

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



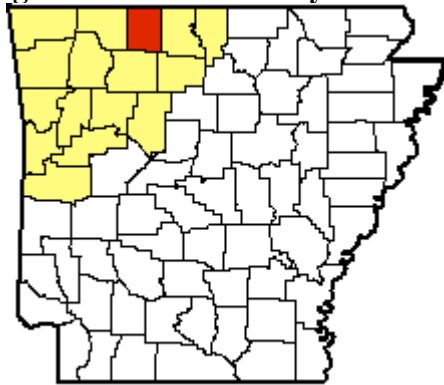
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I. Geographic Description

Boone County is comprised of 591 square miles and is located along the Missouri-Arkansas border in the physiographic regions known as the Salem and Springfield Plateaus. Figure 1 highlights the counties that comprise the Northwest Arkansas region, as defined by the Arkansas Department of Economic Development. Boone County is shown in red; all other counties are shown in yellow.

Figure 1 – Boone County’s Location



Part of Bull Shoals Lake is located in the northeastern section of the county. The headwaters of Crooked Creek lie within the county; the creek flows north to Harrison and then east to its eventually merging with the White River at the border of Marion and Baxter County.

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United States Census Bureau. State and County QuickFacts.

<http://quickfacts.census.gov/qfd/states/05/05009.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 Boone County was 26,067 persons. The county ranked 28th in terms of population among Arkansas’ 75 counties and 7th among the 16 counties in Northwest Arkansas. By 1990, the population of the county had increased 8.6 percent to 28,297 to rank 24th among Arkansas’ counties and 7th 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 Boone County stood at 33,948, an increase of 20.0 percent from 1990. The county was the 21st most populous

county in Arkansas and the 7th most populous county in Northwest Arkansas in 2000. The five most populous cities in Boone County and their populations in the year 2000 were Harrison (12,152), Diamond City (730), Bergman (407), Bellefonte (400), and Alpena (288 of 371 the residents of Alpena lived in Boone County). Harrison is the county seat for Boone County.

DRI-WEFA, an economic analysis consulting firm, projects the population of Boone County will increase by 1.2 percent to 34,340 people in the year 2010. If the projections are realized, Boone County will be the 21st most populous county in Arkansas and the seventh most populous county in Northwest Arkansas.

The gender makeup of Boone 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 48.2 percent and 51.8 percent, respectively, compared to 48.8 percent and 51.2 percent, respectively, for the state.

In the year 2000, Boone County had the 18th oldest median age, the 17th lowest proportion of residents under age 18, and the 23rd highest proportion of residents age 65 and older among all Arkansas counties. In the year 2000, the median age of residents in Boone County was 38.9 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 24.8 percent to 23.9 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 17.2 percent to 16.7 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 Boone County is decidedly more Caucasian than the population for the state on the whole. In 2000, the proportions of Boone County's population comprised of Caucasians, African Americans, American Indians and Native Alaskans, and Asians were 97.6 percent, 0.1 percent, 0.7 percent, and 0.3 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 Boone County who were Hispanic was 1.1 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

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_DP1&_geo_id=04000US05

United States Census Bureau, Census 2000, Table DP-1. Profile of General Demographic Characteristics: 2000. <http://censtats.census.gov/data/AR/05005009.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_DP1&_geo_id=05000US05009

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 Boone County. The table also ranks Boone County in terms of these income statistics among the 75 counties in Arkansas and the 16 counties in Northwest Arkansas.

Table 1 – Boone County Income Statistics

Income Statistic	Boone County	Percent of State	Arkansas			Northwest Arkansas		
			Rank	Range		Rank	Range	
				Low	High		Low	High
1999 Median Household Income	\$29,988	93.2%	29	\$20,510	\$42,569	7	\$21,397	\$40,281
1999 Median Family Income	\$34,974	90.5%	35	\$25,846	\$48,717	7	\$27,580	\$45,235
2000 Per Capita Personal Income	\$20,974	95.4%	19	\$14,303	\$30,447	5	\$14,303	\$25,358

Table 2 presents poverty statistics for different resident groups in Boone 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 58th among the counties in Arkansas and 11th among the counties in Northwest Arkansas in terms of the poverty rate for individuals in 1999.¹

