

ECONOMY

INTRODUCTION

This element examines Boone County's economic situation as it relates to individuals as well as the county in general. Characteristics such as income, unemployment, poverty, population, and employment, the type and distribution of jobs in the county, and commuting patterns are examined as they relate to Boone County's citizens and workforce. This element also examines economic factors related to the county in general such as the types of jobs available, employment levels (the number of employees by sector), and employment trends or major directions in county employment.

Income

From 1990 to 2010, the average income of Boone County residents (per capita personal income) increased steadily and was slightly higher than average personal incomes in the Northern Kentucky region (Boone, Kenton and Campbell counties) and even more so than the State of Kentucky as a whole. **Table 4.1** illustrates this growth and compares the county's per capita incomes with the region and state.

TABLE 4.1 PER CAPITA INCOME BY JURISDICTION

	1990	2000	2010
Florence	\$12,728	\$20,451	\$24,023
Union	\$15,001	\$27,626	\$33,034
Walton	\$10,617	\$17,296	\$19,476
Boone County Overall	\$13,576	\$23,535	\$29,010
Kentucky	\$11,153	\$18,093	\$22,515
United States	\$19,354	\$21,587	\$26,059

Source: U.S. Census, American Community Survey (ACS)

In a general sense, the steady increase in the per capita income of Boone County is representative of the steady monetary growth of the county's economy despite the recent downturn in the national economy. The latest available data on the average income of residents in Boone County reveals that, as a whole, it lies above the average per capita income for the Northern Kentucky Region (Boone, Kenton, and Campbell counties inclusive), as well as that of Kentucky. This generalization holds true for family and non-family households. **Table 4.2** details these findings.

TABLE 4.2 MEDIAN HOUSEHOLD INCOME CHANGE

	2000	2010
Boone County Overall	\$53,593	\$64,008
Kentucky	\$33,672	\$40,062
United States	\$41,994	\$60,609

Source: U.S. Census, American Community Survey (ACS)

As shown in **Table 4.1** and **Table 4.2**, Boone County's income levels are generally higher than state and national averages. The gap is larger for households, suggesting that average household size is larger in Boone County also. Incomes in the Union area continue to be the highest in Boone County.

Unemployment

During the period from 1982 to 2010, Boone County's lowest unemployment rate was 3.1 percent in 2000. The highest rate was 9.9 percent in 2010 due to the recent economic downturn. The unemployment rates for Boone County are presented in **Table 4.3**, along with those for Northern Kentucky, Kentucky, and the United States. Boone County's economy tends to fluctuate with the economies of the larger economic bodies. The

unemployment rates of the county more loosely follow the state and national trends, and consistently remain below the rates for both. Unemployment rates for 2010 are similar to those in the early 1980's, a recessionary period. A decade ago, the rate was at historically low levels. This means that Boone County has tended to fare better in terms of unemployment both during periods of national economic recession and growth.

TABLE 4.3 UNEMPLOYMENT RATES, PERCENTAGE

	1982	1990	2000	2009	2010
Boone County	9.5	3.4	3.1	8.0	9.9
Northern Kentucky	8.7	3.6	3.7	8.3	10.6
Kentucky	10.6	5.8	3.8	10.0	11.7
United States	9.7	5.5	3.6	8.5	10.6

Source: KY Cabinet for Human Resources, Northern KY Chamber of Commerce

Poverty

Poverty status for individuals and families in the United States is determined by the costs of food consumption for a family of three or more persons. The U.S. Department of Agriculture determined in 1955 that poor families of three or more persons will spend a third of their income on food. The poverty level or threshold was then set at three times the cost of this economy food plan. For smaller families or individuals, the relative cost of the "economy food plan" was higher to compensate for higher fixed costs in these smaller households. The U.S. Census Bureau uses these guidelines to create a table of poverty thresholds of income, based on family size and number of children less than 18 years of age.

