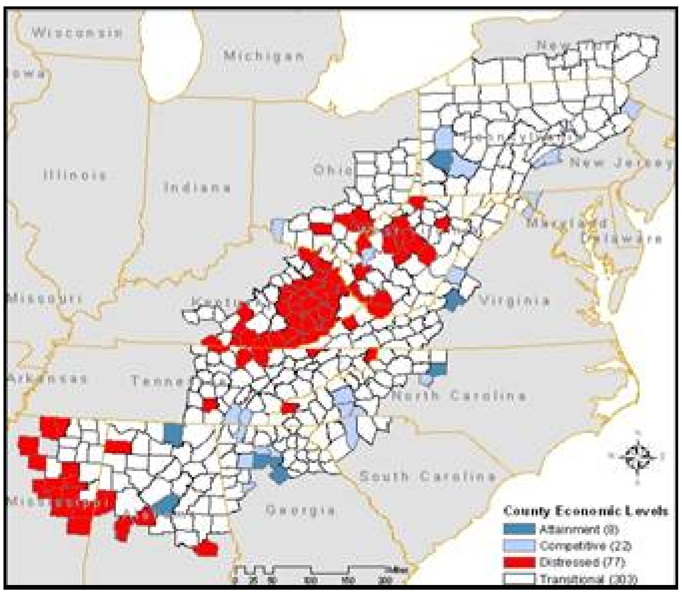
Sources of Regional Growth in Non-Metro Appalachia

Vol. 2. Case Studies of Local Economic Development Growth Processes



Prepared for the Appalachian Regional Commission

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Revised 2007

SOURCES OF GROWTH PROJECT

The *Sources of Growth* project is part of a series of research efforts funded by the Appalachian Regional Commission to improve our understanding of factors affecting economic growth in rural and distressed areas. As stated in the Volume 1 Introduction, "the starting premise of this project is to go beyond the theory of comparative advantage to understand more concretely the multiple paths that an area can pursue in successfully enhancing job and income creation, and the effects of spatial linkages among communities in shaping these options. It is in this context that one can understand how communities may build on natural resources, cultural resources, human resources, local amenities, institutional facilities or location advantages. Furthermore, certain developmental path dependencies may shape the direction of economic growth may involve manufacturing or supply chain development, resource extraction or tourism development, educational development or trade center development." This research is intended to provide a basis of information that can ultimately be useful for enhancing the effectiveness of policies and tools aimed at improving the region's economic development.

This is Volume 2 in a series of reports prepared as part of this project:

- ***Executive Summary*** –synthesis of findings from all work products related to the study's four main research components.

- ***Volume 1, Project Background and Prior Research on Economic Growth Paths*** – study objectives, characteristics of non-metro Appalachian counties, classification of economic development growth paths, and a synopsis of white paper findings on theory relating to economic development growth paths.

- ***Volume 2, Case Studies of Local Economic Development Growth Processes*** – findings related to growth paths as observed for selected case studies covering manufacturing industry specialization clusters, supply chain-based development, tourism-based development, advanced technology development, and diversification from resource-based economies.

- ***Volume 3, Empirical Studies of Spatial Economic Relationships*** – findings from a series of econometric modeling and GIS-based analyses, focusing on roles of spatial adjacency, market access and transportation in determining economic growth and development of trade centers.

- ***Volume 4, Tools for Economic Development & Study Conclusions*** – description of new and updated tools available to ARC and its Local Development Districts to assess economic development opportunities and potential directions for economic growth.

- ***Appendices*** – (A) Spatial Analysis of Economic Health, (B) Economic Analysis of Hub-Spoke Relationships, (C) White Papers on Economic Growth Theories, (D) Literature Review of Empirical Studies on Spatial Influences in Economic Development.

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ACKNOWLEDGEMENTS

This volume was authored by Economic Development Research Group, Inc. (EDRG) and Regional Technology Strategies, Inc. (RTS). EDRG directed the overall research study and edited final documents. Staff of EDRG and RTS each developed half of the case studies.

Altogether, the Sources of Growth project involved a team of researchers including:

- Economic Development Research Group, Inc. (EDRG) – Lisa Petraglia (Project Director), Glen Weisbrod and Teresa Lynch, with research support from Tyler Comings and Brett Piercy;
- Regional Technology Strategies, Inc. (RTS) –Stuart Rosenfeld, Phil Psilos and Dan Broun;
- Massachusetts Institute of Technology, Department of Urban Studies & Planning (MIT-DUSP) – Prof. Karen R. Polenske, Prof. Joseph Ferreira, Jr., Ayman Ismail and Li Xin, with research support from Tan Zhijun, and Isabelle Yi Xu.

The project also benefited from the expertise of outside policy and research experts who reviewed various project documents, participated in meetings and provided technical guidance: Deb Markley (Co-Director of the Center for Rural Entrepreneurship, a Rural Policy Research Institute), Joseph Cortwright (Vice-President of Impresa Consulting), Ken Poole (Executive Director of ACCRA: The Council for Community and Economic Research), David Freshwater (Professor of Agricultural Economics and Public Policy at the University of Kentucky), David McGranahan and Luc Anselin (Professor. Dept. of Agriculture & Consumer Affairs and Regional Economics Applications Laboratory at the University of Illinois, Urbana- Champaign).

Overall project direction and oversight was provided by Dr. Greg Bischak of the Appalachian Regional Commission, whose wide range of research experience served to focus the project team on the development of policy applications. Important insight and suggestions were also provided by officials of the Appalachian Regional Commission who participated in a day-long symposium with the project team, including Thomas Hunter (executive director of ARC, Ann Pope (federal co-chair of ARC) and Rick Peltz (alternate federal co-chair). In addition, Ken Wester and Jason Wang of ARC assisted the project team in collecting and assembling transportation and geographic data.

Finally, the project team acknowledges the important role of prior ARC-funded research studies by Andrew Isserman, Ed Feser and Oleg Smirnov that provided a foundation for the work in Volume 3 this project to build upon.

1 INTRODUCTION

Overview. This volume presents six case studies of local economic development in Appalachia. The study areas range from single counties to multi-county regions. The case studies document the local context and history of economic development in these areas, in order to illuminate the processes of economic growth and change that have been and are occurring there.

All of the case studies focus on non-metro parts of Appalachia. They were selected to a range of locations and a range of economic growth paths, while also testing the usefulness of economic statistics and spatial linkages in illuminating the economic development situations actually occurring across the region.

Selection of Case Study Locations. Since the Appalachian region spans north, south, and central locations in the US it was desirable to have case study representation in each of these three major regions. Also of interest would be to examine how a previously resource dependent, which has seen its prospects diminish, made the transition to reorient their economy (such as leveraging cultural assets).

In addition to these two general priorities for case study definition and development, three specific outcomes from prior analysis studies were considered in identifying potential case study locations:

- Based on their analysis of trade centers and "hub-spoke" economic relationships between counties, Smirnov-Smirnova (2000) identified a sereies of Appalachian counties with "hub" potential and others with "spoke" potential. Case studies could illuminate how some of these areas have actually been performing as trade center hubs or feeders to them.

- Based on ARC's recent time-series comparison (1960 & 2005) of Appalachia's *distressed* counties, case studies focus on actions taken that helped some areas transition out of *distress.*

- Based on successful bids of two southern states to attract auto assembly plants, community stakeholders examine how economic development efforts have affected the extension of -chain and knowledge-based development processes into non-metro Appalachian counties.

The following six locations represent the final selection for undertaking case study regarding sources of growth:

- Scioto County, OH has been at the center of a ring of distress. It exhibits a services-oriented type of economy. While N-S highway improvements along US 23 have helped improve access to E-W traffic along US 50, the lack of an interstate has hampered Scioto development and the county has been slow to advance into the possible trade center (hub) role that Smirnov's analysis (2000) identified. The case study diagnoses the inertia and uncovers small positive steps now underway.

- Chautauqua County, NY has been maintaining its transitional status despite continued adverse forces tied to structural adjustments around U.S. manufacturing. Now attraction of jobs in transportation equipment manufacturing is serving to anchor the regional economy along with impetus of HUD Renewal Community status, various enterprise zones, and attempts to diversify/foster entrepreneurial development around tourism.

- Pike County, KY is the eastern-most county of a five county Local Development District that sits adjacent to the WV border. Pike County has managed to move from distressed to transitional status since 2003. However the four remaining counties in this mining-dependent LDD area have not faired the same. The case study explores reasons for Pike's gradual success, the stalled spillover to its neighboring counties and transferable lessons to other mining-dependent areas of Appalachia.

- Marion & Monongalia Counties, WV represent contrasts; Monongalia (home to Morgantown) is a metro county, while adjacent Marion County is a "micropolitan" area. Marion County had prior mining roots. This case study examines the development of a hi-tech initiative in these two counties with emphasis on the role of university-based research and commercialization and the extent to which Marion County is achieving diversification in its economy.

- SE Tennessee/SW North Carolina are covered by two adjacent Local Development Districts that are connected by Appalachian Highway Corridor K. The case study traces economic development efforts to develop cultural and recreation tourism along Corridor K between Chattanooga, TN and Asheville, NC.

- Alabama provides a state-level case study that traces how northern Alabama's automotive-related manufacturing activity (initiated by attracting Mercedes-Benz to Tuscaloosa, followed by auto parts suppliers) is raising the economic prospects in Appalachian AL.

Exhibit 1-1 below itemizes the case study locations, the research focus for each case study, its location, its ARC-rated economic status and the extent of urbanization.

Exhibit 1-1. Attributes of Case Study Areas

Case Study Area	Focus	Loc	Econ Status 2005	Type
1. Scioto County, Ohio	Potential economic hub (trade center) for services	N	Distressed	Micropolitan
2. Chautauqua County, NY	Manufacturing cluster diversification; Tourism development	N	Transitional	Micropolitan
3. E. Kentucky (Big Sandy Area)	Shift from mining, Medical technology; Trade center	C	Distressed	Rural
4. Monongalia and Marion, WV	Learning-based devel.; High tech complex,	C	Transitional	Micropolitan
5. SE Tennessee and SW North Carolina	Recreation-based amenity; Trade center	S	Transitional	Mixed
6. Alabama Auto Alley	Auto industry supply chain corridor	S	Mixed	Mixed

Collectively, these six case study areas span seven states. There are two case studies each in the northern (N), central (C) and southern (S) parts of Appalachia. Two are rated as substantially "distressed," while three are rated as "transitional" and the remaining one is a mix of those two classes. All are located primarily outside of metropolitan areas, though three feature micropolitan centers, one is completely rural and the other two have a mixture of rural and micropolitan settings.

The focus of these case studies covers all of the growth paths discussed in Volume 1, including trade centers, manufacturing and technology clusters (agglomerations), learning-based development, amenity-based development and supply chains. In addition, each case study addresses different examples of spatial linkages with neighboring communities and the role of metro and micropolitan areas.

Organization of Case Studies. Each case study is structured to present the following:

1) <u>*Introduction*</u> – explanation of why the case study was selected and the types of growth paths that it illustrates

2) <u>*Profile*</u> – brief description of the area's economy and its economic history:

- Composition of economy,
- Special features or assets;
- Labor markets: commuting, migration and education;
- Educational institutions: public and private schools; colleges, vocational training,
- Entrepreneurship: self-employed, startups, special services.

3) *Evolution of Progress* –how regional economy has been changing, related policy interventions and the effectiveness of strategies and actual outcomes:
   - History of interventions, basis for economy, changes over time, business recruitments and closures, supplier development,
   - Plans and strategies: types of plans and/or visions that were pursued
   - Degree to which any of the place-specific assets have been exploited
   - Resources: previous federal grants, subsidies, local foundations, etc.

4) *Catalysts of Change* – the organizational structures and technical changes that support collaboration:
   - Social capital: civic infrastructure, associations, non-profits, local leadership, education, external linkages;
   - Physical infrastructure: transportation, broadband and utility enhancement
   - Politics: strength and interest of state and federal representatives, political access, funding and tax policy
   - External factors: globalization, logistics technology advances

5) *Lessons Learned* –findings that can be useful for application elsewhere:
   - Flexibility in response to unforeseen changes;
   - Role of key players and institutions in leading change.

6) *Interviewees* – credits to business and economic development representatives who were interviewed (Note: all findings are interpretations of the report authors and not the responsibility of interviewees.)

2 SCIOTO COUNTY, OH: *REBUILDING AN ECONOMIC ENGINE*

2.1 Introduction

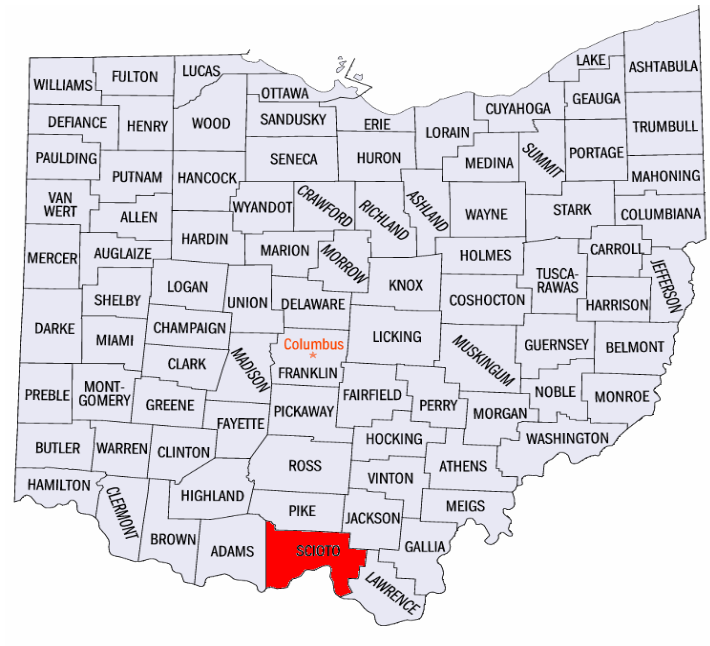
Scioto County, OH has been at the center of a ring of distress. It exhibits a services-oriented type of economy. While N-S highway access improvements to US 23 have mitigated some of the effects of being bypassed by the interstate system Scioto County has been slow to advance into the possible trade center (hub) role that Smirnov's analysis (2000) identified. The case study diagnoses the inertia and uncovers positive steps now underway.

In the last half of the 20th century, Scioto County, Ohio went from being an industrial powerhouse to a community struggling to meet the challenges of the new economy. However, some recent up-ticks in growth suggest that the county is showing signs of progress as it adjusts to a new economic reality. Significantly, while neighboring Ohio counties have remained classified as distressed by the Appalachian Regional Commission, Scioto recently moved to a transitional designation. In addition, some spatial analysis suggests that the county could serve as a regional hub for surrounding counties, drawing outside consumers to the county for the purchase of goods and services. In addition, Scioto County has moved from a community heavily dependent on manufacturing to one in which services play a prominent role.

2.2 Regional Profile

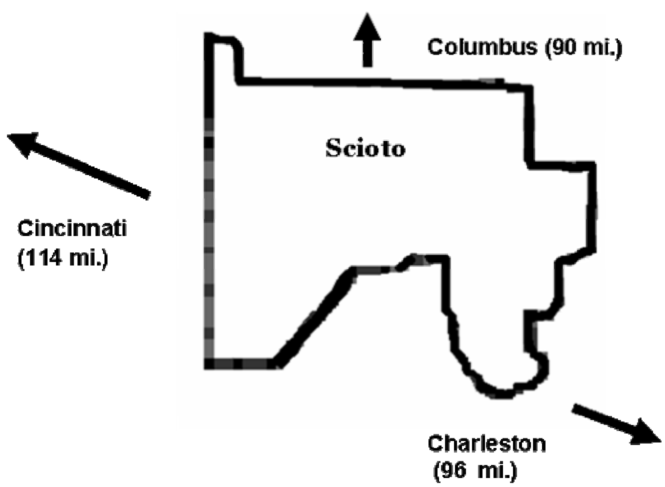
Setting. Scioto County, population 79,195, sits in the far southern part of Ohio, just across the river from Kentucky. It is almost equidistant from the large metropolitan areas of Cincinnati and Columbus and about 45 minutes from Huntington, West Virginia, a mid-sized city. The county seat of Scioto is Portsmouth, which, with 20,909 residents, is also by far the largest city in the county. (See Exhibits 2-1,2,3.)

Exhibit 2-1 Scioto's Location Within Ohio



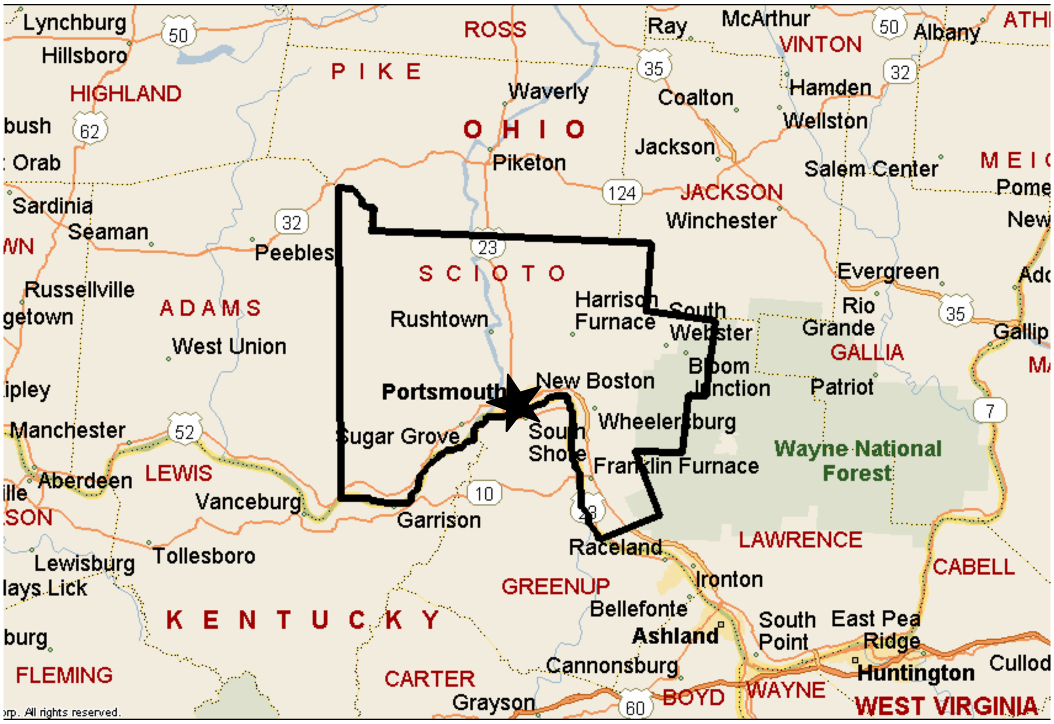
Source: FedStats.

Exhibit 2-2. Distance from Scioto County to Surrounding Metropolitan Cities



Source: Microsoft Streets and Trips

Exhibit 2-3. Scioto County - Detail Map



The county has been steadily losing population, with a decline of 1.4% between 2000 and 1990 (Exhibit 2-4). This is in comparison to the rest of Appalachian Ohio, which enjoyed a modest population growth of six percent over the same time period. Scioto County also has a smaller population than it did in 1950, declining by 4.5% since that date.

Exhibit 2-4. Population Growth, 1970-2000

	Population				% Change			
Population	**1970**	**1980**	**1990**	**2000**	**1970-80**	**1980-90**	**1990-2000**	**1970-2000**
Scioto County	76,951	84,545	80,327	79,195	9.9%	-5.0%	-1.4%	2.9%
State of Ohio	10,652,017	10,495,445	10,847,115	11,353,140	-1.5%	3.4%	4.7%	6.6%

Source: US Census Bureau and EDR Group calculations.

Economic Overview. The stagnant or negative growth in the county can be directly traced to the changing economy of the region. For most of its history, the county was dependent on manufacturing. The county, and Portsmouth specifically, were seen as attractive places to locate and operate industry. Access to transportation was the driving factor in much of the industry location. With a location on the Ohio River, industry had easy access to transport their goods and receive important supplies like coal. As railroads became more important, the presence of an extensive rail network became beneficial for the county.

Foremost in the development of the county in the first half of the 20th century was the steel industry. The community served as a focal point for the industry as Ohio took its place as a center of the national steel industry. As the industry declined due to globalization and mechanization so did the fortunes of the industry in Scioto County. By the early 1980s, the last steel manufacturer had left the county.

The county's other manufacturing industries suffered similar fates. For instance, Portsmouth had been a focal point for the shoe manufacturing industry in the US. But by the 1990s, there were basically no shoe manufacturers left in the US, much less in Scioto County. While the county remains the home to Mitchellace Inc., the only shoelace manufacturer in the country, the production of actual shoes has long ended. The production of bricks also ended leaving the county without a real export driven economic base.

The decline of Scioto County's manufacturing base is partly due to the fact that the particular sectors that the county specialized in were ones most vulnerable nationally. The county also suffered from a changing transportation environment. While the county once could rely on its prime access to the Ohio River and rail access to promote industrial advancement, it began to suffer as the highway became the economic driver. As one local resident put it:

"First there was the river, and Scioto County thrived. Then there was the railroad and Scioto County thrived. Then came the interstate and Scioto County died."

Scioto County does not have an interstate within its borders and while the region's best four lane North-South corridor US 23 has improved access to the East-West route of US 50 just north of Scioto, there are still accessibility issues, particularly with the bypass being built on the east side of the county. So due to both a general decline in its once prominent industries and a changing infrastructure environment, Scioto County no longer can be seen as a county whose economy is manufacturing dependent.

Currently, 7.6 percent of the county's workforce is employed in manufacturing. Instead, in a story similar to most of the country, the areas of economic specialization in the county are in the service industries. Exhibit 2-5 shows the percentage of county employment in various sectors.

Exhibit 2-5. Percentage of Scioto County by Sector

Industry	Percent of Total Employment
Government & non NAICs	16.5%
Food services & drinking places	8.7%
Ambulatory health care	7.1%
Admin support services	6.6%
Hospitals	6.6%
Construction	6.2%
Nursing & residential care	4.8%
Social assistance	3.2%
Professional- scientific & tech svcs	2.5%
Primary metal mfg	2.3%

Source: IMPLAN data derived from BEA, 2002.

The large percentage of Scioto County employment in the health care and social assistance sector is borne out in looking more closely at location quotients for the county. Examining sectors at a more detailed NAICS code reveals areas in which the county appears to have specialization relative to the United States as a whole. Exhibit 2-6 shows the sectors in the county that have a location quotient greater than 1.2 and have more than 500 employees. (Note a location quotient above 1.2 means that the industry sector has a representation in the local area that is 20% or more above the national average for that industry.)

Exhibit 2-6. Location Quotients of Scioto County Sectors

Description	Number of Employees	Location Quotient
Primary metal manufacturing	707	7.8
Nursing & residential care	1,449	2.8
Hospitals	2,001	2.8
Ambulatory health care	2,162	2.1
Social assistance	970	1.7
Food svcs & drinking places	2,653	1.4
General merch stores	688	1.3
Admin support svcs	2,013	1.2
Government & non NAICs	5,022	1.2
Food & beverage stores	676	1.2

Source: IMPLAN data derived from BEA, 2002.

As the above chart shows, with the exception of primary metal manufacturing, Scioto County's comparative strengths lie in retail and services. The concentration of employment in such sectors as food services and food stores would suggest that Scioto County might serve as a hub for these activities. In addition, health care shows up as being an industry in which the local economy has a high concentration. Hospitals, nursing and residential care, and ambulatory care all have extremely high location quotients.

The center of Scioto County's health care industry is Southern Ohio Medical Center (SOMC) in Portsmouth. SOMC is the largest medical center in Ohio, south of Columbus. It employs 2,100, making it the largest employer in the County. Later in this study, we will discuss the role that SOMC plays and could potentially play in the growth of the County.

2.3 Evolution of Progress

Economic Attainment. One reason for choosing Scioto County as a case study was its movement in economic status between ARC's distressed and transitional categories. Exhibit 2-7 shows Scioto's oscillation in economic status using the ARC categories of economic performance. The recent change in status can be attributed to the fact that Scioto's three-year unemployment rate for 2001-2003, while relatively high at 7.8 percent, was just below the critical ARC distressed threshold of 150 percent of the national unemployment rate during the three-year period of measurement.

Exhibit 2-7. Scioto's ARC Economic Status

Period	ARC Economic Attainment level
1988-1992	Transitional
1993-2004	Distressed
2005-2006	Transitional

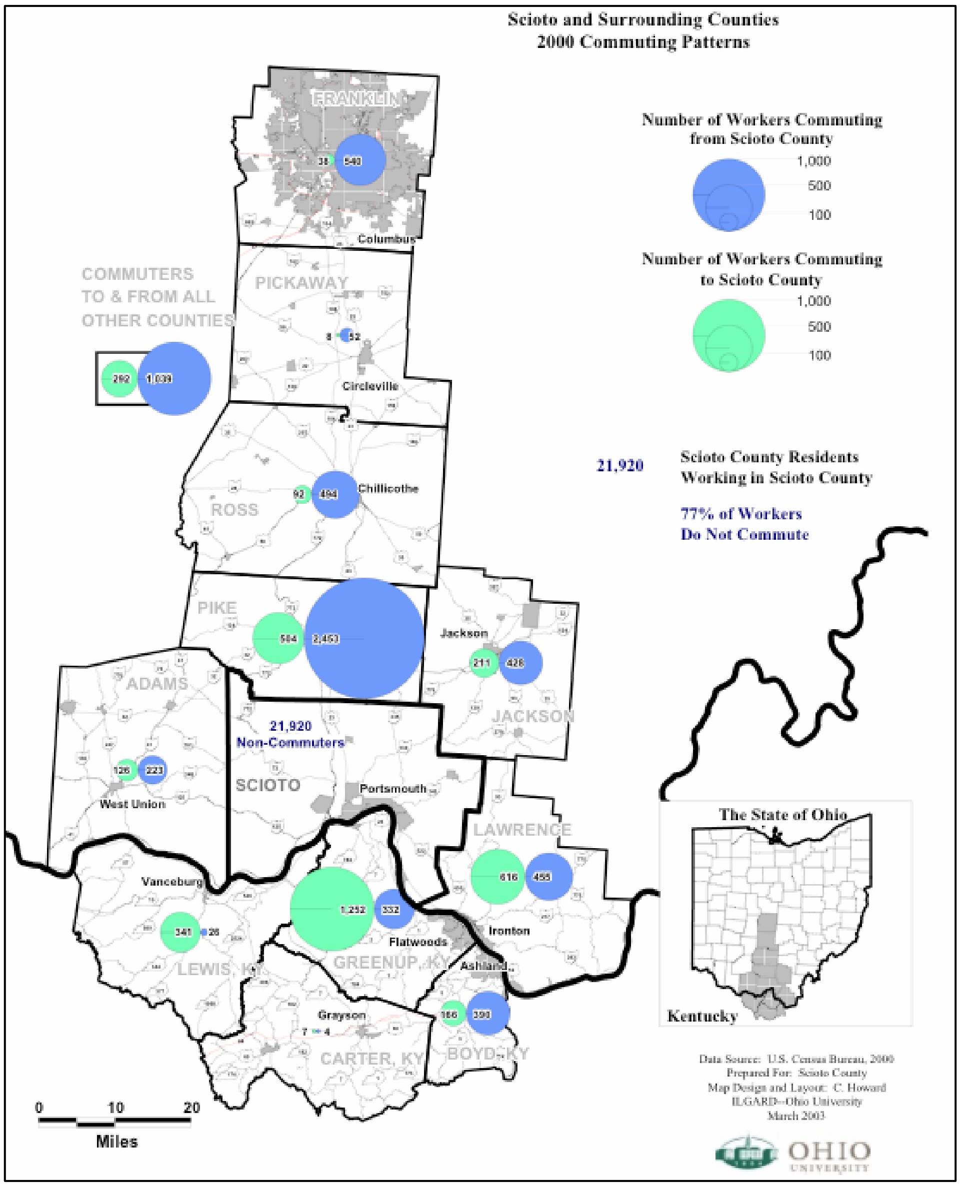
Trade Center (Hub) Status. Another reason for choosing Scioto County as a case study was an earlier economic base study by Smirnov and Smirnova (2000), in which Scioto County was classified as a "Type 1 County" – one with both "a strong economic-base" and "strong local spatial linkages," suggesting a likely regional trade center. That analysis of the industrial mix of the Scioto and surrounding counties concluded that residents and business in the more rural surrounding counties could be expected to utilize businesses in Scioto County.

Further analysis, both quantitative and qualitative, indicated that despite the statistical suggestions that Scioto could serve as a regional hub, the reality is far different. Indeed, representatives from the Ohio Regional Development Commission saw surrounding counties such as Ross and Pike (both transitional counties) as more the regional centers than Scioto, although they believe the county has strong growth potential. Community leaders within Scioto also doubted the county's current ability to serve as a regional hub, several calling Portsmouth " a typical Wal-Mart Town," offering little beyond that store as an attraction to those living outside. "We were once a hub, but we are no longer," said one community leader. "People go to Ashland (WV) or Huntington (KY) for their services, especially retail."

Scioto County's failure to serve as a regional hub manifests itself in several ways, as described in the following pages.

Commuting patterns. If it were a true regional hub, Scioto County could be expected to draw workers to its firms on a daily basis. In fact, as Exhibit 2-8 shows, Scioto is actually a net exporter of workers, with about 2,700 employees commuting on a daily basis. Indeed the only county in which Scioto appears to out commute to is Greenup County, Kentucky, which lies just across the Ohio River.

