight trucking
  - Transportation arrangement services – brokers, freight forwarding
  - Warehousing, storage, inventory management services
- Total U.S. employment in the above NAICS sub-sectors is 8.75 million, as of the second quarter of 2007
- The national average annual pay of these sectors is \$52,723
- Typical Location Factors:
  - ✓ Close proximity to customers, suppliers, and markets
  - ✓ Available labor force with truck driving and technical skills
  - ✓ Close proximity to training resources
  - ✓ Proximity to transportation infrastructure and cargo hub

## Employment Assets

The following table shows Caldwell County's employment and wages for the logistics target business sector in the second quarter of 2007. Logistics employment accounts for 12 percent of jobs in Caldwell County. The sector's size and trends are related to the area's strong presence of manufacturing firms.

Locally, there are approximately 3,200 jobs in logistics distributed among 145 firms. Jobs in most logistics sub-sectors pay higher than the county's average annual wage of \$28,306. Although three sub-sectors have experienced slight job loss over the past two years, the county's nondurable goods merchant wholesalers added 172 jobs (growing 11 percent) and local warehousing and storage employers added 54 jobs (growing 34 percent).

Merchant Distributors, Inc. is a wholesale food distributor headquartered in Hickory, which supplies food and non-food items to over 600 retail stores. The company operates a large-scale distribution center in southern Caldwell County and it is one of the county's largest employers, employing over 1,000 workers. MDI is planning a \$32 million expansion that will employ 200 additional workers. Other large employers in the logistics target include Caldwell Freight, Anderson Trucking, and Newton Transportation, which predominately bring local manufacturers' goods to market.

**Caldwell County: Logistics, Q2 2007**

NAICS Code and Sector Name	Caldwell County						U.S.	
	Q2 2007 Emp	# Emp Change Q2 05- Q2 07	% Emp Change Q2 05- Q2 07	Q2 2007 Wages	Wage Change Q2 05- Q2 07	Q2 2007 LQ	Emp Change Q2 05- Q2 07	Q2 2007 Wages
NAICS 423 Merchant wholesalers, durable goods	364	-2	-1%	\$35,758	\$2,351	0.59	4%	\$58,177
NAICS 424 Merchant wholesalers, nondurable goods	1,762	172	11%	\$41,135	\$768	4.29	2%	\$52,105
NAICS 425 Electronic markets and agents and brokers	57	-17	-23%	\$42,132	\$15,666	0.35	12%	\$71,519
NAICS 484 Truck transportation	788	-54	-6%	\$33,263	\$502	2.73	4%	\$40,825
NAICS 488 Support activities for transportation	11	ND	ND	\$26,680	ND	0.09	3%	\$46,006
NAICS 493 Warehousing and storage	215	54	34%	\$31,634	\$1,006	1.64	13%	\$38,168
<b>Total, all industries</b>	<b>27,179</b>	<b>-2,808</b>	<b>-9%</b>	<b>\$28,306</b>	<b>\$1,087</b>	<b>1.00</b>	<b>3%</b>	<b>\$42,657</b>

Source: U.S. Bureau of Labor Statistics and U.S. Census Bureau  
ND=Not disclosed due to employer privacy issues

### Hickory-Lenoir-Morganton MSA: Logistics, Q2 2007

NAICS Code and Sector Name	Hickory MSA					U.S	
	Q2 2007 Emp	# Emp Change Q2 05- Q2 07	% Emp Change Q2 05- Q2 07	Q2 2007 Wages	Q2 2007 LQ	Emp Change Q2 05- Q2 07	Q2 2007 Wages
NAICS 423 Merchant wholesalers, durable goods	2,208	-527	-19%	\$ 40,530	0.60	4%	\$58,177
NAICS 424 Merchant wholesalers, nondurable goods	3,831	124	3%	\$ 41,598	1.59	2%	\$52,105
NAICS 425 Electronic markets and agents and brokers	362	84	30%	\$ 40,061	0.37	12%	\$71,519
NAICS 484 Truck transportation	4,319	138	3%	\$ 36,750	2.54	4%	\$40,825
NAICS 488 Support activities for transportation	302	ND	ND	\$ 32,460	0.39	3%	\$46,006
NAICS 493 Warehousing and storage	307	ND	ND	\$ 32,124	0.40	13%	\$38,168
<b>Total, all industries</b>	<b>159,937</b>	<b>-476</b>	<b>0%</b>	<b>\$ 31,640</b>	<b>1.00</b>	<b>3%</b>	<b>\$42,657</b>

Source: U.S. Bureau of Labor Statistics and U.S. Census Bureau

ND=Not disclosed due to employer privacy issues

Note: The most current disclosed data were used (Q1 2007) to estimate figures for NAICS 488 and 493 at the MSA level. This data was not disclosed in Q2 2007.

Several target sector trends match Caldwell County's, however, Caldwell County is leading the region in sectors merchants wholesalers, nondurable goods and warehousing and storage.

### Workforce Requirements and Support Services

Occupations within the logistics industry require a range of skills; positions include truck drivers, warehouse managers, software engineers, and logistics coordinators. Although some workers need a college degree, many logistics jobs do not require education beyond high school. New workers usually receive training after they begin work – for instance, in operation of inventory management databases, on-line purchasing systems, or electronic data interchange systems. Technological advances and market forces are rapidly altering this industry. Even workers in small firms need to keep informed about supply chain processes, management methodologies, and information systems. In addition, these technological advances affect the skill requirements for occupations across the entire industry – from warehouse workers to truck drivers to those in management. As a result, numerous firms devote significant resources to worker training.