The level of poverty in an area reflects, to a certain degree, the degree of economic stress in an area. The U.S. Bureau of the Census adjusts the poverty threshold annually as the Consumer Price Index (CPI) changes. The formulas for "poverty line" calculations are a function of the income necessary for a family of 3 or more to meet basic needs of healthy living, i.e., the food, shelter, and clothing required to preserve health. Other than annual adjustments per the CPI, the formula has not changed significantly in 40 years. The poverty rate represents the percentage of the population that is living at or below the established poverty line. Boone County's poverty rate was very low in 2000, providing an indication of a strong economy. The highest poverty rate since then was 8.1 percent recorded in 2009, reflecting the presence of a national economic downturn. The poverty rate has increased in recent years because of the economic downturn. **Table 4.4** demonstrates that Boone County's poverty rate consistently is lower than neighboring counties and the state overall. In 2010 Boone County had 9.2% of its citizens under the poverty level, compared to the statewide percentage of 18.9%. In 2010 the percentage of citizens below the poverty level was at 13.3% in Kenton County and 13.0% in Campbell County.

Table 4.5 compares the poverty levels of families for the years of 1980, 1990, 2000, and 2010. After holding steady for nearly 20 years, the past decade has seen an increase in the number of families who fall below the poverty level.

TABLE 4.4 – PERCENT POPULATION BELOW POVERTY LEVEL

	1980	1990	2000	2010
Boone	7.8	7.4	5.6	9.2
Kenton	11.0	9.9	8.9	13.3
Campbell	10.5	11.0	9.1	13.0
Kentucky Overall	19.3	19.0	15.8	18.9
U.S. Overall	13.0	13.5	11.3	15.3

Source: U.S. Census

TABLE 4.5 – POVERTY LEVELS BY FAMILY, 1979, 1989, 1999, 2009

Number of Families Below Poverty Level								
Year	With Children under 18				Without Children under 18			
	1979	1989	1999	2009	1979	1989	1999	2009
Florence	365	319	498	581	87	74	85	401
Union	3	12	11	28	2	0	3	14
Walton	31	71	31	59	10	9	6	26
Unincorporated	470	390	502	1,502	128	131	97	1,045
Boone County	869	792	1,042	2,170	227	214	191	1,486

Source: U.S. Census, American Community Survey (ACS)

The Population and Employment

Table 4.6 shows the total labor force (Boone County residents eligible to be in the labor force whether employed or not), the employment (number of jobs) in the county and the total employment figures for Northern Kentucky (Boone, Kenton, and Campbell Counties) for the years 1980 to 2010. Overall the county's labor force and employment have steadily increased over the years.

TABLE 4.6 – BOONE COUNTY LABOR FORCE AND EMPLOYMENT, 1980-2010

Year	Total Labor Force	Employment	N. KY Employment
1980	22,239	20,900	121,390
1985	25,600	24,038	127,933
1990	30,919	29,874	140,907
1995	37,980	36,160	146,510
2000	46,791	45,323	165,941
2010	64,234	59,153	183,538

Source: U.S. Census, American Community Survey (ACS)

Table 4.7 compares the Occupation of Employed Residents by Area for the years 1999 and 2010. This table clarifies the types of occupations of Boone County residents. It gives us an initial discernment of the social/economic profile of Boone County residents. From 1999 to 2010 county residents who worked in managerial/professional occupations increased by almost 60 percent. Across the board increases, except in construction/maintenance, are consistent with the pattern of more high-income wage earners migrating to Boone County. They have helped stimulate the dramatic growth in residential and commercial development in the county over the past 10 years. The increases in these categories are also consistent with the continuing trend toward two-worker families.

The Boone County resident worker population has become more "white collar" or professional in orientation than in the past. This has happened across the board in Boone County, not just in the unincorporated areas or Union, as might be expected. It is highly likely that many of these professionals commute outside Boone County.

Commuting Patterns

The relationship of county commuting patterns to the metropolitan region is a valuable tool for analyzing the county's economy, as well as its relationship to the region's economy and transportation systems. In 1980, the Bureau of the Census listed Boone County as having 9,047 resident workers. Of these, one-half worked within

the county and the other one-half commuted outside of Boone County. There were 23,589 resident workers by 2000, and the same ratio existed, with nearly half working outside the county. These job-related commuting patterns are termed transpositions.