Exhibit 2-8. Scioto County Area Commuting Patterns



Retail patterns. If Scioto County operated as a true regional hub, it would be expected that residents of surrounding counties would migrate to the area to satisfy their retail needs such as shopping and eating. The location quotients of retail establishments shown earlier in Exhibit 2-6 also suggest that the county is drawing individuals from surrounding counties. But it appears that this is more of a statistical quirk than any real proof that Scioto County or Portsmouth is acting as a regional hub. Indeed, most leaders and residents interviewed for the study reported that residents of the county were more likely to drive to other areas for destination shopping and dining.

The main reason for Scioto County's inability to attract retail customers is one of location. As shown earlier in Exhibit 2-2, Scioto is actually at the center of a set of counties that have much better metropolitan access. For instance, Pike County, to the north of Scioto, would be more likely drawn into the metropolitan sphere of Columbus. Similarly, Adams County, to the west, is drawn into Cincinnati's service area. In addition, Scioto County does not have any large retail establishment such as a mall to draw shoppers. In fact, most interviewed residents of Scioto County themselves shopped at malls in Ashland, Kentucky or Huntington, West Virginia for their needs.

Supplier-customer relationships. While retail and commuting patterns are critical, the interchange between businesses is even more important to an economy. If a county's businesses draw their customers from surrounding locales, then they can be seen to serve as a regional hub. In the case of Scioto County that does not appear to be the case. The manufacturing firms that remain in Scioto County export their products on a national or larger regional basis than just surrounding counties. For example, Mitchellace in Portsmouth has a large contract with Kiwi, a company not located in Ohio.

There is a small concentration of financial and other professional services but these tend to be more focused on the local market. Portsmouth is home to seven banks, five of which are nationally chartered. Again. conversations with local officials suggest that these banks do not draw heavily from surrounding companies but instead serve the relatively large Portsmouth market.

One "industry" that does appear to attract regional usage is higher education. Portsmouth is home to Shawnee State University, a four-year institution that also offers two-year associate degrees. The university draws both students and employees from surrounding counties. For instance, 71 percent of Pike county residents who attend a four-year public university attend Shawnee State University. The university also employs a large number of employees who cross the bridge from Kentucky. The role of Shawnee State is discussed later in this paper.

2.4 Catalysts of Change

Responding to Growth Challenges. There are three areas of economic emphasis that merit closer examination. Each one of these categories represent ways in which Scioto County, either through intentional government intervention or through market forces, is attempting to grow its economy. This section of the paper examines:

The Health Care Industry

Higher Education

Manufacturing

For each of these categories, the ways in which growth is manifesting itself is discussed as well as the challenges pursuing such a strategy may pose to Scioto County. In addition, this section includes a discussion of how economic development agencies in the county and region are working to improve Scioto County.

Health Care. As mentioned, Scioto County enjoys a high concentration of employment in the health care industry. While there are substantial numbers of private doctors' offices, clinics and health care homes, the prime driver of this sector is Southern Ohio Medical Center located in Portsmouth. Located in Portsmouth, SOMC employs nearly 2,100 doctors, nurses and associated staff. The main hospital has more than 400 beds and the center owns several other health care offices and programs in the county. The hospital's growth has been in part facilitated by a commitment to make SOMC a high-tech medical center. In the last few years, SOMC has added a cancer treatment facility as well as a cardiac care center. All told, the hospital has undergone $70 million in expansion in recent years. SOMC took its current form in 1986, when several local health care facilities merged. The hospital operates as a non-profit entity. SOMC's impact on the economy comes primarily through direct employment. Doctor's offices in the area can affiliate themselves with the hospital and at least seven do so.

A major factor in the growth of the industry is the graying population of Scioto County. According to the 2000 Census, 14.9 percent of Scioto County's residents are over 65 compared to 12.4 percent of the national average. The population is expected to get even older proportionally—31percent of the population is over 50 compared to 27% of the US total. And SOMC is clearly geared to the local market: more than 80 percent of patients come from Scioto County with the rest from surrounding counties including some from Kentucky.

The population served by SOMC does present a problem for the hospital as a true economic growth strategy. The payer mix of the population is extremely dependent on government-assisted patients. Fully 75% of the patients use government insurance to pay for their services. This dependence reduces income for the hospital, as the hospital estimates it only collects a small portion of each dollar charged to these payers.

One plus for the hospital has been its ability to attract and retain nurses and other staff. While rural locations can sometimes hurt hospitals, administrators report an extremely high retention rate. SOMC offers generous benefits including offering 100 percent tuition reimbursement for staff or their spouses to go back to school to become nurses.

In addition to paying for school for staff, one of the reasons for the ability to attract employees are quality educational programs available locally. Shawnee State in particular provides a good source of nurses to SOMC. Students in the program are comfortable with Scioto County and are pleased with the opportunity to pursue employment in that area.

Unfortunately attracting doctors to the area has been extremely difficult for SOMC. In a story repeated all over Rural America, SOMC relies heavily on foreign doctors who travel to the US on special visas or domestic doctors who are able to work off heir medical school loans by working in an economically disadvantaged regions. In either case, doctors that do come do not tend to stay long. Administrators report that the problem in keeping and attracting doctors tends to have more to with these personnel's families comfort level with the community. Families often complain about the lack of cultural and shopping amenities. The results can often result in delays in implementing the high-tech facilities that the center rightly prides itself on. For instance, hospital administrators report that the state of the art cancer facility sat unused for a full year before doctors could be attracted to the site.

To make up for the difficulty in attracting doctors, SOMC relies on different strategies. One is using osteopaths to perform many tasks. The hospital maintains a strong working relationship with Ohio University in Athens and their college of Osteopathic Medicine. This relationship allows graduates of that institution to provide a pipeline of qualified practitioners who understand life in small town Appalachian Ohio and who are committed to staying and working in a community such as Portsmouth.

While the hospital is growing and continued expansion plans are in the work, there are limits to using SOMC, and indeed health care as an economic growth strategy. There is heavy competition in the region for medical services, and while SOMC is the largest facility in the surrounding counties, it is not the only one. Adena Health Systems in Pike County draws significant numbers of patients. In addition, for specialized medical care, patients are likely to journey to national medical centers in Cleveland and Cincinnati. Staff estimate that 70 percent of the "heart market" leaves the county. The fact that 80 percent of patients at SOMC come from Scioto suggests that new money is not being brought into the county.

Higher Education. Shawnee State is clearly an institution that has the potential to impact the growth of Scioto County. Founded as a community college, Shawnee State became a university in 1986. The college has 3,800 students and college offers both four year degrees and associate degrees, making an interesting hybrid of a community college and a university. As a university, Shawnee State is increasing the numbers of students who live on campus. Currently, nearly 500 students a year reside in campus housing and plans are in the works to expand these numbers.

The college possesses several especially strong programs. Of special import to Scioto's "new" economy, is a strong allied health curriculum. As mentioned, Shawnee State provides a significant number of the nurses to SOMC and the hospital and the university have close relationships. In addition to offering traditional programs, Shawnee State also innovative programs that are drawing national attention. For instance, the university offers one of the nation's only programs in gaming. This program trains students in creating and marketing video games. The program attracts students not only from around Ohio but from states all around the country.

Shawnee State does represent one area where the notion of Scioto County serving as a hub is a reality. Exhibit 2-9 shows the percentage of college students from neighboring counties who attend Shawnee State. As it shows, Shawnee is by far the preferred destination for students in these counties.

Exhibit 2-9. OH Public University Attendance at Shawnee State

Scioto	80.1%
Pike	70.8%
Adams	61.7%
Lawrence	27.9%
Jackson	26.4%
Ross	15.2%
Gallia	14.5%

The university not only welcomes these students it, like many universities, is an engine of innovation. Several companies have spun out of activities at the university. For example, Yost Engineering, one of the most successful firms in the County, was founded by a former professor at Shawnee State. In addition to this spin off potential, the college offers training to companies in the area in a variety of areas including:

Management and Human resources training

Customer service

Office skills such as using Microsoft programs

A targeted industry program providing training for 201 employees in the 2004-5 school year. Training was delivered at companies such as Mitchellace, Inc.

Sun Coke and Scioto Plastics.

The university has made an impact in the cultural life of the community as a hole. The university is responsible for the Verne Riffe Center for the Arts, a 1,140-seat performing arts center on campus. The Center brings national musical and performing arts to the area. These amenities are critical in attracting and just as important retaining families and young people to the area.

Using Shawnee State as a growth strategy, however, is not without its problems. Foremost among these is the fact that Portsmouth is not structured right now as a traditional college town, or certainly not one that can cater to a large residential population. Several local officials and residents pointed out the lack of typical college student hangouts as just one example of how Portsmouth lacked amenities that could serve students and benefit from the dollars that they often spend. For instance, there is not a pizza place or a college-focused bar within walking distance of campus.

Some individuals interviewed doubted whether or not Portsmouth really even wants to be a "college town. "They don't want to be an Oxford, Ohio. They don't want to be an Athens, Ohio."

There recently have been heated battles over the location of student housing, suggesting that not all county residents are comfortable with embracing a residential student population in the area.

Manufacturing: Returning to Scioto County's Roots. While Scioto County's industrial mix has changed dramatically, leaders in the community have not abandoned what once was the heart of the region's economy: a strong manufacturing base. Several steps have been taken to encourage the location of new industry in the county and making sure that companies that remain can prosper.

The prime example of the community's focus is the effort to redevelop a plot of land to host Sun Coke, Inc., a large steel manufacturer. Through grants through an empowerment zone project, Scioto County worked to turn a brownfield site into an area that could host an industry that provided good, high paying jobs. The site is not only home to Sun Coke but is the future home of large retail establishments such as a "big box" (e.g. Wal-Mart).

A key in the location of Sun Coke was a regional approach to securing land for the facility. For example, Ohio Valley Regional Development Corporation gave Scioto County funds to provide sewer access for the plant. And although the plant was located in the small municipality of Franklin Furnace, representatives from communities throughout the county were involved in the development of the project.

Indeed, regional cooperation is key to much of the manufacturing development that is occurring in the area. Another prime example is the focus on a facility in neighboring Pike County. Pike County as home to a large uranium enrichment plant that employed hundreds of workers, the majority of whom came from Scioto County. Community leaders in a variety of counties are cooperating through an organization called the Southern Ohio Development Initiative (SODI), to devise ways to turn this brownfield into a viable industrial site. Recently, USEC, Inc. announced plans to build a large centrifuge plant that will employ more than 500 workers, providing opportunities for workers throughout the region, including Scioto County. Although the workers will not be employed within the county limits, the presence of a qualified workforce in Scioto County was critical to the decision to build the facility.

A qualified and experienced manufacturing employment base is a strength of Scioto County. Sun Coke, for instance, reported that they were very pleased with the quality of employees that came to their facility once they opened. Other manufacturing firms may also be attracted by this strong cadre of qualified individuals when making site selection decisions.

Another strength that Scioto County has tried to capitalize on is its continued access to rail and river transportation. Industries that rely on these two transportation modes could be drawn to the county to do business. However, according to the director of the port authority, significant improvement to the system of dams and locks along the river need to be made to take full advantage of the river's potential draw.

A more critical barrier to large-scale industrial/manufacturing growth is the lack of free engineering space. "We don't have 200 acres to show people," one community leader said, saying that brownfield redevelopment as in the case of Sun Coke, is the only real place that manufacturing firms can be expected to open new facilities. The reason for the lack of new development space has more to do with geography than an unwillingness to open land for development. The county is extremely hilly and the presence of two rivers (the Scioto and Ohio) means much available space lies in flood plains. Some available land is owned by Norfolk and Southern which is reluctant to sell the land unless a company that is extremely rail dependent would be willing to purchase the land.

Formal intervention. Scioto County is fortunate to have a number of economic development organizations that are committed to its growth. Foremost among these is the Ohio Valley Regional Development Commission (OVRDC), the local development district, headquartered across the border in Pike County. OVRDC continues to work closely with local officials to see how more industry and commerce can be attracted to the county. For instance, OVRDC provided funding to the County to make infrastructure improvements to ensure that Sun Coke would come to the region.

The Commission is not alone in trying to promote Scioto as part of a regional renaissance. SODI, mentioned in the previous section, is an example of an organization that is looking for regional solutions to vexing problems facing the county. Perhaps the greatest cooperation among economic development players came through the enterprise zone/empowerment zone project in the New Boston Area. As discussed, the project brought together a wide range of community leaders to help convert what previously was a Brownfield site into one that can attract industry. Leaders in several counties help build a small business incubator in Pike County that is utilized by residents from Scioto County. In addition, the Southern Ohio Growth Partnership acts as a regional chamber of commerce, serving businesses within a 30 mile radius of Portsmouth.

Indeed, much of the formal economic development efforts underway concentrate on both ensuring that existing manufacturing can prosper and helping to attract new businesses to the area. In terms of attracting new businesses, area leaders recognize the importance of helping firms compete in an era dependent on information exchange. The Scioto County Economic Development Office is active in HighTech Ohio, an initiative that highlights information and technology based companies in the county.

While these efforts at improving Scioto County are impressive, there is not a comprehensive economic development strategy in place for the county that stresses a single economic sector or set of sectors. Rather efforts are made to make sure that the county continues to adjust as it moves away from being solely dependent on manufacturing to an economy that depends more heavily on the health care and educational sectors.

2.5 Lessons Learned

Scioto County represents an interesting model for those Appalachian counties that are struggling to reinvent themselves. In this case, Scioto County is trying to emerge from an economic downturn related to the loss of manufacturing jobs, particularly in the steel industry. Several lessons emerge for counties facing similar challenges.

Switching to a service-based economy is difficult. Scioto County's economic future is increasingly tied into the service-based industries—particularly health care and higher education. Any community attempting to refocus itself will encounter difficulties. One of the main challenges is in providing a workforce that is equipped to handle this change in direction. Those trained in working in a manufacturing plant can't necessarily turn on a dime to work in a hospital or university. Often service jobs pay less than do manufacturing which means that the average wage in Scioto County may not grow as vibrantly as once expected. Creating better paying service jobs are a challenge but one that needs to be explored. Certainly Shawnee State's strong allied health education program is one way to steer residents into higher paying medical professions.

Manufacturing should not be ignored. Of course, Scioto County recognizes that concentrating solely on service industries is problematic. These types of businesses, as mentioned, pay lower wages and bring less outside money into a community. Thus, Scioto County has tried, when possible, to ensure that the County's strong manufacturing base is not ignored. Programs such as the Sun Coke project and the regional cooperation around the former uranium enrichment plant allow the County to keep a foothold in manufacturing.

Build upon existing assets. Scioto County recognizes that although it has undergone significant economic distress it does have something going for it. Foremost among these are access to rail and river transport. County leaders recognize that while the role of the Ohio River may not be what it once was, for certain industries it remains a critical component of trade. Industrial recruitment efforts promote the area's river access—something that could draw more heavy industry to the county.

The County is also recognizing that the more modern transportation choice of road access is a continued problem for the County. Accordingly, leaders are pushing for a by-pass that would provide better four-lane access through the County. The belief is that this will encourage development in the County and perhaps increase the County's ability to attract consumers from neighboring areas. The proposal is not without its detractors of course. In particular, those who want to see a rebirth of downtown businesses worry that a bypass on the outskirts of town would further cripple retail traffic downtown.

Creating a regional hub is problematic. This case study began with the hypothesis that Scioto County served as a regional hub for its neighbors. Ground truthing that belief revealed that the County does not draw significant business, consumers or workers from surrounding counties. The county faces special challenges due to the relative proximity of larger urban centers, which border Scioto County's neighbors. This siphoning of periphery demand from an older, limited scale core economy to a larger, extra-regional metro area is an example of adverse spillover effect. Improved transportation access at the periphery and emanating away from the core facilitates this economic displacement. It is perhaps unrealistic to believe that Portsmouth could draw individuals away from the bright lights of Columbus or Cincinnati. What Scioto County can do, and has in many cases, is to make sure that it retains the local market within the county. For instance, SOMC 's expansion goals are to capture as much of the Scioto County patient population as possible. The cancer center at SOMC was put into place because more than 75 percent of cancer patients in Scioto County were traveling elsewhere for treatment.

In any case Scioto County is looking regionally for solutions through cooperation with the Ohio Valley Regional Development Commission and other economic development entities in the area. Other efforts include an active program that promotes better internet access in Appalachian Ohio, a shared incubator space, and continued cooperation around the uranium enrichment plant. The leaders in the county recognize that if the County is truly to be reborn it is going to take more than just the residents of Scioto County it will take regional cooperation and linkages with Appalachian Ohio.

2.6 Interviewees

- Elizabeth Blevins, Community Relations Director, Southern Ohio Medical Center
- Steve Carter, Director, Scioto County Economic Development Office

- Craig Gilliand, Administrative Director of Financial Support and Facilities, Southern Ohio Medical Center
- Jason Gillow, Research/Planning Supervisor, Ohio Valley Regional Development Commission
- Steve Gregory, Office of Career Services, Shawnee State University
- Jennifer Hanlon, Director of Community Development, City of Portsmouth,

Sondra Hash, Managed Care Manager, Southern Ohio Medical Center

John Hemmings, Assistant Director, Ohio Valley Regional Development Commission

- Robert Huff, President, Southern Ohio Growth Partnership
- Jim Kalb, Mayor, City of Portsmouth

Virginia Moore, Director University Outreach Services, Shawnee State University

Greg Simonton, Executive Director, Southern Ohio Diversification Initiative

Jeff Spencer, Executive Director, Ohio Valley Regional Development Commission

Bob Walton, Director, Scioto County Community Action Program/ Southern Ohio Port Authority

Susan Warsaw, Director of Development, Shawnee State University

3 CHAUTAUQUA COUNTY, NY: *MANUFACTURING DIVERSIFICATION*

3.1 Introduction

Chautauqua County, NY has been maintaining its transitional status despite continued adverse forces tied to structural adjustments in U.S. manufacturing. Attraction of jobs in transportation equipment manufacturing is now serving to anchor the regional economy along with impetus of HUD Renewal Community status, various enterprise zones, and attempts to diversify/foster entrepreneurial development around tourism.

Chautauqua County presents an interesting case study as a region in transition. For much of the twentieth century, a strong manufacturing sector that relied on an established transportation network, a well-trained blue collar workforce, and the county's natural resources defined the region's economy. Over the past twenty years, the manufacturing sector has declined sharply as a result of global competition, changing consumer tastes, and technological advances. In the face of significant job loss in the manufacturing sector, the County has transitioned, with some success, to a more diversified economy. It retained some of its manufacturing base through specialization and targeted economic development programs, and successfully expanded its base to include a growing tourist industry characterized by expansion in the service and retail sectors. The lessons learned by the County and its strategies for addressing its changing economy offer useful insights for other regions in Appalachia.

3.2 Regional Profile

Chautauqua County is located in far western New York State, directly south of Buffalo. It is bordered by Lake Erie and Pennsylvania to the west and Pennsylvania to the south. It is part of the Southern Tier West planning area along with the counties of Allegany and Cattaraugus. The county encompasses 1,062 square miles Exhibit 3-1.

Exhibit 3-1 Chautauqua County's Location Within New York State

Chautauqua is a rural county, with a population density of 131.6 persons per square mile. As shown in Exhibit 3-2, , the U.S. Census reports that 139,750 people lived in the County in 2000, a decrease of 5.1% since 1970. In comparison, New York State's population increased by 4.1 percent over the same period. Census estimates for 2003 indicate a continued decline in population of Chautauqua County to 137,645. Jamestown, with a population of approximately 31,000 people, is the County's largest city. Dunkirk, located on the shores of Lake Erie, had a population of 13,131 in 2000 and is the County's only other city. The remainder of the County includes 27 towns and 15 villages. The Jamestown-Dunkirk-Fredonia area is the region's designated micropolitan area. The region's business and industry is concentrated around its two cities. Farmland and forests characterize much of the remainder of the County.

Exhibit 3-2 Population Change, 1970-2000 - Chautauqua Co. and NY State

	Population				% Change			
Population	**1970**	**1980**	**1990**	**2000**	**1970-80**	**1980-90**	**1990-2000**	**1970-2000**
Chautauqua County	147,205	146,925	141,895	139,750	-0.2%	-3.4%	-1.5%	-5.1%
New York State	18,236,967	17,558,072	17,990,455	18,976,457	-3.7%	2.5%	5.5%	4.1%

Source: US Census Bureau.

Historically, the geography, climate, and natural resources of Chautauqua County have shaped its economy. For over two hundred years, the rich soils have supported farming, and the microclimate along Lake Erie have proven ideal for growing grapes. The agricultural and viticulture industries in turn spawned a robust food processing industry in the County. The region boasts large areas of hard wood forests that have supported the development of both wood products and furniture manufacturing industries. The primary and fabricated metals industries grew up along the Lake Erie Coast where the Great Lakes shipping lanes and rail road lines provided cheap and easy transportation access to the automobile manufacturing centers in Michigan. Tool and dye, machinery, and transportation equipment manufacturers located in the area to both support the metals industries and to have easy access to their products.

These manufacturing industries remain important to the economic health of Chautauqua County, although the region has struggled in the face of plant closures and employment contractions. Exhibit 3-3 shows that manufacturing employment represented 31.3 percent of all jobs in the County in 1970. While manufacturing still accounts for 19.3 percent of the County's employment, manufacturing jobs declined by over 24 percent between 1970 and 2000.

Exhibit 3-3 Employment Change by Industry, Chautauqua County, 1970-2000

	1970		1980	1990	2000	
EMPLOYMENT		**% of Tot.**				**% of Tot.**
Farm employment	3,070	5.1%	3,470	2,890	2,460	3.3%
Agricultural Services	280	0.5%	440	680	830	1.1%
Mining	30	0.1%	540	510	280	0.4%
Construction	2,290	3.8%	2,220	3,180	3,010	4.1%
Manufacturing	18,770	31.3%	18,120	15,400	14,190	19.3%
Transportation, Comm., PU	2,640	4.4%	2,320	2,460	2,840	3.9%
Wholesale Trade	1,830	3.1%	2,610	2,440	2,340	3.2%
Retail Trade	9,570	16.0%	10,290	12,780	13,240	18.0%
FIRE	3,710	6.2%	3,920	2,860	3,200	4.3%
Services	8,280	13.8%	13,190	17,730	21,100	28.6%
Government	9,480	15.8%	10,270	10,530	10,220	13.9%
Total	59,950	100.0%	67,390	71,460	73,710	100.0%

% CHANGE	**1970-80**	**1980-90**	**1990-2000**	**1970-2000**	**1980-2000**
Farm employment	13.0%	-16.7%	-14.9%	-19.9%	-29.1%
Agricultural Services	57.1%	54.5%	22.1%	196.4%	88.6%
Mining	1700.0%	-5.6%	-45.1%	833.3%	-48.1%
Construction	-3.1%	43.2%	-5.3%	31.4%	35.6%
Manufacturing	-3.5%	-15.0%	-7.9%	-24.4%	-21.7%
Transportation, Comm., PU	-12.1%	6.0%	15.4%	7.6%	22.4%
Wholesale Trade	42.6%	-6.5%	-4.1%	27.9%	-10.3%
Retail Trade	7.5%	24.2%	3.6%	38.3%	28.7%
FIRE	5.7%	-27.0%	11.9%	-13.7%	-18.4%
Services	59.3%	34.4%	19.0%	154.8%	60.0%
Government	8.3%	2.5%	-2.9%	7.8%	-0.5%
Total	12.4%	6.0%	3.1%	23.0%	9.4%

Source: CEDDS Volume II, 2002 Woods and Poole Economics, Inc.; EDR Group

Exhibit 3-4 displays the industry mix (location quotients) by industry for Chautauqua County compared to both New York State and the nation. The location quotients confirm that the region retains a concentration of manufacturing jobs, particularly in the food processing, furniture, fabricated metals, and machinery manufacturing categories. The continued viability of these industries in the County has been dictated by their ability to adapt to global competition; the availability of a well-trained, loyal workforce; and efforts by the economic development community to provide assistance and incentives. Some have faired better than others.

As the manufacturing sector has struggled and lost employment, the tourism industry has expanded in the County. The County's bucolic landscape and natural features such as Lake Chautauqua have helped attract visitors, as have successful efforts to develop destination attractions within the County. Growth in the tourism sector has helped mitigate job loss in manufacturing, and in recent years, the economic development community has recognized that tourism can provide an alternative source of job growth for the workforce.

3.3 Evolution of Progress

Despite contractions in important manufacturing sectors, the county has had some success reinforcing existing industries such as primary and fabricated metals, transportation equipment, food processing and wood products. The region is also beginning to look to recreation and tourism assets to further diversify its economy.

Manufacturing

Primary and Fabricated Metals. The fabricated metals industry dominated the economy of Chautauqua County communities such as Dunkirk for several decades in the mid-1900s. Proximity to Detroit's auto manufacturers provided by cheap water and rail transportation supported the development of the steel and related industries all along the shores of Lake Erie.

Beginning in the early 1980s, international competition and resistance to the strong union workforce led to a sharp decline in the metals industries. Several businesses contracted or closed, including Roblin Steel and Alumax Extrusions. Empire Specialty Steel (formerly Al Tech Steel), which was once employed 800 people and was one of the largest steel manufacturers in the County, closed its doors in 2001 after several years of decline. Employment in the primary metals industry declined by 25.2 percent between 1997 and 2002, while employment in the fabricated metals sector declined by 2.4 percent over the same time period. Reductions in these industries, and the impact of these reductions on the County's local tool and dye and machinery manufacturers, account for a large percentage of the decline in the manufacturing sector in recent decades.

Exhibit 3-4. Industry Mix – Chautauqua County Compared with the State & U.S.

NAICS	Sector	Location Quotient Chautauqua / NY State	Location Quotient Chautauqua / U.S.
111	Crop Production	7.3	1.6
112	Animal Production	5.8	2.4
113	Forestry & Logging	3.2	1.2
114	Fishing, Hunting & Trapping	0.0	0.0
115	Support for Agriculture & Forestry	1.1	0.2
211	Oil & Gas Extraction	46.8	7.3
212-213	Mining & Support Activities	3.3	0.6
221	Utilities	1.1	1.3
230	Construction	0.8	0.6
311	Food Products	7.6	4.4
312	Beverage & Tobacco Products	3.2	1.8
313	Textile Mills	0.0	0.0
314	Textile Product Mills	0.0	0.4
315	Apparel Manufacturing	0.0	0.1
316	Leather & Allied Products	0.0	0.0
321	Wood Products	4.1	1.3
322	Paper Manufacturing	0.0	0.2
323	Printing & Related Support Activities	0.7	0.6
324	Petroleum & Coal Products	5.6	1.8
325	Chemical Manufacturing	0.4	0.4
326	Plastics & Rubber Products	1.1	0.6
327	Nonmetallic Mineral Products	2.9	1.8
331	Primary Metal Manufacturing	2.2	1.0
332	Fabricated Metal Products	7.1	4.4
333	Machinery Manufacturing	4.7	3.7
334	Computer & Electronic Products	0.0	0.1
335	Electric Equipment, Appliances, etc.	0.0	0.3
336	Transportation Equipment	3.2	1.1
337	Furniture & Related Products	19.8	10.4
339	Miscellaneous Manufacturing	0.5	0.5
420	Wholesale Trade	0.7	0.7
441-454	Retail Trade	1.3	1.1
481-487	Transportation	1.0	0.9
491-493	Mail, package delivery & warehousing	0.5	0.5
511	Publishing Industries (except Internet)	0.6	0.9
512	Motion Picture & Sound Recording	0.0	0.3
513	Broadcasting	0.8	0.9
514	Internet & data process svcs	0.0	0.1
521-523	Monetary, Financial, & Credit Activity	0.3	0.4
524	Insurance Carriers & Related Activities	0.3	0.3
525	Funds, Trusts, & Other Financial Vehicles	0.0	0.0
531	Real Estate	0.2	0.3
532	Rental & Leasing Services	1.3	0.9
533	Lessors of Nonfinancial Intangible Assets	0.0	0.0
541-551	Professional Scientific, Technical, Services	0.4	0.4

561	Administrative & Support Services	0.5	0.4
562	Waste Management & Remediation	0.9	0.8
611	Educational Services	0.1	0.2
621-624	Health Care & Social Services	1.0	1.3
711-713	Amusement & Recreation	1.3	1.7
721-722	Accommodations, Eating & Drinking	1.5	1.3
811-812	Repair, Maintenance, & Personal Services	0.8	0.7
813	Religious, Civic, Professional, Organizations	1.5	3.1
814	Private Households	0.3	0.3
920	Government & non NAICs	0.8	0.8

Source: EDR-LEAP (with IMPLAN data) and EDR Group.

Despite the sharp decline in the metals industries, both the private and public sectors remain determined to retain these important components of the economic base. After the closure of Empire Specialty Steel, the state took possession of the facility and worked diligently with the local economic development community to find a buyer for the plant. In 2002, Universal Steel, a Pennsylvania-based company purchased the facility, and opened Dunkirk Specialty Steel on the site. The firm streamlined production, hired 100 employees, and is now producing steel in Dunkirk, although at a much reduced level. Some additional metal fabricators have managed to remain in operation in Chautauqua County by identifying specialty markets such as galvanized rebar. Dawson Metals, a locally owned firm, has developed a niche making steel doors for clients including the Mayo Clinic and US Senate. Another manufacturer has developed a specialty market producing metal door handles. In 2002, the fabricated metals industry still accounted for four percent of the County's employment (2,645 jobs), making it the fifth largest employment sector in the region (see Exhibit 3-5).