Many firms offer on-the-job training. However, because providing training is becoming more costly and complex, the industry is increasingly using third-party training organizations and trade associations to reduce this burden. To increase productivity, many companies make their employees responsible for more than one function and cross-train them by familiarizing them with many aspects of the company. Most employees will need to be highly trained and skilled workers who can operate well in an increasingly technological, dynamic, and solutions-oriented environment.<sup>5</sup>

Caldwell County's higher educational institutions offer degree programs related to logistics, as outlined below. In order to ensure a sustainable workforce supply for this growing industry, local colleges and universities should consider the addition of a program(s) in business logistics management, warehousing and distribution, logistics, or supply chain management.

- *Caldwell Community College and Technical Institute* offers a certificate or Associate's degree programs in truck driver training, auto body repair, computer information technology, automotive systems technology, web technologies, and business administration.
- *Appalachian State University* offers Bachelor's degree programs in business, computer information systems, and management, and Master's degree programs in business administration and computer science.
- *Lenoir-Rhyne College* offers Bachelor's degree programs in computer science, information technology, business management, and management of information systems. The college also offers a Master's degree in business administration.

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<sup>5</sup> Hallock, Thom. "The Future of Logistics." *Business Facilities Magazine*. March 2004. p. L-1-2.

## Issues and Opportunities

A clear perceived challenge to the growth of this sector locally is Caldwell County's lack of direct interstate access. However, the county possesses a number of four-lane highways, such as US 321 and US 64/SR18 that provide competitive ingress and egress for shipments of goods and materials, as well as efficient access to Interstates 40, 77, and 85.

In January, leaders from Hickory, Granite Falls, and Caldwell County voted to fund an engineering study for a new road that will ease congestion on NC 321. By providing local funding, the design and engineering phases of the project will take six to eight months (speeding the start of construction). If the communities were to wait for the state to complete these project phases, it could take up to two years. Elected leaders have acknowledged the importance NC321 plays to the regional economy and have shown they are willing to invest in it.<sup>6</sup>

Over ten years ago, the Economic Development Commission purchased the 22-mile Caldwell County Railroad from Norfolk Southern to prevent it from being abandoned. Caldwell Railroad serves a number of local manufacturers and material suppliers and links Lenoir to the Norfolk Southern Tier 1 line in Hickory. As was discussed in the *Competitive Realities* report, Caldwell County Railroad is building new transload facility off Norwood Street (U.S. 321-A) that will have easy access to US 321. The construction of this facility shows that that the community can leverage its assets to compete for logistics employment.

Business leaders and community stakeholders who participated in interviews and focus groups noted that the EDC does not control any sites that are available for industrial development. Communities that can compete for logistics employment must have ample available land with highway and/or rail access that can be easily developed at a low cost.

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<sup>6</sup> Hickory, Granite Falls, Caldwell County: 3 communities push to get road built fast. *The Charlotte Observer*. (January 10, 2008).

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## Health Care

### Sector Description and Trends

As the Baby Boom generation enters retirement, an increasing number of individuals will require health care and will purchase trillions of dollars worth of medications and medical products. U.S. health care consumption rose from 10.9 percent of national Gross Domestic Product (GDP) in 1988 to 17 percent in 2007.<sup>7</sup> In late 2006, *BusinessWeek* ran a cover story on the economic momentum generated by the health care industry. It reported that health care is “propping up” the national economy.<sup>8</sup> Between June 2001 and June 2007, the health care sector created 2.1 million new jobs, accounting for half of private sector job growth during this time.<sup>9</sup>

In fact, most economic forecasters agree that health care will experience explosive growth in the coming decades. This growth will coincide with developments in life science research that will result in a new generation of highly specific drugs and medical devices, targeting ever more finite health areas. Various fields such as manufacturing, R&D, information technology, and patient care are converging, as health care providers are increasingly using state-of-the-art technologies to optimize and personalize medical treatments and procedures. This field provides solid employment growth opportunities in the coming years.

Jobs in health care feature higher than average wages. While doctors, researchers, and specialists earn top salaries, the jobs available to individuals without substantial professional training can still provide viable, high-paying career opportunities in a stable profession. Furthermore, numerous technical support occupations require only one or two years of education beyond high school. In the Q2 2007, health care provided over 16.4 million U.S. jobs, paying an average annual wage of \$44,439.

The following chart shows the national employment growth projections from the U.S. Bureau of Labor Statistics (BLS) between 2006 and 2016. Most sub-sectors in this target cluster are expected grow faster than the national employment average of 11 percent. Additionally, seven of the 20 occupations projected to grow the fastest from 2006 to 2016 are in health care, and more new jobs created during this time period will be in health care than in any other industry.<sup>10</sup>

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<sup>7</sup> The Milken Institute (2003). “America’s Health Care Economy.”

Burrows, Peter (March 20, 2008). “The Few Bright Spots.” *BusinessWeek*.

<sup>8</sup> Mandel, Michael. (September 25, 2006). “What’s Really Propping up the Economy?” *BusinessWeek*.

<sup>9</sup> Bureau of Labor Statistics. Quarterly Census of Employment and Wages.

<sup>10</sup> “Health Care.” *Career Guide to Industries, 2008-09 Edition*. U.S. Bureau of Labor Statistics.