¹ 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 – Boone County Poverty Rates, 1999

Poverty Statistic	County Rate	Arkansas Rate	Arkansas			Northwest Arkansas		
			Rank	Range		Rank	Range	
				Low	High		Low	High
Individuals	14.8%	15.8%	58	7.2%	32.7%	11	10.1%	23.8%
Families with Related Children	15.8%	18.1%	61	7.8%	40.8%	11	11.2%	26.4%
Individuals 65 and Older	12.9%	13.8%	60	7.3%	27.6%	12	8.6%	26.6%

Table 3 presents average weekly earnings for covered employment in Boone County in the year 2001. The table also displays average weekly earnings as a proportion of the state’s figure and ranks Boone 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 manufacturing sector, Boone County ranked 30th among the 71 counties in Arkansas for which data were available and 5th among the 15 counties in Northwest Arkansas for which data were available.

Table 3 – Boone 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	\$538.80	93.8%	30 / 71	\$260.75	\$894.22	5 / 15	\$312.98	\$587.60
Wholesale Trade	\$483.74	67.5%	45 / 68	\$214.77	\$995.14	8 / 14	\$214.77	\$995.14
Retail Trade	\$339.71	100.0%	8 / 73	\$215.61	\$439.32	4 / 15	\$244.32	\$358.05
Information	\$543.54	80.5%	24 / 56	\$306.77	\$869.54	8 / 12	\$348.10	\$832.62
Financial Activities	\$547.72	86.5%	8 / 73	\$282.76	\$829.55	5 / 14	\$282.76	\$622.20
Professional and Business Services	\$384.54	61.5%	49 / 68	\$218.14	\$955.05	12 / 15	\$256.91	\$955.05
Education and Health Services	\$453.79	83.7%	21 / 74	\$231.49	\$668.35	9 / 16	\$231.49	\$649.85
All Sectors	\$466.78	90.1%	23 / 75	\$316.63	\$681.93	6 / 16	\$316.63	\$631.34

Table 4 presents the share of personal income in Boone 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 Boone County in terms of the share of personal income attributed to the sectors relative to 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 manufacturing sector, Boone County ranked 39th among the 73 counties in Arkansas for which data were available and 10th among the 15 counties in Northwest Arkansas for which data were available.

Table 4 – Disposition of Personal Income in Boone 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	3.0%	0.4%	44 / 75	0.1%	15.9%	8 / 16	0.4%	15.9%
Manufacturing	13.1%	-1.2%	39 / 73	1.3%	77.9%	10 / 15	3.4%	27.1%
Transportation and Utilities	9.1%	3.4%	5 / 71	1.3%	14.5%	3 / 15	1.8%	14.5%
Wholesale Trade	5.9%	2.4%	4 / 67	0.2%	11.4%	1 / 15	0.4%	5.9%
Retail Trade	7.0%	-0.8%	14 / 75	1.4%	24.4%	7 / 16	2.4%	24.4%
Finance, Insurance, and Real Estate	3.1%	-0.3%	6 / 71	0.8%	8.0%	3 / 15	1.1%	3.5%
Services	9.7%	-5.2%	27 / 75	3.3%	29.0%	8 / 16	4.8%	29.0%
Business Services	1.4%	-1.2%	19 / 65	0.1%	10.5%	6 / 14	0.2%	5.5%
Health Services	3.2%	-3.0%	40 / 72	0.5%	14.4%	8 / 16	0.5%	14.4%
Hotel and Lodging	0.2%	-0.1%	32 / 55	0.04%	1.9%	10 / 14	0.05%	1.9%
Amusement and Recreation Services	0.1%	-0.2%	29 / 48	0.03%	1.0%	7 / 10	0.03%	1.0%

The sale of livestock accounted for 99.0 percent of Boone County’s cash receipts from farm marketings in the year 2000. Livestock cash receipts and total cash receipts for Boone County in the year 2000 were \$66.7 million and \$67.3 million, respectively; the county ranked 17th in terms of the former and 33rd in terms of the latter among Arkansas’ counties. Cash receipts for crops and government payments for Boone County in the year 2000 totaled \$662,000 and \$2.5 million, respectively; the county ranked 54th in terms of the former and 33rd in terms of the latter among Arkansas’ counties. The county ranked 41st among Arkansas’ counties in terms of total production expenses in the year 2000, \$59.9 million. As of January 1, 2002, Boone County had a total of 61,000 cattle and calves and 31,000 beef cows; the county ranked 5th in terms of both cattle and calves and in terms of beef cows among the counties in Arkansas.