Exhibit 3-5. Top Five Employment Sectors in Chautauqua County, 2002

	Rank	Employment
Government & non-NAICS	1	7,149
Food Services/Drinking Estbls	2	4,874
Religious-grantmaking/Similar	3	3,707
Food Product Mfg	4	2,783
Fabricated Metals MFG	5	2,645

Source: MIT – DUSP Economic-base Analysis Update

Transportation Equipment. The transportation equipment industry in Chautauqua has managed to remain viable, primarily as a result of continued expansion at two major employers. Cummins, Inc., an international manufacturer of diesel engines, consolidated its mid-west operations in 2002, shutting its plant in Indiana and expanding employment at its Lakeville site. The firm is now the fifth largest employer in the County with 1,020 employees, and is expected to increase employment to 1,250 before the expansion is completed. The firm chose to expand operations in Jamestown because of the well-trained workforce, low energy rates ($0.04 per kilowatt hour) available through the municipal utility (the remainder of the County's energy is provided by a private firm, and is more than double the cost of competing regions), and tax incentives available through the Greater Jamestown Empire Zone.

Truck-Lite Co., Inc., a manufacturer of vehicle safety lighting, opened in Jamestown 50 years ago. The firm, which is now a subsidiary of Penske, retains it headquarters and a manufacturing plant in Chautauqua County, in addition to several plants throughout the world. The firm has 550 employees in Chautauqua County. The quality of the workforce and good union relationship are two important reasons why the firm remains in the County. It is located in the Greater Jamestown Empire Zone and has taken advantage of the employee tax credits available through the Empire Zone as it has expanded. Because of expansion at these two facilities, employment in the transportation equipment sector increased by 3.4 percent between 1997 and 2002.

Food Processing. The County retains a strong food processing industry in the northern part of the County, even though today much of the raw product used in it manufacturing facilities is imported from out of state or abroad. The ability to quickly ship produce around the world for processing, as well as wage competition from other regions have created challenges for the food processing industry in Chautauqua. Kraft Foods closed its Chautauqua Operation, and within the past year, Welch's significantly reduced its operations at its two facilities in the County. Despite these challenges, employment in the food products industry grew by 5 percent between 1997 and 2002. Two off-label food processing companies, the locally-owned Cliffstar Corporation (635 employees) and the nationally-owned Carriage House Companies (793 employees) anchor these sectors in the County, producing products such as juice, ketchup, and peanut butter. The presence of these two off-label manufacturers proved important during the recent national economic downturn, as consumers increase their purchases of lower priced off-label goods when the economy falters.

Other major food processors include Fieldbrook Foods (400 employees locally), the second largest producer of ice cream on the east coast. Fieldbrook Foods bought out the locally-owned Dunkirk Ice Cream Company in 1996. Another major food processing firm in the northern part of the region is Nestle Purina PetCare Company (270 local employees), which manufactures pet food in the Dunkirk area. Nestle Purina recently completed a $90 million expansion of its operations, and purchased more than 50 acres of land to accommodated future expansion plans. The Empire State Development Corporation has given a large grant to the firm to finance an electrical substation to reduce energy costs.

In 1999, the County Industrial Development Agency invested in four industrial parks, including the Chadwick Bay Park in the Dunkirk-Sheridan Empire Zone. The County developed a spec building in the Park aimed at attracting businesses that support the food processing industry. In 2002, Grafco PET Packaging Technologies, which manufactures containers and bottles for the food processing industry, built a 120,000 square foot manufacturing facility in the Chadwick Bay Industrial Park in close proximity to the existing food manufacturers. The firm located in Dunkirk to "better serve its northeastern and Canadian markets" and because of the well-trained workforce. The plant supplies both Carriage House and Cliffstar. The plant employs over 300 people. The economic development community believes that Grafco will be an important factor in retaining and growing the region's food processing industry.

Wood Products. The southern part of the County around Jamestown is noted for its hardwood forests, which supported vibrant wood products and furniture industries for many years. The wood products industry has faltered in recent years, decreasing employment by 5.1 percent between 1997 and 2002. The decline in the County's wood products industry is a result of changes in consumer tastes and competition from other regions with cheaper labor costs. Today, much of the high end furniture market, which once used the high quality hardwoods grown in Chautauqua County, now uses exotic woods from Asia and South America. Less expensive furniture is now manufactured using laminates and lesser quality woods grown elsewhere.

Although the County's furniture industry has faced strong competition from abroad (particularly Asia and the southern United States) and the closure of several plants including two Ethan Allen facilities, employment in the furniture and related products manufacturing sector has managed to remain stable (+0.8% between 1997 and 2002). The industry employs 2,783 people (4.2 percent of all jobs), ranking fourth among Chautauqua County industries. The importance of this industry to the region is underscored by its 19.16 location quotient compared to New York State, and 11.46 compared to the nation.

To compete, the County's furniture manufacturers have developed niche markets. Bush Industries has moved away from using the high quality woods grown in the region to manufacturing pieces made from composites. The firm, which opened in Jamestown in 1959, is the third-largest employer in the County, with 1,249 employees in 2005. The firm has branch plants in several locations around the world. The locally-owned Crawford Furniture manufactures reproduction pieces in the Stickley style. Greco, a national firm, makes baby furniture, and Cold Craft manufactures conference furniture. The ability to identify and create specialty products has helped the furniture sector survive in the County, although according to the region's economic development professionals, the industry continues to struggles to remain competitive.

The decline in manufacturing employment in the County has certainly raised concerns about the economic future of the region. In particular, many of the jobs lost were in strongly unionized sectors that provided good wages for a skilled workforce. However, the ability of the County to retain and attract some new firms in its traditional industries through specialization and streamlining provides some encouragement that the region can maintain, through creative approaches and targeted economic development programs, a solid manufacturing sector.

Tourism. Chautauqua County has mitigated job loss in the manufacturing sector through diversification into other sectors. In 1970, the service sector accounted for 13.8 percent of jobs in the County, and retail jobs made up 16 percent of the employment base. In 2000, these industries accounted for 28.6 percent and 18 percent of the County's jobs, respectively. Food service and drinking establishments employed 4,874 people in 2002, ranking it second among employment sectors in the County. The strength of the retail and service sectors is attributable to growth in the tourism industry, which has tapped the region's natural resources, landscape, and history create destinations and activities to attract tourists.

The cornerstone of the County's tourist attractions is the world-renowned Chautauqua Institution (CI), founded in 1874 as a religious retreat on Lake Chautauqua. The CI is a unique community built on 750 acres of land. The gated community includes 1,200 properties, including 300 year-round residents, hundreds of summer homes, a 160 room hotel, and a 5,500 capacity amphitheater. Home values within the gates have soared and have anchored an escalating interest in summer homes in Chautauqua County. The CI is currently expanded, purchasing several acres of land adjacent to the facility and adding 32 housing lots. The Institution's nine-week summer season features over 2,000 programs including lectures, theater, opera, symphonies, and other activities, which attract over 150,000 visitors (both day trippers and overnight guests) to the region. The CI is currently seeking to expand its draw beyond the summer season by marketing the facility for conferences, reunions and other events.

The Peek'n Peak Resort and Conference Center is a four season destination that includes two golf courses and 27 trails of downhill and cross country skiing. Visitors come from surrounding states and Canada to use these facilities. The resort recently constructed 150 condominiums on-site. Golf Digest recently recognized the region as an outstanding golfing destination. Snowmobile clubs in the County also help promote winter tourism by maintaining hundreds of miles of trails, and summer tourist activities include fishing in Lake Erie and Chautauqua Lake**.** The grape growers and wine producers have developed a "wine trail" along Routes 5 and 20 near Lake Erie, which attracts visitors from surrounding states and Canada. The region is also attracting cyclists because of its rolling hills, scenic landscape and roads with wide shoulders.

Chautauqua Lake has long drawn visitors from outside the County, including Ohio, Pennsylvania and Ontario. Attractions have included Bemus Point amusement park and numerous beaches along the shores of the Lake. The Lily Dale Assembly, a spiritual retreat on the eastern shores of the Lake attracts several thousand visitors during the summer. In recent years, interest in second homes around the Lake has increased, with real estate values increasing at a fast pace. The economic potential of the Lake area as a tourist attraction is demonstrated by the interest of at least one outside investor, who has purchased and opened four restaurants in the past few years.

Attractions have also been built around the reputations of the region's famous sons and daughters. Jamestown houses the Lucille Ball-Desi Arnaz Center and Museum, and hosts two Lucy-Desi festivals each year. The Roger Tory Peterson Institution of Natural History, the Robert Jackson Center, and the Fenton History Center also celebrate the lives and legacies of famous Jamestonians. Other attractions in

Jamestown include the recently-completed ice arena, funded by the Gebbie Foundation. The arena successfully hosted the junior national ice skating championships in 2004, and expects to draw additional competitions in the future. A Best Western Hotel is under construction adjacent to the arena.

The interest of the region's economic development community in growing its tourism industry has emerged in recent years. Jamestown currently is preparing a downtown urban design plan that will recommend the city pursue the development of a tourist attraction that can attract up to 100,000 people per year. The city is developing its river-walk, and has applied for federal transportation funds to redevelop its train station. In the Dunkirk area, an investor is promoting the creation of the Lake Erie Heritage Museum, focusing on the shipwrecks that have occurred on the lake throughout its history. In addition, the tourism industry is currently developing an agricultural trail that will highlight area farmers' markets, seasonal farm stands, and the County's maple syrup producers. After many years of ignoring the industry, the County government now provides funds to the Chautauqua County Visitors' Bureau for marketing and development.

Two recent changes are expected to heighten the appeal of Chautauqua County as a tourist destination. First, the upgrade of the Appalachian Development Highway corridor T (also known as US 17 and designated as I-86 in the upgraded sections) to Interstate standards has dramatically improved access to the region. Although some businesses expressed concern that these improvements would simply facilitate the exodus of people from Chautauqua to shopping destinations in tax free Pennsylvania, there are indications that the highway is helping to bring more people to the County for recreation. There are two new hotels in Jamestown near the highway interchange, and representatives of the tourist industry report that visitation to the County's attractions is increasing. The tourism community would also like to utilize the two rest areas along the Interstate to better promote the region's attractions.

Second, swayed by considerable lobbying by the Chautauqua County Chamber of Commerce, the County legislature voted this year to allow the County to abolish its sales tax, reducing the overall sales tax from 8.5 percent to 4.5 percent. Retailers and economic development professionals anticipate that this reduction will help dissuade residents from leaving the County to shop in Pennsylvania.

Industry-setting Labor Markets. Because manufacturing dominated the economy of Chautauqua County for so many years, the region developed a highly skilled blue collar workforce with a strong work ethic. Despite the decline in manufacturing jobs, a blue collar "culture" continues to dominate the workforce. Many families have passed down to their children the expectation that they will work in manufacturing, a goal which has become harder to achieve as the sector has declined. Additionally, the earning potential of the blue collar workforce has decreased as manufacturing firms have been forced to cut wages to remain competitive in the global marketplace, and jobs in the tourism industry typically pay lower wages than manufacturing jobs.

Prior to the decline of the metals industries, Chautauqua County was known as a strong union area. Today, the strength of the unions has declined, as is evidenced by the $10/hour wages offered at the newly opened Dunkirk Specialty Steel. Some economic development professionals believe that the history of union activity in Chautauqua and the proximity of the region to Buffalo, a once-strong union town, continue to hinder the County's ability to attract new firms. The County's economic development community often tries to downplay its proximity to Buffalo when courting new manufacturers to the region.

In 2000, 91,261 Chautauqua County residents were over the age of 25, and the labor force participation rate was 61.4 percent. Just over eighty-one percent of the labor force had at least a high school education, compared to 45.6 percent in 1970. The percentage of the labor force with a four-year college education increased from 7.5 percent in 1970 to 16.9 percent in 2000. Comparatively, 27.4 percent of the New York State workforce has at least a four-year college education.

Chautauqua County suffers significant out-migration of its young, working age population. According to researchers at the Center for Rural Regional Development and Governance at the State University of New York at Fredonia (SUNY-Fredonia), young people between the ages of 15 and 29 account for more than 50 percent of the out-migration from the three counties that make up the southern tier west area of New York State. Further, the 2000 US Census reports that the Jamestown-Dunkirk-Fredonia Micropolitan Statistical Area suffered the highest rate of out-migration of young, single, educated people (-344.8) in New York State. This compares to a state out-migration rate for this population group of -11.3. Economic development professionals report that the out-migration is particularly pronounced for the college educated population, and while many businesses can find skilled workers for factory jobs, they report difficulty filling vacancies for professional-level jobs.

The Chautauqua County workforce primarily works within the County. The average travel time to work is 18.4 minutes, compared to a nation average of 25.5 minutes.

Entrepreneurship. Economic development professionals in Chautauqua County indicated that there is some entrepreneurial activity in the County, but that success is limited. Those who are successful generally are professionals who have identified a specialty niche market, and spin off from a larger manufacturing establishment. There is also a growing number of people who grew up in the region returning to Chautauqua County to raise families. A small number of these people have developed internet-based businesses that allow them to effectively serve their clients from a location in Chautauqua County. However, entrepreneurship is not a major contributor to economic growth in the region.

The success of entrepreneurial activity in the County can be measured by the ratios of the number of proprietors in the County to the number of wage and salaried worker, and the income of proprietors to wage and salaried workers, as well as changes in these ratios over time. Exhibit 3-6 shows that the ratio of proprietors to wage and salaried workers in Chautauqua County in 2003 was 0.238, a 6.9 percent increase since 1998. However, the ratio of non-farm proprietor income to wage and salaried employee income was only 0.083, and this ratio declined by 31.9 percent between 1998 and 2003. These data indicate that while the number of people employed as proprietors is increasing, the income of these proprietors relative to the rest of the work force is declining. Further, the wages of proprietors in 2003 was considerably lower than that of wage and salaried employees. These trends suggest that, overall, entrepreneurial activity in Chautauqua County is not occurring in response to perceived opportunities for economic growth, but instead people are becoming self-employed due to necessity (such as job loss.)

Exhibit 3-6. Entrepreneurial Activity - Chautauqua County, New York

Indicator of Entrepreneurial Activity	Ratio / %
Ratio of Non-farm Proprietors Income/wages - 2003	0.083
Change in ratio (1998 to 2003)	-31.9%
Ratio of Proprietors/Wage & slary Workers - 2003	0.238
Change in ratio (1998 to 2003)	6.9%
Proprietors Employment Growth (1998 to 2003)	2.8%

Source: EDR Group calculations and REIS data.

Educational Institutions. The County's three institutions of higher education also play a role in promoting and supporting economic growth. The State University of New York at Fredonia has a reputation for high academic standards. The university regularly partners with the business community and public sector to provide technical assistance and improve the business climate in the County. The Center for Regional Development and Governance was created eight years ago to provide assistance to the 26 cities and towns in the County on ways to reduce the cost of government as well as the cost to do business in the County. The Center has been involved with the strategic planning study in Jamestown, and an evaluation of the impacts on Dunkirk's tax base of allowing the NRG power station to provide a payment in lieu of taxes (PILOT) to the city of Dunkirk. The Center recently developed a masters degree program in accounting program to help serve the needs of Chautauqua County businesses. A computer science program is under development to help attract high technology firms to the area, and the Center is exploring the creation of an MBA program.

The University has been working with the Dunkirk-Sheridan Empire Zone for the past five years on an effort to create a high technology incubator in Dunkirk. The university recently earmarked $5 million to be used for the construction of the incubator, although operating funding is still being sought. Supporters are currently defining the target market for the facility. One niche under consideration is computer-based food technology applications that can support the food processing industry. The University is already involved with a project to evaluate opportunities for technology transfer between the University and the food processing industry.

Jamestown Community College offers two-year liberal arts associates degrees. Many of the College's students transfer to four-year colleges after graduation. The College also offers technical and career programs, and part-time study programs for job skill and cultural enrichment. The college has grown from an enrollment of 169 students at the local high school to over 4,000 students at multiple campuses in the Southern Tier region. Local businesses work with the college to design job training programs specific to their individual business needs. The Manufacturing Technical Center at the College provides training for high technology and machinery industries in the County, and works with businesses to develop courses specific to their needs.

Jamestown Business College offers associate degrees and certificate programs in a variety of business fields. The College offers coursework in marketing and management, information technology, entrepreneurship, accounting, and medical and legal fields.

3.4 Catalysts of Change

Prior to the 1980s, the people of Chautauqua County proudly identified their region as a manufacturing stronghold. For the most part, the region's economic development efforts were aimed at supporting the manufacturing sector. The region boasted a workforce well-trained to serve the region's metals, food processing, furniture, and related industries. Businesses prospered, employment and wages increased, and the economy grew.

In the 1980s, regions within the United States and abroad began courting manufacturers with a lower wage work force, lower energy costs, and favorable tax structures. Chautauqua County found itself significantly handicapped by the high union wages that predominated, energy costs more than double other areas of the Country, and the notoriously high corporate, employee, and income tax rates in New York State. Further, innovations in shipping allowed for perishable items to be transported internationally, and reduced the costs of shipping bulky items overseas, thus improving the ability of foreign firms to serve American markets. Next day air services produced options for quickly delivering parts, equipment and products to markets around the world. Some analysts have suggested that environmental regulations within the United States increased manufacturing costs in the states relative to off-shore locations, although the evidence is mixed. In the 1980s, many analysts argued that while overseas companies eagerly adopted new production methods and innovations that produced high quality products more cheaply, American manufacturers failed to do so.

Many if no all of these factors may have contributed to the decline of the manufacturing sector in Chautauqua County. Because the County's identity was so closely tied to manufacturing, the workforce, business community, and government were all slow to respond to the structural shifts occurring in the economy. Instead, the region expanded efforts to retain the existing economic base rather than exploring opportunities to diversify and change. Further, significant competition existed between the northern and southern parts of the county, as well as between individual jurisdictions. The various organizations working to grow the economy operated individually, and often in competition with each other to attract businesses. According to several economic development professionals in the region, the region needed to suffer through the considerable economic upheaval of the 1980s and 1990s before it was ready to embrace economic change and work together as a region to diversify and grow the economy.

Today, the County has recast its image from being predominantly a manufacturing center. After years of refusing to acknowledge that tourism and service-based businesses could provide an important component of an economic development strategy, the economic development community has now embraced tourism as central the region's future growth. The community also is reevaluating its assets to identify additional areas for growth and development, such as the development of a distribution center in Ripley, where Interstates 79, 90, and 86 converge. Furthermore, the business and economic development communities have moved from a territorial approach to economic development to embrace a team approach to economic growth. Strong leaders have emerged from both the business and public sectors to provide a strong voice for change both at home and in Albany. These changes in attitude and strategy form the basis of the County's successful transformation to a more diversified, stable economy.

A Strong Framework for Economic Development

As Chautauqua County's economy contracted over the past twenty years, the number and strength of economic development organizations in the County has increased. Furthermore, these organizations have dropped parochial attitudes and come together to attract businesses to the region instead of competing among themselves to attract firms. Collaborations include:

- A partnership between the County Industrial Development Agency, the City of Jamestown, the two Empire Zones, the for-profit Buffalo Niagara Enterprise (responsible for business attraction and marketing), the Westfield Development Corporation, and the Workforce Investment Board. This group meets regularly to discuss strategies for business retention and growth.
- The consolidation of the North county and South County Chambers of Commerce into a single Chamber representing the entire County.
- The participation of the Chamber in the Committee for the Future, a super-regional group of business and public sector leaders representing Chautauqua, Cattaraugus, Allegany, and Munroe Counties.
- A partnership between the four Empire Zones in the Southern Tier Region,

facilitating the sharing of leads and information.

The strength of these local efforts at collaboration have been rewarded with state and federal programs and grants aimed at stabilizing the economy in light of losses in the manufacturing sector. Organizations involved in economic development range from super regional organizations to local community development agencies to business organizations and private foundations. Some of the most active organizations involved in economic development in the County and their roles are described below.

- The **Southern Tier West Regional Planning and Development Board (STWRPDB)** provides economic development assistance to Chautauqua, Cattaraugus and Allegany Counties. This regional agency produces the annual Regional Economic Development Strategy, which is funded by the US Department of Commerce Economic Development Agency (EDA), and the Appalachian Regional Commission (ARC). The document includes an analysis of economic trends, an evaluation of the region's successes in implementing programs and projects aimed at improving economic conditions in the region, and a strategy achieving economic growth in future years. The strategy is participatory, and includes input from other economic development agencies, the communities within the region, educational institutions, businesses, and other interested parties.

  As the conduit for EDA and ARC funding in the region, STWRPDB oversees major infrastructure and development projects funded by these federal agencies. STWRPDB also works on major regional initiatives, such as the purchase of 180 miles of rail lines serving the Southern Tier, and the reinstitution of rail service in the region. The agency also works with other economic development groups throughout the county to attract and retain businesses.

- **Chautauqua County Industrial Development Agency (CCIDA)** provides financial assistance to area businesses through two revolving loan funds, industrial development bonds, and tax leases. The CCIDA also provides training for area businesses and works with area businesses to retain jobs. The Agency manages four industrial parks in the County, and was instrumental in the development of two speculative industrial buildings at two of the parks, an aggressive initiative that has proven successful in attracting new firms to the County.

- The **Greater Jamestown and Dunkirk-Sheridan Empire Zones** provide tax incentives to certified businesses located with the boundaries of the zones. Incentives include wage tax credits for newly created jobs, real property tax credits, sales tax exemption, employment incentive credits, business tax reductions, and infrastructure loans. Over 150 businesses have been certified to participate in the Empire Zone programs.

- The **City of Jamestown Development Office** works within the City to attract, retain and grow businesses. The department provides planning, zoning, and building inspection services, and administers entitlement programs such as

Community Development Block Grants. The Development Office completed a consolidated plan for the City, as well as a Downtown Commercial Redevelopment Plan. An urban design plan and a traffic plan are currently underway. A key to the successful development of these plans has been participation by community leaders such as the president of the community college, the executive director of the hospital, and business and civic leaders. The agency has been successful in obtaining grants for these planning studies, as well as a Brownfields Redevelopment Grant to inventory the existing industrial buildings in the City and assess what is needed to clean up the sites. The Jamestown Local Development Corporation is housed within the Development Office, and provides $10,000 to $350,000 loans to local businesses through its $6 million revolving loan fund.

- **Chautauqua Opportunities for Development, Inc. (CODI)** provides assistance to micro-enterprises with five or fewer employees. CODI provides loans of up to $15,000 to businesses that are unable to secure traditional financing. CODI's clients are generally retail and service businesses. The program started in 2000, capitalized through HUD's Small Cities Program. The Small Business Development Center at Jamestown Community College provides management and technical assistance to small businesses throughout the County.

- The **Chautauqua County Workforce Investment Board (CCWIB)** helps match businesses with workers. CCWIB works with businesses to train existing and new employees to keep area businesses competitive. CCWIB recently worked with the developer of a proposed distribution center in Ripley to ensure that the region could supply the 1,000 plus workers expected to be needed at the facility. The **Manufacturing Training Institution** at Jamestown Community College also provides workforce training tailored to the needs of specific businesses.

- The **Chautauqua County Chamber of Commerce** works to promote business in the County in several ways. It provides a networking opportunity for businesses throughout the County to come together to discuss economic development issues and develop strategies to address these issues. Further, the Chamber has evolved into a strong regional voice on state-level policy issues that effect business operations in the state, and has been affective in influencing policy changes favorable to the County. The Chamber also works to attract new businesses to the County by compiling information about business resources and workforce statistics and making this information available when businesses inquire about Chautauqua County locations.

- The for-profit **Buffalo Niagara Enterprise (BNE)**, located in Buffalo, acts a clearing house for information about business locations in western New York. BNE collects and compiles economic and employment data for Chautauqua County, and keeps and up-to-date inventory of available industrial and commercial sites. BNE responds to business inquires and develops and distributes marketing materials promoting the area to businesses.

- The role of **local foundations** in economic development is unique in Chautauqua County. Four Jamestown area foundations have embraced efforts to improve the regions economy, at least one going so far as to adopt economic development as part of its mission. These foundations have helped fund Chautuaqua County staff at the NBE, paid to hire a community grant writer as well as an advocate for Jamestown and the region in Albany, partially funded Jamestown's urban design plan and activities of the Jamestown Center City Development Corporation, and will fund the initial recommendations of the urban design plan. One foundation fully financed the development of the ice arena in Jamestown to provide an anchor for activity in the west end and create a destination for tourists. The active involvement of foundations has proven critical to the region's ability to succeed in stabilizing and diversifying it economy, and provides a model for other regions to emulate.

In addition to the above, there are several local agencies and organizations that work to promote economic growth in the County.

Key Elements of Economic Development Successes. Six elements of the County's economic development program emerge as central to its successful efforts to stabilize the region's economy during the past several years.

1. **Broadening of focus beyond traditional manufacturing base.** For many years, Chautauqua County identified itself as a manufacturing area. The economic development community focused on attracting and retaining manufacturing facilities, and the workforce expected to obtain manufacturing employment. This strong cultural mindset prevented the region from moving forward with efforts to branch out and exploit other opportunities for economic development, including the service industry and tourism. More recently, the economic development community has recognized the potential of the tourism industry in particular to help stem the loss of jobs in the County and to provide options for new directions. At the same time, the County continues to provide assistance to manufacturers interested in locating starting up, or expanding in the County.

2. **Within manufacturing, a focus on supporting existing businesses.** While the County and its municipalities continue to work with organizations such as Buffalo Niagara Enterprises to attract businesses, the economic development community is focused on working with existing businesses in the sectors which have proven important to the region's economy to ensure that they remain viable. Examples of efforts to support these businesses at both the local and state level include the purchase of the old ConRail lines and reinstitution of rail service to the area, the development of industrial parks with spec buildings aimed at attracting businesses that support the major manufacturing sectors, assistance with reducing energy costs through subsidies, the configuration of Empire Zones to incorporate major manufacturers, and

business assistance and job training programs created through the region's institutions of higher education.

3. **Regional partnerships for economic development.** During the past five years, the County has witnessed a clear shift away from an attitude of competition among the many jurisdictions in the County to a regional partnership for economic development. This partnership is evident in the creation of the Partnership for Economic Development, the participants of which include the Southern Tier West Regional Planning and Development Board, the County Industrial Development Agency, the Greater Jamestown Empire Zone, the Dunkirk-Sheridan Empire Zone, the Cities of Jamestown and Dunkirk, the Chautauqua County Workforce Investment Board, and Westfield Development Corporation. The Partnership provides a forum for discussing and solving barriers to economic development within the County, as well as a one-stop shop for businesses interested in learning more about business development opportunities within the County. The partnership has reduced barriers to entry by opening up channels of communication and providing potential businesses with information about multiple municipalities and programs without needing to make multiple phone calls. Further, the four Empire Zones in the Southern Tier (Jamestown, Dunkirk-Sheridan, Cattagaurus, and Allegany all work together to share leads and to present a united voice in Albany.

   Another regional partnership developed five years ago when the north county and south county chambers of commerce merged into a single chamber serving the entire county. The County-wide chamber has a membership of approximately 1,600 firms, representing more than half the businesses in the County. This resulted in improved efficiencies and effectiveness in running the chamber, and better communications between all businesses in the County.

   Two additional examples of regional partnerships for economic development extend beyond Chautauqua County. One is the County's involvement with Buffalo Niagara Enterprises (BNE), a for-profit entity that develops marketing information and provides marketing leads for participating organizations. BNE maintains an inventory of available commercial and industrial land within its service area, and works with businesses and localities to solve barriers to entry. The services provided by BNE allow local economic development professionals to focus on site specific issues rather than the maintenance of up-to-date site inventories and marketing materials. In addition to BNE, the Committee for the Future is a consortium of four counties – Chautauqua, Cattaragus, Allegany, and Monroe – whose business and political leadership have come together to identify strategies for moving the region forward.

   On a smaller scale, the City of Dunkirk and Town of Dunkirk were able to come to overcome boundary issues by developing a revenue sharing agreement for development in the Town adjacent to the Interstate 90 interchange. In this instance, the City was asked to extend services to the land around the interchange so that the Town could attract development. At first the City balked at extending services without benefit of any of the resulting tax revenue. Working with SUNY Fredonia, the City and Town worked out a revenue sharing agreement, and the City extended the necessary services.

These regional approaches to economic development represent a significant shift away from parochial competition for single businesses. The organizations that have joined forces recognize that economic growth anywhere in the County or the broader region can benefit all of the partners by creating economic activity that can attract additional businesses, and by providing jobs for area residents. These regional efforts have been instrumental in creating a climate of cooperation that is evident to businesses and in helping to stabilize the economy of the County.

4. **Leadership.** Another key element of the economic development efforts in the County is leadership by both the public and private sectors. Community leaders including private sector business executives, the president of SUNY Fredonia, and the County Executive have come together in efforts to stimulate economic growth. They have participated in strategic planning initiatives and in business attraction efforts. Business leaders participating in planning efforts bring a results- oriented attitude to the table, and insist on developing achievable goals with clearly defined steps and assigned responsibilities for making things happen. The County Executive and the Director of the County Industrial Development Agency have shown leadership in developing speculative buildings at the County's businesses parks, which have succeeded in attracting new firms to the area. Both the County's strong leadership and the united voice provided by its partnerships have been instrumental in garnering financial support and grants from both the state and federal governments. The can-do, won't-take-no-for-an-answer attitudes of the County's leadership and its elected representatives in Albany and Washington have been instrumental in helping the County move forward.