Accessed online at: <http://www.bls.gov/oco/cg/cgs035.htm>

### National Growth Projections for Health Care

Sector Name and NAICS Code	Projected U.S. Job Growth 2006-2016	
	Percent	Number of New Jobs
<i>Manufacturing (NAICS 31-33)</i>	-11%	-1,502,800
Pharmaceutical and medicine manufacturing (3254)	24%	69,400
Medical equipment and supplies manufacturing (3391)	1%	3,600
<i>Health care and social assistance (NAICS 62)</i>	27%	4,034,300
Ambulatory health care services (621)	30%	1,560,600
Offices of health practitioners (6211-6213)	24%	857,100
Home health care services (6216)	55%	480,500
Outpatient, laboratory, and other ambulatory care services (6414-6219)	25%	223,000
Hospitals, private (622)	16%	691,800
Nursing and residential care facilities (623)	24%	686,900
<i>Total Non-Agriculture Employment</i>	11%	15,050,100

Source: U.S. Bureau of Labor Statistics. Career Guide to Industries. 2008-2009 Edition.

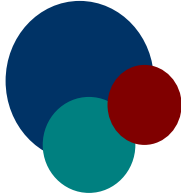
An issue of concern that may threaten the industry's long-term performance and stability is rising health care costs. According to the Centers for Medicare and Medicaid Services, "In 2006, people and the government spent \$2.1 trillion on health care, an average of \$7,026 a person. In 2017, health spending will cost an estimated \$13,101 a person." Furthermore, the sector's 6.7 percent annual increase in spending reflects a rate nearly three times that of inflation (2.7 percent). These increases are driven by higher prices coupled with increased demand for services."<sup>11</sup>

<sup>11</sup> Freking, Kevin. (February 26, 2008). Spending on Health to Rise Dramatically. *BusinessWeek*. Accessed online at: <http://www.businessweek.com/ap/financialnews/D8V1QNC01.htm>

Mounting health care costs for current and retired employees threaten many industries in the U.S. as well as the prosperity of small businesses. The federal government's response to these issues will clearly impact the delivery of patient care in the future. For now, health care service providers are increasingly investing in technologies that increase efficiency, reduce errors, and improve decision-making, all of which will help to drive down provider costs over the long run.<sup>12</sup>

The following chart outlines Caldwell County's health care target structure, key U.S. data, and key location factors to consider.

### Health Care



- NAICS definition for Caldwell's target:
  - 3254 Pharmaceutical and medicine manufacturing
  - 3391 Medical equipment and supplies manufacturing
  - 621 Ambulatory health care services
  - 622 Hospitals
  - 623 Nursing and residential care facilities
- Examples:
  - Manufacturing laboratory apparatus and hospital furniture, surgical and medical instruments, dental equipment and supplies
  - Health care practitioners, doctors, outpatient care and medical centers
  - Medical and diagnostic laboratories, ambulance services
  - Hospitals and mental health facilities
- Total U.S. employment in the above NAICS sub-sectors is 16.4 million as of the second quarter of 2007
- The national average annual pay of these sectors is \$44,439
- Typical location factors:
  - ✓ Close proximity to existing hospitals, health care facilities, university medical school, and/or research laboratories
  - ✓ Available, affordable, and technically skilled labor force
  - ✓ Strong quality of life

<sup>12</sup> Mandel, Michael. (September 25, 2006). "What's Really Propping up the Economy?" *BusinessWeek*.

## Employment Assets

Health care accounts for one in ten jobs in Caldwell County. In the second quarter of 2007, this sector employed an estimated 3,080 workers in 95 local businesses. Anchoring the County's health care cluster is Caldwell Memorial Hospital, which employs over 100 physicians and specialists and over 700 medical support staff. The hospital has 110 beds and several in- and out-patient specialty divisions including acute care, oncology, breast health, diabetes health, wound treatment, pain management, and lymphedema. In addition, the hospital has a Surgical Center, Cardiac Rehab Center, and an Occupational Therapy Center.

The community has assets in other sub-sectors of the health care industry as well. Caldwell County has seen growth in the number of jobs in ambulatory health care services, which includes physicians' offices and out patient treatment centers. In addition, Caldwell County has seven employers involved in pharmaceutical and medical equipment manufacturing. Due to privacy issues, much of the data for these sub-sectors is suppressed.

Greer Labs is a biotech company located in Caldwell County employing over 200 people. The company specializes in providing allergenic extracts to help physicians treat allergies. The presence of Greer represents a different aspect of health care: research and development, as opposed to health care services or product manufacturing. Because of the types of jobs associated with research and development, this area overlaps with some areas of the corporate, professional, and data services target.

### Caldwell County: Health Care, Q2 2007

NAICS Code and Sector Name	Caldwell County					U.S.	
	Q2 2007 Emp	Emp Change Q2 05-Q2 07	Q2 2007 Wages	Wage Change Q2 05-Q2 07	Q2 2007 LQ	Emp Change Q2 05-Q2 07	Q2 2007 Wages
NAICS 621 Ambulatory health care services	1,380	554	\$ 25,331	-\$7,625	1.25	7%	\$48,481
NAICS 622 Hospitals	930	ND	\$ 40,713	ND	0.82	3%	\$47,846
NAICS 623 Nursing and residential care facilities	732	ND	\$ 19,537	ND	1.16	3%	\$26,056
NAICS 3254 Pharmaceutical and medicine manufacturing	ND	ND	ND	ND	ND	2%	\$88,490
NAICS 3391 Medical equipment and supplies manufacturing	37	ND	\$ 28,784	ND	0.61	0.5%	\$54,931
Total, all industries	27,179	-2,808	\$ 28,306	\$ 1,087	1.00	3%	\$ 42,657

Source: U.S. Bureau of Labor Statistics and U.S. Census Bureau  
ND=Not disclosed due to employer privacy issues

Note: The most current disclosed data were used (2006 year-end) to estimate figures for NAICS 3391. Employment figures for NAICS 622 are from the Caldwell County EDC. This data was not disclosed in Q2 2007.

