

**AN ECONOMIC ANALYSIS OF  
CARROLL COUNTY IN  
NORTHWEST ARKANSAS**



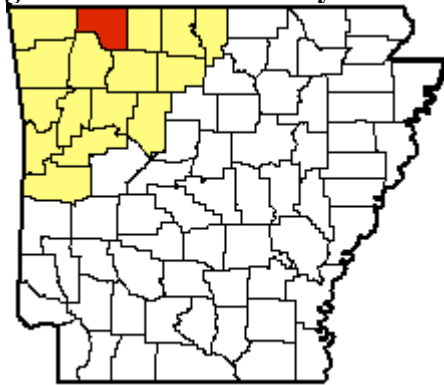
Center for Business and Economic Research  
Reynolds Center Building 217  
Sam M. Walton College of Business  
1 University of Arkansas  
Fayetteville, Arkansas 72701-1201  
(479) 575-4151  
August 30, 2002

# An Economic Analysis of Carroll County in Northwest Arkansas

## I. Geographic Description

Carroll County is comprised of 630 square miles and is located along the Missouri-Arkansas border in the physiographic regions known as Salem and Springfield Plateaus. Figure 1 highlights the counties that comprise the Northwest Arkansas region, as defined by the Arkansas Department of Economic Development. Carroll County is shown in red; all other counties in the region are shown in yellow.

**Figure 1 – Carroll County’s Location**



Part of Beaver Lake is located in the extreme western portion of the county. The Kings River flows north from Madison County through Carroll County to Table Rock Lake in Barry County, Missouri.

Sources:

United States Census Bureau. State and County QuickFacts.

<http://quickfacts.census.gov/qfd/states/05/05015.html>

Chart 2-5: Physiographic Regions. Arkansas Statistical Abstract – 2000. April 2000.

Census State Data Center, University of Arkansas at Little Rock. Page 72.

The Rand McNally Road Atlas, 2002 Edition. Page 10.

## II. Demographic Characteristics

### Population

In 1980, the population of Carroll County was 16,203 persons. The county ranked 46<sup>th</sup> in terms of population among Arkansas’ 75 counties and 10<sup>th</sup> among the 16 counties in Northwest Arkansas. By 1990, the population of the county had increased 15.1 percent to 18,654 to rank 37<sup>th</sup> among Arkansas’ counties and 9<sup>th</sup> among the counties in Northwest Arkansas. From 1980 to 1990, the population of the state of Arkansas increased 2.8 percent from 2,286,435 to 2,350,725; from 1990 to 2000, the state’s population increased 13.7 percent to 2,673,400 persons. In 2000, the population of Carroll County stood at 25,357, an increase of 35.9 percent from 1990. The county was the 28<sup>th</sup> most populous county in Arkansas and the 8<sup>th</sup> most populous county in Northwest Arkansas in 2000.

The five most populous cities in Carroll County and their populations in the year 2000 were Berryville (4,433), Green Forest (2,717), Eureka Springs (2,278), Oak Grove (376), and Beaver (95). The county seat for Carroll County is split between Berryville and Eureka Springs.

DRI-WEFA, an economic analysis consulting firm, projects the population of Carroll County will increase by 9.8 percent to 27,840 people in the year 2010. If the projections are realized, Carroll County will be the 23<sup>rd</sup> most populous county in Arkansas and eighth most populous county in Northwest Arkansas.

The gender makeup of Carroll County is similar to that of the state on the whole. In the year 2000, the proportions of males and females in the county were 49.3 percent and 50.7 percent, respectively, compared to 48.8 percent and 51.2 percent, respectively, for the state.

In the year 2000, Carroll County had the 15<sup>th</sup> oldest median age, the 19<sup>th</sup> lowest proportion of residents under age 18, and the 33<sup>rd</sup> highest proportion of residents age 65 and older among all Arkansas counties. In the year 2000, the median age of residents in Carroll County was 39.4 years, compared to 36.0 years for the state. From 1990 to 2000, the proportion of the county's population that was under 18 years of age decreased from 24.2 percent to 24.0 percent; for the same period, the proportion of Arkansans under 18 years of age decreased from 26.4 percent to 25.4 percent. From 1990 to 2000, the proportion of the county's population that was 65 years of age or older decreased from 18.2 percent to 15.8 percent; for the same period, the proportion of Arkansans age 65 or older decreased from 14.9 percent in 1990 to 14.0 percent in 2000.

The racial composition of Carroll County is decidedly more Caucasian than the population for the state on the whole. In 2000, the proportions of Carroll County's population comprised of Caucasians, African Americans, American Indians and Native Alaskans, and Asians were 93.6 percent, 0.1 percent, 0.9 percent, and 0.4 percent, respectively. For the state, in 2000, the proportions of Caucasians, African Americans, American Indians and Native Alaskans, and Asians were 80.0 percent, 15.7 percent, 0.7 percent, and 0.8 percent, respectively. In 2000, the proportion of residents in Carroll County who were Hispanic was 9.7 percent, compared to the state's proportion of 3.2 percent.

Sources:

United States Census Bureau, Population of Counties by Decennial Census: 1900 to 1990. <http://www.census.gov/population/cencounts/ar190090.txt>

United States Census Bureau, Census 2000, Redistricting Data (Public Law 94-171) Summary File.

[http://factfinder.census.gov/servlet/BasicFactsTable?\\_lang=en&\\_vt\\_name=DEC\\_2000\\_PL\\_U\\_GCTPL\\_ST7&\\_geo\\_id=04000US05](http://factfinder.census.gov/servlet/BasicFactsTable?_lang=en&_vt_name=DEC_2000_PL_U_GCTPL_ST7&_geo_id=04000US05)

The Rand McNally Road Atlas, 2002 Edition. Page 10.

DRI-WEFA, U.S. Regional Analysis. Data supplied by the Institute for Economic Advancement, University of Arkansas-Little Rock.

United States Census Bureau, Census 2000, Table DP-1. Profile of General Demographic Characteristics: 2000. <http://censtats.census.gov/data/AR/04005.pdf>

United States Census Bureau, 1990 Census, Table DP-1. Profile of General Demographic Characteristics: 1990. [http://factfinder.census.gov/servlet/BasicFactsTable?\\_lang=en&\\_vt\\_name=DEC\\_1990\\_STF1\\_DPI&\\_geo\\_id=04000US05](http://factfinder.census.gov/servlet/BasicFactsTable?_lang=en&_vt_name=DEC_1990_STF1_DPI&_geo_id=04000US05)

United States Census Bureau, Census 2000, Table DP-1. Profile of General Demographic Characteristics: 2000. <http://censtats.census.gov/data/AR/05005015.pdf>

United States Census Bureau, 1990 Census, Table DP-1. General Population and Housing Characteristics: 1990. [http://factfinder.census.gov/servlet/BasicFactsTable?\\_lang=en&\\_vt\\_name=DEC\\_1990\\_STF1\\_DPI&\\_geo\\_id=05000US05015](http://factfinder.census.gov/servlet/BasicFactsTable?_lang=en&_vt_name=DEC_1990_STF1_DPI&_geo_id=05000US05015)

## **Income**

Table 1 presents median household income and median family income for the year 1999 and per capita personal income for the year 2000 for Carroll County. The table also ranks Carroll County in terms of these income statistics among the 75 counties in Arkansas and the 16 counties in Northwest Arkansas.