5. **The participation of non-profit foundations.** Traditionally, non-profit family and community foundations do not target economic development activities for the focus of their giving. However, in Chautauqua County, four such foundations have proven instrumental in providing funding for economic development programs, and the Gebbie Foundation actually incorporated economic development into its mission. The Gebbie Foundation, as well as the Chautauqua Region Community Foundation, the Lenna Foundation and the Sheldon Foundation have all contributed to strategic planning efforts and local development corporations. The Gebbie Foundation funded the construction of the Jamestown Savings Bank Ice Arena in an effort to provide an anchor for the redevelopment of the west end of downtown Jamestown. By providing funding for key planning and economic development programs, these foundations have leveraged scarce public dollars to better achieve economic

development goals in the County.

6. **Transportation investments.** Two significant transportation investments have occurred in Chautauqua County over the past decade, both of which have supported business attraction, retention and expansion efforts. In 1999, New York State Department of Transportation completed work on the upgrade of the two-lane Route 17 through Chautauqua County to the new four-lane Interstate 86. The project included upgrading 185 miles of two lane roadway to four lanes, as well as a bridge across Lake Chautauqua, saving significant time for travelers. The impacts of the highway improvements are still being realized as more businesses take advantage of the improved access provided by the upgraded facility. Early business investments associated with the highway included new hotels built at or near the highway interchange at Jamestown, and expansion of retail and restaurant uses. The new highway also improves the attractiveness of Ripley as the location of a distribution center.

   Another important transportation investment in the region was the purchase, rehabilitation and reopening of the old Southern Tier Extension railroad line, which serves southwestern New York Counties. The project resulted from the efforts of a large consortium that included Southern Tier West Regional Planning and Development Board, Norfolk Southern, Allegany County, Cattaraugus County, Chautauqua County, Steuben County, the Southern Tier Extension Railroad Authority (STERA - which was created to own the railroad), the New York Department of Transportation, and the Western New York and Pennsylvania Railroad. The railroad is owned by STERA and leased back to Norfolk Southern "to facilitate a tax abatement incentive program to redevelop the line." (Southern Tier West Regional Planning and Development Board, p. 16). The line reopened in 2003. Prior to the redevelopment of the line, only 70 carloads per year were shipped on the line. Today, 35,000 carloads per year pass over the line. Although not all of these shipments originate or terminate in Chautauqua County, several businesses including metal fabricators and farm suppliers are using rail sidings and shipping goods via rail. The cheaper cost of shipping by rail has also created competition for trucks, and led to a reduction in truck shipping costs for some businesses.

3.5 Lessons Learned

Chautauqua County's success in stabilizing and diversifying its economy in response to significant structural changes provides several lessons for others facing similar circumstances.

Work to identify and embrace non-traditional opportunities for economic growth. Many regions that have grown and prospered as a result of strong manufacturing sectors have difficulty embracing non-manufacturing sectors as opportunities for growth and expansion. This was true of Chautauqua County for many years. However, in recent years, fueled by the undeniable robust growth in the tourism industry, the Chautauqua County economic development community has embraced tourism as an important component to successful economic diversification and growth. The County's success in diversifying by being willing to look beyond its historical strengths to new opportunities for growth can provide an important role model for other Appalachian regions.

Continued support for existing business sectors. A typical mistake that distressed regions make is to pursue new national growth sectors at the expense of their existing economic base. While the Chautauqua County economic development community embraced tourism, a new and growing sector, they did not abandon the existing manufacturing businesses within the County. Through selective retention the county recognized that, although declining, the manufacturing base still accounts for the largest share of jobs, and that many in the workforce still depend on these jobs. Therefore, the County continues to offer and develop programs to help the manufacturing businesses in the community. This strategy has proved effective in ensuring a diversified economy by adopting a multifaceted approach to economic development that embraces change while not abandoning its history.

A united voice can provide results. Much of Chautauqua County's success in stabilizing its economy is attributable to the many partnerships that developed to promote economic growth in the throughout the County. The recognition that growth anywhere in the County benefited the whole County, the region was able to come together to provide a united, cohesive image to businesses. This united approached allows for efficiencies in program delivery, facilitates problem solving, and allows for effective, streamlined communication with the business community. In rural areas where economic development resources are in short supply, this approach can be particularly effective. A united voice can also prove effective in garnering state and federal attention and support.

Engage community leaders in economic development efforts. Chautauqua County's economic development program has greatly benefited from strong leadership. This has included the involvement of community leaders in planning initiatives, financial leadership provided by local foundations, and political leadership on policy issues at all levels of government. A successful economic development program, particularly in distressed areas, requires participation by people who do not accept the status quo and who are committed to making change happen.

3.6 Interviewees

Diane G. Hewitt, Director of Economic Development, Chautauqua Opportunities for Development

Michael P. Sullivan, Director of Institutional Relations and Public Affairs, Chautauqua Institution

Richard L. Alexander, Director, County of Chautauqua Industrial Development Agency

Pamela S. Lydic, President, Chautauqua County Chamber of Commerce

Donald Rychnowski, Executive Director, Southern Tier West Regional Planning and Development Board

Terry Norman, Comptroller, Cummins Engines

Rebecca Congdon, Executive Director, Dunkirk-Sheridan Empire Zone

Cory Zahm, Planner, Greater Jamestown Empire Zone

Steven Centi, Director of Development, City of Jamestown

Greg Lindquist, Economic Development Director, City of Jamestown

Andrew Nixon, Executive Director, Chautauqua County Visitors' Bureau

Dr. Leonard Faulk, Director, Rural Regional Development Center, SUNY Fredonia

Greg Serto, Plant Manager, Truck-Lite

Pam Frank, Executive Director, Westfield Development Corporation

4 PIKE COUNTY, KY: *EVOLUTION AS A TRADE CENTER*

4.1 Introduction

Pike County, KY is the eastern-most county of a five county Local Development District that sits adjacent to the WV border. Pike County has managed to move from distressed to transitional status since 2003. However the four remaining counties in this mining-dependent LDD area have not faired the same. The case study explores reasons for Pike's gradual success, the lack of beneficial spillover to its neighboring counties and transferable lessons to other mining-dependent areas of Appalachia.

To many outsiders, Eastern Kentucky's image has remained for decades as a region of persistent poverty. However, the reality is far different. The region is populated with hard working people who have worked diligently to change their image and fortune. Nowhere is this truer than in Pike County.

This case study seeks to determine the root causes of Pike's improvement through a survey of recent studies, statistics and interviews. It explains how Pike County's transformation took place over decades, through a combination of vision, leadership and good fortune that allowed Pike to be transformed into a regional hub with a diversified economy. The "Cut-Thru Project" – a massive infrastructure initiative – was a first step in the County's progress and has brought additional development, access and a spark of belief in itself. Pike's past reliance on coal is being replaced by new economic growth as a regional health, service and retail destination.

4.2 Regional Profile

Pike County lies at the crossroads of eastern Kentucky, although it is located quite a distance from the nearest metropolitan areas in three states (Exhibits 4-1,2). It is also the first in the Big Sandy Area (BSA) Local Development District to graduate from "distressed" to "transitional" status (as designated by the Appalachian Regional Commission in 2003), while its neighboring counties — Floyd, Johnson, Martin and Magoffin –have seen fewer economic opportunities.

Exhibit 4-1. Pike County's Location Within Kentucky

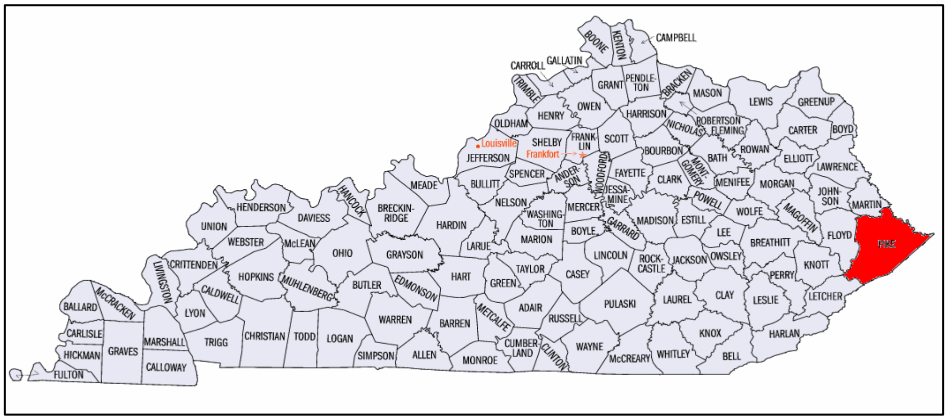
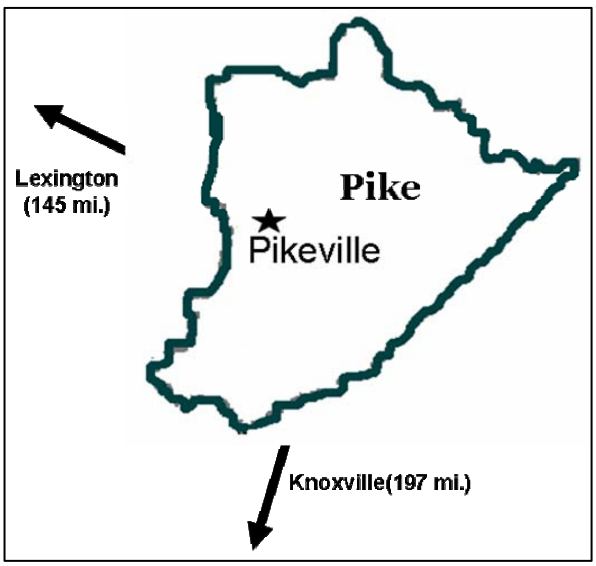


Exhibit 4-2. Distance from Pike County, KY to Selected Major Cities



Pike County, with a population of 70,000 and square mileage of 788 is by far the largest county in the region. Although the local quality of life is improving, the area has been losing population since 1980 (see Exhibit 4-3). The 1970s brought the coal boom and its subsequent influx of people and capital as the industry expanded because of a sharp increase in the price of coal due to regulatory changes and the OPEC oil embargo.

Exhibit 4-3. Big Sandy Region Changes in Population, 1970-2000

	Population				% Change			
Population by County	**1970**	**1980**	**1990**	**2000**	**1970-80**	**1980-90**	**1990-2000**	**1970-2000**
Floyd	35,889	48,764	43,586	42,441	36%	-11%	-3%	18%
Johnson	17,539	24,432	23,248	23,445	39%	-5%	1%	34%
Magoffin	10,443	13,515	13,077	13,332	29%	-3%	2%	28%
Martin	9,377	13,925	12,526	12,578	49%	-10%	0%	34%
Pike	61,059	81,123	72,583	68,736	33%	-11%	-5%	13%
State of Kentucky	3,218,706	3,660,777	3,685,296	4,041,769	14%	1%	10%	26%

Source: US Census Bureau.

After the mid-1980s coal bust, brought about by declining oil prices, new mining in the Western US and industry technology changes, coal mining declined but still maintained a presence in the region. As mining technologies changed, workers were not as needed as pure labor, but rather as machine operators and technicians. This technology shift had a large impact on employment: once plentiful high-wage, low-skill jobs vanished. As jobs and amenities vanished, so did area residents.

While this decline is leveling off, it has left the region without much of an increase in population since the 1970s. Partially because of this stagnation, and partially because of lingering stereotypes about employee skill levels and poverty levels, businesses have hesitated to locate in the area. Travel to the metro Lexington or Ashland / Huntington / Charleston is necessary to go to a large shopping mall or national chain restaurant or for recreational activities like ice skating. As a result, area college graduates who have spent the last four-plus years in a metro area hesitate to return home.

Changes in population are mirroring a dramatic change in the county's industry mix. Once ruled by coal, Pike is now showing strength in services (especially healthcare) and retail, but this has not meant that coal has completely diminished as a vital sector the county's economy.

Mining companies have been expanding recently, thanks to new demand for coal and new processing technology. However, employers report difficulty in finding qualified applicants. Many companies are willing to pay for training "for the right person," and are offering high starting salaries ($40,000+). The importance of mining to the county's economy is illustrated by the fact that despite dramatic reductions in employment levels from 1970, 14% of the workforce still is employed by the industry. Exhibit 4-4 shows just how concentrated the coal industry is in Pike County, with the county showing a location quotient of 16.8 compared with Kentucky as a whole and 58.1 when compared with the nation. Considering that anything over a 1.0 is considered a higher than expected concentration, it is clear that Pike County remains a coal-based economy.

But as Exhibits 4-4 and 4-5 show, there are other sectors that are emerging. Of special note is the location quotient of 1.2 for health care and social services. The increased importance of the health care industry suggests a new direction for Pike County, one that is having dramatic impact on the ways in which the county serves as a hub for neighboring communities.

Exhibit 4-4. Pike County Employment by Industry, 1970-2000

	1970		1980	1990	2000	
EMPLOYMENT		**% of Tot.**				**% of Tot.**
Farm employment	40	0.3%	50	60	50	0.2%
Agricultural Services	20	0.1%	40	140	200	0.6%
Mining	5,490	35.1%	9,950	6,420	5,200	16.8%
Construction	550	3.5%	1,360	1,150	1,200	3.9%
Manufacturing	260	1.7%	320	420	910	2.9%
Transportation, Comm., PU	1,110	7.1%	2,020	2,010	2,040	6.6%
Wholesale Trade	390	2.5%	810	840	930	3.0%
Retail Trade	2,500	16.0%	4,110	5,520	6,830	22.0%
FIRE	420	2.7%	750	1,160	1,380	4.4%
Services	2,550	16.3%	4,330	6,190	8,380	27.0%
Government	2,300	14.7%	3,350	3,750	3,910	12.6%
Total	15,630	100.0%	27,090	27,660	31,030	100.0%

% CHANGE	1970-80	1980-90	1990-2000	1970-2000	1980-2000
Farm employment	25.0%	20.0%	-16.7%	25.0%	0.0%
Agricultural Services	100.0%	250.0%	42.9%	900.0%	400.0%
Mining	81.2%	-35.5%	-19.0%	-5.3%	-47.7%
Construction	147.3%	-15.4%	4.3%	118.2%	-11.8%
Manufacturing	23.1%	31.3%	116.7%	250.0%	184.4%
Transportation, Comm., PU	82.0%	-0.5%	1.5%	83.8%	1.0%
Wholesale Trade	107.7%	3.7%	10.7%	138.5%	14.8%
Retail Trade	64.4%	34.3%	23.7%	173.2%	66.2%
FIRE	78.6%	54.7%	19.0%	228.6%	84.0%
Services	69.8%	43.0%	35.4%	228.6%	93.5%
Government	45.7%	11.9%	4.3%	70.0%	16.7%
Total	73.3%	2.1%	12.2%	98.5%	14.5%

Source: CEDDS Volume II, 2002 Woods and Poole Economics, Inc.; EDR Group

Exhibit 4-5. Selected Pike County Industry Location Quotients, 2002

	Location Quotients	
	Pike / Kentucky	Pike / U.S.
Crop Production	0	0.0
Animal Production	0.05	0.2
Forestry & Logging	1.14	1.6
Fishing, Hunting & Trapping	0	0.0
Support for Agriculture & Forestry	0	0.0
Oil & Gas Extraction	7.3	5.1
Mining & Support Activities	16.77	58.1
Utilities	2.17	1.8
Construction	0.8	0.8
Food Products	1.11	1.2
Beverage & Tobacco Products	0	0.2
Textile Mills	0	0.0
Textile Product Mills	0	0.1
Apparel Manufacturing	0	0.0
Leather & Allied Products	0	0.0
Wood Products	0.16	0.3
Paper Manufacturing	0	0.0
Printing & Related Support Activities	0	0.1
Petroleum & Coal Products	0	0.0
Chemical Manufacturing	0	0.0
Plastics & Rubber Products	0	0.0
Nonmetallic Mineral Products	0.27	0.4
Primary Metal Manufacturing	0	0.0
Fabricated Metal Products	0	0.1
Machinery Manufacturing	0.16	0.2
Computer & Electronic Products	0	0.0
Electric Equipment, Appliances, etc.	0	0.2
Transportation Equipment	0	0.1
Furniture & Related Products	0	0.0
Miscellaneous Manufacturing	0	0.1
Wholesale Trade	0.66	0.6
Retail Trade	1.41	1.5
Transportation	1.43	1.5
Mail, package delivery & warehousing	0.19	0.3
Publishing Industries (except Internet)	0.66	0.4
Motion Picture & Sound Recording	0	0.1
Broadcasting	0.87	0.6
Internet & data process svcs	0	0.0
Monetary, Financial, & Credit Activity	0.85	0.7
Insurance Carriers & Related Activities	1	0.8
Funds, Trusts, & Other Financial Vehicles	0	0.0
Real Estate	0.63	0.5
Rental & Leasing Services	0.82	0.8
Lessors of Nonfinancial Intangible Assets	0	0.0
Professional Scientific, Technical, Services	0.82	0.5
Administrative & Support Services	1.33	1.1

Waste Management & Remediation	0.55	0.6
Educational Services	2.23	1.6
Health Care & Social Services	1.21	1.2
Amusement & Recreation	0.21	0.1
Accommodations, Eating & Drinking	1.09	1.1
Repair, Maintenance, & Personal Services	1.17	1.2
Religious, Civic, Professional, Organizations	0.47	0.2
Private Households	0.69	0.6
Government & non NAICs	0.79	0.8

Source: EDR-LEAP (with IMPLAN data) and EDR Group.

Pike County has acknowledged the need to diversify industry, and has strongly supported the development of two industrial parks: the 200-acre Honey Branch Regional Industrial Park (located in Martin County) and the 11-acre Mossy Bottom Industrial Park (located in Pike County). The Honey Branch Park was a cooperative effort between all of the Big Sandy Area counties and is adjacent to a federal prison site. This park has been successful in attracting tenants, and the coalition of counties shares in the generated tax revenues. Mossy Bottom has had more difficulty in retaining tenants but has several successful firms.

Another industrial force is the Kellogg Company's Pikeville Plant. Originally recruited by former Kentucky Governor Paul Patton when he was Pike County Judge Executive, Kellogg has developed the facility into one of the country's largest suppliers of Nutri-Grain bars and Pop-Tarts. Nearly 400 people are employed there.

Pike also benefits from an innovative telecommunications company locating its headquarters in downtown Pikeville, and from focusing on additional training for both the police and fire departments. These two departments have state of the art equipment and have begun training other departments in the region.

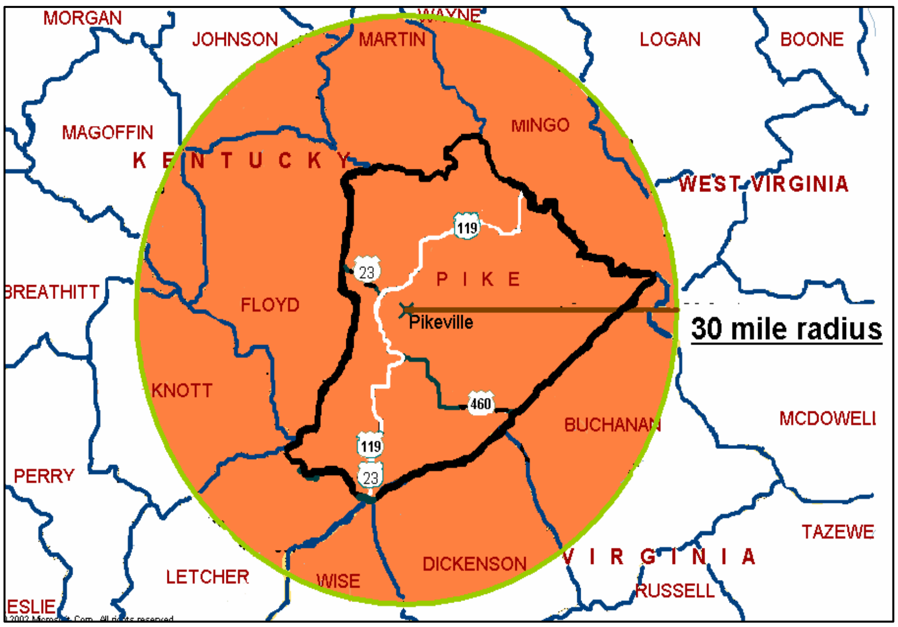
Perhaps the greatest influence in Pike's changing industry mix and development into a regional center is the partnership between Pikeville College and Pikeville Medical Center (PMC). PMC is the largest private employer in Eastern Kentucky with 1,300 employees; with 261 beds and over 535,000 square feet, it operates as the region's medical center. Pikeville College is a private four-year college that offers four associate degree programs, 23 baccalaureate degree programs and one doctoral program – the School of Osteopathic Medicine, which ARC helped to fund.

4.3 Evolution of Progress

As the largest county in the Big Sandy Region, Pike County serves as the area's hub of activity. Both people and materials flow into the county in a way that has helped spur the county's relative growth.

Transportation Access. Part of the reason for its ability to act as a hub among other counties in the region is the county's location at the intersection at some of the best roads in the region. Pike County stands at the crossroads between Kentucky, West Virginia and Virginia and is the center hub between Lexington (KY), Knoxville (TN) and Huntington and Charleston (WV). It is home to four major US highways: US 460, 23, 119 (ADHS Corridor G) and 80. Highway 23 (segment south of Pikeville, Corridor B), which was tuned into a four-lane highway nearly a decade ago, has become a major north-south connector. Another highway, 119, should be completed within the next year, and will connect Pikeville with South Williamson, WV (see Exhibit 4-6). Pike is also home to a regional private airport with a 5,000-foot runway and also has good rail line access.

Exhibit 4-6. Highway Access for Pike County



The newly built Eastern Kentucky Exposition Center in Pikeville, which also has a 7,000-seat arena, is expected to be a strong area attraction because of its conventions, cultural events and entertainment. Built on land reclaimed as part of the Cut-Thru Project, it is estimated that the Center will have a $10 million impact on the local economy with the bulk of that figure coming from visitors outside the state. The Center's projected impact will also bolster two currently booming industries in Pike County: retail trade and services—and a new downtown hotel hopes to capture some of the traffic generated by the facility.

The improvements in infrastructure make Pike more "commuter friendly," and are expected to bring more people into the region, which will further develop Pike's reputation as a hub, especially its ability to attract shoppers from neighboring counties. While it does not have a large mall with its typical mix of national retail establishments, it does offer a number of department-type retail stores in addition to big-box retailers. Pike offers nearly double the number of both food service/drinking places and retail trade establishments than the next largest concentration, as shown in Exhibit 4-7.

The City of Pikeville is also burnishing its image through two major renovation projects: relocating all overhead wires (power, cable and phone) to underground conduits and the Main Street Renaissance Program, which is a large-scale beautification project.

Exhibit 4-7. Number of Establishments and Revenue, 2002

Type of Establishment	County	Number in Category	Business Revenue (in '000s)
Food services & drinking places	Pike	74	$50,943
	Floyd	39	$19,831
	Johnson	31	$19,393
	Martin	13	D
	Magoffin	11	$4,994
Retail trade	Pike	324	$783,587
	Floyd	191	$341,056
	Johnson	121	$267,789
	Martin	46	$68,629
	Magoffin	43	$51,515

Source: US Census Bureau *D = not disclosable; data is suppressed*

Industry. In addition to being the region's top coal producer (35 million tons, almost 20 percent of Kentucky's total coal production), Pike County is headquarters for financial institutions and holding companies worth more than $1 billion in assets – the third largest concentration in Kentucky. It also ranks fifth in Kentucky in both total retail sales and effective buying income, and is the seventh biggest contributor to the state's budget in individual income tax paid and eighth in sales tax paid.

In terms of employment, Pike County's commuting patterns (Exhibit 4-8) show that most of Pike County's residents work in Pike County – only 14.6 percent of Pike County's labor force participants working in another county. Pike County also attracts workers from throughout the region, with Floyd County providing the most workers from the Big Sandy region. However, as this data is nearly five years old, new patterns may have emerged, especially with new highways opening. The expansion of US 23, 460 and 119 has – and will – enhance mobility throughout the region, making it easier for workers to travel for their jobs and for companies to expand and relocate.

Exhibit 4-8. Workers Commuting to Pike County, 2000

Lives in	Works in Pike	As % of home county employed labor force	Percent of home county workers working elsewhere (not including Pike)
Pike	18,455	85%	15%
Floyd	2,221	18%	13%
Mingo, WV	1,244	16%	21%
Martin	186	6%	27%
Johnson	395	5%	28%
Magoffin	206	5%	36%
Buchanan, VA	362	4%	24%

Source: Kentucky State Data Center; Virginia Employment Commission; Bureau of Business and Economic Research, West Virginia University

As noted before, the Pikeville Medical Center (PMC) has boosted Pike County's economic and healthcare profile. It offers services unavailable elsewhere in the greater Big Sandy region, such as:

- Neurosurgery
- The Heart Institute with Philips Allura Interventional Catheterization Labs
- The Leonard Lawson Cancer Center
- The Family Practice Clinic
- 40-bed Inpatient Rehabilitation Hospital
- Home Health
- Medical Detoxification Unit
- MedFlight of East Kentucky
- Level II +/- III NICU
- Sleep Disorders Clinic
- The Birth Place (largest obstetrical service in the region)
- Pediatric Transitional Care Unit
- Siemens ONCOR Linear Accelerator (second in the nation)
- PET Scanning and other state of the art diagnostic department

These divisions offer top-notch care to the residents of Eastern Kentucky and beyond, as it attracts patients who would rather be closer to home than travel to Lexington, Louisville, or Huntington/Charleston for top-tier services. With its almost holistic provision of services, the hospital is able to provide for almost any need the local population has, from heart surgery to addiction. Although there are several other hospitals in the region (Paul B. Hall in Johnson County, Highlands Regional Medical Center in Floyd and Our Lady of the Way in Martin), they do not offer the level of care PMC does.

The hospital is also spurring some concurrent cluster growth, with physicians setting up private practice and medical service centers. Community leaders also hope for medical suppliers and research to locate in the area, especially because of the chronic health needs of the population.

Part of the reason for this boom is the unique partnership between the PMC and Pikeville College's School of Osteopathic Medicine, which opened in 1997 with a class of 60 students. Its genesis was the result of a Johnson County resident who believed the area needed a medical school to alleviate chronic shortages of doctors. Because Pikeville College had the existing infrastructure necessary to support such an initiative, the school was opened at the College. To date, 282 Doctors of Osteopathic Medicine have graduated from the school, and many have stayed in the region as primary care providers. The local medical community is very supportive of the medical college's mission, and many medical students complete residencies at PMC.

PMC also recently established the Pikeville Medical Development Corporation with the mission to:

• Develop collaborative research initiatives between PMC and major medical research entities in Louisville as well as Pikeville College School of Osteopathic Medicine and other similar institutions.

• Create an e-Health system at PMC which will serve as a model for other medical entities throughout the Commonwealth.

• Obtain public and private funding for the development of the local economy and for the expansion of the programs and facilities at PMC.

• Create a high-tech, regional research and development Institute in eastern Kentucky to work with other medical partners in fostering advanced medical-related concepts and other new economy-type startup companies.

• Encourage private companies to locate in eastern Kentucky so as to enhance economic stability.

• Link the economic engine of PMC with the economic development activities of governmental, non-profit and for-profit entities in eastern Kentucky.

While lofty, these goals provide an ideal – much like the Cut-Thru Project – for leaders to aspire. A 2003 report by the KY Rural Health Works estimates that the economic impact of Pike's health care system was significant to the county's growth. This report estimates that for every health care job, an additional .40 jobs are created in the local economy; for every dollar of health care labor income, an additional $0.25 of income was generated in the local economy. Assuming a similar effect in Pike County, an average wage of $30,000 would provide approximately $7,500 for the local economy.

In addition to keeping local health care dollars local and attracting outside dollars, the industry also has the potential to act as a magnet for both similar and other industries.

4.4 Catalysts of Change

Pike County has benefited from three opportunities that are not as pronounced in the rest of the Big Sandy Region: vision and leadership, political fortune, and funding.

Vision and Leadership. Shortly after his election in 1960, Pikeville Mayor William Hambley first began talking about the Cut-Thru Project. Mayor Hambley's vision was to move mountains – a mile and a half long channel through them – to provide a corridor that would contain railroad tracks, US highways 23, 80, 119 and 460, and the Levisa Fork of the Big Sandy River. This project, completed in 1987, alleviated annual flooding and provided nearly 400 acres of additional developable land, almost all of which has been developed. Although this project took nearly three decades, Mayor Hambley never wavered in his belief in the project, and was able to promote it to many other local leaders.

Former Governor Patton, a protégé of Mayor Hambley, also developed programs that gave Pike County a good jumping-off point. As County Judge Executive, he instituted mandatory solid waste pickup and began the process of installing water and sewer lines throughout the county. While these projects may seem minor, it is important to remember Pike's difficult terrain, as well as the difference made by water, sewer and solid waste pickup access. Governor Patton also provided momentum during his time as governor and lieutenant governor by supporting progressive policies, infrastructure and investing state dollars in local initiatives; by some estimates, up to $500 million was brought to the area.

The current Pikeville City Manager, Donovan Blackburn, has also initiated several recent projects to boost the area's profile. A 2003 comprehensive strategic plan was the first in more than a decade and part of an initiative to modernize and enhance local development, which also included the hiring of a dedicated maintenance manager and an economic development officer, and the expansion of access to technology throughout city government.

Other local leaders are promoting development strategies around tourism. Pike County Magistrate Chris Harris believes strongly in the potential of an ATV trail system. West Virginia's trail system is heavily used and draws tourists from a wide geographic area. Harris believes that connecting West Virginia and Kentucky through a trail system will bring additional visitors to the area, and keep visitors in the area longer.