Table 4.8 and **Table 4.9** show the transpositions of the labor force by decade. By comparing the commuting patterns for 1970 and 1980, it is clear that transpositions increased during this ten-year period, with non-resident county workers, a trend that began to reverse during the 1990's. In 2000, the resident county workers outnumbered the non-resident county workers. However, 2009 data shows that this trend reversed over the last decade until the non-resident county workers reached the highest recorded level just as there were fewer resident county workers. **Table 4.8** details the number of resident, nonresident, and resident out commuters for Boone County from 1970 to 2009. **Table 4.9** presents the statistics in **Table 4.8** (both resident and non-resident) as percentages. Based on the 2009 numbers in **Table 4.8**, Boone County's resident employee numbers decreased nearly 17% from 2000, whereas the number of non-resident workers more than doubled.

TABLE 4.7 – OCCUPATION OF EMPLOYED RESIDENTS; BY AREA FOR 1999 & 2010

<i>Occupation of Employed Residents</i>	Boone County	
	1999	2010
Management, Professional, & related	14,520	23,111
Service occupations	5,357	8,422
Sales & Office	13,647	16,258
Farming-Forestry-Fish	114	127
Construction-Extraction-Maintenance	4,047	3,474
Production/Transportation	7,368	8,108
TOTALS	45,053	59,500

Source: U.S. Census, American Community Survey (ACS)

TABLE 4.8 – BOONE COUNTY TRANSPOSITION, 1970-2009

	1970	1980	1990	2000	2009
Resident County Workers	4,099	9,047	14,102	23,589	19,575
Non-Resident County Workers	4,025	11,687	15,772	21,734	44,142
Resident Out Commuters	7,034	9,172	14,412	20,918	33,044

Source: U.S. Census, American Community Survey (ACS)/Local Employment Dynamic (U.S. Census)

TABLE 4.9 – BOONE COUNTY WORKERS BY PERCENT RESIDENT OR NON-RESIDENT, 1970-2009

	1970	1980	1990	2000	2009
Resident County Workers	50.4	43.6	47.2	52.0	30.7
Non-Resident County Workers	49.6	56.4	52.8	48.0	69.3

Source: U.S. Census, American Community Survey (ACS)

The exchange of workers continues to happen to the greatest degree between Boone County and Kenton County in Kentucky, and between Boone County and Hamilton County in Ohio. In 1990, 11,299 Kenton County residents worked in Boone County; by 2000, the number had increased to 17,053. The number peaked in 2007 at 17,634 but has since fallen off to 13,947 in 2009. In 1990, 3,044 Hamilton County residents commuted to Boone County to work; by 2000, the number had more than doubled to 6,505. By 2007, it reached 8,743, but fell to 6,838 in 2009. The amount of workers commuting to Boone from Clermont, Campbell, Kenton, and Dearborn Counties significantly outnumbers those commuting from Boone County to those counties, while Hamilton County is the only county that receives more workers than Boone County.

The counties immediately south of Boone County, Grant and Gallatin, continue their dependence on Boone County for jobs. This same phenomenon is now happening between Boone County and Dearborn County in Indiana. In 1990, there were 784 workers from Dearborn County commuting to Boone County. By 2000, it had almost doubled to 1,466. The significance of these numbers is that it indicates the strong economic ties Boone County has with the surrounding region. To some extent these other counties act as bedroom communities for Boone County, even though Boone County is a suburban county. The county's economic growth directly affects the counties to the south and Dearborn County in the north. The recent economic downturn has clearly impacted transpositions, both into and out of Boone County. Any future economic transformations in Boone County will have an impact on all surrounding counties.