**Table 1 – Carroll County Income Statistics**

Income Statistic	Carroll County	Percent of State	Arkansas			Northwest Arkansas		
			Rank	Range		Rank	Range	
				Low	High		Low	High
1999 Median Household Income	\$27,924	86.8%	44	\$20,510	\$42,569	10	\$21,397	\$40,281
1999 Median Family Income	\$33,218	85.9%	46	\$25,846	\$48,717	11	\$27,580	\$45,235
2000 Per Capita Personal Income	\$17,964	81.7%	52	\$14,303	\$30,447	10	\$14,303	\$25,358

Table 2 presents poverty statistics for different resident groups in Carroll County and for the State of Arkansas in 1999. The table ranks the county among the 75 counties in Arkansas and among the 16 counties in Northwest Arkansas in terms of the three poverty rates presented. For example, the county ranked 45<sup>th</sup> among the counties in Arkansas and 6<sup>th</sup> among the counties in Northwest Arkansas in terms of the poverty rate for individuals in 1999.<sup>1</sup>

<sup>1</sup> Note: Rankings are from highest poverty rate to lowest. Hence, a ranking of one indicates relatively high levels of poverty, and a ranking of 75 indicates relatively low levels of poverty.

**Table 2 – Carroll County Poverty Rates, 1999**

Poverty Statistic	County Rate	Arkansas Rate	Arkansas			Northwest Arkansas		
			Rank	Range		Rank	Range	
				Low	High		Low	High
Individuals	15.5%	15.8%	45	7.2%	32.7%	6	10.1%	23.8%
Families with Related Children	18.3%	18.1%	46	7.8%	40.8%	6	11.2%	26.4%
Individuals 65 and Older	13.6%	13.8%	54	7.3%	27.6%	11	8.6%	26.6%

Table 3 presents average weekly earnings for covered employment in Carroll County in the year 2001. The table also displays average weekly earnings as a proportion of the state’s figure and ranks Carroll County in terms of average weekly earnings relative to the counties in Arkansas and Northwest Arkansas for which data were available. For example, in terms of average weekly earnings in the wholesale trade sector, Carroll County ranked 42<sup>nd</sup> among the 68 counties in Arkansas for which data were available and 7<sup>th</sup> among the 14 counties in Northwest Arkansas for which data were available.

**Table 3 – Carroll County Average Weekly Earnings, by Sector, Calendar Year 2001**

Sector	Average Weekly Earnings	Percent of State	Arkansas			Northwest Arkansas		
			Rank	Range		Rank	Range	
				Low	High		Low	High
Manufacturing	N/A	N/A	N/A	\$260.75	\$894.22	N/A	\$312.98	\$587.60
Wholesale Trade	\$494.94	69.0%	42 / 68	\$214.77	\$995.14	7 / 14	\$214.77	\$995.14
Retail Trade	\$332.01	97.7%	11 / 73	\$215.61	\$439.32	5 / 15	\$244.32	\$358.05
Information	N/A	N/A	N/A	\$306.77	\$869.54	N/A	\$348.10	\$832.62
Financial Activities	N/A	N/A	N/A	\$282.76	\$829.55	N/A	\$282.76	\$622.20
Professional and Business Services	\$448.73	71.7%	30 / 68	\$218.14	\$955.05	7 / 15	\$256.91	\$955.05
Education and Health Services	\$482.90	89.1%	15 / 74	\$231.49	\$668.35	7 / 16	\$231.49	\$649.85
All Sectors	\$392.60	75.8%	58 / 75	\$316.63	\$681.93	12 / 16	\$316.63	\$631.34

Table 4 presents the share of personal income in Carroll County in 2000 attributable to different sectors of the economy. The table displays how this share compares to the proportion for the state in aggregate and ranks Carroll County in terms of the share of personal income attributed to the sectors relative the counties in Arkansas and Northwest Arkansas for which data were available. For example, in terms of the share of personal income attributed to the transportation and utilities sector, Carroll County ranked 49<sup>th</sup> among the 71 counties in Arkansas for which data were available and 8<sup>th</sup> among the 15 counties in Northwest Arkansas for which data were available.

**Table 4 – Disposition of Personal Income in Carroll County, by Sector, Year 2000**

Sector	Share of Personal Income	Greater or Less than State	Arkansas			Northwest Arkansas		
			Rank	Range		Rank	Range	
				Low	High		Low	High
Farm Earnings	9.0%	6.4%	16 / 75	0.1%	15.9%	3 / 16	0.4%	15.9%
Manufacturing	N/A	N/A	N/A	1.3%	77.9%	N/A	3.4%	27.1%
Transportation and Utilities	3.3%	-2.4%	49 / 71	1.3%	14.5%	8 / 15	1.8%	14.5%
Wholesale Trade	N/A	N/A	N/A	0.2%	11.4%	N/A	0.4%	5.9%
Retail Trade	7.8%	0.0%	9 / 75	1.4%	24.4%	5 / 16	2.4%	24.4%
Finance, Insurance, and Real Estate	2.7%	-0.7%	11 / 71	0.8%	8.0%	5 / 15	1.1%	3.5%
Services	12.8%	-2.1%	13 / 75	3.3%	29.0%	5 / 16	4.8%	29.0%
Business Services	0.4%	-2.2%	52 / 65	0.1%	10.5%	13 / 14	0.2%	5.5%
Health Services	4.8%	-1.4%	16 / 72	0.5%	14.4%	5 / 16	0.5%	14.4%
Hotel and Lodging	1.9%	1.6%	1 / 55	0.04%	1.9%	1 / 14	0.05%	1.9%
Amusement and Recreation Services	1.0%	0.7%	1 / 48	0.03%	1.0%	1 / 10	0.03%	1.0%

The sale of livestock accounted for 99.6 percent of Carroll County’s cash receipts from farm marketings in the year 2000. Livestock cash receipts and total cash receipts for Carroll County in the year 2000 were \$158.2 million and \$158.9 million, respectively; the county ranked third in terms of both livestock cash receipts and total cash receipts among Arkansas’ counties. Cash receipts for crops and government payments for Carroll County in the year 2000 totaled \$681,000 and \$718,000, respectively; the county ranked 53<sup>rd</sup> in terms of the former and 45<sup>th</sup> in terms of the latter among Arkansas’ counties. The county ranked 9<sup>th</sup> among Arkansas’ counties in terms of total production expenses in the year 2000, \$124.6 million. As of January 1, 2002, Carroll County had a total of 75,000 cattle and calves and 35,000 beef cows; the county ranked 3<sup>rd</sup> in terms of the former and 4<sup>th</sup> in terms of the latter among the counties in Arkansas.