Sources:

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- United States Census Bureau, Census 2000, Table DP-3. Profile of Selected Economic Characteristics: 2000. <http://censtats.census.gov/data/AR/05005009.pdf>
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- 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/boone.PDF>

Education

Boone County contains the following six school districts, with October 1, 2000 enrollment found in parentheses: Alpena (550), Bergman (881), Harrison (2,835), Lead Hill (375), Omaha (394), and Valley Springs (903). 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 Boone County Schools, 2000-2001 School Year

School District	ACT Composite Score	Attendance Rate	Dropout Rate	Graduation Rate	College Remediation Rate
Alpena	21.3	90.8%	4.4%	68.9%	44.0%
Bergman	20.2	92.7%	4.0%	80.6%	53.0%
Harrison	22.6	93.0%	1.3%	92.0%	41.0%
Lead Hill	17.8	96.3%	2.2%	96.2%	67.0%
Omaha	18.5	93.0%	3.3%	89.5%	13.0%
Valley Springs	21.8	93.3%	1.0%	95.7%	43.0%
State Average	20.1	93.2%	3.0%	84.3%	41.0%

Among the 301 school districts in Arkansas for which data were available, the ACT composite scores for the school districts in Boone County ranked as follows: Alpena (tied for 34th), Bergman (109th), Harrison (tied for 4th), Lead Hill (tied for 253rd), Omaha (tied for 226th), and Valley Springs (tied for 18th); 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 Boone County ranked as follows: Alpena (tied for 17th), Bergman (43rd), Harrison (tied for 3rd), Lead Hill (68th), Omaha (65th), and Valley Springs (tied for 11th). 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 Boone County ranked as follows: Alpena (tied for 48th), Bergman (tied for 56th), Harrison (tied for 211th), Lead Hill (tied 143rd), Omaha (tied for

81st), and Valley Springs (tied for 235th); because of 27 districts' being tied for last place with a 0.0 percent dropout rate, the rankings ranged from 1 through 285.² Among the 72 school districts in Northwest Arkansas, the dropout rates for the school districts in Boone County ranked as follows: Alpena (7th), Bergman (tied for 9th), Harrison (tied for 51st), Lead Hill (tied for 25th), Omaha (tied for 17th), and Valley Springs (tied for 58th); 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 Boone County ranked as follows: Alpena (290th), Bergman (234th), Harrison (84th), Lead Hill (29th), Omaha (tied for 110th), and Valley Springs (tied for 32nd). Among the 72 school districts in Northwest Arkansas, the graduation rates for the school districts in Boone County ranked as follows: Alpena (70th), Bergman (58th), Harrison (19th), Lead Hill (5th), Omaha (tied for 32nd), and Valley Springs (6th). 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 Boone County ranked as follows: Alpena (tied for 172nd), Bergman (tied for 113th), Harrison (tied for 192nd), Lead Hill (tied for 45th), Omaha (278th), and Valley Springs (tied for 179th); because of 31 districts' being tied for last place with a 0.0 percent college remediation rate, the rankings ranged from 1 through 281.³ Among the 72 school districts in Northwest Arkansas, the college remediation rate for the school districts in Boone County ranked as follows: Alpena (37th), Bergman (tied for 16th), Harrison (tied for 44th), Lead Hill (tied for 6th), Omaha (69th), and Valley Springs (tied for 38th); 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 Alpena School District, neither of the district's schools is accredited by the North Central Association of Secondary Schools and Colleges (NCASSC). In the Bergman School District, neither of the district's schools is accredited by the NCASSC. In the Harrison School District, all seven schools are accredited by the NCASSC. In the Lead Hill School District, neither of the district's schools is accredited by the NCASSC. In the Omaha School District, none of the district's three schools is accredited by the NCASSC. In the Valley Springs School District, both of the district's schools are accredited by the NCASSC.