Part of the explanation for the growth in employment has to do with the overall trend in the growth of industrial and commercial uses in suburban areas from 1970 to 2009. Much of this growth in Boone County was stimulated by the expansion of airport operations during the 1980's and 1990's. **Table 4.8** clearly illustrates the substantial overall increase of commuters on Boone County's roadways. There were 11,059 commuters (both non-resident workers and resident out workers) on Boone County's roadways in 1970. By 1990 that number had tripled to 36,000 commuters, increased to 42,652 in 2000 and stood at 77,186 in 2009.

Employment projections by the Ohio-Kentucky-Indiana Regional Council of Governments (OKI) predict that there will be 108,049 jobs in Boone County by the year 2030. Light-rail and improved bus services could be in place by that time. Otherwise, traffic congestion on Boone County's roadways would be significant and could have the effect of limiting this expected growth in employment.

The questions that could be asked about present and future transpositions are "who commutes in and out of the county?" "Why?" According to the data in **Table 4.7**, the number of workers in Boone County increased by 14,447 people over the last decade. 8,591 of these workers, or almost 60% of the increase, are in the Management and Professional occupation category. This data implies that Boone County "imports" its professional workers, while the County's non-professional, lower-wage workers tend to be largely made up of Boone County residents. Further study with more detail looking at a cross section of occupation and commuting patterns would shed more light on this issue.

Transpositions are generally viewed negatively by transportation planners because a transposition most often means commuting in a single occupant vehicle (SOV). If the projected increase in employment as described above happens in Boone County and present commuting habits persist, it would result in similar increases in transpositions. If no changes in commuting habits are seen, or no major roadway capacity improvements or transit improvements (i.e. light-rail, feeder bus) are implemented, economic development could result in chronic congestion and increased pollution problems for the whole region. **Table 4.10** gives the trips to and from Boone County by location. The average daily commuting trips for the OKI region was 909,906 in 2000 and 1,017,575 in 2008, an increase of 10.6 percent.

TABLE 4.10 – BOONE COUNTY COMMUTING PATTERNS IN 2000 and 2008

	Trips from Boone County		Trips to Boone County	
	2000	2008	2000	2008
Butler	641	1,880	857	1,430
Clermont	350	1,120	1,422	3,190
Hamilton	8,351	21,860	6,505	14,540
Warren	242	430	337	580
Boone	23,589	31,930	23,589	31,930
Campbell	1,150	1,340	4,062	4,075
Kenton	8,220	11,270	17,053	16,735
Dearborn	350	1,470	1,466	3,230
TOTAL	42,893	71,300	55,291	75,710

Source: Ohio-Indiana-Kentucky Regional Council of Governments (OKI)

Employment Types

As described in the Business Activity Element, there are two categories of industrial activity, base and non-base. Base industries furnish the products which sustain society, such as those derived from agriculture, mining, and manufacturing activities. Non-base industries are users and marketers of base industrial products. These support or service activities have developed beyond the simple distribution of physical products to the provision of human services.

The two industry types are interrelated and interdependent. Base industrial activities are responsible for bringing outside income into a community. Non-base industries then circulate that income while providing the services necessary both for the operation of base industries and for daily activities of all residents in the community.

While base industries provide the foundation for a long term employment sector, base industry products, employees and families immediately generate the need for non-base support industries. This develops an urban growth cycle of population, products, and service, in terms of both volume and diversity. Growth may be considered to be an increase in volume. Base industries increase their activities and expand their employment rolls in response to market demand for their products. Such growth generates population increases and requirements for additional non-base services.

It is important to realize the constraints of the comparison. With the shift of the past few decades in the United States to a post-industrial economy, the base and non-base distinction no longer strictly follows traditional lines. Boone County's strong retail, office, and service sectors serve as a regional base and act as a regional draw resulting in significant outside dollars flowing into the county's economy. The U.S. Census and other data sources also change, combine, or split categories over time, which often makes data difficult to compare.

Furthermore, Boone County's economy is strongly tied to the Greater Cincinnati Metropolitan Area's economy. It is important to note that several factors outside the county have an important affect on the county's economy. However, despite these constraints the base to non-base analysis does reveal important aspects of the county's economic anatomy, and this comparison is useful in establishing the current status of economic factors.