Sources:

- United States Census Bureau, Census 2000, Table DP-3. Profile of Selected Economic Characteristics: 2000. <http://censtats.census.gov/data/AR/04005.pdf>
- United States Census Bureau, Census 2000, Table DP-3. Profile of Selected Economic Characteristics: 2000. <http://censtats.census.gov/data/AR/05005015.pdf>
- U.S. Commerce Department, Bureau of Economic Analysis, Regional Accounts Data, Local Area Personal Income, Table CA1-3: Personal Income Summary Estimates. <http://www.bea.gov/bea/regional/reis/>
- Arkansas Employment Security Department, Covered Employment and Earnings, Annual 2001. Table 6: County Summary Employment and Earnings, by Industry, Calendar Year 2001. <http://www.accessarkansas.org/esd/01antb6.htm>
- Arkansas Employment Security Department, Covered Employment and Earnings, Annual 2001. Table 1: Average Covered Employment and Average Weekly Earnings, by Industry, 2001. <http://www.accessarkansas.org/esd/01antb1.htm>

U.S. Commerce Department, Bureau of Economic Analysis. Regional Accounts Data, Local Area Personal Income. Table CA05 – Personal Income by Major Source and Earnings by Industry. <http://www.bea.gov/bea/regional/reis/>  
 Arkansas Agricultural Statistics Service, National Agricultural Statistics Service, United States Department of Agriculture, 2001 County Profiles. <http://www.nass.usda.gov/ar/carroll.PDF>

## **Education**

Carroll County contains the following three school districts, with October 1, 2000 enrollment found in parentheses: Berryville (1,606), Eureka Springs (746), and Green Forest (1,210). Table 5 displays the average ACT composite score for high school seniors (which ranges from 1 to 36, with 36 being the best), the attendance rate, the dropout rate (percentage of students dropping out of school in Grades 7-12 from October of one school year to October of the next school year), the graduation rate (percentage of students enrolled in Grade 9 and completing Grade 12), and the college remediation rate (percentage of freshmen entering an *Arkansas* college or university who are required to take at least one remedial class) for the above school districts and for the state in aggregate.

**Table 5 – Educational Statistics for Carroll County Schools, 2000-2001 School Year**

School District	ACT Composite Score	Attendance Rate	Dropout Rate	Graduation Rate	College Remediation Rate
Berryville	20.9	93.2%	1.1%	85.2%	45.0%
Eureka Springs	22.3	91.6%	1.5%	92.9%	28.0%
Green Forest	19.5	93.3%	1.7%	83.9%	73.0%
<b>State Average</b>	<b>20.1</b>	<b>93.2%</b>	<b>3.0%</b>	<b>84.3%</b>	<b>41.0%</b>

Among the 301 school districts in Arkansas for which data were available, the ACT composite scores for the school districts in Carroll County ranked as follows: Berryville (tied for 57<sup>th</sup>), Eureka Springs (tied for 7<sup>th</sup>), and Green Forest (tied for 154<sup>th</sup>); because of ties, the rankings ranged from 1 through 299. Among the 72 school districts in Northwest Arkansas, the ACT composite scores for the school districts in Carroll County ranked as follows: Berryville (tied for 23<sup>rd</sup>), Eureka Springs (tied for 6<sup>th</sup>), and Green Forest (54<sup>th</sup>). District-wide average ACT composite scores for the 301 school districts in Arkansas for which data were available ranged from 24.0 to 14.0; for the school districts in Northwest Arkansas, the district-wide average ACT composite scores ranged from 24.0 to 15.8.

Among the 307 school districts in Arkansas for which data were available, the dropout rates for the school districts in Carroll County ranked as follows: Berryville (tied for 223<sup>rd</sup>), Eureka Springs (tied for 194<sup>th</sup>), and Green Forest (tied for 181<sup>st</sup>); because of 27 districts' being tied for last place with a 0.0 percent dropout rate, the rankings ranged

from 1 through 285.<sup>2</sup> Among the 72 school districts in Northwest Arkansas, the dropout rates for the school districts in Carroll County ranked as follows: Berryville (tied for 55<sup>th</sup>), Eureka Springs (tied for 46<sup>th</sup>), and Green Forest (tied for 38<sup>th</sup>); because of four districts' being tied for last place with a 0.0 percent dropout rate, the rankings ranged from 1 through 69. For the state, dropout rates ranged from 15.4 percent to 0.0 percent; for the districts in Northwest Arkansas, dropout rates ranged from 12.5 percent to 0.0 percent.

Among the 307 school districts in Arkansas for which data were available, the graduation rates for the school districts in Carroll County ranked as follows: Berryville (tied for 169<sup>th</sup>), Eureka Springs (tied for 66<sup>th</sup>), and Green Forest (184<sup>th</sup>). Among the 72 school districts in Northwest Arkansas, the graduation rates for the school districts in Carroll County ranked as follows: Berryville (47<sup>th</sup>), Eureka Springs (tied for 14<sup>th</sup>), and Green Forest (52<sup>nd</sup>). For the state, graduation rates ranged from 100.0 percent to 23.6 percent; for the districts in Northwest Arkansas, graduation rates ranged from 100.0 percent to 63.2 percent.

Among the 307 school districts in Arkansas for which there were data available, the college remediation rates for the school districts in Carroll County ranked as follows: Berryville (tied for 162<sup>nd</sup>), Eureka Springs (256<sup>th</sup>), and Green Forest (tied for 32<sup>nd</sup>); because of 31 districts' being tied for last place with a 0.0 percent college remediation rate, the rankings ranged from 1 through 281.<sup>3</sup> Among the 72 school districts in Northwest Arkansas, the college remediation rate for the school districts in Carroll County ranked as follows: Berryville (tied for 31<sup>st</sup>), Eureka Springs (62<sup>nd</sup>), and Green Forest (2<sup>nd</sup>); because of three districts' being tied for last place with a 0.0 percent college remediation rate, the rankings ranged from 1 through 70. For the state, college remediation rates ranged from 100.0 percent to 0.0 percent; for the districts in Northwest Arkansas, college remediation rates ranged from 80.0 percent to 0.0 percent.

In the Berryville School District, all three of the district's schools are accredited by the North Central Association of Secondary Schools and Colleges (NCASSC). In the Eureka Springs School District, all three of the district's schools are accredited by the NCASSC. In the Green Forest School District, the Green Forest Elementary School and Green Forest High School are accredited by the NCASSC, but the Green Forest Middle School is not.

Table 6 displays the proportion of persons 25 years of age or older in Carroll County with various levels of education in the year 2000. The table also presents the proportions for the state in aggregate and ranks the county among the 75 counties in Arkansas and among the 16 counties in Northwest Arkansas in terms of the 4 levels of education presented. For example, Carroll County ranked 17<sup>th</sup> among Arkansas' counties and fifth among the

---

<sup>2</sup> Note: Rankings are from highest dropout rate to lowest. Hence, a ranking of one indicates a relatively high dropout rate, and a ranking of 285 indicates a relatively low dropout rate.

<sup>3</sup> Note: Rankings are from highest remediation rate to lowest. Hence, a ranking of one indicates a relatively high dropout rate, and a ranking of 281 indicates a relatively low remediation rate.



counties in Northwest Arkansas in terms of the proportion of the persons 25 years of age or older with a bachelor’s degree in 2000.

**Table 6 – Educational Attainment in Carroll County, 2000**

Level of Education	County	Arkansas	Arkansas			Northwest Arkansas		
			Rank	Range		Rank	Range	
				Low	High		Low	High
Bachelor's Degree	9.2%	11.0%	17	4.2%	18.0%	5	5.4%	14.8%
Graduate or Professional Degree	4.6%	5.7%	17	1.8%	10.1%	5	2.8%	9.8%
Bachelor's Degree or Higher	13.8%	16.7%	18	6.3%	28.1%	5	8.4%	24.5%
High School Diploma or Higher	71.8%	75.3%	37	56.2%	84.4%	8	65.4%	80.4%

There are 6 Arkansas colleges and universities within 100 miles of Eureka Springs, Arkansas. The institutions, the number and type of degree programs offered at the institutions, and their enrollment statistics are presented below.