### Hickory-Lenoir-Morganton MSA: Health Care, Q2 2007

NAICS Code and Sector Name	Hickory MSA					U.S.	
	Q2 2007 Emp	Emp Change Q2 05-Q2 07	Q2 2007 Wages	Wage Change Q2 05-Q2 07	Q2 2007 LQ	Emp Change Q2 05-Q2 07	Q2 2007 Wages
NAICS 621 Ambulatory health care services	6,702	1,267	\$ 42,830	-\$3,340	1.03	7%	\$48,481
NAICS 622 Hospitals	3,622	-91	\$ 41,603	\$5,073	0.54	3%	\$47,846
NAICS 623 Nursing and residential care facilities	3,802	89	\$ 22,217	\$1,640	1.03	3%	\$26,056
NAICS 3254 Pharmaceutical and medicine manufacturing	ND	ND	ND	ND	ND	2%	\$88,490
NAICS 3391 Medical equipment and supplies manufacturing	128	ND	\$ 30,657	ND	0.36	0.5%	\$54,931
Total, all industries	159,937	-476	\$ 31,640	\$ 2,117	1.00	3%	\$ 42,657

Source: U.S. Bureau of Labor Statistics and U.S. Census Bureau  
 ND=Not disclosed due to employer privacy issues

The regional sector trends match the trends in Caldwell County.

### Workforce Requirements and Support Services

The health care sector can be defined very broadly, and extends far beyond health care services to include conducting of clinical trials, the manufacture of medical products and devices, and other practices. It offers job opportunities for workers with varying educational backgrounds and skill levels. However, most jobs in health care do require some degree of specific training.

As the demand for medical care increases, health care institutions will need increased personnel in patient care as well as in support occupations such as accounting, information technology, administrative support, and human resources. Additionally, more widespread opportunities will be created for health technologists (i.e. clinical laboratory technologists, EKG technologists, etc.); health technicians (i.e. emergency medical technicians, dispensing opticians, etc.); and pharmacy and therapy occupations (i.e. nutritionists, physical therapists, pharmacists, etc.).

The Bureau of Labor Statistics (BLS) provides a report of the fastest growing occupations between 2006 and 2016 and the level of education or training needed for each occupation. The table illustrates a wide array of opportunities in patient care. Education requirements for these occupations range from on-the-job training to graduate degrees. Many of the sector's fastest growing occupations do not require an advanced degree; in fact, many require no more than an Associate's degree.

### Nation's Fastest Growing Health Care-Related Occupations by Education Levels, 2006-2016

Education or Training Needed	Fastest Growing Occupations
First Professional Degree	<ul style="list-style-type: none"> <li>▪ Pharmacists</li> <li>▪ Physicians and Surgeons</li> <li>▪ Chiropractors</li> <li>▪ Optometrists</li> <li>▪ Veterinarians</li> </ul>
Doctoral Degree	<ul style="list-style-type: none"> <li>▪ Medical Scientists, Except Epidemiologists</li> <li>▪ Biochemists and Biophysicists</li> <li>▪ Clinical, Counseling, and School Psychologists</li> </ul>
Master's Degree	<ul style="list-style-type: none"> <li>▪ Physical Therapists</li> <li>▪ Occupational Therapists</li> <li>▪ Substance Abuse and Behavioral Disorder Counselors</li> </ul>
Bachelor's, plus Work Experience	<ul style="list-style-type: none"> <li>▪ Medical and Health Services Managers</li> </ul>
Bachelor's Degree	<ul style="list-style-type: none"> <li>▪ Physician Assistants</li> </ul>
Associate Degree	<ul style="list-style-type: none"> <li>▪ Physical Therapist Assistants</li> <li>▪ Dental Hygienists</li> <li>▪ Diagnostic Medical Sonographers</li> <li>▪ Veterinary technologists and technicians</li> </ul>
Postsecondary Vocational Award	<ul style="list-style-type: none"> <li>▪ Surgical Technologists</li> <li>▪ Emergency Medical Technicians and Paramedics</li> </ul>
Work Experience in a Related Occupation	<ul style="list-style-type: none"> <li>▪ Emergency Management Specialists</li> </ul>
Moderate-Term On-The-Job Training	<ul style="list-style-type: none"> <li>▪ Medical Assistants</li> <li>▪ Dental Assistants</li> <li>▪ Social and Human Service Assistants</li> </ul>
Short-Term On-The-Job Training	<ul style="list-style-type: none"> <li>▪ Home Health Aides</li> <li>▪ Personal and Home Care Aides</li> <li>▪ Occupational Therapist Aides</li> </ul>

Source: U.S. Bureau of Labor Statistics. Occupational Outlook Handbook. 2008-2009 Edition.

As shown in the following table, the local health care sector benefits from a variety of programs – ranging from the certificate level to Master’s degree level – at Caldwell Community College and Technical Institute, Appalachian State University, and Lenoir-Rhyne College. In the 2006-07 academic year, 46 certificates and 131 Associate’s degrees were awarded at CCC&TI in health professions and related clinical sciences. ASU and Lenoir-Rhyne College together awarded 295 degrees in health professions and biological sciences.<sup>13</sup>

<sup>13</sup> National Center for Education Statistics. Integrated Postsecondary Education Data System.