Another potential attraction is a series of reclaimed mining areas. These areas have been used to demonstrate varying methods of reclamation, and some are fully forested and support elk populations. It is hoped that these areas will become nature preserves, and they may also offer the possibility of an annual elk hunt.

Political Fortune and Funding. While much of the credit for the area's turnaround must be given to the local community, it is also very important to note the impact of state funding targeted to Pike during both Mayor Hambley's tenure and Governor Patton's time in Frankfurt. Estimates of state program funding during Patton's tenure run as high as $500 million – a significant amount for a county of roughly 70,000 people. Granted, the area's needs were great, both in terms of infrastructure and social and development programs, but this amount gave Pike an extra boost as compared to its BSA neighbors.

Pike also benefits from the Coal Severance Tax. This tax is designed to provide a resource for economic and social development as a means to replace the income lost when area coal resources are depleted. State statute requires that 50 percent of this tax is returned to coal-producing counties, with the remainder going to the state's general fund; however, it is difficult to determine whether this mandate has been filled. According to the Kentucky Department of Revenue, tax receipts since the 1970s have totaled more than $4.6 billion dollars, with nearly $1 billion collected from coal mined and/or processed from Pike County. These dollars have been used to fund local projects, such as water and wastewater projects, osteopathic medical school loan forgiveness, and industrial park and economic development.

Exhibit 4-9 shows the value of severed and processed coal, along with the tax receipts incurred by the Coal Severance Tax. The tax assesses 4.5 percent of the value of mined ("severed") coal, for at least $0.50 per ton. Pike County provides the largest share of the tax receipts of all mining counties throughout the state, nearly $40 million. Martin County accounts for the next highest share of revenue, with slightly over $8 million. Pike's revenue from the tax, according to formula, should be $20 million.

Because of their larger tax base, Pike County has been able to take the "extra steps" needed to wean itself from traditional industries as well as provide development funding for the County. Nevertheless, Pike still faces challenges in industry diversification and workforce training.

Exhibit 4-9. Coal Severance Tax Revenue, FY 2002-2003

	Gross Value of Severed Coal	Tax on Severed Coal	Gross Value of Processing	Total Tax Receipts
Kentucky Total	$2,838,514,744	$125,530,144	$356,948,150	$141,488,813
E. Kentucky	$2,390,638,851	$105,361,781	$300,451,561	$118,783,697
Pike	**$766,110,260**	**$34,112,484**	**$120,971,083**	**$39,568,774**
Perry	$250,870,326	$11,509,372	$39,392,890	$13,287,261
Knott	$278,760,063	$12,295,994	$17,513,323	$13,156,757
Harlan	$255,715,512	$11,497,770	$11,256,571	$12,024,444
Martin	*$155,881,929*	*$6,956,284*	*$27,915,765*	*$8,223,374*
Leslie	$129,087,420	$5,810,747	$19,042,562	$6,669,475
Bell	$85,172,600	$3,793,572	$13,004,196	$4,414,843
Floyd	*$87,133,866*	*$3,789,958*	*$4,685,984*	*$3,994,261*
Johnson	*$16,926,563*	*$761,696*	*$2,346,803*	*$867,303*
Magoffin	*$17,155,789*	*$772,012*	*$246,405*	*$783,095*

Source: Kentucky Revenue Cabinet

4.5 Lessons Learned

While it is difficult to replicate the specific factors that guided the Pike County's growth, other mining dependent areas of Appalachia can take away some guidance from its experience.

Leadership and Regionalism. Perhaps the most important asset of Pike County is the strong leadership by several public servants, including former Mayor Hambley and former Governor Patton. They both developed visions for Pike County, remained focused on the outcomes, and fought for resources to fulfill their goals. While this tactic was arguably simpler because of Governor Patton's position and political skill, their initial leadership was the starting point. While many in the area thought the Cut-Thru Project would never come to fruition, it did – bringing respite from floods, additional developable land, and more importantly, a sense of pride and accomplishment.

The five county region now works together more frequently, continuing a collaborative approach begun years ago. The BSA has been particularly successful on major projects such as the Honey Branch Regional Industrial Park, in which 200-acres was developed for industrial use and is adjacent to a federal prison. This initiative was perhaps one of the first collaborative projects in the BSA, and resulted in new jobs and a landmark profit-sharing agreement. Another example is the City of Pikeville's willingness to install water and sewer lines outside of city limits, particularly along the US 23 corridor between Pikeville and Floyd County. This infrastructure will induce additional development and will benefit both counties. The counties are also benefiting from leaders who are willing to try new approaches, such as those in Pike and Johnson Counties.

While relationships between the counties are not always ideal, and such bonds are difficult to form, it is important to note the possibilities and results from such communication. By having strong leaders willing to work as a region, municipal sub-units of that area are more likely to prosper. This will be particularly important to Johnson, Martin, and Maggofin counties which while adjacent to the economic progress of Pike County are not sharing in the opportunity. Floyd County has decent highway access to Pike County which has clearly enabled 18% of Floyd's labor force participants to import their wages from jobs held in Pike County.

Determination, or, Slow and Steady Wins the Race. Pike County leaders developed some very ambitious projects – some would say overambitious or impossible, as in the case with the Cut-Thru Project. However, these leaders persevered and continued to work on their goal: additional developable land and jobs. Although it has taken decades, Pike County has gained developable land, jobs, infrastructure and, as noted before, a spark of encouragement. This spark led to a number of projects, including a new multi-use park and a performing arts center in downtown Pikeville. Area leaders believe this project will begin a chain reaction of development. Even before opening, Pikeville was able to attract a new chain hotel for its downtown, which will begin construction shortly. Pikeville approached a national chain about building a downtown hotel a few years ago and was told it wasn't feasible. However, they went back after some time, made another presentation, and expect the new hotel to be ready soon.

Industrial diversification is key but not easy

Pike County is growing in part because community leaders have recognized that depending on coal for their county's livelihood no longer made sense. In 35 years, the percentage of the county's employees in the mining industry has dropped from 35 percent to 14 percent, a huge shift. Accordingly the county has begun to look to other industries to fill the void left by the shrinking mining industry.

The best example occurs with the growing health care industry in the county. The partnership between Pikeville College and the Pike Medical Center show how a community asset, in this case the college, can build a new industry, in this case health care. It also shows how Pike is recognizing its role as a regional hub. The Medical Center now is the preeminent health care facility in the Big Sandy Region.

Another key has been recognizing that the environmental impacts of the mining industry can be addressed in a way that is positive to the economy. The University of Kentucky's College of Agriculture has been successful in determining the most effective ways of reclaiming former mine sites, and County leaders are looking at ways to reclaim this land into such uses as wildlife preserves and ATV trails that could attract tourists to the naturally beautiful region.

Of course, the large-scale economic shift away from mining is not without its challenges. The biggest one being the presence of so many displaced, and in this case often disabled, workers. Helping these workers find new opportunities, especially in jobs that can pay beyond a living wage, is a consistent challenge facing both workforce and economic development teams. This is especially difficult given that manufacturing, which at least would seem to offer similar wages and use similar skills to mining, has been so slow to develop in the county. If the county wants to continue to grow, figuring out ways to enhance the manufacturing sector will be critical.

Similarly, because the mining industry seems to be experiencing a resurgence, and because these firms provide crucial tax revenues, adequate workforce training should be made available to those seeking work as a miner. Because technology plays such an important role now, possible cross-training opportunities (i.e. safety or heavy equipment) could exist with other industries.

4.6 Interviewees

Donovan Blackburn, Pikeville City Manager

R. Tucker Daniel, Johnson County Judge/Executive

William Deskins, Pike County Judge/Executive

Dennis Dorton, President, Citizens National Bank

Robert M. "Mike" Duncan, Chairman and CEO, Inez Deposit Bank and Republican National Committee General Counsel

Don Graves, professor and former chair, University of Kentucky College of Agriculture

Chris Harris, Pike County Magistrate (District 6)

Paul Patton, former Kentucky Governor and Lieutenant Governor and Pike County Judge/Executive

David Pelphrey, Dean of Community, Workforce, Economic Development, Big Sandy Community and Technical College

Karen Sue Ratliff, Deputy Pike County Judge/Executive

Sandy Runyon, Executive Director, Big Sandy Area Development District

Terry Spears, Vice President for Development, Pikeville College

5

MARION & MONONGALIA CO, WV: *HIGH-TECH INITIATIVE*

5.1 Introduction

Monongalia County, WV is a metro county (home to Morgantown), while adjacent Marion County is a “micropolitan” area. Marion County had prior mining roots. This case study examines the development of a hi-tech initiative in these two counties with emphasis on the role of educational-training assets and the extent to which Marion County is achieving diversification in its economy.

The two-county region of Monongalia County and Marion County, in West Virginia, show clear signs of economic growth and improvement over the past five years. The average income and average wage of the two counties have increased, and the rate of job growth and entrepreneurship is also increasing. These changes are the product of a confluence of several factors: the presence of higher education assets; the increasing role of local capital; and, importantly, federal investments which have combined to create local and regional economies whose upward dynamics contrast with the trends governing the economy of the rest of West Virginia. The hypothesis going into this study is that the role of technology development may have been pivotal in bringing about these changes. As the study shows, technology has been a key factor but without the region’s entrepreneurial energy and collaborative capacities, technology could not have brought about the changes that the region has seen.

5.2 Regional Profile

Tucked into the north central nook of uppermost West Virginia, the Monongalia-Marion region is at the crossroads of two regions – often called the northernmost point in the South and the southernmost point in the North (Exhibits 5-1 and 5-2).

Exhibit 5-1. Location of Marion and Monongolia Counties

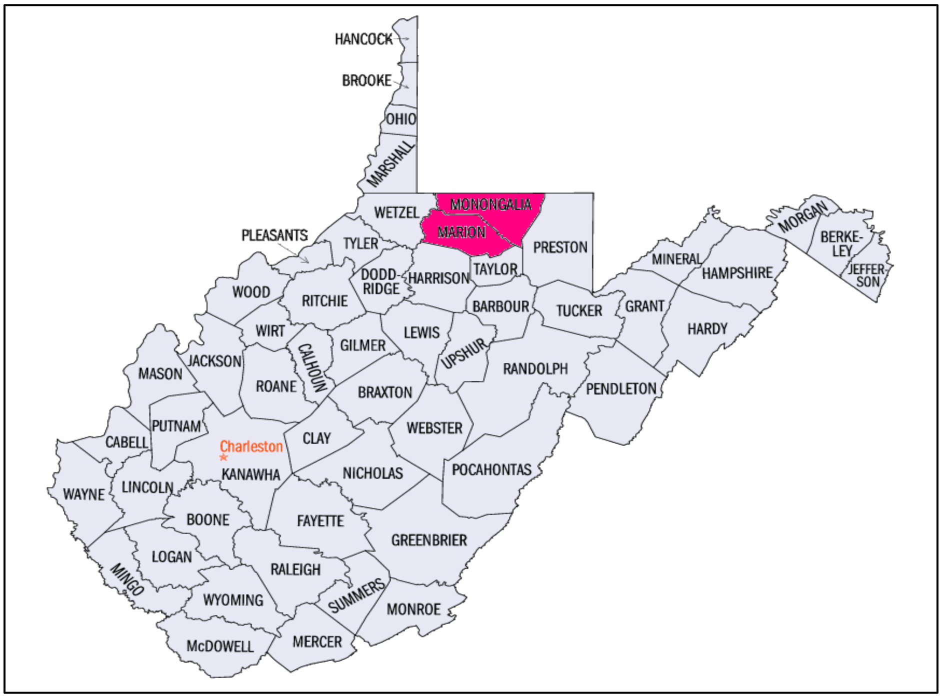


Exhibit 5-2. Marion and Monongalia County Detail

The region's economic, industrial, and cultural identity is distinct from that of West Virginia as a whole. While the rest of the state has experienced the loss of much of the mining and manufacturing jobs that have dominated its economy for years, Monongalia and Marion are experiencing increases in both jobs and income, as well as expansion in high-value growth industries. The growth in this region stands in strong contrast to the economic trends governing the rest of the state. In fact, the region added jobs at an average annual rate of 1.3 percent between 2000 and 2004, while the state as a whole (and the nation as a whole) lost jobs (source: *West Virginia Economic Outlook: North Central Region and Morgantown MSA Outlook, Forecast 2005 – 2009.* Bureau of Business and Economic Research, West Virginia University).

Population Growth. As shown in Exhibit 5-3, population in Marion County has declined over the past 30 years while Monongalia County has continually gained population. In fact, between 1990 and 2000 while the State as a whole grew by less than 1 percent, Monongalia County grew by more than 8 percent.

Exhibit 5-3. Population Growth, 1970-2000

	Population				% Change			
Population by County	**1970**	**1980**	**1990**	**2000**	**1970-80**	**1980-90**	**1990-2000**	**1970-2000**
Marion County	61,356	65,789	57,249	56,598	7.2%	-13.0%	-1.1%	-7.8%
Monongalia County	63,714	75,024	75,509	81,866	17.8%	0.6%	8.4%	28.5%
State of West Virginia	1,744,237	1,949,644	1,793,477	1,808,344	11.8%	-8.0%	0.8%	3.7%

Source: US Census Bureau.

In Monongalia County, the major city is Morgantown, which has recently grown enough to be designated a metropolitan statistical area (comprising Monongalia and Preston counties). Morgantown is the largest, fastest-growing, and most prosperous municipality in the region, with a population increase of 3.6% (25,879 to 26,809) between the 1990 and 2000 Census, and with an average income far exceeding other communities. Marion County's corridor city is Fairmont, also growing, but less rapidly than Morgantown. Morgantown is the home of West Virginia University, which includes a large undergraduate and graduate student body as well as a comprehensive health system; the university employs over 5,000 faculty and is largely responsible for the region's high concentration of employment in government.

Composition of the Regional Economy. Exhibits 5-4 and 5-5 show employment by industry trends in each county between 1997 and 2002. However, the economy of this two-county region is heterogeneous, with quite distinct trends governing the economic changes in the region's two major towns as compared to the region's more rural areas. In fact, the regional economy is best understood by expanding the view beyond these two counties to include Preston County, directly east of Monongalia County, and Harrison County, directly south of Marion County.

Exhibit 5-4. Marion County Employment by Industry, 1997-2002

		Marion County			Annual Growth		2002 LQ
NAICS	Sector	1997	2002	Annual Growth	West Virginia	U.S.	Marion / W VA
111	Crop Production	293	127	-15.4%	-9.38%	-2.88%	0.5
112	Animal Production	116	198	11.3%	11.65%	8.09%	0.6
113	Forestry & Logging	17	0	-100.0%	-3.96%	-4.86%	0.0
114	Fishing, Hunting & Trapping	0	0	-100.0%	142.18%	12.33%	0.0
115	Support for Agriculture & Forestry	16	0	-100.0%	-2.55%	1.13%	0.0
211	Oil & Gas Extraction	38	49	5.3%	-1.24%	-5.75%	0.3
212-213	Mining & Support Activities	1,288	954	-5.8%	-1.82%	2.87%	1.6
221	Utilities	470	610	5.3%	-5.31%	-4.87%	3.4
230	Construction	2,598	2,492	-0.8%	-3.65%	0.20%	1.6
311	Food Products	9	15	10.1%	-0.02%	0.43%	0.1
312	Beverage & Tobacco Products	0	0	0.0%	3.00%	-0.57%	0.0
313	Textile Mills	0	0	-100.0%	-0.27%	-6.79%	0.0
314	Textile Product Mills	20	3	-32.8%	-7.18%	-4.38%	0.4
315	Apparel Manufacturing	0	0	-100.0%	-20.89%	-13.59%	0.0
316	Leather & Allied Products	0	0	-100.0%	-45.20%	-11.46%	0.0
321	Wood Products	34	38	2.2%	-1.27%	-3.77%	0.2
322	Paper Manufacturing	31	163	39.6%	-2.02%	-3.56%	6.4
323	Printing & Related Support Activities	117	20	-29.7%	-0.87%	-3.57%	0.3
324	Petroleum & Coal Products	0	0	-100.0%	16.26%	-2.91%	0.0
325	Chemical Manufacturing	2	0	-100.0%	-4.53%	-4.52%	0.0
326	Plastics & Rubber Products	31	61	14.2%	8.90%	-3.05%	0.6
327	Nonmetallic Mineral Products	23	8	-19.5%	-4.73%	-2.59%	0.1
331	Primary Metal Manufacturing	538	168	-20.8%	-6.05%	-4.76%	0.7
332	Fabricated Metal Products	299	464	9.2%	-4.30%	-2.47%	2.3
333	Machinery Manufacturing	95	99	0.8%	-4.89%	-4.73%	1.5
334	Computer & Electronic Products	78	16	-26.9%	-5.08%	-5.30%	0.5
335	Electric Equipment, Appliances, etc.	694	118	-29.8%	-12.75%	-5.34%	4.7
336	Transportation Equipment	49	57	3.0%	3.20%	-3.90%	0.4
337	Furniture & Related Products	54	79	7.9%	0.91%	-0.04%	1.4
339	Miscellaneous Manufacturing	43	50	3.1%	-2.51%	-1.97%	0.8
420	Wholesale Trade	695	521	-5.6%	-5.12%	-3.18%	0.7
441-454	Retail Trade	3,592	2,944	-3.9%	-0.85%	-0.30%	0.9
481-487	Transportation	452	431	-1.0%	0.62%	1.75%	0.8
491-493	Mail, package delivery & warehousing	203	162	-4.4%	1.17%	6.41%	0.6
511	Publishing Industries (except Internet)	235	114	-13.5%	-4.05%	-6.03%	1.0
512	Motion Picture & Sound Recording	73	27	-17.7%	-15.52%	-4.38%	1.4
513	Broadcasting	197	154	-4.9%	0.34%	2.87%	0.7
514	Internet & data process svcs	75	136	12.7%	-1.53%	6.10%	6.1
521-523	Monetary, Financial, & Credit Activity	593	418	-6.8%	0.75%	1.77%	0.9
524	Insurance Carriers & Related Activities	375	298	-4.5%	0.02%	-1.21%	0.9
525	Funds, Trusts, & Other Financial Vehicles	3	13	35.9%	10.90%	12.29%	1.0
531	Real Estate	284	348	4.1%	9.48%	9.70%	0.8
532	Rental & Leasing Services	97	188	14.2%	7.70%	6.86%	1.2
533	Lessors of Nonfinancial Intangible Assets	1	2	12.8%	-16.54%	-8.48%	1.9
541-551	Professional Scientific, Technical, Service	1,227	1,650	6.1%	1.63%	6.95%	1.4
561	Administrative & Support Services	1,100	1,327	3.8%	2.32%	0.00%	1.3
562	Waste Management & Remediation	63	66	0.8%	3.55%	8.86%	1.2
611	Educational Services	192	149	-4.9%	-0.64%	0.10%	0.5
621-624	Health Care & Social Services	1,871	2,359	4.7%	3.26%	2.60%	0.8
711-713	Amusement & Recreation	183	210	2.9%	7.30%	3.65%	0.5
721-722	Accommodations, Eating & Drinking	1,461	1,809	4.4%	1.44%	2.26%	1.0
811-812	Repair, Maintenance, & Personal Service	1,146	1,507	5.6%	3.50%	3.78%	1.7
813	Religious, Civic, Professional, Organizatio	453	240	-12.0%	-4.51%	1.38%	0.7
814	Private Households	243	205	-3.3%	8.98%	10.06%	0.7
920	Government & non NAICs	3,781	4,141	1.8%	0.13%	1.04%	1.0

Source: EDR-LEAP (with IMPLAN data).

Exhibit 5-5. Monongalia Co. Employment by Industry, 1997-2002

		Monongalia County			Annual Growth		2002 LQ
NAICS	Sector	1997	2002	Annual Growth	West Virginia	United States	Monongalia Co./ West Virginia
111	Crop Production	325	170	-12.1%	-8.8%	-2.9%	0.3
112	Animal Production	179	294	10.4%	11.7%	8.1%	0.4
113	Forestry & Logging	46	40	-3.1%	-4.0%	-4.9%	0.0
114	Fishing, Hunting & Trapping	0	0	0.0%	142.2%	12.3%	0.0
115	Support for Agriculture & Forestry	13	6	-15.1%	-2.3%	1.1%	0.0
211	Oil & Gas Extraction	3	128	106.6%	-1.7%	-5.7%	0.3
212-213	Mining & Support Activities	748	503	-7.6%	-1.6%	2.9%	0.3
221	Utilities	367	305	-3.6%	-5.4%	-4.9%	0.7
230	Construction	2,717	2,891	1.2%	-3.9%	0.2%	0.8
311	Food Products	14	62	34.5%	-0.2%	0.4%	0.2
312	Beverage & Tobacco Products	0	3	0.0%	2.9%	-0.6%	0.0
313	Textile Mills	0	0	-100.0%	-0.2%	-6.8%	0.0
314	Textile Product Mills	1	2	10.8%	-6.6%	-4.4%	0.0
315	Apparel Manufacturing	83	3	-47.4%	-20.3%	-13.6%	0.0
316	Leather & Allied Products	0	0	-100.0%	-45.2%	-11.5%	0.0
321	Wood Products	82	56	-7.1%	-1.2%	-3.8%	0.1
322	Paper Manufacturing	0	0	-100.0%	-2.0%	-3.6%	0.0
323	Printing & Related Support Activities	54	64	3.5%	-0.8%	-3.6%	0.5
324	Petroleum & Coal Products	0	14	0.0%	16.0%	-2.9%	0.0
325	Chemical Manufacturing	818	1,316	10.0%	-5.7%	-4.5%	1.7
326	Plastics & Rubber Products	23	6	-23.1%	9.1%	-3.0%	0.0
327	Nonmetallic Mineral Products	146	151	0.6%	-4.9%	-2.6%	0.4
331	Primary Metal Manufacturing	1	0	-100.0%	-6.0%	-4.8%	0.0
332	Fabricated Metal Products	535	289	-11.6%	-3.9%	-2.5%	0.6
333	Machinery Manufacturing	98	140	7.3%	-5.5%	-4.7%	1.0
334	Computer & Electronic Products	52	79	8.6%	-5.7%	-5.3%	1.0
335	Electric Equipment, Appliances, etc.	2	4	16.6%	-12.8%	-5.3%	0.0
336	Transportation Equipment	7	5	-5.8%	3.2%	-3.9%	0.0
337	Furniture & Related Products	40	38	-1.2%	0.9%	0.0%	0.0
339	Miscellaneous Manufacturing	76	32	-16.2%	-2.2%	-2.0%	0.0
420	Wholesale Trade	1,137	989	-2.7%	-5.2%	-3.2%	0.6
441-454	Retail Trade	5,912	5,657	-0.9%	-0.8%	-0.3%	0.8
481-487	Transportation	396	419	1.1%	0.7%	1.7%	0.3
491-493	Mail, package delivery & warehousing	230	207	-2.1%	1.3%	6.4%	0.3
511	Publishing Industries (except Internet)	239	271	2.6%	-4.4%	-6.0%	1.0
512	Motion Picture & Sound Recording	62	34	-11.4%	-15.7%	-4.4%	0.0
513	Broadcasting	284	329	3.0%	0.2%	2.9%	0.6
514	Internet & data process svcs	50	189	30.4%	-5.7%	6.1%	4.6
521-523	Monetary, Financial, & Credit Activity	728	724	-0.1%	0.8%	1.8%	0.7
524	Insurance Carriers & Related Activities	343	237	-7.1%	0.2%	-1.2%	0.3
525	Funds, Trusts, & Other Financial Vehicles	19	153	51.3%	3.4%	12.3%	7.5
531	Real Estate	656	1,617	19.8%	8.6%	9.7%	1.6
532	Rental & Leasing Services	164	295	12.5%	7.4%	6.9%	0.8
533	Lessors of Nonfinancial Intangible Assets	7	0	-100.0%	-15.3%	-8.5%	0.0
541-551	Professional Scientific, Technical, Services	1,790	3,310	13.1%	0.9%	7.0%	1.3
561	Administrative & Support Services	1,337	2,444	12.8%	1.7%	0.0%	1.0
562	Waste Management & Remediation	39	50	5.5%	3.5%	8.9%	0.0
611	Educational Services	250	247	-0.2%	-0.7%	0.1%	0.3
621-624	Health Care & Social Services	6,306	9,571	8.7%	2.8%	2.6%	1.4
711-713	Amusement & Recreation	457	413	-2.0%	7.7%	3.7%	0.4
721-722	Accommodations, Eating & Drinking	3,672	4,434	3.8%	1.3%	2.3%	1.1
811-812	Repair, Maintenance, & Personal Services	1,373	2,229	10.2%	3.1%	3.8%	1.1
813	Religious, Civic, Professional, Organizations	578	355	-9.3%	-4.3%	1.4%	0.4
814	Private Households	222	336	8.7%	9.0%	10.1%	0.5
920	Government & non NAICs	12,568	16,700	5.8%	-0.5%	1.0%	1.9
	TOTAL	**45,249**	**57,811**				

Source: EDR-LEAP (with IMPLAN data).

In this four-county region, there are two distinct economic trends – one governing the towns and small cities close to I-79, the other governing the rest of the four-county area. The towns and cities form a swath locally referred to as the I-79 Corridor. Along this corridor, incomes are higher, wages are greater, jobs are growing faster, and the growth industries are primarily those that require high levels of skill and technology to create competitive advantage. The I-79 corridor, in short, is booming. Along this corridor, communities are collaborating with each other to produce growth in technology-based industries, and the primary sites of this growth are Morgantown, in Monongalia County, and Fairmont, in Marion County. The corridor is not, however, taking the rest of the region with it. I-79 is a clear dividing line between the areas of the region that are prospering and those that are not.

In both Monongalia and Marion, the strong concentration in government jobs is due primarily to the presence in Morgantown of West Virginia University and in Fairmont of Fairmont State University and Fairmont State Community and Technical College. And in both counties, the strong service sector is concentrated primarily in business services, engineering services, and computer services- skill-intensive, high-wage industries that are a strong indicator of the region's growth in high-value industries.

It has been years since Monongalia and Marion county depended to any real extent on the mining industries for their economic welfare – in fact, neither county has ever had the level of mining dependence seen in the rest of West Virginia. As the above tables show employment in *Mining & Support Activities* for both these counties has been shrinking at a faster rate than mining jobs in West Virginia. For at least the past ten years, the region's economy has been much more strongly centered on services, retail, and government.

Place-Based Amenities. Like much of West Virginia, Monongalia and Marion counties are abundant with considerable natural beauty. The region's mountains, forests, and rivers combine to create a topography that is unpredictable and striking. Morgantown in particular is starting to build on its riverfront, with walking and biking trails that stretch for miles along the river's edge and culminate in community gathering places close to the city's downtown. Fairmont has not done as much with its riverfront, whose banks are beautiful but still obscured by various retail operations, a few private homes, and other structures; however, plans are being developed to develop the riverfront into a community amenity.

As beautiful as the region is, some of the same factors that create this beauty also contribute to the economic disparities between its rural and metro areas. The mountainous terrain makes it very difficult to move around within the counties – not only making it harder for residents of the counties to reach jobs in Fairmont and Morgantown, but also creating significant infrastructure challenges. Transportation, water and sewer, landfills, construction – all are made very difficult by the rugged topography, with the result that all are in poor condition. Transportation in particular is frequently cited as one of the major challenges of the region outside Morgantown and Fairmont; as Figure 3 below shows, there are virtually no good east-west connectors in the entire northern half of the state, and the roads that do exist are, to a great extent, old and in disrepair.

The effects of the mountainous terrain are seen not only in the region's infrastructure, but also in its culture. West Virginians are famous for their local orientation; many residents agree that a typical West Virginian identifies with the smallest community possible, thinking of himself not as a resident of a particular county, but of the west side of that county, of a small town within the county, or even of one side of the river in that small town. The topography plays a large role (and reinforces) insularity; because it is so difficult to get from one place to another, residents of towns and communities become used to thinking of themselves as isolated and independent, and resist attempts to connect them with outside communities. While insularity is not necessarily a negative quality –in fact often helping to promote a sense of independence and self-reliance that can be necessary when isolated from external assistance and support – it can make it more difficult to create the kind of regionally coordinated approach that is often necessary for building on place-specific assets to create economic growth that reaches all of the region's citizens.

Labor Markets. Like other aspects of the region's economy, the labor market in the Monongalia – Marion region is an uneven picture. Though unemployment is fairly low throughout the region (4.2 percent, compared to 5.2 for the state and 5.5 for the nation), the region's urban areas have distinctly different labor markets from its rural areas. As discussed earlier, poor transportation infrastructure and the mountainous terrain make it difficult for those outside the urban areas to have access to these job markets. Even in areas where the commute would not be physically difficult, however, there appears to be a strong cultural bias regionwide against commuting. County planners and workforce development directors report that most people in the area expect to drive no more than 10-15 minutes to work, and simply do not tend to consider employment options outside that radius. One exception to this rule, however, is that many of the people filling high-level and technology-intensive jobs in Fairmont live in Morgantown instead and commute to Fairmont, which can't offer the same level of amenities and housing options that Morgantown can. Approximately 9.5 percent of the workforce in Marion County commutes to Monongalia County for work and 7.5 percent of the workforce in Monongalia County commutes to Marion County for work. In fact, one of the key factors hindering the technology-intensive job growth in Fairmont is that it's difficult for employers in these industries to find enough workers.