Arkansas State University – Mountain Home (ASUMH) is a two-year public college located in Mountain Home, Arkansas in Baxter County. The Arkansas Higher Education Coordinating Board (AHECB) of the Arkansas Department of Higher Education has approved the dissemination of the following academic degrees and certificate programs at ASUMH: certificates of proficiency in 5 program areas, technical certificates in 9 program areas, and associate degrees in 14 program areas. Opening fall enrollment for ASUMH was 1,238 persons in 2001, 8.5 percent greater than fall 2000. Opening fall enrollment for the two-year public institutions in Arkansas stood at 43,387 in 2001, 6.3 percent greater than fall 2000. ASUMH ranked 13<sup>th</sup> among the 23 two-year public institutions in Arkansas in terms of fall enrollment in 2001. Since 1997, fall enrollment at ASUMH has increased 45.3 percent, compared to a 16.6 percent increase for two-year public institutions in Arkansas.

John Brown University (JBU), located in Siloam Springs, Arkansas in Benton County, is a private, four-year Christian college (interdenominational) that offers associate degrees in 6 program areas, baccalaureate degrees in 50 program areas, and master’s degrees in 6 program areas. Opening fall enrollment for JBU was 1,684 persons in 2001, 9.0 percent greater than fall 2000. Since 1997, fall enrollment has increased 27.1 percent.

North Arkansas College (NAC), located in Harrison, Arkansas in Boone County, is a two-year public college. The AHECB has approved the dissemination of the following academic degrees and certificate programs at NAC: certificates of proficiency in 5 program areas, technical certificates in 25 program areas, an advanced certificate in electronics, and associate degrees in 26 program areas. Opening fall enrollment for NAC was 1,889 persons in 2001, 4.0 percent greater than fall 2000. The school ranked 8<sup>th</sup> among the 23 two-year public institutions in Arkansas in terms of fall enrollment in 2001. Since 1997, fall enrollment at NAC has decreased 14.6 percent.

Northwest Arkansas Community College (NWACC), located in Bentonville, Arkansas in Benton County, is a two-year public college. The AHECB has approved the dissemination of the following academic degrees and certificate programs at the NWACC: certificates of proficiency in 4 program areas, technical certificates in 3 program areas, associate degrees in 26 program areas, and an advanced certificate in medical dosimetry. Opening fall enrollment for NWACC was 4,292 persons in 2001, 5.8 percent greater than fall 2000. The school ranked third among the 23 two-year public institutions in Arkansas in terms of fall enrollment in 2001. Since 1997, fall enrollment at NWACC has increased 32.5 percent.

The University of Arkansas (UA), located in Fayetteville, Arkansas in Washington County, is the flagship institution of the University of Arkansas system. The AHECB has approved the dissemination of the following academic degrees and certificate programs at the UA: associate degrees in 2 program areas, baccalaureate degrees in 123 program areas, post-baccalaureate certificates in 2 program areas, master's degrees in 101 program areas, specialist degrees in 8 program areas, doctoral degrees in 42 program areas, and a professional degree in law. Opening fall enrollment for the UA was 15,752 in 2001, 2.6 percent greater than fall 2000. Opening fall enrollment for the four-year public universities in Arkansas stood at 65,704 in 2001, 2.4 percent greater than fall 2000. The school ranked first among the ten four-year public institutions in Arkansas in terms of fall enrollment in 2001. Since 1997, fall enrollment at the UA has increased 7.5 percent, compared to a 4.8 percent increase for four-year public universities in Arkansas.

The University of the Ozarks, located in Clarksville, Arkansas in Johnson County, is a four-year private liberal arts university and offers baccalaureate degrees in 25 program areas. Opening fall enrollment for the University of the Ozarks was 654 persons in 2001, 5.1 percent greater than fall 2000. Since 1997, fall enrollment at the University of the Ozarks has increased 22.5 percent.

Sources:

Arkansas Department of Education, Arkansas School Information Site, Performance Report, 2001. <http://www.as-is.org/reportcard/rc2001/>

North Central Association Commission on Accreditation and School Improvement. <http://www.ncacasi.org/>

United States Census Bureau, Census 2000, Table DP-2. Profile of Selected Social Characteristics: 2000. <http://censtats.census.gov/data/AR/05005015.pdf>

United States Census Bureau, Census 2000, Table DP-2. Profile of Selected Social Characteristics: 2000. <http://censtats.census.gov/data/AR/04005.pdf>

Arkansas Department of Higher Education, Arkansas State Colleges and Universities. <http://www.arkansashighered.com/colleges.html>

Arkansas Department of Higher Education, Approved Academic Degree and Certificate Programs. [http://www.arkansashighered.com/pdfs/RP/degrees\\_2003.pdf](http://www.arkansashighered.com/pdfs/RP/degrees_2003.pdf)

Arkansas Department of Higher Education, Opening Fall Enrollment at Public Colleges and Universities. October 29, 2001. <http://www.arkansashighered.com/Research/Enrollment/Actual%20Enroll%20Fall%202001.xls>

John Brown University, "Catalog for 2001-2003."