Table 4.11 contains employment numbers for Boone County's major industries for 2005 and 2010. Of the represented industries, Agriculture/Mining, Construction, Manufacturing, and Transportation/Warehousing/Public Utilities are base industries, and Trade (wholesale/retail), Professional (finance, insurance, real estate, scientific, management, administrative, and information), Education and Health Care, Services (arts/entertainment, hospitality, and food), and Public Administration are traditionally non-base industries. Increasing numbers of services and public administration/real estate industries may be considered base employment in a post-industrial, metropolitan area.

Before 1960, a greater percentage of Boone County residents were employed in base industries than non-base industries. This trend began to change during the 1970's; by 1980, non-base industry employment accounted for nearly 60 percent of the total county employment. This shift in the major employment sector is partly due to the decreasing role of agriculture in the county's economy. In 1940, agriculture accounted for nearly 53 percent of the county's employment; by 1980 agriculture employed just over 2 percent of the county's workers, and in 2009 was approximately 0.04 percent, up from 0.027 percent in 2005. This trend is representative of the county's transition from a rural to an urban economy.

TABLE 4.11 –EMPLOYMENT BY MAJOR INDUSTRY IN BOONE COUNTY, 2005-2009

Year	Ag/ Mining	Constr.	Manuf.	Trans/Ware- housing/ Utilities	Trade	Prof.	Educ/ Health Care	Serv- ices	Pub. Admin	Work- Force (16+ yrs)
2005	158	3,827	7,364	7,813	10,872	8,402	8,494	9,019	2,349	58,298
2010	396	2,977	7,868	5,871	9,342	9,285	12,362	7,290	2,546	64,234

Source: U.S. Census, American Community Survey (ACS)

Employment Levels

According to the data, the top three industries are Educational/Health Care, Professional, and Trade, all non-base industries. 48 percent of the workers in Boone County were employed in one these three industries.

Some industries show evidence of being fairly volatile in terms of employment, with important shifts from year to year in the number of workers employed. Construction experienced the greatest shifts in numbers of employees from year to year, and Manufacturing likewise experienced substantial changes in the number of workers employed. The employment levels for Trade and Professional industries have demonstrated a steadier, positive growth. Again, the growth in these non-base industries has closely followed the regional pattern, in which the non-base industries did not experience the declines during periods of national recession that the base industries experienced.

This brief analysis of employment numbers again suggests that Boone County's economic complexion is shifting from the traditional prominence of Manufacturing and Trade to that of non-base industries such as Trade, Professional Services, and the Education/Health Care industries.

Employment Trends

Future trends should include a continuation in the growth of wholesale/retail employment, considering the planned redevelopment of the regionally-oriented commercial district in the Mall Road Area into a mixed use urban community and the continued expansion of the Houston/Donaldson commercial development. There should also be growth in manufacturing employment with the continued expansion of industrial development around the airport and along U.S. 25 near Richwood. The airport reported that aviation affiliated employment had expanded from 10,000 in 1994 to more than 15,000 in 2000. In 2005, the University of Cincinnati Economics Center for Education and Research estimated a total of 55,800 jobs in the region and has an annual economic impact of \$4.5 billion.

CONCLUSION

Economic Development and a Sustainable, Regional Economy

The late 1980's and the 1990's contained a resurgence of growth in manufacturing. However, this has not continued during the last ten years. The Northern Kentucky Tri-County Economic Development Corporation (Tri-ED), a non-profit corporation serving the three Fiscal Courts of Boone, Kenton and Campbell counties, is charged with recruiting companies into the Northern Kentucky region. Tri-ED has clearly been successful in recruiting firms into the industrial developments. In recent years, Tri-ED has also placed an emphasis on retaining existing businesses. The region's specific resources and strengths should be nurtured as catalysts for economic

development. Boone County, Northern Kentucky, as well as the whole Cincinnati Metropolitan region, should start taking the necessary steps, now, to make the transition to a sustainable, regional economy of the future. Furthermore, the establishment of small business and incubator business assistance should become a priority so as to encourage local businesses to start and grow here in Boone County.