Educational Institutions. Both Monongalia and Marion have high-performing K-12 school systems; Monongalia's, in fact, was rated by *Offspring Magazine and Expansion Management Magazine* as one of the best public school systems in the country. Exhibit 5-6 displays some recent education statistics for Monongalia County.

Exhibit 5-6. Monongalia County Public School Statistics, 2003-2004

Total Public School Enrollment	10,206
Total Graduates (from three high schools)	691
Average SAT Test Scores (Math)	538
Average SAT Test Scores (Verbal)	538
Pupil/Teacher Ratio	15:1

Source: National Center for Education Statistics, <http:www//nces.ed.gov>; accessed 12/5/2005

As discussed earlier, the region is also home to several excellent post-secondary institutions. West Virginia University in Morgantown is the flagship institution of the state's 14-college state university system. Fairmont State University is a regional public university that merged, a few years ago, with Fairmont State Community and Technical College. The two institutions now operate somewhat independently, but are administrated jointly and coordinate their offerings and outreach activities to ensure that they do not overlap and that where possible they leverage and build on each other. Fairmont State University has focused primarily on its education mission; until now, it has thought of its role in economic development to be primarily educating the workforce that will drive economic growth. The leadership has begun, however, to consider the possibility of becoming involved in research and development and other more industry-focused economic development activities.

Fairmont State Community and Technical College, in Fairmont, is the two-county region's only post-secondary institution of career and technical education. It serves 7,200 students from a wide-ranging service area that covers thirteen of West Virginia's counties (some of which are served by satellite campuses and/or mobile programs). Nevertheless, much of the population of the two-county region lives outside practical commuting range from most of what FSCTC offers, and has little access to postsecondary technical education.

Entrepreneurship. Most of the region's entrepreneurial activity is centered in Morgantown. The university has begun playing a major role, as will be discussed below, in technology-based spin-offs, and the city attracts a considerable number of entrepreneurs who locate their businesses there primarily because it's where they want to live. Many of the entrepreneurs currently doing business in Morgantown say that they located there because the city has a "buzz," an "entrepreneurial energy," that makes it feel like a place where things are happening. The city has a wide range of public and private organizations that support entrepreneurs at all stages; however, these appear to be more an outgrowth of the entrepreneurial activity rather than its cause. The services and support they provide are important to entrepreneurs currently doing business in Morgantown, but they appear to value even more the connections and networks that these organizations, and the people in them, help create. Exhibit 5-7 shows how each of these counties compare to state-level averages for several measures gauging entrepreneurial activity.

Exhibit 5-7 Growth for Self-Employed and Wage Earning Segments of Economy

	Growth # Self-employed 1998-2003	# Self-Emp: Wage Earners	Growth in Income of Self-employed 1998-2003	Growth in Wage Earnings 1998-2003
Marion County	3.0%	1:4	53%	21%
Monongalia County	9.3%	1:6	138%	37%
West Virginia	4.3%	1:5	33%	16%

Source: REIS data and EDR Group calculations

5.3 Evolution of Progress

The two-county region of Marion and Monongalia has seen significant economic improvements over the past five to ten years. Income, employment, educational attainment, and other indicators all tell the story of a region on the rise. Exhibit 5-8 shows the economic indicators for the two counties over 1990 to 2003.

Exhibit 5-8. Economic Trends in Monongalia and Marion Counties, 1990-2003

	Monongalia County			Marion County			West Virginia		U.S.	
	1990	2000	2003	1990	2000	2003	1990	2003	1990	2003
Median household income	$22,183	$28,625	$32,971	$20,386	$28,626	$31,468	$23,147	$32,967	$29,943	$43,318
Median housing value	$64,600	$95,500	n/a	$42,300	$63,600	n/a	$47,900	$85,709	$79,100	$147, 275
%>25 w/ H.S. dipoma	75%	83.6%	n/a	71.4%	79.5%	n/a	66%	78.3%	75.2%	83.6%
%>25 w/ college degress	45%	32.4%	n/a	12.5%	16.0%	n/a	12.3%	17.0%	20.3%	26.5%
Unem-ployment rate	6.6%	4%	4%	11.2%	6%	6%	8.6%	8.4%	5.6%	7.6%
Poverty rate	32%	15.3%	15.3%	16.3%	16.2%	16.2%	16.3%	13.5%	13.1%	12.5%

Source: U.S. Census Bureau, "State and County Quick Facts" >

Differences between these two centers of growth. In this analysis, Morgantown and Fairmont have been singled out from the two-county region as the actual locations of the growth that has been detected at the county level, because the economic trends and dynamics that are producing the growth appear to be at work in these two towns much more than in any other place in either county. Morgantown and Fairmont are much more like each other than either of them is like the rest of their respective counties.

Yet the resemblance between the two places, seemingly so strong when they are viewed in the context of their counties, the larger region, and the rest of West Virginia, fades when the two cities are compared just to each other.

The large student population in Morgantown makes it difficult to find indicators such as income, wage, and employment to demonstrate Morgantown's better position, but reports from stakeholders in both towns confirm that Morgantown has made a leap to a new plane of growth and development that has not occurred (yet) in Fairmont. In fact, more than one stakeholder (including those that are working in and invested in Fairmont's economy) referred to the path of recent prosperity growth as flowing between Morgantown and Harrison County but "hopping over" Fairmont.

One area in which this can be clearly seen is in the level of entrepreneurship and of reinvestment in the community by local entrepreneurs, which is much greater in Morgantown than in Fairmont. The entrepreneurial buzz that is so frequently referenced in descriptions of Morgantown is not mentioned in descriptions of Fairmont – even by those whose job it is to sell the town and its economic assets. Clearly, one major reason for this is that Morgantown has WVU and Fairmont does not – though that is not as clear a reason as it might appear.

The two towns are about a twenty to thirty minutes' drive apart – even allowing for increased travel difficulties at different times of the day and due to inadequate transportation infrastructure, the distance is certainly far less than the informal (and admittedly unscientific) "one day's drive" rule of thumb often observed in the flow of venture capital – i.e., that the majority of funds will flow less than one day's drive away from their source, so that funders can easily keep an eye on their investments. In other words, the distance between the two towns should not be a deterrent to the university's evolving technology development and commercialization relationships with firms in Fairmont. Morgantown must clearly be the primary beneficiary of WVU's economic energy – but shouldn't lower development costs, if nothing else, be encouraging at least some spillover into Fairmont? Why shouldn't university spin-offs be locating in Fairmont, perhaps not just as much as in Morgantown, but at least to a noticeable extent?

Several reasons are responsible. For one thing, Fairmont is working with certain disadvantages that Morgantown is not. One is its degraded physical assets and housing stock. Simply on the basis of its residential real estate offerings, Fairmont cannot compete with Morgantown in the attraction and development of the type of entrepreneur who makes business location decisions based on where he or she wants to live. Less tangibly, Fairmont also is said to be lacking in the entrepreneurial energy, as well as the dense network of connections and resources, that are so important, if hard to quantify, in attracting and growing entrepreneurs.

Fairmont also is described as having relatively undeveloped retail offerings (though, as shown in the entrepreneurship analysis, this may be changing), which both detracts from its attractiveness as a place to live and works against its potential role as a retail hub for the adjacent counties. According to econometric and spatial analyses, Fairmont should be serving as a center of retail activity for the more rural areas surrounding it that lack a micropolitan areas of their own, and so look to Fairmont for goods and services. Instead, as described above, nearly the opposite is happening. Economic activity, instead of flowing naturally into Fairmont, is "hopping over" Fairmont to get between Morgantown and Harrison County. At one point in its history, about forty years ago, Fairmont *was* serving as a retail center for the region, with a thriving downtown that provided retail, restaurants, services, and other attractions that pulled in consumers from the surrounding rural areas, as well as from Monongalia (including Morgantown, whose retail offerings were limited at that time) and from Harrison County. Then the fateful decision was made to build a mall on the outskirts of town. The mall, quite modest by today's standards, was the first in the region, and effectively killed Fairmont's downtown in a matter of two or three years. By that time, a larger and fancier mall was under construction in Harrison County, drawing business away from Fairmont, and the Mall War, much like those that have been waged in similar communities all over the U.S., was on.

At the same time, the purchasing power of the rural areas that, theoretically, would be looking to Fairmont as a retail center, has been steadily eroding, along with the transportation assets that would facilitate the flow of consumers from the rural areas into Fairmont. (The only truly well-developed transportation route in the region is Interstate 79, which connects throughout the region all the way up to Pittsburgh and beyond – with the result that those in the region willing to travel to find consumer opportunities often simply drive into Pittsburgh, which of course has retail options well beyond anything northern West Virginia has to offer.) Fairmont's retail offerings have been relatively under-invested ever since, to the point where they not only do not attract much business from outside Fairmont but are a detriment to its attractiveness as a place to settle and live. Consequently potential entrepreneurs may be discouraged from locating there not only on their own account, but also because of the increased difficulty of finding, attracting, and keeping talented employees.

Another major difference between the two towns is in the role that federal investment has played in the local economy. Both have been the beneficiary of federal dollars. If anything, Fairmont has received more direct investment than Morgantown, since Congressman Mollohan is focusing primarily on Marion County while Senator Byrd looks at the entire state. In fact, one of the major investments that Senator Byrd secured for West Virginia, the FBI laboratory, was located in Harrison County rather than in Morgantown in order to keep it from being too close to the state border and providing jobs for Pennsylvania residents rather than West Virginians.

It appears, however, that the investments made in the Morgantown area have been parlayed into increased economic capacity, while those made in Fairmont have not. The firms in the Morgantown area that have been the beneficiaries of federal contracts have, for the most part, used the federal work to create or expand their ability to compete in the private sector, while the Fairmont firms are still quite dependent on federal contracts. If the federal investments dried up tomorrow, most of the affected firms in Morgantown would be able to survive through their private sector work; most or all of the Fairmont firms would close immediately.

This continued dependence on the federal dollars is partly due to the fact that at the time the federal investments started coming in, Morgantown was simply farther along in its economic development path than Fairmont was. There were more assets already in place for the federal dollars to leverage, and the firms already had some experience in competing in the private sector technology-intensive marketplace. The most significant investments in Fairmont were not building on existing technology capacity; many of the firms now working on federal contracts did not exist prior to the federal investment. Being at an earlier stage than Morgantown in its technology development, added to the disadvantages described above, has meant that Fairmont has not yet used its federal dollars to create lasting technology and economic capacity.

A brighter future for Fairmont. There is, however, good reason for optimism regarding future progress in Fairmont. As mentioned above, Fairmont is in an earlier stage of development than Morgantown, and has many strong public and private sector players working to move the town along its development path to a point similar to where Morgantown is now – at which technology, entrepreneurship, and outside investment all converge to create a surge of economic activity. The West Virginia High Technology Center, for example, located in Fairmont and created through federal funds obtained by Congressman Mollohan, works to help technology-based businesses that focus primarily on federal contracts diversify and develop the capacity to compete in the private sector. At the same time, Fairmont's economic development authorities and Chamber of Commerce are thinking about how to parlay the technology-based businesses that have developed as a result of federal investment into more economic growth in other sectors.

One way in which they are already learning from Morgantown's example is in the reinvestment of entrepreneurial wealth into the community. Technology commercialization combined with entrepreneurial energy has produced a great deal of wealth in Morgantown, and the Chamber of Commerce and city planners have been successful in securing some of this wealth as investment in new development in the city. Several new retail, service, and other amenity developments are underway in Morgantown, financed by local entrepreneurs. These developments continue to add to Morgantown's attractiveness as a place to live, work, and invest.

Fairmont stakeholders see the wealth that is being created in its technology-based businesses as a result of federal investment, and know that one of the primary ways in which that wealth can be parlayed into greater overall prosperity for the town is for the entrepreneurs creating the wealth to reinvest in the community. They also know, however, that it is difficult to attract investors to a place that does not appear to be receiving other kinds of investment – not to mention that if they want to create the sort of attachment to place that helps inspire Morgantown's entrepreneurs to invest there, the town itself must work to make Fairmont a place in which entrepreneurs want to live and build. The town is therefore about to start a comprehensive downtown revitalization project that will create new access to downtown from I-79 (also partly financed through federal funds) and will include riverfront development and retail and street-level renovation as well. The project will address some of Fairmont's primary obstacles to growth: difficulty of access, minimal retail offerings, and undeveloped amenities, and may prove the catalyst that, by improving the town's aesthetic and place-based appeal to its entrepreneurs and other potential investors, will help move Fairmont onto a different trajectory of growth – the one that has brought prosperity to its neighbor and collaborator Morgantown.

5.4 Catalysts of Change

Several notable individuals were identified as connected to growth initiatives in Morgantown and Fairmont, particularly Senator Byrd and Congressman Mollohan for the federal investment that they have brought to the region, and President Hardisty for the focus on technology commercialization that he has brought to West Virginia University.

Even more significant than these key individuals, however, and what makes the region truly distinctive, is the strong network of connections that brings together stakeholders from different realms – the university, the economic development community, the workforce development fields, community planners, the private sector, and others. While it may seem that networks like these exist in all economically dynamic communities, the capacity to connect and collaborate outside the borders of a given identified community is not one that is native to most of West Virginia (though West Virginians are known for fierce loyalty and strong community feeling within the communities they claim as their own).

Earlier, it was described how the state's counties, towns, and communities tend to define themselves inwardly, rather than as part of a larger unit, and to resist connecting with those they consider outsiders. One rather extreme illustration of this point is found in the experience of the Monongalia County officials have made more than one attempt to spread some of the wealth from Morgantown into the rest of the county. The officials met with intense resistance from the county residents, who resented intruders from outside their own communities attempting to influence the path of their development. When the officials persisted, the county residents responded by calling a special referendum and voting to disband the county planning commission. Just as, in resisting commuting, the county's residents resist a geographical connection with Morgantown and other "outsider" communities, they also resist any sort of external planning or development process that might take some control out of their own hands – even if, on their own, they cannot hope to develop very far.

In contrast, Morgantown and Fairmont are part of a vibrant network of collaborators and connectors, entrepreneurs and entrepreneurially minded public sector officials who include other towns, communities, and counties in nearly every initiative they undertake. In fact, they are much more identified with the I-79 Corridor, and the people and organizations behind it, than they are with the rest of their own counties. This spirit of collaboration was noted by more than one community stakeholder as what truly makes Morgantown, in particular, and Fairmont as well, different from the rest of their respective counties.

5.5 Lessons Learned

One of the most difficult aspects of discerning the lessons learned in a place like Morgantown/Fairmont is separating out the effects of non-replicable advantages, such as large flagship universities and federal investment, and the effects of what has been created here and could be created elsewhere. The most fruitful way to think about it is not to say that every community should have a university and powerful Congressional representation if it possibly can, but rather to hold Morgantown and Fairmont up against comparable communities. There are other communities that have universities, and even some level of federal investment, that do not embark on a tech boom. Given the presence of these advantages, what should a community do with the resources it can control to try to parlay them into lasting economic growth?

First, follow the example of WVU's President Hardisty: **give the university a specific and focused role in local technology commercialization.** Many state and regional universities consider themselves economic assets merely because of the jobs they create or even the technology they deploy and sell; it is the explicit focus and follow-through on the creation of new businesses, or new product lines in existing businesses, that makes WVU not just an economic asset, but an economic driver.

Second, **think and act regionally and in complementary fashion.** Morgantown and Fairmont, alone out of their counties, are thriving; and they alone are connected to communities beyond their own, and show an awareness in their planning of being situated in a regional economic context that has little to do with political borders. While it is the work of years to overturn a community's insular tendencies, a few leaders who are willing to do the uphill work of making the initial connections, and demonstrating the economic power of these connections, especially when each city's economic activity has been focused to complement rather than compete with the other's.

Third, **turn investment into capacity.** By connecting its federal investments with other industries, by using its developing technology expertise and workforce to attract private sector firms and private capital, by assisting federally-invested firms to expand into the private sector market, Morgantown has avoided the dependency trap into which so many recipients of federal investment fall. Fairmont, on the other hand, has yet to make these connections, and is still mostly dependent on its government contracts.

Finally, what do you do if you are the "other" city – the Fairmont, the town that is doing pretty well, considering its context – but receiving less attention than Morgantown, the university city that attracts all the attention, entrepreneurs, new firms, and venture capital? The primary thing is to **assess where your success can fit into the other city's and the region's success**. In Fairmont's case, it is beginning to realize that there are considerable opportunities to be had in supporting and facilitating the economic activity taking place in Morgantown—more than there are in attempting to compete with Morgantown for that activity. For instance, Fairmont is not likely to create another center of commercially-oriented, high-technology research and development. It can, however, create a center of R&D that focuses on technology application and transfer, to complement the R&D being performed in Morgantown, and to foster the growth of businesses that can serve as complements to the high-level technology firms spinning off WVU. Fairmont State University is beginning to examine how it can develop its own R&D capacities to complement those of WVU.

5.6 Interviewees

Charlie Reese, Director, Marion Regional Development Corporation

Bruce McDaniel, City Manager, City of Fairmont

Dr. Dan Bradley, President, Fairmont State University

Blair Montgomery, President, Fairmont State Community and Technical College

Dale Bradley, Assistant Provost of Workforce Development at Fairmont State Community and Technical College

Paul Schreffler, Director of Economic Development and Workforce Education at Fairmont State Community and Technical College

Jim Hall, LDD Director

Don Reinke, Director, Morgantown Area Economic Partnership and Monongalia County Economic Development Authority

Bob McLaughlin, President, I-79 Economic Development Council

Russ Lorince, Director of Economic Development at West Virginia University

Christopher Fletcher, Monongalia county planner

Scott Rostruck, Morgantown Area Chamber of Commerce

Jim Estep, President, West Virginia High Technology Consortium.

Barbara DeMary, Executive Director, Region VI Workforce Investment Board

6 SOUTHEAST TN & SOUTHWEST NC: *RE-TOOLING ASSET-BASED GROWTH*

6.1 Introduction

SE Tennessee/SW North Carolina are covered by two adjacent Local Development Districts that are connected by Appalachian Highway Corridor K. For McMinn County, TN the case study examines the role of entrepreneurship and the arts in maintaining the economic viability of a rural area that has had substantial loss of manufacturing employment. In addition, the case study traces economic development efforts to develop cultural and recreation tourism along Corridor K between Chattanooga, TN and Asheville, NC.

This case study profiles economic development efforts focused on tourism potential in recreation-based and cultural heritage, principally along Corridor K in the Southeastern Tennessee and Southwestern North Carolina located between the metro areas of Chattanooga, TN and Asheville, NC.

This region presents an interesting case study as it spans multiple counties, state, and the Local Development District boundaries. These jurisdictions are competing with each other for employers, workforce, tourists and resources, yet they have organized themselves for economic development as a cohesive unit, pooling resources and efforts to create the critical mass necessary to attain their economic development goals. One reason is that the case study counties are linked by Corridor K – a planned link in the Appalachian Development Highway System (ADHS)

The region is also of interest as a case study because the geographic factors that isolated it also led to the emergence of a regional trade center in Murphy, NC. Finally, the region's natural resources—forests, rivers, railroads, and mines—that were once a source of industrial activity are now being used diversify their economy by building a tourism industry based on recreation and cultural heritage.

6.2 Regional Profile

The study area is comprised of counties that are linked by the planned highway of Appalachian Corridor K, including the North Carolina counties of Cherokee, Graham, Jackson, Swain and the Tennessee counties of Bradley, Hamilton, and Polk (Exhibit 6-1). The study area also includes the adjacent counties of Clay and Macon (NC) and McMinn and Meigs (TN) because their economies are closely linked to those located along the corridor (Exhibit 6-2). Though not part of this study, the area also has economic ties to northern Georgia, particularly with Fannin, Union and Towns Counties.

While the counties of interest have a combined population of nearly 589,000, more than half of this is attributable to the Chattanooga metro area. This case study focuses on economic development potential in the non-metropolitan areas east of Chattanooga, TN and southwest of Asheville, NC. This area is isolated from the State capitals, and at one time even harbored an independence movement to succeed from Tennessee, North Carolina and Georgia to form their own state to be called Franklin.

Large portions of the study area are public lands including Cherokee National Forest, Nantahala National Forest, and Hiwassee Lake State Park. For example, Swain County is approximately 87 percent public lands. The region is relatively isolated, ringed in high mountains and bisected by dramatic river gorges.

Exhibit 6-1. Corridor K of the Appalachian Development Highway System

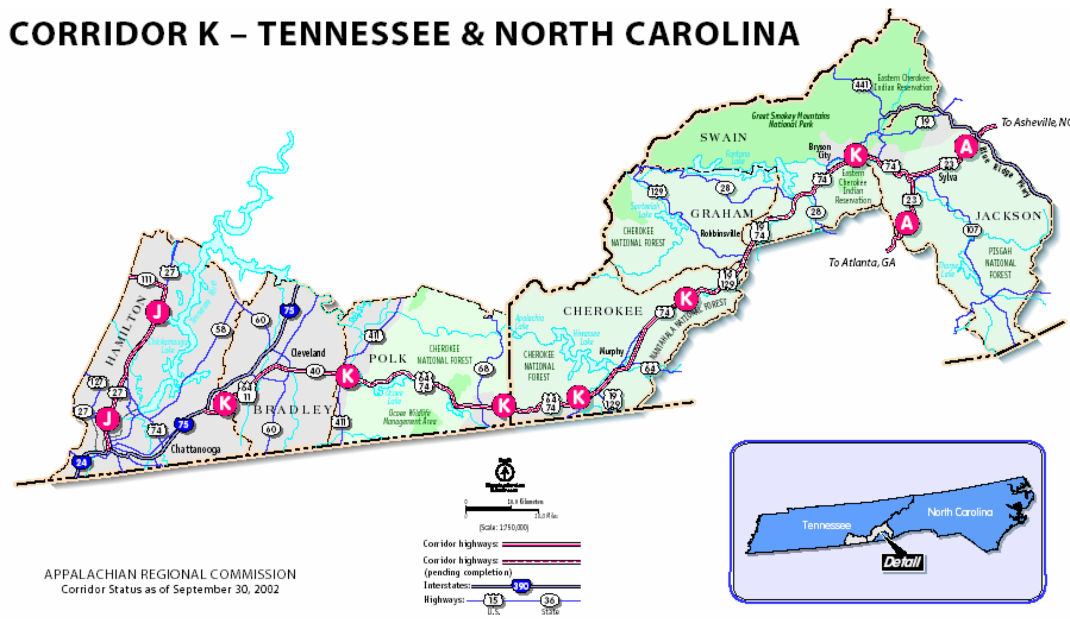
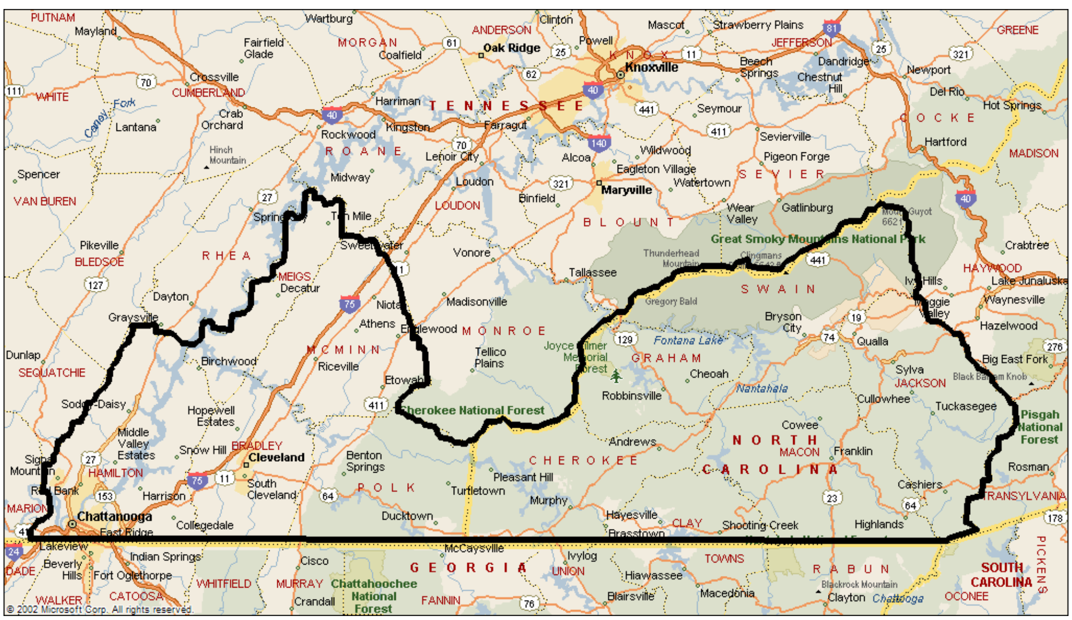


Exhibit 5-2. Map of the Full Case Study Area



Source: Microsoft Streets & Trips and EDR Group

Originally home to the Cherokee and vibrant early-American trade paths, the region has been populated since before the 1700s. In the 1820s, gold was discovered and in the 1840s copper was discovered. The copper mining industry in particular drove boom-town style growth. Railroads were constructed to serve the mining industry, which allowed the logging and textile industries to flourish. The textile industry remained strong until the late 1980s when the national textile industry began to experience significant losses as the industry shifted to lower-cost manufacturing in China. The furniture industry, which had grown out of the region's logging activities, remained strong until the last decade when this industry also went abroad.

Population Growth. Exhibit 6-3 presents population in each of the study area counties for the past four decennial Censuses. The largest county by far is Hamilton, TN (pop. 307,896), which includes Chattanooga. Bradley and McMinn Counties also have relatively large populations, while Graham and Clay have populations under 9,000. During the 1990s, population growth in three of the six North Carolina counties outstripped that of the state as a whole, while three of the five Tennessee counties surpassed the rate of growth statewide.

Exhibit 6-3. Population and Population Growth

	Population				% Change			
Population by County	**1970**	**1980**	**1990**	**2000**	**1970-80**	**1980-90**	**1990-2000**	**1970-2000**
Hamilton County, TN	256,190	288,370	285,536	307,896	13%	-1%	8%	20%
Bradley County, TN	51,230	67,770	73,712	87,965	32%	9%	19%	72%
McMinn County, TN	35,600	42,030	42,383	49,015	18%	1%	16%	38%
Jackson County, NC	21,593	25,811	26,846	33,121	20%	4%	23%	53%
Macon County, NC	15,910	20,380	23,499	29,811	28%	15%	27%	87%
Cherokee County, NC	16,410	18,990	20,170	24,298	16%	6%	20%	48%
Polk County, TN	11,720	13,650	13,643	16,050	16%	0%	18%	37%
Swain County, NC	8,835	10,283	11,268	12,968	16%	10%	15%	47%
Meigs County, TN	5,250	7,450	8,033	11,086	42%	8%	38%	111%
Clay County, NC	5,200	6,660	7,155	8,775	28%	7%	23%	69%
Graham County, NC	6,560	7,210	7,196	7,993	10%	0%	11%	22%
State of Tennessee	3,926,018	4,591,120	4,877,185	5,689,283	17%	6%	17%	45%
State of North Carolina	5,082,059	5,881,813	6,628,637	8,049,313	16%	13%	21%	58%

Source: US Census Bureau.

Economic Profile. Exhibit 6-4 presents employment trends by NAICS sector in the study area for 1997 and 2002. The top three sectors across both years are government, retail trade, and health care/social services which is typical for many areas in the nation, particularly under-performing areas such as those found in Appalachia. *Accommodations, eating & drinking* is the fourth largest source of employment, and is important to regional tourism. Construction is fifth, which is supported by the pace of second-home construction discussed later in this case study. Transportation is sixth, which reflects the presence of Interstate 75 at the western edge of the study area, a major east coast north-south trade corridor.