<http://www.jbu.edu/academics/catalog/03catalog.pdf>

University of the Ozarks. <http://www.ozarks.edu/academics/programs.html>

### **III. Infrastructure**

#### **Ports**

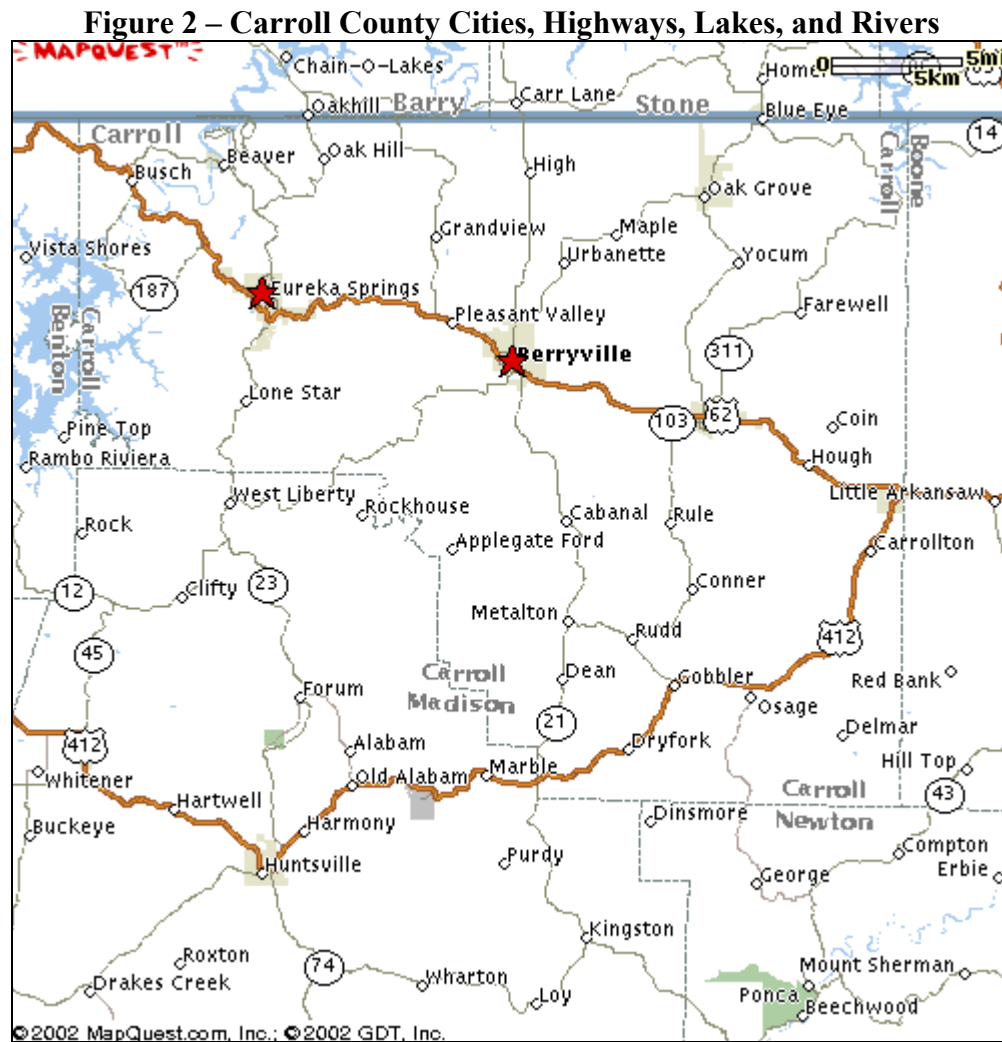
There are no navigable waterways in Carroll County.

Source:

Arkansas Waterways Commission. <http://www.waterways.dina.org/waterways.html>

## Highways

Figure 2 displays the major cities, highways, lakes, and rivers found in Carroll County. In 2003, 3 miles of passing lanes will be added to U.S. Highway 62 in Berryville, and 0.36 miles of reconstruction of Arkansas Highway 23 will be done in Eureka Springs.



Sources:

Arkansas State Highway and Transportation Department. Statewide Transportation Improvement Program 2003-2005 Preliminary.

<http://www.ahtd.state.ar.us/contract/progcon/stip/stip%20by%20ffy%202003%2D2005%20prelim.xls>

MapQuest.com, Inc. <http://www.mapquest.com>

## **Utilities**

Table 7 displays the surplus water capacity, the surplus wastewater capacity, the electricity provider, and the natural gas provider for the three most populous cities in Carroll County.

**Table 7 – Utilities for the Three Most Populous Cities in Carroll County**

<b>City</b>	<b>Water Surplus Capacity</b>	<b>Waste Water Surplus Capacity</b>	<b>Electricity Provider</b>	<b>Natural Gas Provider</b>
Berryville	N/A	N/A	Entergy	Arkansas Western Gas
Green Forest	N/A	N/A	Carroll County Electric Cooperative	Arkansas Western Gas
Eureka Springs	N/A	N/A	Arkansas Electric Power Company / Southwestern Electric Power Company / Carroll County Electric Cooperative	Arkansas Western Gas

The cities of Berryville, Green Forrest, and Eureka Springs receive their water from Beaver Lake.

Sources:

Dwayne Allen and the City of Berryville, Arkansas.

<http://www.cswnet.com/~berryvil/water.htm>

Steve Pattan, Water Superintendent, City of Green Forest, Arkansas.

City of Eureka Springs. <http://www.cityofeurekasprings.org/>

## **Railroads**

The Burlington Northern Santa Fe Railroad has the nearest intermodal facility, located in Springfield, Missouri. The nearest piggy-back service is located in Bergman with the Missouri and Northern Arkansas Railroad, which has interchanges with the Union Pacific Railroad in Kansas City, Missouri and Newport, Arkansas; with the Burlington Northern-Santa Fe Railroad in Lamar, Aurora, and Springfield, Missouri; and with the Kansas City Southern Railroad in Joplin, Missouri.

Sources:

Greater Eureka Springs, Arkansas Chamber of Commerce.

<http://www.eurekaspringschamber.com/elogistics.htm>

RailAmerica, Inc. North American Rail Group.

<http://www.railamerica.com/railmaps/MNA.htm>

Development Information Network of Arkansas.

<http://harrison.dina.org/business/transportation.html>

## **Airports**

The Carroll County Airport is the only airport serving Carroll County. The airport, located 3 miles west of Berryville, has two asphalt runways, each 3,550 feet in length, that can accommodate a 12,000-pound single-wheel aircraft. There is no control tower at this airport. Services offered at the Carroll County Airport include: aircraft parking (tie-downs), flight instruction, and aircraft rental.

The four major airports closest to Carroll County are the Northwest Arkansas Regional Airport in Bentonville, Arkansas (roughly 50 miles west of Berryville), Springfield-Branson Regional Airport in Springfield, Missouri (roughly 80 miles northeast of Berryville), Tulsa International Airport in Tulsa, Oklahoma (roughly 170 miles west of Berryville), and Adams Field Airport in Little Rock, Arkansas (roughly 190 miles southeast of Berryville).

Sources:

AirNav, LLC. Carroll County Airport: Berryville, Arkansas.

<http://www.airnav.com/airport/4M1>

## **IV. Labor Force**

A breakdown of covered employment for Carroll County in 2001 is provided in Table 8 below.

**Table 8 – Covered Employment for Carroll County, 2001 Annual Averages**

<b>North American Industry Classification System Industry Group</b>	<b>Average Employing Units</b>	<b>Average Covered Employment</b>
Natural Resources & Mining	18	312
Trade, Transportation & Utilities	212	1,592
Wholesale Trade	28	74
Retail Trade	167	1,274
Transportation, Warehousing & Utilities	17	244
Professional & Business Services	58	181
Education & Health Services	59	754
Leisure & Hospitality	183	1,620
Local Government	25	835
State Government	10	89
Other	207	4,318
<b>Carroll County - Total</b>	<b>772</b>	<b>9,701</b>

Data for the manufacturing sector in Carroll County were not available. For the state, the manufacturing sector accounted for 20.5 percent of total covered employment in 2001.

Among the 71 counties in Arkansas for which data were available, the proportion of covered employment attributed to the manufacturing sector ranged from 62.4 percent (Calhoun County) to 5.1 percent (Perry County). Among the 15 counties in Northwest Arkansas for which data were available, the proportions ranged from Marion County's 48.2 percent to Newton County's 8.3 percent.

The wholesale trade sector accounted for 0.8 percent of total covered employment in Carroll County in 2001, compared to the state's figure of 4.1 percent. In terms of the proportion of covered employment attributed to the wholesale trade sector, the county ranked 66<sup>th</sup> ahead of Marion County and Perry County among the 68 counties in Arkansas for which data were available and 13<sup>th</sup> ahead of Marion County among the 14 counties in Northwest Arkansas for which data were available. For the state, the proportions ranged from 23.0 percent (Woodruff County) to 0.3 percent (Marion County); for Northwest Arkansas, the proportions ranged from Boone County's 7.5 percent to Marion County's 0.3 percent.