Having health care programs available for graduating high school students, adults who return to school, and professional development opportunities for health care workers only strengthens Caldwell County’s competitiveness. Overall, the community has the infrastructure in place to meet the future demand in the health care field.

**Caldwell Community College**

Associate Degree Programs	Certificate Programs
<ul style="list-style-type: none"> <li>* Biomedical equipment technology</li> <li>* Biotechnology</li> <li>* Cardiovascular sonography</li> <li>* Medical office administration</li> <li>* Medical sonography</li> <li>* Nuclear medicine technology</li> <li>* Nursing</li> <li>* Ophthalmic medical assistant</li> <li>* Physical therapist assistant</li> <li>* Radiography</li> <li>* Speech-language pathology assistant</li> </ul>	<ul style="list-style-type: none"> <li>* Cardiovascular sonography</li> <li>* Echocardiography</li> <li>* Magnetic resonance imaging</li> <li>* Nursing assistant</li> </ul>

**Appalachian State University and Lenoir-Rhyne College**

Bachelor's Degree Programs	Master's Degree Programs
<ul style="list-style-type: none"> <li>* Athletic training</li> <li>* Biology</li> <li>* Biology, focus in medical technology</li> <li>* Biology, focus in paramedical</li> <li>* Chemical technology</li> <li>* Chemistry</li> <li>* Chemistry, focus in forensic science</li> <li>* Health care management</li> <li>* Health and exercise science</li> <li>* Medical technology</li> <li>* Nursing</li> <li>* Pre-medicine</li> <li>* Psychology</li> </ul>	<ul style="list-style-type: none"> <li>* Biology</li> <li>* Gerontology</li> <li>* Nutrition (family and consumer sciences)</li> <li>* Occupational therapy</li> <li>* Psychology/counseling</li> <li>* Psychology - clinical health</li> </ul>

## **Issues and Opportunities**

While there are opportunities for growth, the community's health care sector is not without challenges. Caldwell Memorial Hospital faces significant financial challenges because a majority of its patients (70 percent) are private pay, Medicare or Medicaid. The Hospital is severely impacted by federal legislation and mandated reductions in Medicare and Medicaid reimbursements. The current payer ratios make it difficult for the hospital to expand its service offerings as well as attract physicians and specialists to work at the hospital or in Caldwell County.

Indeed, many stakeholders who participated in interviews and focus groups noted the need to increase the number of insured residents within Caldwell County. Some suggested that Caldwell Memorial work with local employers of all sizes to develop an affordable insurance plan for small businesses. One avenue to develop such a program could be through a health care industry council. In other communities, such councils are coordinated through the Chamber or EDC to facilitate discussions and interactions among health care employers and professionals, and educational institutions to address workforce, regulatory, and other business issues. By forming such a network, Caldwell County would improve linkages between different constituencies to more effectively address such concerns.

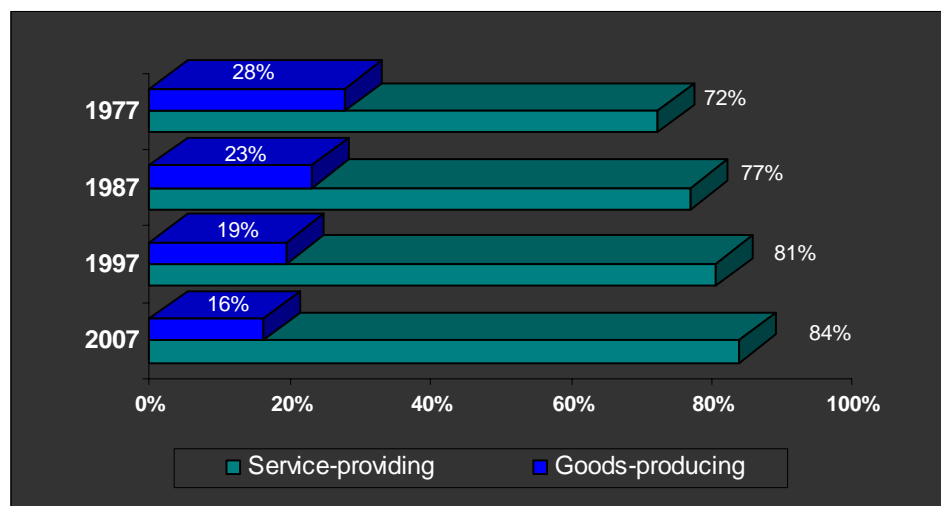
## Corporate, Professional, and Data Services

### Sector Description and Trends

Services are a natural growth area of a local economy, and thus often grow without encouragement. However, there is benefit derived from targeting these types of firms to ensure a comprehensive network of high-capacity service providers is established in an economy. Traditionally, “services” has included firms that provide a wide variety of support to persons, businesses, and other organizations. Usually services are non-exporting operations, and therefore the primary benefits are the support system they provide to local individuals and businesses, thus making the community more attractive to prospective exporting employers.

The national shift from a production to a more service-oriented economy has dramatically increased opportunities in service-oriented sectors. As shown in the following chart, the decades-long trend of increased employment opportunities in service sectors is continuing. Today, 84 percent of U.S. jobs are in service-providing industries compared to 16 percent in goods-producing industries (natural resources and mining, manufacturing, and construction).