Exhibit 6-4. Employment by Industry, 1997-2002

		Study Area			Annual Growth		2002 LQ
NAICS	**Sector**	**1997**	**2002**	**Annual Growth**	**TN & NC Combined**	**United States**	**Study Area/ TN & NC**
524	Insurance Carriers & Related Activities	10,147	14,241	7.0%	-0.3%	-1.2%	2.7
335	Electric Equipment, Appliances, etc.	5,703	6,612	3.0%	-4.2%	-5.3%	2.5
325	Chemical Manufacturing	4,349	8,355	13.9%	-3.0%	-4.5%	2.4
311	Food Products	8,413	9,373	2.2%	1.4%	0.4%	2.2
481-487	Transportation	10,344	20,878	15.1%	1.1%	1.7%	2.2
322	Paper Manufacturing	3,268	3,765	2.9%	-1.3%	-3.6%	2.0
114	Fishing, Hunting & Trapping	23	552	88.4%	44.1%	12.3%	1.9
331	Primary Metal Manufacturing	3,887	1,570	-16.6%	-7.3%	-4.8%	1.8
813	Religious, Civic, Professional, Organizations	6,751	6,781	0.1%	-1.6%	1.4%	1.3
212-213	Mining & Support Activities	328	455	6.8%	-3.6%	2.9%	1.2
315	Apparel Manufacturing	6,328	2,707	-15.6%	-17.2%	-13.6%	1.2
441-454	Retail Trade	45,460	45,340	-0.1%	-0.4%	-0.3%	1.1
333	Machinery Manufacturing	4,095	3,218	-4.7%	-3.3%	-4.7%	1.0
339	Miscellaneous Manufacturing	1,913	1,589	-3.6%	-3.7%	-2.0%	1.0
491-493	Mail, package delivery & warehousing	3,675	5,944	10.1%	8.3%	6.4%	1.0
531	Real Estate	7,100	9,913	6.9%	8.2%	9.7%	1.0
541-551	Professional Scientific, Technical, Services	17,006	21,846	5.1%	7.3%	7.0%	1.0
721-722	Accommodations, Eating & Drinking	23,510	26,377	2.3%	2.6%	2.3%	1.0
811-812	Repair, Maintenance, & Personal Services	9,912	12,883	5.4%	4.9%	3.8%	1.0
113	Forestry & Logging	811	423	-12.2%	-7.3%	-4.9%	0.9
221	Utilities	1,005	747	-5.8%	-9.0%	-4.9%	0.9
230	Construction	26,505	22,965	-2.8%	-0.7%	0.2%	0.9
332	Fabricated Metal Products	4,003	3,486	-2.7%	-1.5%	-2.5%	0.9
532	Rental & Leasing Services	1,148	1,908	10.7%	7.6%	6.9%	0.9
621-624	Health Care & Social Services	27,790	29,153	1.0%	2.7%	2.6%	0.9
814	Private Households	1,886	3,646	14.1%	11.0%	10.1%	0.9
920	Government & non NAICs	44,422	47,674	1.4%	1.4%	1.0%	0.9
112	Animal Production	2,269	2,659	3.2%	4.9%	8.1%	0.8
323	Printing & Related Support Activities	2,130	1,420	-7.8%	-4.0%	-3.6%	0.8
337	Furniture & Related Products	4,676	3,160	-7.5%	-4.3%	0.0%	0.8
420	Wholesale Trade	14,036	11,800	-3.4%	-2.6%	-3.2%	0.8
521-523	Monetary, Financial, & Credit Activity	6,053	6,797	2.3%	2.3%	1.8%	0.8
561	Administrative & Support Services	20,388	18,300	-2.1%	1.1%	0.0%	0.8
562	Waste Management & Remediation	895	533	-9.8%	1.0%	8.9%	0.8
611	Educational Services	3,212	4,098	5.0%	1.9%	0.1%	0.8
711-713	Amusement & Recreation	4,709	5,320	2.5%	4.9%	3.7%	0.8
312	Beverage & Tobacco Products	1,135	842	-5.8%	-1.3%	-0.6%	0.7
313	Textile Mills	3,199	2,908	-1.9%	-8.6%	-6.8%	0.7
336	Transportation Equipment	1,683	3,123	13.2%	-2.5%	-3.9%	0.7
512	Motion Picture & Sound Recording	647	414	-8.6%	-7.1%	-4.4%	0.6
513	Broadcasting	1,717	1,762	0.5%	2.8%	2.9%	0.6
321	Wood Products	1,398	1,110	-4.5%	-5.3%	-3.8%	0.5
326	Plastics & Rubber Products	2,078	1,583	-5.3%	-2.4%	-3.0%	0.5
327	Nonmetallic Mineral Products	1,602	751	-14.1%	-3.6%	-2.6%	0.5
511	Publishing Industries (except Internet)	1,463	927	-8.7%	-4.6%	-6.0%	0.5
111	Crop Production	2,377	1,598	-7.6%	-4.3%	-2.9%	0.4
314	Textile Product Mills	1,752	384	-26.2%	-5.5%	-4.4%	0.4
334	Computer & Electronic Products	189	932	37.6%	-4.6%	-5.3%	0.4
115	Support for Agriculture & Forestry	272	219	-4.2%	10.4%	1.1%	0.0
211	Oil & Gas Extraction	120	0	-100.0%	40.5%	-5.7%	0.0
316	Leather & Allied Products	283	177	-9.0%	-15.5%	-11.5%	0.0
324	Petroleum & Coal Products	48	208	34.2%	4.4%	-2.9%	0.0
514	Internet & data process svcs	196	242	4.3%	15.7%	6.1%	0.0
525	Funds, Trusts, & Other Financial Vehicles	172	27	-30.9%	4.9%	12.3%	0.0
533	Lessors of Nonfinancial Intangible Assets	58	41	-7.0%	-2.9%	-8.5%	0.0
	TOTAL	**358,539**	**383,736**	**7.0%**			

Source: EDR-LEAP (with IMPLAN data) and EDR Group.

As shown in Exhibit 6-4, the region's major manufacturing sectors include food products, chemical manufacturing, electrical equipment and appliances, furniture, paper, textiles, apparel, fabricated metal products, machinery, and transportation equipment.

Despite losses between 1997 and 2002 in historically important sectors such as textile mills, apparel manufacturing, forestry and logging, furniture and wood products, and mining, the region experienced a net gain of more than 25,000 jobs. The computer and electronic products industry grew from under 200 employees to nearly 1,000 and other large gains occurred in the transportation services, chemical manufacturing, transportation equipment manufacturing, and package delivery & warehousing industries.

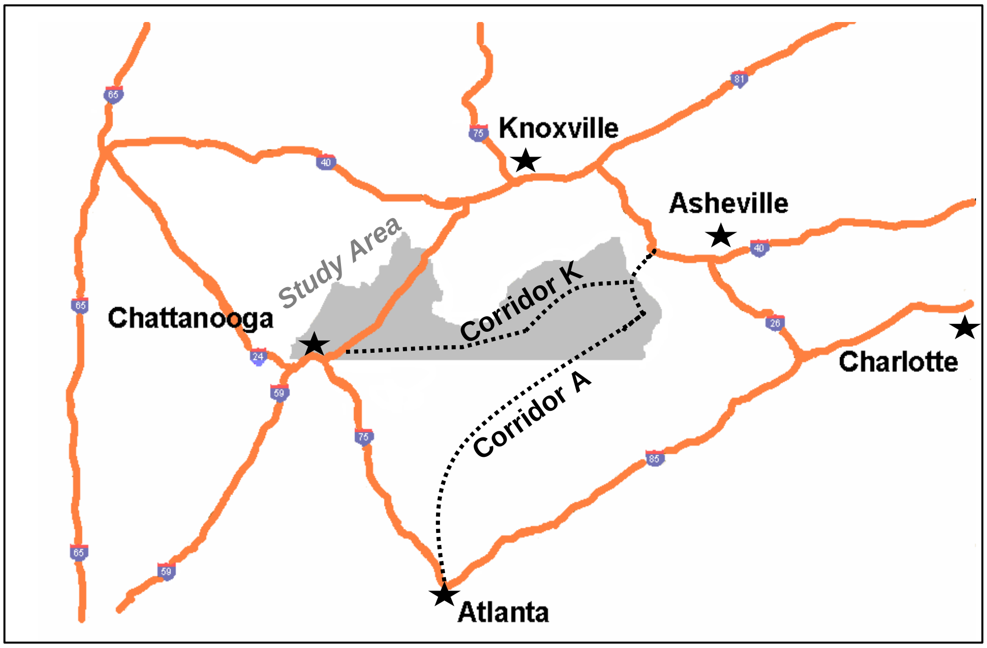
The last column of Exhibit 6-4 also shows the 2002 location quotients (LQ) for the study area. In comparison to the employment mix of Tennessee and North Carolina combined, the study area has particularly high shares of employment in insurance, electric equipment and appliance manufacturing, chemical manufacturing, food products and transportation. The region also has relatively higher shares of employment in paper manufacturing, fishing/hunting/trapping, primary metal manufacturing, mining, apparel manufacturing, apparel manufacturing, furniture manufacturing, and mining. These industries reflect historical strongholds of the region.

Regional Connections. One of the most notable features of the region is the lack of connection between Chattanooga and Asheville/Charlotte (Exhibit 6-5). Currently, the trip from Chattanooga to Asheville involves a five-hour, 230 mile journey around Great Smoky Mountains National Park through Knoxville on I-75 and I-40. An alternative route runs through Cherokee and Nantahala National Forests, a 200-mile journey taking nearly six hours. This second route along Corridor K involves several stretches of modern 4-lane divided highway, however in two key spots along the Ocoee and Nantahala Gorges, the road narrows to just two lanes, so that trucks must sometimes maneuver into oncoming traffic to negotiate tight curves. During the summer months, the route becomes congested with tourists flocking to rafting, mountain biking, hiking and other recreational activities in the two gorges.

Traditionally, Chattanooga was the industrial anchor of the region, connected to Cincinnati and Atlanta via I-75 and to Nashville via I-24. Murphy, NC also developed an industrial concentration, and has a highway connection south to Atlanta. However, the region has weak east-west linkages, which economic development leaders see as a barrier to business attraction and job growth. In particular, it is seen as limiting access to East Coast international trade and European market connections.

Economic development leaders in the region have identified the potential for job growth and economic benefits for Chattanooga; increased commerce between Chattanooga and points east; and the opportunity for Murphy and Sylva, NC to tie into the I-65 "Auto Parts Alley" as likely outcomes of improved east-west connection and improved linkages to the Interstate Highway system. Though regional leaders see Chattanooga experiencing the greatest benefits from such improved connections, they expect positive spillover effects to occur throughout the region.

Exhibit 6-5. Study Area Interstate and Highway Connections



6.3 Evolution of Progress

Despite the region's relative isolation and manufacturing losses which parallel those that have occurred in the national economy, the region has experienced some economic development success by fostering its tourism industry, and building on manufacturing assets to recoup a portion of jobs lost.

Tourism. The study area is outside of higher profile tourist areas near Asheville such as the Great Smoky Mountains and Blue Ridge Parkway. However, as the tourism industry has shifted away from more traditional types of outdoor recreation based on relaxation and visual beauty toward more active forms of recreation such as hiking, rafting, mountain biking and so-called "ultimate sports", the region has been able to capitalize on its outdoor and cultural heritage assets. For example, Cherokee County Chamber of Commerce has changed its strategy from promoting "Peace in the Mountains" to promoting "Fun in the Mountains". Regional outdoor recreation, cultural heritage, and second-home market assets are described below. Later ections describe how regional leaders have cooperated to develop and promote these assets.

Outdoor Recreation. Outdoor recreation assets include the challenging class IV rapids of the Ocoee River, which was the site of the 1996 Atlanta Olympic Games. The Nantahala River has class II and III rapids which are less challenging and more oriented towards beginner and intermediate rafters (though Ocoee outfitters offer trips that do not require previous rafting experience). Local companies also facilitate outdoor activities including hiking, mountain biking, horseback riding, fishing, hunting, rock climbing and repelling, water skiing, llama trekking, hang gliding, and bird-watching, though many of these activities can also be done by individuals on their own. Outdoor attractions include the Unicoi Turnpike Trail, Benton-MacKaye Trail, Appalachian Trail, Lost Sea cavern and underground lake, and Cherohala Skyway.

Cultural Heritage Tourism. In addition to outdoor recreation amenities, the region is rich in cultural heritage sites and activities. The region is crisscrossed by 1,000 year old trade passages, steeped in Native American history, and has many remnants of the Industrial Revolution. Organizations such as the Tennessee Overhill Heritage Association (discussed below) are working to restore, revitalize, and interpret these cultural heritage amenities to attract visitors, increase visitor spending, and contribute to the region's economic base. Cultural heritage attractions include the John C. Campbell Folk School, Sequoyah Birthplace Museum, Ducktown Basin Museum, L&N Depot and Rail Museum, McMinn County Living Heritage Museum, Swift Museum (Globe and Temco Swift airplanes), Englewood Textile Museum, Mason's Corn Maze, and Fields of the Wood Bible Park.

Second Home Market. In recent years, the region has experienced a surge in second home construction. In fact, Murphy, NC recently appeared on Forbes list of emerging second home markets. This is seen as a positive development as seasonal residents demand very little of municipal services while contributing to the local economy through dining, entertainment, health care, property taxes and other expenditures.

Recently, the completion of Corridor A to the east of the study area has improved the region's connection with points east, which has fanned the second home market in counties toward the eastern end of the study area. In fact, several area towns double in population during the summer as city-dwellers primarily from Florida and Georgia escape to their vacation homes. In some areas, the pace of growth is beginning to generate concerns of gentrification, though there has not yet been a movement for zoning or land use restrictions most areas. A zoning referendum recently put to voters in McMinn County was defeated. The more isolated counties such as Polk and Cherokee have not yet experienced the same pace of growth, thus there has been little interest in regulation.

Building Critical Mass. Many of the region's tourism assets have traditionally drawn either from a day-trip market or catered to very specialized interests such as bird watchers or crafts enthusiasts. In a later section, this case study shows how regional organizations are working together to expand their offerings and bundle them in a way that transforms the region from a local attraction drawing from adjacent areas into a major tourist area drawing overnight visitors from throughout the southeastern US.

Industry and Trade Center. Throughout the region's history, its topography reinforced regional cohesiveness. The high mountains that ring the region create a "bowl" around the Tennessee county of Polk, North Carolina counties of Cherokee and Clay, and Georgia counties of Fannin, Union (GA) and Towns (GA), with Cherokee County at the center. This bowl, together with highway connections centered on Cherokee County, made the county a natural regional trade center (Exhibit 6-6A-B.) Though the county itself has a population of only about 24,300, the market area population is approximately four times that. As evidence of Cherokee County's role as a trade center, in 2005 the county ranked 71st in population but 20th in per capita retail sales among the state's 100 counties. Most of this activity takes place in Murphy, the county's largest city.

Exhibit 6-6A Topography Defining the Murphy, NC Trade Center

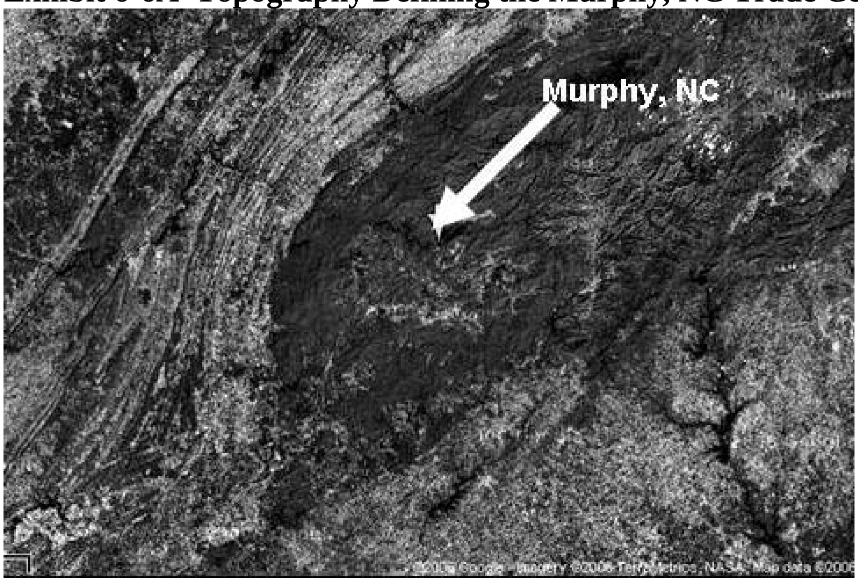
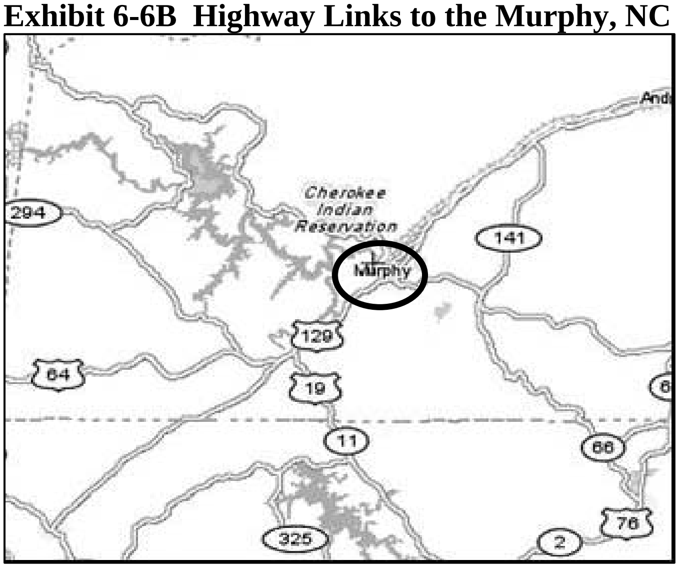


Exhibit 6-6B Highway Links to the Murphy, NC Trade Center



In addition to creating a retail trade center, topography and highways supported a natural labor market. This labor market combined with metals from the mining industries, and extensive railroad connections, fostered significant manufacturing activity that would have been unlikely without this labor market. Despite manufacturing losses that mirror those experienced in the nation as a whole, the region has a strong presence of metal fabrication and machine and equipment manufacturing. Major companies in Murphy include MGM Brakes, Moog Components and Sioux Tools.

Though much of the economy is in transition toward tourism, regional leaders are still pursuing industrial development to ensure that the regional economy stays balanced and includes jobs with health care and retirement benefits. Through industrial recruitment efforts, the region has been able to regain about half the manufacturing jobs lost due to the relocation of the textile and furniture industries.

Industrial recruitment is primarily achieved through networking with companies familiar with the area. Though Murphy has connection south to Atlanta in which the journey is all interstate after the first seven miles, industrial recruitment efforts are still challenged by the perception of greater transportation access difficulties going east or west. This is compounded when business prospects arrive via alternative routes through narrow, winding, mountain roads. Furthermore, though there is an abundance of flat land suitable for industrial sites, outsiders often harbor the perception that the entire region is mountainous.

While Corridor K will help to address the access problem, for now much of this area is poorly connected to both Asheville and Chattanooga. The lack of access is felt to substantially reduce the representation of auto parts related industry in the region, though that could change if future highway improvements better link it to the "Auto Alley" of parts and assembly plants located along I-75. At the other end of the study area, an improved connection with Ashville would also connect the area to Charlotte, which is a key location for export-oriented industries.

6.4 Catalysts of Change

The study area spans several County, State and Local Development District boundaries. Though these jurisdictions are competing with each other for jobs, workforce, tourists and resources, they have organized themselves for economic development as a cohesive unit, pooling resources and efforts to create the critical mass necessary to attain their economic development goals.

Local Development Districts. The study area spans the jurisdiction of two Appalachian Regional Commission (ARC) Local Development Districts (LDDs), the Southeast Tennessee Development District and Southwestern North Carolina Planning and Economic Development Commission. In addition to addressing their local responsibilities, they have also created a partnership organization, the Southeast Industrial Development Association (SEIDA), which has been a catalyst for the region's major economic development efforts.

Southwestern North Carolina Planning and Economic Development Commission. This LDD encompasses North Carolina's seven western-most counties and addresses housing and community development, land and water conservation and preservation, transportation planning, infrastructure, workforce development, and education. The organization also operates a revolving loan fund to promote access to capital for local businesses.

Southeast Tennessee Development District. The Southeast Tennessee Development District covers a 12-county service area which includes three Georgia Counties (Dade, Walker, and Catoosa). The organization encompasses 11 functional areas: Aging and disability planning, regional planning, utility development, tourism development, housing development, industrial recruitment and marketing, transportation planning, economic development, recreation and cultural resources, solid waste and natural resources and workforce development.

The LLD operates as part of a consortium called the Southeast Development Resource Group, which includes the Chattanooga Area Regional Council of Governments, Southeast Tennessee Local Development Corporation, and several other business, industrial and community development agencies all of which are staffed and administered by the LDD. The LDD also staffs and operates SEIDA, which has been a powerful force for regional economic development.

Southeast Industrial Development Association. The Southeast Industrial Development Association (SEIDA) is a unique example of cross-jurisdictional cooperation. The organization is comprised of the economic development arms of the Tennessee Valley Authority (TVA) power districts in Tennessee, North Carolina and Georgia as well as three regional LDDs— Southeast Tennessee Development District, Southwestern North Carolina Planning and Economic Development Commission, and the Coosa Valley Regional Development Center (Georgia). These three organizations contract with the Southeast Tennessee Development District to staff and administer SEIDA programs and initiatives. In turn, SEIDA promotes and coordinates industrial development and tourism initiatives in the region.

Three decades ago, the organization laid out a comprehensive plan for regional economic development with 10 functional areas and capital budgeting. Preservation of the region's natural resources was a key element of the strategy, and the organization has been involved in land swaps that have allowed large tracts of land to remain pristine and undisturbed while preserving the natural beauty of recreation lands and facilitating industrial development on less sensitive areas.

According to local economic developers, the willingness of local leaders to work together emerged several decades ago through participation in ARC project prioritization exercises. Rather than seeing themselves as leaders of individual counties, they see themselves as regional leaders. They are comfortable promoting projects outside of their own jurisdiction because they recognize that they will benefit either as "the rising tide lifts all boats" or simply because working together provides the critical mass necessary to fund and execute projects that each county alone could not.

In terms of tourism promotion, regional leaders have realized that outdoor recreation is a given, thus their focus is on extending the season beyond the Memorial Day-Labor Day period ("add shoulders to the season"), extending stays (adding room nights and meals), and promoting activities that generate revenue ("make the cash registers ring").

One strategy to achieve these goals is water releases on the upper Ocoee River. Currently, the river has approximately 120 days of water on the lower portion which is long enough for half-day rafting excursions. Releases into the upper portion of the Ocoee River would allow for full-day rafting trips. Half-day rafting trips draw visitors from about a 150-miles radius, whereas full-day excursions draw from beyond that and encourage overnight stays even from visitors from within the current market area, as a full day of rafting is physically taxing. After a long, complicated planning process, SEIDA was able to borrow $1.1 million to buy water from TVA for release into the upper Ocoee River for 34 of the existing 120 days. SEIDA has signed long-term contracts with rafting outfitters wishing to operate on the upper Ocoee, and will repay the loan using fees collected from these outfitters.

Tennessee Overhill Heritage Association. One successful example of cross-jurisdictional cooperation for tourism development is the Tennessee Overhill Heritage Association, which focuses on McMinn, Monroe, and Polk Counties in Tennessee. SEIDA formed this organization in 1990 as a pilot through the National Trust for Historic Preservation's Heritage Tourism Initiative. During that period, the development of I-75 just west of the study area had shifted manufacturing away from the McMinn, Monroe, and Polk Counties and towards the I-75 corridor. Around the same time, there was a reduction in the amount of timber allowed to be cut, drastically limiting a major source of local government revenues.

Regional leaders realized the need to diversify their economic development strategy to include more emphasis on cultural heritage tourism. Tennessee Overhill was created to jointly market the region's small museums with the idea that though each individual museum would not attract many overnight visitors, together they would form enough of an attraction to draw from a larger overnight market. Within the first year, the need to include the region's recreation and outdoor assets became apparent. At the end of the three-year pilot, the organization became permanent, receiving operational support from the three county governments, City of Etowah, and special projects support through grants, donations and earned income.

Tennessee Overhill is unique in several ways. First, it does not operate on a "pay to play" basis which requires attractions to pay to be included in marketing efforts. Instead, Overhill considers each attraction's contribution to area hotels, restaurants and shops and its role as a piece of the whole tourism experience. Second, rather than a blanket marketing campaign, Overhill advertises in less expensive and more targeted venues, such as birding and whitewater rafting publications. Finally, cultural heritage travelers are not motivated by a list of an area's attractions. Instead, they are looking for content and interpretation, which Overhill brochures, publications and website provide.

The organization's major outdoor initiative is the rehabilitation of the 40-mile Old Line Haiwasee River Gorge Rail Road and operation of passenger excursions. This railroad used to serve a major copper mine operated by Tennessee Minerals, LLC that has since left the region. As the line was no longer in use, CSX planned to dismantle it. Seeing an opportunity to preserve a piece of the region's history and offer passenger excursions through otherwise inaccessible wilderness, SEIDA negotiated acquisition of line from CSX and entrusted it to Tennessee Overhill. Before acquiring the railroad, SEIDA and Overhill invited a team from the National Forest Rails to Trails program to inspect its condition, and the team found that if necessary the materials could be salvaged with minimal invasiveness, leaving the bridges and surrounding landscape in tact. This provided SEIDA and Overhill with the confidence of a "plan B" in the event that it was not profitable.

SEIDA also oversaw an ARC-sponsored feasibility study which determined that the line would need to run approximately 500 cars of freight in addition to passenger excursions to remain profitable. Some 10 million tons of iron oxide, commonly called calcine and recognizable as rust remain on the former mine site, and Tennessee Minerals has decided to sell it to "pig iron" manufacturing operations in China. Thus, Glenn Springs Holdings, a wholly owned subsidiary of Occidental Petroleum charged with the environmental remediation of the former mine, restored the tracks to the point that they could carry the freight. The company then entered a contract with Overhill for use of the tracks for cargo and in 2005, the first eight trainloads were shipped out. The contract also preserved the right for Overhill to operate passenger excursions, which will consist of shorter trips to the Appalachia Powerhouse, the Bald Mountain Loop, and a few full-day excursions to the Copperhill mine.

The organization sees potential for future tourism development associated with the Benton-MacKaye trail, a 300 mile footpath between Springer Mountain in Georgia to Davenport Gap on the northern edge of the Great Smoky Mountains National Park through isolated backcountry and numerous federally designated Wilderness and Wilderness Study Areas. Overhill has observed that there are numerous cultural and historic points of interest along the trail that could be further developed and promoted.

Southeast Tennessee Tourism Association. Another entity staffed and administered by the Southeast Tennessee Development District is the Southeast Tennessee Tourism

Association, which markets the region as a visitor destination. Recently, the organization embarked upon an interesting project to promote the region's diverse religious heritage. In 2005, the organization secured a $60,000 relief grant from the Economic Development Administration to help the region overcome damage done by a severe infestation of Southern Pine Beetles that hit two key regional industries, logging and agriculture.

The organization used the funds to hire a consultant from the National Trust for Historic Preservation to identify regional assets. The consultant identified the opportunity for the development of a religious heritage trail, which would capitalize on the region's diverse religious history. The concept was well received by the public, and the concept has been developed into the "Glory Land Road". The self-guided trail features the courthouse where the "Scopes Monkey Trial" took place; a Holocaust Museum in Whitwell; Beth Salem, a historic black church in McMinn County; the Brainerd Mission in Chattanooga where Cherokee Indians were converted to Christianity; and Our Lady of the Poor Shrine in Marion County which is a replica of a famous church in Belgium where the Virgin Mary is said to have appeared. The Tourism Association estimates that the region draws approximately 60,000 to 80,000 visitors each year for religious events and conferences, and the Religious Heritage Trail is designed to lengthen their stay, generate return visits, and increase expenditures.

Among other efforts, the organization also publishes the *Outdoor Recreation Guide*, *Shopping Guide to the Art Trails*, and *Out to The Farm Agritourism Guide,* all of which string smaller attractions together into a more comprehensive experience.

Coker Creek Economic Development Group. CCEDC provides an example of a local economic development organization's tourism promotion efforts. Coker Creek, Tennessee is surrounded by National Forest and is cut off from industrial development alternatives by Tellico Mountain on the North, Farner Mountain on the south, Unicoi Mountain on the east, and Cataska mountain on the west. Despite a lack of manufacturing, the area is rich in craft and folk art tradition, and the Coker Creek Economic Development Group (CCEDG) was initially formed to preserve and pass on these traditions to local residents. The organization found that outsiders were also interested in learning folk art traditions, and now craft workshops include visitors from Georgia, Florida and other areas. CCEDG operates the local post office which is adjacent to the organization's Welcome Center and arts and crafts retail space.

Barriers to Cooperation. Though the organizations discussed above have coordinated to overcome jurisdictional barriers to economic development, some difficulties remain. The State tourism bureaus of Tennessee, North Carolina, and Georgia have resisted funding cross-jurisdictional marketing efforts. A result is that though tourists consider the region a contiguous recreation area, there are separate guide materials for each of the three states.

The State transportation departments also lack mechanisms for working together, which has challenged the region's efforts to improve transportation connections.

Priorities for the Future. Regional economic development leaders are virtually unanimous regarding the region's leading economic development priority, and that is the completion of Corridor K. Corridor K is part of the Appalachian Development Highway System (ADHS) authorized by the Appalachian Development Act of 1965. As a whole, the ADHS encompassed more than 3,000 miles of highway necessary to connect Appalachia with economic development opportunities, and to date 85 percent of the system has been completed. Corridor K is one of the last remaining pieces of the system. Though the final alignment has not yet been determined, Corridor K would run from I-75 near Cleveland, Tennessee to Corridor A near Sylva, North Carolina, resulting in a direct connection from Chattanooga to Ashville (and consequently, Charlotte).

The North Carolina portion of Corridor K has already gone through the Environmental Impact Study (EIS) process and been approved. The Tennessee portion has been more contentious, however. The initial alternatives considered by the EIS received heavy criticism because among other concerns, the alignments included several bridges over the Ocoee River which stakeholders felt would detract from the natural beauty of the Gorge as well as the river rafting experience. A second alternative that cut expensive passes and tunnels through the mountains was rejected due to its billion dollar price tag.

A second regional priority, which is primarily relevant to the western end of the study area is the potential for a high speed rail connection from Chattanooga to Atlanta. Atlanta is a major airline hub and hosts the headquarters of numerous major companies. The two metropolitan areas already have strong economic ties, but increasing traffic congestion around Atlanta is limiting further integration of the two economies. A high speed rail connection would mitigate the barrier of traffic congestion by allowing tourists, businesspeople and residents to move more freely between the two regions.

6.5 Lessons Learned

1. Cross-Jurisdictional Planning, Coordination and Implementation - Potential employers and tourists alike view the study area as a region, rather than a collection of counties spanning multiple states. If regional leaders insisted upon marketing only their own individual tourist attractions and improving business conditions and transportation linkages only within their own jurisdictions, they would lack the critical mass needed to draw overnight tourists, and create and retain jobs in key industries. By creating an organization that rewards county leaders for thinking and acting like regional leaders (SEIDA), they have been able to better leverage resources from their respective states and raise the profile of their tourism assets to create a destination for overnight visitors who come to the are from a greater distance than the day trippers.