The retail trade sector accounted for 13.1 percent of total covered employment in Carroll County in 2001, compared to the state's figures of 11.9 percent. In terms of the proportion of covered employment attributed to the retail trade sector, the county ranked 26<sup>th</sup> among the 74 counties in Arkansas for which data were available and 8<sup>th</sup> among the 15 counties in Northwest Arkansas for which data were available. For the state, the proportions ranged from 18.9 percent (Saline County) to 2.7 percent (Calhoun County); for Northwest Arkansas, the proportions ranged from Baxter County's 14.5 percent to Benton County's 8.6 percent.

The transportation, warehousing, and utilities sectors accounted for 2.5 percent of total covered employment in Carroll County in 2001, compared to the state's figure of 5.5 percent. In terms of the proportion of covered employment attributed to the transportation, warehousing, and utilities sectors, the county ranked 46<sup>th</sup> among the 69 counties in Arkansas for which data were available and 11<sup>th</sup> among the 14 counties in Northwest Arkansas for which data were available. For the state, the proportions ranged from 18.4 percent (Little River County) to 0.8 percent (Marion County); for Northwest Arkansas, the proportions ranged from Crawford County's 17.7 percent to Marion County's 0.8 percent.

Data for the information sector in Carroll County were not available. For the state, the information sector accounted for 1.9 percent of total covered employment in 2001. Among the 56 counties in Arkansas for which data were available, the proportion of covered employment attributed to the information sector ranged from 3.6 percent (Pulaski County) to 0.3 percent (Little River County). Among the 12 counties in Northwest Arkansas for which data were available, the proportions ranged from Boone County's 3.2 percent to Johnson County's 0.4 percent.

Data for the financial activities sector in Carroll County were not available. For the state, the financial activities sector accounted for 4.3 percent of total covered employment in 2001. Among the 73 counties in Arkansas for which data were available, the proportion

of covered employment attributed to the financial activities sector ranged from 7.5 percent (Pike County) to 1.9 percent (Nevada County). Among the 14 counties in Northwest Arkansas for which data were available, the proportions ranged from Marion County's 5.0 percent to Scott County's 2.3 percent.

The professional and business services sector accounted for 1.9 percent of total covered employment in Carroll County in 2001, compared to the state's figure of 9.2 percent. In terms of the proportion of covered employment attributed to the professional and business services sector, the county ranked 49<sup>th</sup> among the 68 counties in Arkansas for which data were available and 10<sup>th</sup> among the 15 counties in Northwest Arkansas for which data were available. For the state, the proportions ranged from 23.3 percent (Benton County) to 0.5 percent (Woodruff County); for Northwest Arkansas, the proportions ranged from Benton County's 23.3 percent to Scott County's 0.6 percent.

The education and health services sector accounted for 7.8 percent of total covered employment in Carroll County in 2001, compared to the state's figure of 11.3 percent. In terms of the proportion of covered employment attributed to the education and health services sector, the county ranked 59<sup>th</sup> among the 74 counties in Arkansas for which data were available and 11<sup>th</sup> among the 16 counties in Northwest Arkansas. For the state, the proportions ranged from 19.9 percent (Baxter County) to 2.2 percent (Little River County); for Northwest Arkansas, the proportions ranged from Baxter County's 19.9 percent to Crawford County's 6.6 percent.

The leisure and hospitality sector accounted for 16.7 percent of total covered employment in Carroll County in 2001, compared to the state's figure of 7.8 percent. In terms of the proportion of covered employment attributed to the leisure and hospitality sector, the county ranked 1<sup>st</sup> among the 73 counties in Arkansas for which data were available. For the state, the proportions ranged from 16.7 percent (Carroll County) to 1.9 percent (Woodruff County); for Northwest Arkansas, the proportions ranged from Carroll County's 16.7 percent to Madison County's 4.3 percent.

A summary of Carroll County's largest employers is presented in Table 9 below.

**Table 9 – Carroll County's Largest Employers**

<b>Company Name</b>	<b>City</b>	<b>Product</b>	<b>Employees</b>
Tyson Foods	Berryville/Green Forest	Poultry	G
Wal-Mart	Berryville	Retail	C
Carroll Regional Medical Center	Berryville	Hospital	B
Carroll Electric Cooperative	Berryville	Utility	B
LaBarge Electronics	Berryville	Wire Harnesses and Circuit Boards	B

Employee Codes – B: 100-250; C: 251-500; G: 2,501-5,000

Figure 3 displays the annual unemployment rates for Carroll County, the State of Arkansas, and the United States for the period 1995 through 2001. For the period, Carroll County experienced unemployment rates roughly equal to those of the state. In 2001, the unemployment rate in Carroll County was 4.2 percent, compared to the state and national figures of 5.1 percent and 4.8 percent, respectively. Carroll County had the



15<sup>th</sup> lowest unemployment rate among Arkansas' 75 counties in 2001 and the 8<sup>th</sup> highest unemployment rate among the 16 counties in Northwest Arkansas. Unemployment rates in Arkansas ranged from 2.2 percent in Benton County to 13.9 percent in Mississippi County; unemployment rates in Northwest Arkansas ranged from Benton County's 2.2 percent to Newton County's 6.7 percent.

**Figure 3 – Historical Unemployment Rate Comparisons: 1995-2001**

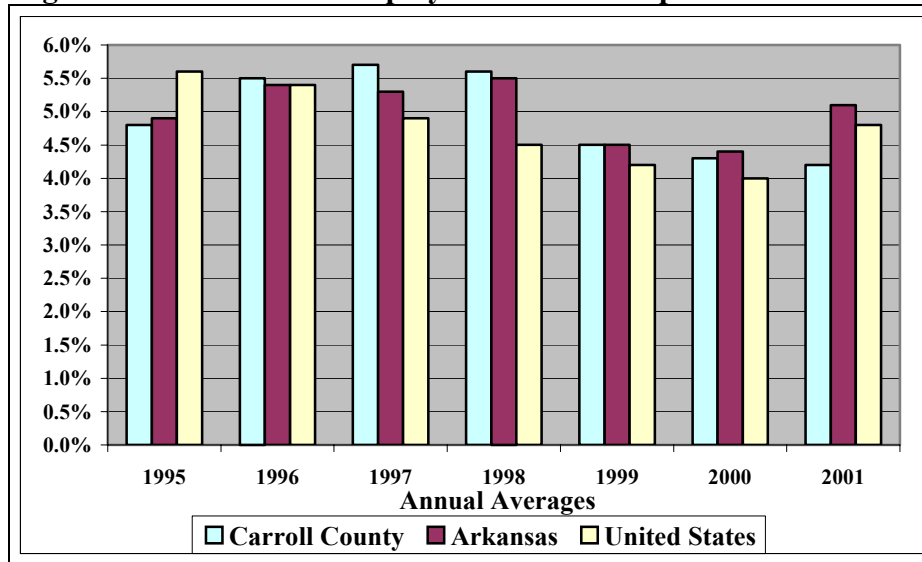
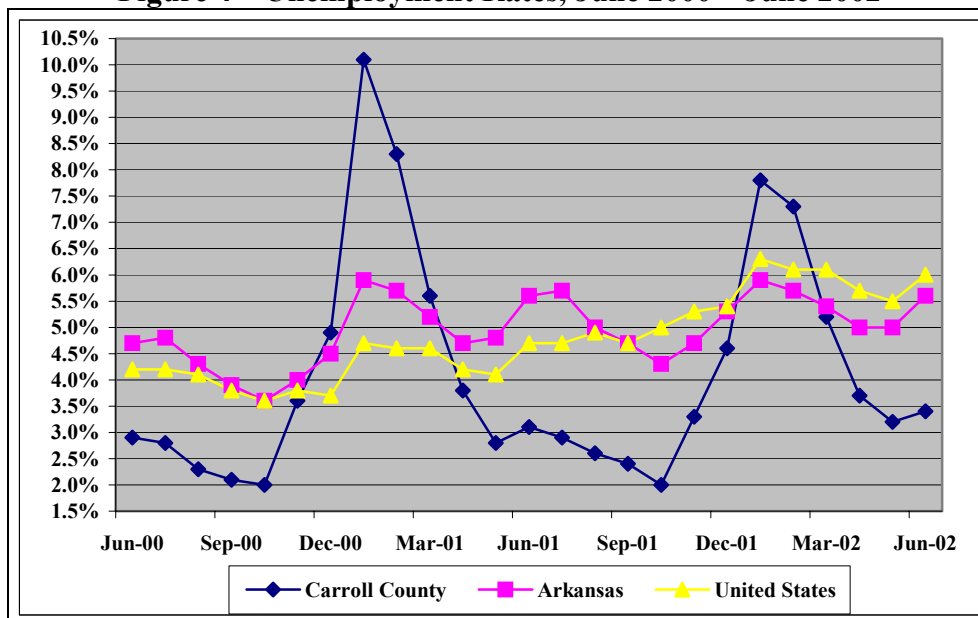