**U.S. Service-Providing and Goods-Producing Employment**  
(as % of total non-farm employment), 1977-2007



Source: U.S. Bureau of Labor Statistics

The corporate, professional, and data services target focuses on generating additional jobs with competitive earning potential for a variety of skill levels. This target sector includes management at headquarters and regional offices, but also small to mid-sized service firms in finance, insurance, design, consulting, advertising, marketing, and accounting. Typical functions that occur in these types of offices include executive decision-making and strategizing, sales and marketing, human resources, financial operations, consulting, and training. In the second quarter of 2007, the corporate, professional, and data services target employed 17.8 million workers in the United States paying an average annual wage of \$66,429.

The following chart shows the national employment growth projections from the U.S. Bureau of Labor Statistics (BLS) between 2006 and 2016. Many sub-sectors like management, scientific, and technical consulting services; computer systems design; accounting services; and specialized design services are expected to add thousands of jobs nationwide in the coming years.

#### National Growth Projections for Corporate, Professional and Data Services

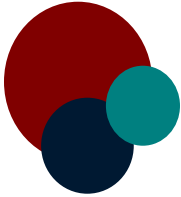
Sector Name and NAICS Code	Projected U.S. Job Growth 2006-2016	
	Percent	Number of New Jobs
<i>Information (51)</i>	7%	211,800
<i>Financial Activities (52-53)</i>	14%	1,206,900
Monetary authorities, credit intermediation, and related activities (521,522)	8%	237,800
Insurance carriers (5241)	2%	35,200
Agencies, brokerages, and other insurance related activities (5242)	15%	136,700
<i>Professional and Technical Services (54)</i>	29%	2,121,900
Legal services (5411)	9%	111,300
Accounting, tax preparation, bookkeeping, and payroll services (5412)	21%	182,900
Architectural, engineering, and related services (5413)	25%	345,400
Specialized design services (5414)	32%	43,500
Computer systems design and related services (5415)	38%	489,400
Management, scientific, and technical consulting services (5416)	78%	717,800
Scientific research and development services (5417)	9%	55,400
Advertising and related services (5418)	14%	62,100
Other professional, scientific, and technical services (5419)	21%	114,000
<i>Management of companies and enterprises (55)</i>	15%	270,200
<i>Total Non-Agriculture Employment</i>	11%	15,050,100

Source: U.S. Bureau of Labor Statistics. Career Guide to Industries. 2008-2009 Edition.

Call centers and other back office operations are generally not pursued in professional and corporate services targeting efforts due to their below-average wage rates. However, these types of services may provide job opportunities for lower-skill and entry-level workers and warrant inclusion in Caldwell County's target. It should be emphasized, however, that local economic developers should pursue these types of employment opportunities that provide value-added services to the "typical" call center position and therefore pays higher average wages.

The following chart outlines Caldwell County's corporate, professional, and data services target structure, key U.S. data, and key location factors to consider.

### Corporate, Professional and Data Services



- NAICS definition for Caldwell County's target:
  - 51 Information
  - 522 Credit intermediation and related activities
  - 524 Insurance carriers and related activities
  - 541 Professional and technical services
  - 551 Management of companies and enterprises
  
- Examples:
  - Small and medium-sized firms, regional offices, headquarters
  - Financial institutions
  - Customer-care centers and back office operations
  - Accounting, sales, marketing, and consulting firms
  
- Total U.S. employment in the above NAICS sub-sectors is 17.8 million as of Q2 2007
- The national average annual pay of these sectors is \$66,429
  
- Typical Location Factors:
  - ✓ Skilled workforce
  - ✓ Availability of professional business services
  - ✓ Proximity to an airport with non-stop destinations
  - ✓ High speed internet and other advanced telecommunications
  - ✓ Low business costs
  - ✓ Strong quality of life

## Employment Assets

The corporate, professional, and data services target includes 177 local firms, which together employ over 1,500 local workers. As shown in the following table, each of the target's sub-sectors pays well above the county's Q2 2007 average annual wage. Caldwell County does not have a strong presence in professional and technical services, which includes legal services; accounting, tax preparation, bookkeeping, and payroll services; architectural, engineering and related services; specialized design services; computer systems design; and scientific and technical consulting. However, this sub-sector did post seven percent growth between Q2 2005 and Q2 2007 in Caldwell County.

Now under construction in Lenoir, Google's \$600 million data center will employ as many as 210 people. The massive investment by a high profile company has given Lenoir and Caldwell County national and international attention as a competitive place to do business. Google's presence in Caldwell County may be leveraged to promote growth within the corporate, professional, and data services target.

**Caldwell County: Corporate, Professional, and Data Services, Q2 2007**

NAICS Code and Sector Name	Caldwell County						U.S.	
	Q2 2007 Emp	# Emp Change Q2 05-Q2 07	% Emp Change Q2 05-Q2 07	Q2 2007 Wages	Wage Change Q2 05-Q2 07	Q2 2007 LQ	Emp Change Q2 05-Q2 07	Q2 2007 Wages
NAICS 51 Information	228	-39	-14%	\$35,177	\$3,678	0.36	-1%	\$63,555
NAICS 522 Credit intermediation and related activities	299	-2	-1%	\$33,930	\$2,137	0.51	2%	\$54,796
NAICS 524 Insurance carriers and related activities	86	-7	-8%	\$38,796	\$9,198	0.20	1%	\$63,603
NAICS 541 Professional and technical services	361	25	7%	\$34,855	ND	0.23	8%	\$67,585
NAICS 551 Management of companies and enterprises	609	ND	ND	\$65,660	ND	1.66	5%	\$88,331
<b>Total, all industries</b>	<b>27,179</b>	<b>-2,808</b>	<b>-9%</b>	<b>\$ 28,306</b>	<b>\$1,087</b>	<b>1.00</b>	<b>3%</b>	<b>\$42,657</b>