2. Understanding that Tourism Preferences are Changing - Just as the manufacturing sector has changed over the past several decades, the tourism sector is changing as well. Tourism once centered on relaxation and natural beauty. Two key emerging trends are eco-tourism and cultural heritage tourism, which reflect a preference for activity-based vacations. Thus the industry is shifting away from "one size fits all" attractions and toward those that allow visitors to create a more tailored, specialized vacation experience.

Regional efforts are helping ensure that local tourism attractions cater to these new preferences. Tennessee Overhill efforts such as "Furs to Factories Heritage Area: Exploring the Industrial Revolution in the Tennessee Overhill" and "From Native Gardens to Cheese Farms: AgriCulture in the Tennessee Overhill" string together individual attractions into a more unified, complete experience.

3. Sheer Creativity - This case study illustrates the importance of creatively using one problem to leverage a solution for another. For example, the concept for the "On the Glory Land Road" religious heritage trail emerged from a National Trust for Historic Preservation study funded by monies apportioned by TVA as relief from a devastating infestation of Southern Pine Beetles.

Another example was the acquisition of the Old Line Haiwasee River Gorge Rail Road by the Tennessee Overhill Heritage Association through SEIDA. The closure of the mine could have been a net loss for the region, but instead it is being used as a recreation asset and generating earned income through cargo shipments.

4. An Asset-Based Economy Depends on Market Access. Though the region has managed to assemble a unique and diverse selection of tourism offerings, regional leaders recognize that their ability to fully capitalize on them depends upon transportation access. Expansion beyond the day trip market and attracting visitors from throughout the southeast depends on safe and efficient highway linkages to the southeast's major metropolitan areas and tie-ins with the Interstate Highway system.

6.6 Interviewees

Hale Booth, Executive Director, Southeast Tennessee Development District

Linda Caldwell, Executive Director, Tennessee Overhill Heritage Association

John Carringer, Manager, Murphy Electric Power Board

Vicki Greene, Director of Planning and Development, Southwestern North Carolina Planning and Economic Development Commission

Bill Gribson, Executive Director, Southwestern North Carolina Planning and Economic Development Commission

Joe Guthrie, Manager, Southeast Local Development Corporation

Larry Kernea, Assistant Manager, Murphy Electric Power Board

Sandra H. Kimball, Executive Director, Cherokee County Chamber of Commerce

Hoyt T. Firestone, County Executive, Polk County

Bill Forsyth, Executive Director, Cherokee County Economic Development Commission

Beth Jones, Deputy Director, Southeast Tennessee Development District

Larry Mashburn, President, Ocoee Adventure Company

Delos Monteith, Institutional Research and Planning Officer, Southwestern Community College

Barbara Palmer Vicknair, Vice-Chairman (District 2), Cherokee County Board of Commissioners

7 ALABAMA: *AUTO ALLEY*

7.1 Introduction

Alabama provides a state-level case study that traces how Alabama's automotive-related manufacturing activity (initiated by attracting Mercedes-Benz to Tuscaloosa, followed by auto parts suppliers) is raising the economic prospects in the Appalachian portion of the state.

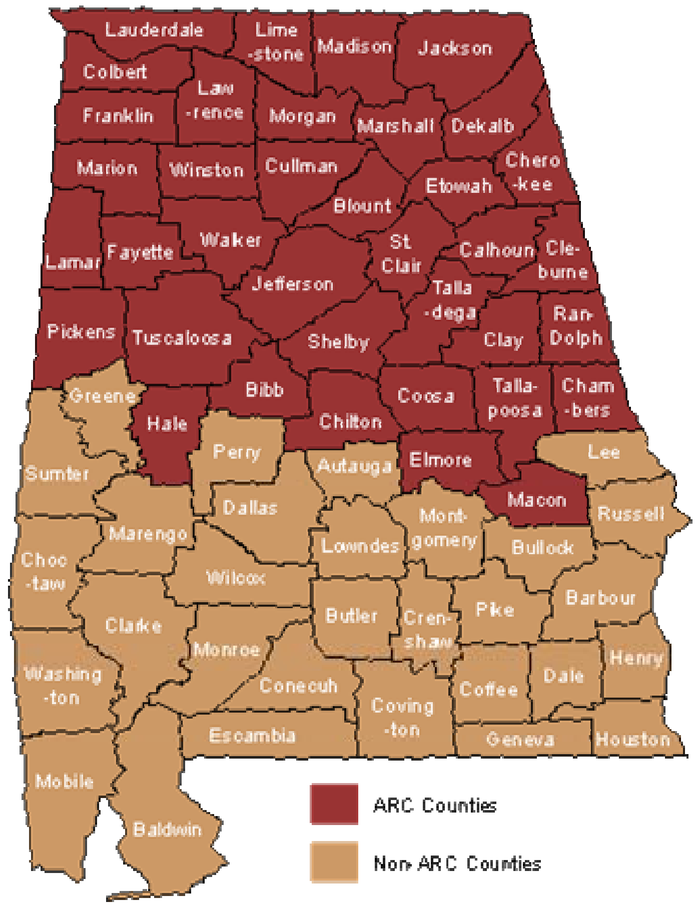
The Appalachian counties of Alabama have been at the center of a major industrial revival powered by foreign investments in the auto industry. The efforts Alabama made to attract Daimler Chrysler, Honda, Hyundai, and key suppliers resulted in the growth of an auto cluster that is now a well-known story. This case study examines the conditions that led to that success but also the extent to which the benefits reached the Appalachian non-metro parts of the state.

The strategy to attract the auto industry was an economic development, not a rural development strategy. Conditions in rural Appalachian Alabama, though not as dire as more southern areas or as other parts of Appalachia, nonetheless were poor compared to national standards. How did the auto cluster affect rural Alabama? Was there a spillover of investment and jobs into rural areas? Did it create new jobs and wealth or did it deplete non-metro counties by attracting the best and brightest to the higher paying jobs in the auto companies locating in metro Alabama? These issues motivated this case study.

7.2 Regional Profile

The Appalachian region covers the northern half of the state, as shown in Exhibit 7-1. Since this case study is vastly different from the other case studies in terms of its geographic size and level of diversity, the economic development context of the region is best understood by reviewing its historical evolution, and the predicament that it presented.

Exhibit 7-1. Northern Half of Alabama is within the Appalachian Region



This northern part of Alabama has a long industrial history that was built on the steel and related industries in and around Birmingham and, in the more rural counties, the traditional non-durable goods industries that migrated South during the middle third of the 20th century to take advantage of surplus labor, low costs, and right-to-work laws. The Appalachian counties of Alabama, in particular, benefited from the state's incentives, physical infrastructure, low wages, and federal investments.

During this period, manufacturing industry thrived in the rural areas. In 1984, the percent of employment in non-metro Alabama was 41.1 percent—and growing. The percent in metro counties was 18.5 and dropping. (source: Stuart Rosenfeld and Edward Bergman, *Making Connections: After the Factories Revisited*. Research Triangle Park: Southern Growth Policies Board, 1989). The share of metro workers employed in technical occupations, however was more than double the technical work force in non-metro counties. The biggest non-metro employers were furniture/wood (mainly in the northwest part of the state), metals, and apparel/textiles, rather than technology industries.

At the northernmost fringe of the state, in Madison County, Huntsville emerged as a high tech oasis. In the late 1940s, when Huntsville was still a small city in a non-metro county, the military brought German rocket scientist Werner Von Braun to the Redstone Arsenal. In1960 President Eisenhower dedicated the NASA-funded Marshall Space Fight Center there, and Huntsville became "Rocket City," one of the leading high tech centers in the nation.

The benefits of the space programs, however, did not reach out very far across the state, and in the early 1980s, Alabama began to realize that its still heavy reliance on low costs to recruit labor-intensive branch plants was increasingly precarious. Less developed countries could promise much lower costs with adequate skill levels and technological capacities.

7.3 Evolution of progress

In the1980s the University of Alabama, influenced by the work of the Southern Growth Policies Board and Southern Technology Center to connect universities and economic development, began looking for new investment. The northern area was home to the Southern Research Institute, University of Alabama, and a recognized high tech industry capability.

As part of the search for new and more stable industry, a university team and state officials together saw a window of opportunity in autos, a product for which growing domestic demand was likely to provide continued advantage and stability. The University of Alabama had prepared a strong proposal in the bidding to locate the Saturn plant in Tuscaloosa. Although GM ultimately chose the Nashville area, Huntsville came close enough that the die was cast to pursue the next big opportunity. That came in 1993, when Mercedes Benz announced it was looking for a U.S. location for a large new production facility, in large part to gain entry to the growing American SUV market, avoid currency fluctuations, and access new sources of knowledge.

Mercedes' needed a place in the United States that it could manufacture for both U.S. and export markets. To narrow down the options, the company established the following criteria:

1. labor force (underemployed but capable) and training system
2. physical infrastructure to make it easy to quickly reach suppliers and markets
3. supportive business climate (right-to-work, taxes)
4. existing and potential supplier base
5. strong university presence for access to business and engineering graduates plus adding to the area's "melting pot" environment
6. good quality of life, melting pot of auto cultures

Later, Honda's criteria would be quite similar, focusing first and foremost on the availability of a trained and trainable work force, logistics to accommodate movement of supplies and products, physical infrastructure, and opportunities for growth, and an accepting and cooperative community.

7.4 Catalysts of change

On all counts, Alabama was competitive. Its extensive road, rail, port, and air systems were essential parts of the infrastructure. Some suppliers were in place. The Appalachian region of Alabama was already home to a small part of the auto supply chain, including two General Motors suppliers in Tuscaloosa. Mercedes visited JVC during its decision-making process to see how the company operated in Alabama and observe any differences from what they were accustomed to in their German facilities.

Education and training, in particular, greatly enhanced the state's competitive position, but for different reasons. The most important, according to those involved in the process, was its customized training. The Alabama Industrial Development Training, which is funded through a direct state budget line item, was set up to deliver various levels of training plus a wide range of recruitment, filtering, and selection activities. The state's community and technical college system was not only already organized to prepare skilled technicians for many of the occupations critical to the auto industry through its Bevill Centers but also was a principal part of the state's manufacturing extension partnership (Alabama Technology Network). The primary impacts of the universities were the cultural and multi-cultural amenities and hospitable and open social environment they created in their respective regions.

The University of Alabama, with one of the first U.S. Department of Commerce-funded International Trade Centers, played a key role in convincing the German company to choose Alabama for its U.S. home. The universities also were sources of local expertise and problem solutions via their faculty and students in their science and engineering programs. The research capabilities of the universities have been more important to suppliers than the OEMs which continue to conduct most of their research near their home offices. The most valued contribution of the university, however, was the open and tolerant environment they instilled in their communities, particularly important to welcoming different cultures.

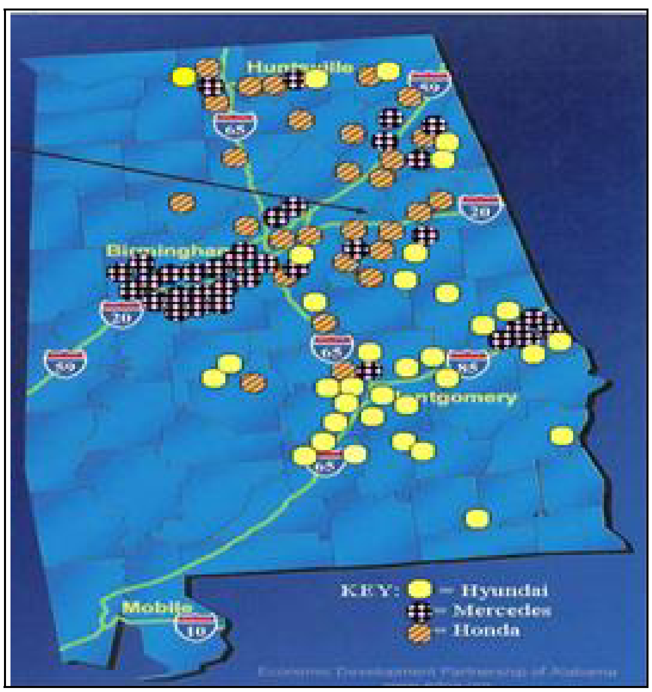
The elementary school system was undoubtedly the weakest link in the educational system. Although on average, Alabama is very close to the South's average, it has some of the most pressing rural education problems in the nation—ranked fifth most serious among all states(source: Jerry Johnson and Marty Strange, *Why Rural Matters 2005,* Rural School and Community Trust, 2005). But so long as a selection of good schools, public and private, were available to the employees and most employees were drawn from metro counties, overall statistics were not as barrier. It may, however, be one of the reasons that employment was so concentrated in urban areas.

The state further sweetened the pot—as did all the final candidates—with a sizable incentive package of $372 million, one of the largest given for new investment at that point in time.

Giving Birth to the Auto Supply Chain Cluster. The site selection team from Mercedes began with proposals from 30 states, reduced it to 12, then six, then three (North Carolina, South Carolina, and Alabama). In 1997 Mercedes announced its decision to build its plant in Tuscaloosa, Alabama. That decision put Alabama on the map of the U.S. auto industry, extending the automotive manufacturing corridor along Interstates 65 and 75 dubbed “Auto Alley” that ran from Detroit through Indiana, Ohio, Kentucky, and Tennessee into Appalachian Alabama.

With the rapid growth of auto industry in Alabama (and Nissan in Mississippi), the center of gravity of that dispersed supply chain has drifted farther and farther south. The choice of Tuscaloosa by Mercedes proved to be the birth of a full-blown regional supply chain cluster—that is, the state eventually developed the exporter-OEMs, a base of suppliers some of which are shared, specialized support, expertise, work force, education and training system, and social infrastructure that together comprise a cluster. The key was landing Mercedes. According to University Chancellor Malcolm Portera, “Had Alabama not landed Mercedes, there would be no auto assembly in Alabama.” In 1998, the first year of production, Mercedes produced 68,800 units. (See map of the Alabama auto cluster in Exhibit 7-2.)

Exhibit 7-2. Alabama Auto Assembly and Parts Manufacturers



The incentives were important to the location decision but, according to site selection team members and economic developers, the value of incentives to the final decision was overrated and they were not the deciding factor. (Of course, only Daimler-Chrysler knows whether or not incentives were decisive and like all auto manufacturers, are unlikely to speak forthrightly about their importance.) They remain important, however, because virtually all U.S. regions offer them, and the absence of incentives could rule a location out of contention. State and business leaders offered different perspectives on the relative importance of the different reasons the two OEMs gave for their location decisions, but they all agreed that presence of a trainable labor force and state supported industry oriented education and training programs were the most important assets.

7.5 Lessons learned

The Human Capital Factor - Alabama is a good example of how an educational system can be focused to prepare for new job opportunities. The key to acquiring and growing the auto cluster was the presence of an underemployed but trainable labor force with the work ethic and learning potential the plants needed. The assembly plants had to hire large numbers of pre-qualified workers in a relatively short time since they did not intend to bring their work force with them. Mercedes officials initially were somewhat skeptical of the ability of Alabama to match the skills of Mercedes' German work force that was trained in its renowned "dual" vocational system (classroom theory combined with extensive work-based experience). By the time Honda arrived, however, it was clear that export-quality vehicles could be assembled in Alabama. A by-product of this workforce redirection towards in-state automotive assembly functions also meant that Alabama could be home to other vertically-linked businesses claiming a node position in several automotive supply-chains. These firms are then tied to auto-related business in Tennessee, Kentucky, Ohio, Michigan, Georgia, South Carolina and North Carolina.

Although Alabama as a state had lower levels of education than most states (in 1980 almost of third of adults living in non-metro counties had no more than eight years of education), attainment levels were higher in the Huntsville area and the state had a good record in vocational-technical education. Mercedes was concerned but believed the work ethic and training capabilities were on balance an advantage. They also realized that because their pay and benefits were going to be far above the state average, they would be able to attract the best from the incumbent work force. The companies that lost employees, then, would have to replenish their work force from the school systems. But this also meant that new job opportunities would eventually be dispersed across the region.

Alabama Industrial Development and Training (AIDT), according to multiple sources, was particularly important to both assemblers. Although customized training is now ubiquitous across the U.S., AIDT offers a fuller set of services than most competing states, including advertising positions, taking applications, screening and then interviewing applicants, and conducting pre-employment training at plant sites, one of its permanent training centers, or in one of its 34 mobile units outfitted to meet a variety of technical training needs. The state's community and technical college system, which extended across the state, was an additional plus for Mercedes.

Mercedes initially brought over 150 Germans to conduct in-plant training and took workers to Germany for experience in German industry. But with the need to gear up and train a large workforce in a short time, the services and capabilities of Alabama's Industrial Development Training (AIDT) program quickly became a key to workforce recruitment, selection, and development.

The role of the university system is less clear cut. According to one state leader, it was "the spark that caused the automobile manufacturing fire" in the state. In this view, Alabama's engineering programs would provide the stream of engineers, student interns, and faculty consultants required to produce high-quality automobiles in a state with little experience in automotive manufacturing. Some graduating engineering did enter the industry but in general in the upper tiers of the auto industry, searches for engineers and top level managers tend to be national to attract the most experienced people possible. At the same time, engineering graduates from Alabama universities look nationally for employment—the majority of the state's engineering graduates leave Alabama to find jobs. The role of engineering students and programs, however, is clearer. Many students enter into coops with the industry and/or design engineering projects in cooperation with the industry. The presence of the schools offers opportunities for employees to get more advanced degrees or just upgrade their skills.

In the supply sector, there is little demand for engineering skills, as design and engineering are generally performed at existing sites in places like Michigan, Ohio, Germany, and Japan, rather than at new branch plants. There has been some movement into engineering functions at the 4th tier in Alabama and some prospects for further involvement. Overall, though, it might be the case, as one local official suggested, that the auto industry might rely more on University of Alabama's business school than on its engineering school.

***Building blocks of human resource development* -** The state's formal education system starts with pre-school and continues through post-graduate education. But a comprehensive human resource development system also includes a variety of vendor-, industry- and company-based education and training, continuing and management education and informal learning. In Alabama, the public sector plays a major role at all levels.

1. ***Alabama Industrial Development Training***, created in 1971 by the state legislature to support economic development, was a major resource for the auto cluster. Administered by the Department of Postsecondary Education, AIDT's highly placed advisory council from business, industry, and education guide and advise its work. In 2004, the governor and Mercedes jointly announced a new

"backfill" program called Focused Industry Training at 34 sites to help fill the positions left open by those hired by the auto industry. Sites are located in and around the three assembly sites. A 400-hour curriculum produced an Alabama Certified Worker credential recognized by many of the state employers. To underline its importance to Alabama, AIDT has a line item in the state's budget.

2. ***The University of Alabama*** was instrumental in focusing the state's resources on the auto industry and in developing the proposals for both Mercedes and Honda. Its engineering and business schools and its International Trade Center were key factors, but it also created a welcoming environment for foreign investment. It runs, for example, a German Saturday school on campus that teaches math, science, and German language. It helped orchestrate the "Commission on Community Change" to help improve the quality of life in the area. The Alabama Productivity Center at UA was available to work on production problems with companies and the Center for Advanced Vehicle Technologies was established in 1998, the year Mercedes began production, with funding from the U.S. Department of Transportation.

3. ***Alabama's community college system*** was also an important factor. In the final competition, North Carolina's governor even offered as part of its package of incentives to build a "Mercedes University" within its already strong community college system. Alabama's approach, however, was to offer to target the resources of its existing system. Bessemer Technical College (now merged with Lawson State Community College) and Shelton State Community Colleges both offered relevant education and training. The well-equipped Bevill Center for Advanced Manufacturing at Gadsden State Community College offered a nationally known and respected education and training programs in precision manufacturing and they housed a key part of Alabama's manufacturing extension service. That Center was the result of a historic partnership between the college, the University of Alabama, and the city of Gadsden growing out of successful efforts there to save a GM plant in the early 1980s. (source: Stuart Rosenfeld, *New Technologies and New Skills: Two- Year Colleges at the Vanguard of Modernization,* American Association of Community Colleges, 1995).

   The auto industry relies on the community college system for its more advanced training and to improve employees' opportunities for advancement. Honda encourages (and reimburses) its associates to work towards Associate Degrees at the community colleges. To accommodate Honda's policy of rotating its work force among shifts, the college system has arranged programs in which faculty alternate their class hours between day and evening consistent with the shift changes.

4. ***The state's public school system*** was probably the weakest link in Alabama's human resource development chain. While improving, it remains low compared to most other states, and was given a "D" by the Corporation for Enterprise development in its 2005 scorecard. Alabama ranks in the bottom ten states in

reading and math proficiency of 4th and 8th graders. One place the state has improved is in reducing the disparities among races and between genders, although disparities according to income were second highest in the nation. Graduation rates, while climbing, are still among the lowest in the nation. This is a particular issue for non-metro counties that, according to the Rural School and Community Trust. Alabama has the fifth most critical rural educational needs in the nation based on availability and distribution of educational funds, special needs, and poverty rates. (source: Jerry Johnson, Marty Strange. 2005. *Why Rural Matters: The Facts about Rural Education in the 50 States*. Rural School and Community Trust .)

The Topography Factor **–** also conducive to the entrenchment of automotive assembly activities in Alabama has been the availability of readily developable, affordable land amidst situated within an ample highway network.

7.6 Interviewees

Gregg Bennett, Alabama Technology Network and The Bevill Center for Advanced Manufacturing

Ernie Cowart, Senior Economic Development Specialist, Economic Development Partnership of Alabama

Robert Culver, Top Alabama Regional Council of Governments

Austin Dare, Mercedes-Benz

Brad Davis, Director, Alabama Technology Network

Steven Dean, Randolph County Chamber of Commerce

Dale Greer, Cullman Economic Development

Lee Hammett, Automotive Group Manager, AIDT

James Hayes, President, Economic Development Partnership of Alabama

Greg Knighton, Director of Business Information, Economic Development Partnership of Alabama

Jeff Newman, University of Alabama

Linda Paulmeno, Mercedes-Benz

Ray Perez, Honda Corporation

Malcolm Portera, Chancellor, University of Alabama

Bernard Schroer, Alabama Automotive Manufacturers Association

Steve Sewell, Executive Vice President, Economic Development Partnership of Alabama

Dana Stone, Program Manager, Alabama Technology Network

Perry Ward, President, Lawson State Community College

8.0 Conclusions – Strength of Growth Processes

The preceding six locations examined through case study exhibit distinct bases upon which their regional economies are organized, and varying degrees of success in achieving growth. Why do some of these studies show more pronounced evidence of a growth path than others? For locations with improving economic results can we attribute this to a growth orientation that's just right for the local conditions regardless of whether the evolution was organic or achieved by planning intervention? Or even if regional planners and local stakeholders diligently frame a growth path and strategy are they guaranteed success? What role does geography play in determining the strength of growing trade center, or a tourism market for example?

We summarize the highlights as follows:

Growth Affirming Case Studies

Case Study	***Chautauqua, NY***
Growth Process	***Tourism Development***

What worked

*Working to organize, market and leverage tourism assets into a year-round offering

*Diversify the county's economy to reduce the exposure to shrinking manufacturing presence

What Else worked

*Reinforced a vital segment of its Trans Equip MFG base & facilitated its expansion creating higher value-added/paying jobs and advancing the skills of the workforce. The latter with the help of the county's Workforce Investment Board and the community college's Manufacturing Training Institute

*Selective retention of this firm and other manufacturing likely not possible without ADHS corridor "T " which offers a viable connection to I-79 and I-90.

Growth Affirming Case Studies

Case Study	***Alabama's Manufacturing Resurgence***
Growth Process	***Automotive Assembly***
What worked	
*Incentives alone were not expected to be the silver bullet	
*State's Educational system (k-12, Community Colleges and advanced degree conferring institutions) has been a proactive and responsive element to assuring the workforce needs of all aspects of the vertical-chain of firms	
*Leadership from both state and regional agencies persevered to succeed in the germinal event - attracting Mercedes-Benz to Tuscaloosa	
What Else worked	
*Workforce programs assisted in retraining textile workers from jobs going overseas to automotive applications growing in state.	
* Ample land resources (typically flat green fields) with relatively unencumbered permitting process	
*Good highway accessibility to parcels developed	

Growth Affirming Case Studies

Case Study	***Corridor K Region***
Growth Process	***Tourism Development***
What worked	
*Regional collaboration (e.g. *SEIDA*) between SE TN and SW NC to further develop eco-recreational-cultural tourism assets	
*Addressing the road access capacity to carry regional visitors	
*Water resource planning to support rafting tourism	
What Else Needs to Happen	
*Establish a direct connection between the terminating corridor cities of Chattanooga and Asheville that will separate through traffic from tourism trips to corridor communities	
*Ensure that cities such as Murphy (Cherokee Co., NC) that desire to retain a healthy industrial component obtain efficient highway links to I-85, and I-65.	

Growth Affirming Case Studies

Case Study	Morgantown-Fairmont
Growth Process	Hi-Tech Spin-offs from Educational Assets

What worked
*I-79 backbone through the Morgantown MSA has facilitated regional collaboration, most predominantly between Morgantown and Fairmont.
*Infusion of federal research grants secured by U.S. Congressional representative & research readiness
*City of Morgantown provides good entrepreneurial support
*Ample higher education assets: WVU (Morgantown), Fairmont State University & Fairmont State Community Technical College
*Technology-transfer office of WVU and WV High Tech Consortium in Fairmont
Fairmont's smaller hi-tech economy appears to serve as a complement to Morgantown's economy
What Else Works
*I-68 connection (ADHS corridor E) links Morgantown to Baltimore-Washington area
What Else needs to Happen
*Fairmont needs to find opportunities to commercialize federal support research and incubate local start-up firms
*Region needs additional east-west access without which the current limited extent of beneficial urban spillovers intraregionally goes unchanged

Growth Ambiguous Case Studies

Case Study	Scioto County Ohio
Growth Process	Alleged Trade Center

What Happened
Extra-regional N-S and E-W highways bypassed the county
Difficult transition since 1980 as key manufacturing sectors (e.g. Steel, Shoes) moved jobs overseas
Lack of critical mass in services to effectively draw surrounding rural consumers (household or business)
Adverse urban backwash effect on Scioto as surrounding rural counties gained access to extra-regional metro area markets in Columbus, Cincinnati and Huntington WV.
Geographic constraints of hilly terrain and flood plains of the Scioto and Ohio rivers limit developable land
What Else needs to Happen
Develop cultural and shopping amenities
Remedy recruitment problem for doctors to the So. OH medical Center
Launch high-tech health care services for hospital to serve a broad regional market in a realistic niche
Build on the regional collaboration success of SODI in securing a new manufacturing resurgence in Scioto using joint infrastructure financing, brownfield redevelopment
Build from/retrain the remnants of Scioto's strong manufacturing workforce

Growth Ambiguous Case Studies

Case Study	***Pike Co., KY and Big Sandy Area***
Growth Process	***Diversifying from Extraction Industry reliance***

What Happened
*Unique cut-through project completed in 1987 provided Pike Co. new developable land and better access
*County as recipient of Coal Severance Tax to fund community development projects
*Though still an economy based on coal mining, Pike Co. has taken on a function as a regional economic hub for other counties in the BSA
*Emergence in healthcare services the result of cooperative efforts between Pikeville Medical College & Pikeville Medical Development Corporation (PMDC)
*PMDC also champions non-healthcare economic development opportunities for the county
*Pike Co. has good highway access, offers rail freight service and a regional airport
What Else needs to Happen
*Furthering industry diversification will require retraining of former mining workforce given population losses
*More multi-county planning initiatives to remedy the paucity of positive economic spillover from Pike Co. to the four other BSA counties which remained *distressed*
*Investment in regional amenities to retain/attract working age population

These examples each show that numerous interventions or aspects contribute to the economic situation counties find themselves with. Whether economic progress or stagnation is the situation, these processes take time. This is both double-edged. First, there is no quick turn-around strategy. Well conceived program investments and targeted policy must be committed to with patience and a willingness to reassess over time and readjust as the background regional or macroeconomic conditions change. Second, there is always a time to take action towards improving the economic prospects of communities that have been in persistent distress. Some of these communities have high hurdles to ever developing a modest sized employment centers for their working age residents. This does not however preclude ensuring that populations gain access to regional employment opportunities – so that expanding healthcare services growth in Pike County may spell more of an opportunity for workers from Floyd, Martin, Magofinn and Johnson counties as well.

Likewise Scioto County, a distressed micropolitan area, along with six other distressed Appalachian counties in the local development district need to build more regional solutions that can leverage the economic success at the periphery of the district and Appalachian boundary (in Brown, Clermont, Highland & Ross counties) to help revitalize the core of the region.

Many of the barriers or challenges to growth can be named: *topographical* (land constraints or access barriers), *underserved by necessary transportation infrastructure, limited local market demand, limited local services, limited labor supply and quality from persistent out migration and limited educational-training resources, neighboring economies that compete or fail to synergize regional opportunity, adverse urban/core backwash effects*.

Last, the case studies demonstrate that several key aspects must improve in sync to welcome economic development. All growth paths require good transport access and a suitably trained workforce for the employment center they will access. Other important components depending on the growth strategy are attracting federal research dollars to advance the role of higher-education institutions that are present, and learning to commercialize research and spur small business starts; evolving recreation and cultural assets into a tourism product with critical mass and learning to market the product; and improving both housing stock and local amenities as a mean to retain and attract working age population.

In the next volume of findings for the study of Sources of Growth in non-metro Appalachia, we interpret several statistical tests of the possible spatial influences at work in the economic outcomes of Appalachian counties.