Figure 4 displays the monthly unemployment rates for Carroll County, Arkansas, and the United States from June 2000 to June 2002.<sup>4</sup>

**Figure 4 – Unemployment Rates, June 2000 – June 2002**



<sup>4</sup> Note: Data are not seasonally adjusted.

Sources:

Arkansas Employment Security Department, Covered Employment and Earnings, Annual 2001. Table 6: County Summary Employment and Earnings, by Industry, Calendar Year 2001. <http://www.accessarkansas.org/esd/01antb6.htm>

Arkansas Employment Security Department, Covered Employment and Earnings, Annual 2001. Table 1: Average Covered Employment and Weekly Earnings, by Industry, 2001. <http://www.accessarkansas.org/esd/01antb1.htm>

Largest Employers by County data from Arkansas Department of Economic Development.

Arkansas Economic Security Department, Arkansas Revised Labor Force Statistics, Annual Average, 2001. <http://www.accessarkansas.org/esd/lmiaa01.htm>

Arkansas Employment Security Department, Arkansas Labor Force Statistics. <http://www.accessarkansas.org/esd/lmilaborforcestats.htm>

## **V. Available Industrial Sites and Buildings**

There are no available industrial sites in Carroll County.

There is one available industrial building in Carroll County. The facility, constructed in 1995, is located in Berryville at 1125 Industrial Park and was previously occupied by Corrugated Machinery, Inc. The metal facility has 22,500 square-feet of space (21,385 square-feet of manufacturing space and 1,115 square-feet of office space) on 6-inch concrete floors and is accompanied by 3.75 acres of land. Clearance under the beams ranges from 13 feet, 11 inches to 19 feet, 11 inches; the span between the beams ranges from 15 feet, 11 inches to 21 feet, 0 inches. The facility is directly serviced by the South Missouri railroad and has 1 floor-level door, 1 dock-high door, two truck wells, and 20 paved parking spaces. The City of Berryville provides the facility with water service through a 1-inch main with normal line pressure of 12 psi. The City of Berryville also provides sewer services through a three-inch sewer main. The Arkansas Louisiana Gas provides natural gas service to the site through a half-inch main. Carroll Electric Cooperative provides the facility with electricity. The facility is for sale with a price of \$425,000.

Source:

Available Building and Site Database for Arkansas Communities, Arkansas Department of Economic Development. [http://www.1800arkansas.com/Buildings\\_Sites/Building.asp?BldNumber=732](http://www.1800arkansas.com/Buildings_Sites/Building.asp?BldNumber=732)

## **VI. Economic Goals**

Carroll County faces both opportunities and challenges in economic development. A strong base of tourism in Eureka Springs provides economic activity for the whole county. Hence, any economic downturn that adversely affects tourism will disproportionately affect the economy of Carroll County. While lodging, amusement, and recreation services form a large portion of the economy, Carroll County is relatively weak in terms of transportation, education, health, and professional services.

Carroll County has an opportunity with a labor pool that is relatively well educated, compared to other Arkansas counties, at the upper end of the distribution. Economic development leaders should tout this aspect when appealing to high quality service jobs that can help improve per capita personal income. With an economy that is particularly susceptible to seasonal variations, Carroll County should look to attract jobs that provide a more consistent level of employment, in order to insure itself against the volatility of the tourism industry.

Additionally, economic developers in Carroll County need to stress the development of transportation infrastructure that would allow more industries access to the resources of the county. Improvements to U.S. Highways 62 and 412 can only help stimulate growth within Carroll County.

## **VII. Opportunities for Future Business Development**

### **Poultry**

The domestic market for the U.S. agribusiness industry is relatively mature, with consistent but modest growth likely in the future. Demand for protein-rich foods is growing more rapidly in developing countries than in the United States, because of their higher population growth, rapid industrialization, and rising disposable income. Furthermore, agricultural output in such countries is growing less rapidly than consumption. Consequently, the U.S. agribusiness industry is strongly positioned to take advantage of future increases in worldwide food demand.

With the world's gross domestic product expected to rise to nearly \$10.1 trillion in 2009 (a 34 percent increase over the preceding 10 years), there is ample reason to expect ever-growing demands on the world's agriculture. Whenever incomes begin to rise, one of the first things people do is to upgrade their diets. With increasing prosperity, people consume more food grains, meat, sweeteners, and vegetable oils. Since 1990, worldwide consumption of beef, pork, and poultry has surged approximately 29 percent.

Another trend in the U.S. agribusiness industry is the number of market participants, ranging from farmers to processors, has steadily declined, as agriculture has moved toward vertical integration and consolidation. According to the Center for Rural Affairs, a private nonprofit group focused on rural development and agricultural policy, as of 2000, an estimated 80 percent of the U.S. beef market was controlled by 4 firms: Tyson Foods, ConAgra, Excel Corp., and Farmland National Beef Inc. These same firms, plus Smithfield Foods, controlled approximately 58 percent of the U.S. pork market. In 1999-2000, 24 percent of pork producers went out of business. Today, 35 producers account for 95 percent of the pork slaughter capacity, although they operate only about 5 percent of the estimated 800 pork slaughterhouses in the United States. According to the National Chicken Council, during 2000, the top 8 chicken producers raised 64 percent of the broilers sold in the United States. Further consolidation in the poultry industry is expected to cut the number of broiler suppliers almost in half by 2010.