Source: U.S. Bureau of Labor Statistics and U.S. Census Bureau  
ND=Not disclosed due to employer privacy issues

### Hickory-Lenoir-Morganton MSA: Corporate, Professional, and Data Services, Q2 2007

NAICS Code and Sector Name	Hickory MSA					U.S.	
	Q2 2007 Emp	# Emp Change Q2 05- Q2 07	% Emp Change Q2 05- Q2 07	Q2 2007 Wages	Q2 2007 LQ	Emp Change Q2 05- Q2 07	Q2 2007 Wages
NAICS 51 Information	991	-142	-13%	\$ 35,797	0.27	-1%	\$ 63,555
NAICS 522 Credit intermediation and related activities	1,909	329	21%	\$ 36,595	0.56	2%	\$ 54,796
NAICS 524 Insurance carriers and related activities	ND	ND	ND	ND	ND	1%	\$ 63,603
NAICS 541 Professional and technical services	2,832	124	5%	\$ 35,318	0.31	8%	\$ 67,585
NAICS 551 Management of companies and enterprises	2,732	ND	ND	\$ 79,297	1.27	5%	\$ 88,331
<b>Total, all industries</b>	<b>159,937</b>	<b>-476</b>	<b>-0.3%</b>	<b>\$ 31,640</b>	<b>1.00</b>	<b>3%</b>	<b>\$ 42,657</b>

Source: U.S. Bureau of Labor Statistics and U.S. Census Bureau  
 ND=Not disclosed due to employer privacy issues

The regional employment change trends match Caldwell County's trends.

### Workforce Requirements and Support Services

According to BLS, among the 10 major occupational groups, employment in professional and related occupations is expected to increase the fastest between 2006 and 2016.<sup>14</sup> The occupations found within this target business sector will be filled by Caldwell County's most highly educated and skilled workers.

The most successful workers at all levels have an aptitude for numerical analysis and sales. Personal qualities such as work ethic, self motivation, and management skills are very important. Some jobs, such as paralegals, secretaries, and other administrative positions, require only an Associate's, or at most a Bachelor's degree. Most others require at least a Bachelor's degree. Some entry-level positions are available that do not require a specialty degree, assuming the necessary level of education has been reached (i.e., a Bachelor's degree in a variety of liberal arts majors may be sufficient for some positions in a law firm or advertising firm). Some occupations require advanced degrees or certifications as well. For example, many accounting firms require their accountants to be certified public accountants (CPAs).

Currently, Caldwell County's local educational institutions offer a variety of professional services-related programs, as evidenced in the following table.

<sup>14</sup> Bureau of Labor Statistics. Career Guide to Industries, 2008-09 Edition. Accessed online at: <http://www.bls.gov/oco/cg/indchar.htm>

**Caldwell Community College**

Associate Degree Programs	Certificate Programs
<ul style="list-style-type: none"> <li>* Accounting</li> <li>* Business administration</li> <li>* Business administration - e-commerce</li> <li>* Computer information technology</li> <li>* General occupation technology</li> <li>* Networking technology</li> <li>* Office systems technology</li> <li>* Paralegal technology</li> <li>* Web technologies</li> </ul>	<ul style="list-style-type: none"> <li>* Accounting - basic accounting</li> <li>* Accounting - basic income tax</li> <li>* Business administration - management</li> <li>* Business administration - marketing</li> <li>* Computer information technology</li> <li>* Computer programming</li> <li>* Networking technology</li> <li>* Office systems technology</li> <li>* Paralegal technology</li> </ul>

**Appalachian State University and Lenoir-Rhyne College**

Bachelor's Degree Programs	Master's Degree Programs
<ul style="list-style-type: none"> <li>* Accounting</li> <li>* Actuarial science</li> <li>* Business</li> <li>* Communications</li> <li>* Computer science</li> <li>* Economics</li> <li>* Finance and banking</li> <li>* Management</li> <li>* Management information systems</li> <li>* Marketing</li> <li>* Risk management and insurance</li> </ul>	<ul style="list-style-type: none"> <li>* Accounting</li> <li>* Business administration</li> <li>* Computer science</li> <li>* Human resource management (Certificate)</li> </ul>

## Issues and Opportunities

The primary location factors for corporate, professional, and data firms – quality of life and an educated workforce – provide the framework through which challenges and opportunities for pursuing this target can be considered.

The majority of the workforce in this target sector that will drive growth are “knowledge workers.” In 2002, Richard Florida brought nationwide attention to the concept of knowledge workers, or the “creative class,” as drivers of innovation and economic growth. It has been researched and documented by Florida and others that these knowledge workers are highly selective in where they locate, weighting quality of life factors heavily into their decision making process. Thus, the perception of quality of life in Caldwell County will be critical to growing the workforce and generating additional employment opportunities in corporate, professional, and data services. As a recent CEOs for Cities report stated, “Rather than a world in which places compete for business (and people follow), we will increasingly live in a world where places compete for people (and businesses follow).”<sup>15</sup>

Attracting knowledge workers to locate in Caldwell County is one means of achieving a highly educated workforce. An additional, even more critical initiative is to provide the education programs necessary – from pre-k through graduate education – to prepare the current and future workforce for employment in growing occupations in the industry. The previous workforce requirements and assets section addressed the existing degree programs of the two-year and four-year institutions applicable to this target, finding that they already address the basic training needs of sector.