A sustainable economy would be sustainable from generation to generation. It would not be as susceptible to national recessions or highly dependent on national expansions. A sustainable economy's engine would not be growth by any means, but instead, continuous innovation and regional cooperation and integration. A sustainable economy holds the promise that economic development, environmental preservation and restoration, and the evolution of a regional orientation (that is inclusive of central city and outer suburb) could all come together as coordinating parts of a continually renewing, economic system, which is competitive in the new world economy.

During the 1990's Boone County added a tremendous amount of warehouse and distribution centers. This type of use occupies significant amounts of land while not creating a significant number of jobs per acre. Adjacent counties and cities have expressed desire in attracting these types of employment opportunities. Boone County should work with Kenton and Campbell counties in order to appropriately locate these types of businesses.

To illustrate that we are already beginning to take the initial steps to create a sustainable, regional economy, some attributes of such an economy are characterized below, along with descriptions of Boone County's and the metropolitan region's actual "initial steps". Recommendations for the next steps to be taken by the county are then introduced.

A most important attribute for a metropolitan region with a sustainable economy is the development of an infrastructure of public transit, roads, bike paths, and pedestrian facilities, so that human-scale community is enhanced and options to auto travel are ubiquitous.

The Economy Element's Goals and Objectives describe other definite attributes of a sustainable, regional economy. These include support of local agriculture and patronage of local business products and services. Examples of local support for agriculture include the farmers' market in Burlington. The State of Kentucky has promoted this Farmers' Market as the ideal outlet for traditional tobacco farmers to sell alternative crops like fruits and vegetables and to help shorten the distances our foodstuffs are transported as well as enabling our local farmers.

Encouraging the establishment of recycling programs and recycled materials industries is another objective in the Economy Element that describes specific attributes of a sustainable, regional economy. Boone County has maintained a volunteer curbside recycling program for the community. Another step that could be taken would be maximizing the use of the local governments' purchasing power so that recycled products would be purchased. The State of Kentucky has instituted such a policy.

Maximizing energy conservation and the development of local renewable resources are also two other attributes of a regional, sustainable economy. Duke Energy is now promoting energy conservation that includes recommendations for replacing normal light bulbs with long-life, energy-efficient, fluorescent bulbs, as well as, energy audits for homes that give homeowners tips on energy savings. Duke Energy is also promoting a program for conversion of government, school bus, taxi, or delivery fleets to natural gas vehicles.

Overall quality of life and local economic health can be assisted by the presence of a strong pedestrian and bike system that connects neighborhoods, employment uses, retail, recreation facilities, government centers, and community identifiers such as historic sites. These systems or individual paths can give identity to an area of the county and encourage small business growth. Examples would include the Mary Ingles (historic pioneer) trail system along the Ohio River, a General John Hunt Morgan (Civil War) trail through the center of the county, or an airport perimeter multi-use trail system.

In conclusion, the county and metropolitan regions are already making the transition to a sustainable, regional economy out of necessity. There are many further steps to be taken by all levels of society. What are now

viewed as environmental problems (e.g. energy inefficient construction methods) will actually become opportunities for new, innovative sustainable businesses (e.g. retrofitting older structures for energy conservation).

In the last 25 years, Boone County has experienced rapid population and job growth. New jobs have been created in many employer classifications or sectors of the economy. Furthermore, job growth has occurred with various size industries. The strength of Boone County's economy has been its diversity and its growing global influence. As a result of the past job growth and recent economic downturn, it is recommended that a detailed study or analysis of Boone County's economy be performed to provide an accurate profile of Boone County businesses and labor force, employment trends, workforce readiness, etc. Such a study would also evaluate the strengths and weaknesses of current industry types and their potential for expansion. It could also be used to recruit target industries suitable to Boone County and its local workforce. City/County officials will then be able to use this information to promote job growth within their jurisdiction and provide direction on incentive programs to expand existing businesses or recruit new ones.