For the past three decades, much of the consolidation among meat processors occurred at the slaughter capacity level. Today, however, more and more companies are focusing on acquisitions that will expand their final offerings to include higher-margin processed and prepackaged meat that is ready for the consumer to heat and eat. These can include freshly cooked and frozen meats that have been marinated or seasoned. Advocates of consolidation believe that the process will lead agricultural producers toward more efficiency, less dependence on government assistance, and greater global competitiveness. Furthermore, as larger and more specialized producers realize lower production costs through economies of scale, these savings can be passed through to consumers in the form of lower commodity and processed food prices.

In the mean time, agribusiness is being transformed by modern technology. Technological developments have changed the way things are done on the farm, in assembly, in processing, and in distribution. An increasing number of farmers and ranchers are doing business over the Internet. According to the U.S. Department of Agriculture, 55 percent of all farms were using computers in 2001, up from 38 percent in 1997. In 2000, 24 percent of farms used the Internet as a management tool in their farming operations, including \$665 million in online buying and selling. Use of this technology allows farmers to receive and manage timely information in rural locations. In addition, nearly all farms that used the Internet in 2000 to purchase inputs indicated that they are likely to maintain or increase purchases in the future. Thus, with decreasing costs of computers and Internet access, growth in Internet use is likely to continue.

In April 2000, the world's leading meat and poultry processors took the next step toward realizing "seamless" trade — the transacting of wholesale business without intermediaries, and the streamlining of the purchase and sales process to facilitate higher volumes. Tyson Foods Inc., Cargill, Smithfield Foods, Gold Kist Inc., and Farmland Industries Inc. launched an online marketplace, or portal, for meat and poultry products called Provision X; the venture is headquartered in Chicago. Provision X agreed to be acquired by iTradeNetwork (ITN) in February 2002. ITN provides online e-business solutions for 38 percent of the U.S. retail grocery and food service industries, including seven of the top fifteen food retailers in the nation.

## **Retail**

Retailing is a mature business, and growth opportunities are limited, given the large number of retail outlets spread across the country. Demographic trends primarily affect retail sales. As demographic trends influence consumers' preferences and shopping patterns, they are important to retailers' understanding of target markets. For example, the Baby Boom Generation, comprising individuals born between 1946 and 1964, constitutes some 78 million Americans - about 30 percent of the U.S. population. As the Baby Boomers entered adulthood and formed households, they fueled much of the boom in retail sales in the 1970s and 1980s. Today, having swollen the ranks of Americans in their 40s and 50s, their priorities have shifted from youthful spending to tuition payments for children and to saving for retirement.

Shopping trends also affect all aspects of retailing, from store layout to merchandise assortment. Current shopping trends in the U.S retail market can be summarized as Price + Quality = Value, “cross shopping,” “precision shopping,” and “going casual.”

Although the American retail landscape is saturated with stores, sales can be increased by developing new markets overseas. Discount stores, like Wal-Mart, are expanding overseas more rapidly than other types of retailers, such as department stores. This is because discount stores offer low prices to attract customers; merchandising and cultural differences have made it unattractive for department stores, whose mainstay is apparel, to allocate the capital for overseas expansion.

## **Hospitals**

One of the persistent trends in the hospital industry is the steady decline in the number of hospitals in the United States. According to data published by the American Hospital Association (AHA), the number of U.S. hospitals declined 1.4 percent to 5,810, and the number of licensed beds declined 1.0 percent to 984,000 in 2000. Although the number of hospitals fell, admissions are rising. According to the same AHA survey, admissions rose 2.1 percent to 34.9 million in 2000. These statistics indicate that as the total number of hospitals has declined, capacity utilization — the percentage of occupied beds to total beds — has risen.

While inpatient admissions moderated, the number of patients treated in outpatient settings, whether hospital-based or freestanding outpatient clinics, surgery centers, or physicians’ offices, has grown dramatically due to the cost advantages of outpatient treatment. According to the most recent data available from the AHA, industry-wide outpatient visits reached 593 million in 2000, up more than 3.0 percent from 1999.

The growing role of information technology has become part of the marketing strategy utilized by hospitals. In general, hospitals are viewed as being in the early stages of general Internet use, with most of the sites currently providing basic information about a hospital and its services. It is less common for hospitals to utilize the Internet to provide information about disease management or doctor referrals, communicate with patients, or publish an online newsletter. Hospitals have also been increasing their use of information technology for administration and the storage of patient records, including images, such as those from x-rays, ultrasound, computed tomography (CAT), and positron emission tomography (PET). An area of increasing importance is the use of computer systems to make hospitals safer, particularly regarding medication errors.

With the restrictive pricing environment imposed by the realities of managed care organizations, hospitals’ cost-cutting measures are expected to focus on reducing staffing levels and re-engineering to improve worker efficiency. The equipment categories that are likely to suffer the most include automated laboratory testing, cardiac catheterization, computed tomography, critical care, magnetic resonance imaging, nuclear medicine, radiation therapy, ultrasound, and x-rays. There are, however, some areas in which hospitals are expected to invest growing amounts in coming years. These include data

processing equipment, telecommunications, energy-saving equipment (such as ventilation systems), and construction of new medical office buildings.

## **Utilities**

The electric power industry is in the midst of radical change brought on by deregulation. The National Energy Policy Act of 1992 exposed the generation and wholesale power markets to competition. The industry restructuring has been focused on open-access transmission, pricing, and the recovery of stranded costs.

Despite the specter of increased competition, the U.S. electric industry is mature. Over the long term, utilities are facing the prospect of sluggish demand growth. Industry experts have projected long-term average annual growth in national demand at about 1.7 to 1.8 percent through 2010. On a regional level, however, growth can vary substantially due to differences in the composition of local businesses, industries, and economies.

Residential electric utility customers accounted for nearly 88 percent of the 126.7 million total final customers in the United States in 2000. The number of residential electric utility customers increased 1.2 percent to 111.1 million in 2000. This modest increase in the customer base will likely persist, reflecting the sluggish rate of new U.S. household formations and slow growth in the overall population, trends that are expected to continue for the foreseeable future. Thus, demand growth will remain mostly weather-related.

Long-term growth in sales to industrial customers is also expected to be modest. Standard and Poor's expects the volume of annual industrial sales growth to be relatively modest through 2006, with demand determined by the relative strength of the economy.

Over the next several years, Standard and Poor's expects to see increased demand from the commercial sector, with the pace dependent on the vigor of the economy. Demand should be boosted by the growing number of customers as well as the increasingly widespread use of computers and other office equipment.

Facing slow demand growth and regulatory constraints in their core business, many electric utilities are diversifying in an attempt to generate higher returns. In general, however, diversification strategies have been limited to the purchase of natural gas and water utilities, geographic expansion, and a focus on various electric services.

Another trend in the electric utility industry is that the investor-owned utilities have begun to consolidate with gas pipeline and/or distribution companies in order to become providers of "energy" rather than of just electricity. Numerous recent mergers have involved at least one partner with gas operations.

The advent of wholesale wheeling and non-utility generation created the opportunity — and the need — for companies to market and broker power. As of May 1, 2002, 534 independent power marketers and 171 affiliated power marketers were registered with the Federal Energy Regulatory Commission. However, the move toward developing an

efficient power market has encountered serious problems that led to astronomical rise in power prices and pushed several utility companies into financial disaster.

Source: Standard and Poor's NetAdvantage.

<http://0-www.netadvantage.standardpoor.com.library.uark.edu/>