Thus, the community’s primary challenge is to raise awareness of the availability of these programs and the value of pursuing them as a path to better wages and higher standards of living this sector can provide. Many who participated in interviews and focus groups noted that many local workers feel that a job with Google is beyond their reach. Addressing such challenges will be critical to growing this target business sector.

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<sup>15</sup> “The Young and Restless in a Knowledge Economy.” CEOs for Cities. December 2005. P. 47.

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## Special Opportunity Areas:

### Retiree Attraction

There are clearly opportunities for Caldwell County to strategically market itself to retiring Baby Boomers. Not only would an influx of seniors help to grow the community's health care industry, but it would also help to create more demand for population-driven services. Increasingly, seniors are choosing to locate in walkable environments that allow them to be more independent, like historic downtown settings. In this regard, seniors may provide a boost in demand for local downtown housing and retail development.

The opportunity to recruit retirees to Caldwell County aligns with national trends. More than 76 million Baby Boomers will be entering retirement age in the coming years, marking one of the most significant demographic shifts in U.S. history. Research estimates that up to one in four retiring Baby Boomers will relocate their primary residence in their retirement years.<sup>16</sup>

There has also been an increasing trend of so-called “half-backs” moving north from Florida to escape severe weather and high insurance premiums. These retirees typically locate in an inland area “half the way back” from their original homes.

According to researchers who have conducted retiree-migration studies for several states, including North Carolina, the strategy of attracting retirees has two major advantages in smaller communities. “First, the amenities retirees attract will provide jobs to entice new workers into the community or persuade the younger residents not to seek jobs elsewhere thereby expanding the community's workforce. Secondly, many highly skilled retirees may want to work part time. Including such individuals in the workforce increases the skill set of a rural community's workforce.”<sup>17</sup>

Specific recommendations related to retiree attraction will be outlined in Caldwell 20/20's *Community Consensus Strategy*.

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<sup>16</sup> Sims, Don and Dan Owens. (September 16, 2007). Attracting Retirees Can Be Economic Boost to Towns. *The Augusta Chronicle*.

<sup>17</sup> Thomas, Warren, and Associates. Attracting Retirees as Economic Development.

## **Green Industries**

Though there is little existing Caldwell County employment in “Green” Industries, the community’s agricultural history and employment base offers potential opportunities to leverage this capacity into a presence in the growing world of “green” products and processes.

### **Green Power**

Events such as wars in the Middle East and Hurricane Katrina, escalating fossil fuel costs, global warming concerns, and other occurrences have heightened national awareness of the implications of America’s dependency on foreign oil and non-renewable energy sources. With this awareness comes more prominent calls for leveraging renewable and “clean” energy sources, reducing personal and corporate “carbon footprints” through changed consumption patterns and business policies, increasing recycling efforts, and constructing more energy efficient buildings.

The Energy Center at Appalachian State University conducts energy research and applied program activities. The Center has programs in the areas of energy efficiency, renewable energy technology, biofuels, policy analysis, forecasting, and economic development that could be leveraged for growth in Caldwell County.

### **Organic Farming and Sustainable Agriculture**

Historically, organic farms have been relatively small family-run farms — which is why organic food was once only available in small stores or farmers' markets. However, since the early 1990s, organic food production has had growth rates of around 20% a year, far ahead of the rest of the food industry. This has also driven a similar increase in organically managed farmland. Several Caldwell County tree and shrub nurseries serve landscaping companies across the country. Organic farming and sustainable agriculture companies such as Whistle Pig Acres, Ripshin Goat Dairy, La Paz Group, LLC, Ford’s Nursery, Boyd Coffey & Sons Nursery, and others should also be encouraged to grow and expand.

In order to best capitalize on Green Industries opportunities, Caldwell County should work with local producers and the Energy Center to determine local capacity in new types of “green” products and services.

Specific recommendations related to the Special Opportunity Areas will be outlined in Caldwell 20/20’s *Community Consensus Strategy*.

## CONCLUSION

Developing target clusters requires more than just “traditional” business recruitment activities. A more holistic economic development approach is needed, leveraging business recruitment as just one component of a *Consensus Community Strategy*. The utilization of targets is one method of strengthening the overall community and focusing economic development efforts.

Successfully developing target clusters must include a combination of the following steps:

- ⇒ Supporting existing businesses by understanding their needs and addressing the obstacles to their growth and expansion.
- ⇒ Establishing or enhancing communication networks to allow information and idea exchange within the business area.
- ⇒ Identifying and addressing gaps in education and training programs.
- ⇒ Nurturing entrepreneurship and small business by ensuring that the support infrastructure – such as financing, incubators, and mentors – is available.
- ⇒ Cultivating an environment that is attractive to both businesses and employees within the cluster. Creating a positive business environment includes factors like education and workforce development, infrastructure, business costs, and quality of life. A strong business climate will attract and create opportunities for growth in many business sectors.

The targets recommended in this document are meant to be part of a *Consensus Community Strategy* and focus economic development resources on existing sectors as well as the business sectors that have strongest opportunities for growth and diversification. This in turn provides employment opportunities and access to better wages. The targets leverage Caldwell County’s existing assets. The four target clusters *Market Street* identified - advanced manufacturing; logistics; health care; and corporate, professional, and data services - were the most promising for Caldwell County to pursue.

Success of each target will require the strengthening of supporting infrastructure, including education programs and cluster networks. All of this is part of the effort to build a better community. Goals and specific action steps for growing the target clusters will be detailed in the *Consensus Community Strategy*, the next phase of this strategic planning process.