² 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.

³ 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.

Table 6 displays the proportion of persons 25 years of age or older in Boone 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 four levels of education presented. For example, Boone County ranked 22nd among Arkansas' counties and 6th among the 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 Boone County, 2000

Level of Education	County	Arkansas	Arkansas			Northwest Arkansas		
			Rank	Range		Rank	Range	
				Low	High		Low	High
Bachelor's Degree	8.7%	11.0%	22	4.2%	18.0%	6	5.4%	14.8%
Graduate or Professional Degree	3.9%	5.7%	30	1.8%	10.1%	8	2.8%	9.8%
Bachelor's Degree or Higher	12.7%	16.7%	23	6.3%	28.1%	8	8.4%	24.5%
High School Diploma or Higher	76.8%	75.3%	12	56.2%	84.4%	5	65.4%	80.4%

There are 12 Arkansas colleges and universities within 100 miles of Harrison, 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 13th 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.

Arkansas Tech University (ATU), located in Russellville, Arkansas in Pope County, is a four-year public university. The AHECB has approved the dissemination of the following academic degrees and certificate programs at ATU: technical certificates in 3 program areas, associate degrees in 10 program areas, baccalaureate degrees in 54 program areas, master's degrees in 20 program areas, and a specialist degree in educational leadership. Opening fall enrollment for ATU was 5,576 in 2001, 7.8 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 fifth among the ten four-year public universities in terms of fall enrollment in 2001.

Since 1997, fall enrollment at ATU has increased 31.6 percent, compared to a 4.8 percent increase for four-year public universities in Arkansas.

Central Baptist College (CBC), located in Conway, Arkansas in Faulkner County, is a four-year private college and offers associate degrees in three program areas and baccalaureate degrees in nine program areas. Opening fall enrollment for CBC was 358 persons in 2001, 8.5 percent greater than fall 2000. Since 1997, fall enrollment at CBC has increased 7.5 percent.

Hendrix College, located in Conway, Arkansas in Faulkner County, is a four-year private liberal arts college associated with the United Methodist Church and offers baccalaureate degrees in 27 program areas and a master's degree in accounting. Opening fall enrollment for Hendrix College was 1,085 persons in 2001, 4.6 percent less than fall 2000. Since 1997, fall enrollment at Hendrix College has increased 4.9 percent.

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 8th 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 3rd 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.

Ozarka College, located in Melbourne, Arkansas in Izard County, is a two-year public college. The AHECB has approved the dissemination of the following academic degrees and certificate programs at Ozarka College: certificates of proficiency in five program areas, technical certificates in six program areas, and associate degrees in nine program areas. Opening fall enrollment for Ozarka College was 878 persons in 2001, 10.2 percent greater than fall 2000. The school ranked 22nd among the 23 two-year public institutions

in Arkansas in terms of fall enrollment in 2001. Since 1997, fall enrollment at Ozarka College has increased 22.3 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. 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.

The University of Arkansas Community College at Morrilton (UACCM), located in Morrilton, Arkansas in Conway County, is a two-year public college associated with the University of Arkansas system. The AHECB has approved the dissemination of the following academic degrees and certificate programs at the UACCM: certificates of proficiency in 3 program areas, technical certificates in 17 program areas, and associate degrees in 17 program areas. Opening fall enrollment for UACCM was 1,290 in 2001, 10.1 percent greater than fall 2000. The school ranked 12th among the 23 two-year public colleges in Arkansas in terms of fall enrollment in 2001. Since 1997, fall enrollment at UACCM has increased 43.8 percent.

The University of Central Arkansas (UCA), located in Conway, Arkansas in Faulkner County, is a four-year public university. The AHECB has approved the dissemination of the following academic degrees and certificate programs at UCA: associate degrees in 6 program areas, baccalaureate degrees in 105 program areas, post-baccalaureate certificates in 2 program areas, master's degrees in 50 program areas, specialist degrees in 2 program areas, and doctoral degrees in 3 program areas. Opening fall enrollment for UCA was 8,486 in 2001, 0.1 percent greater than fall 2000. The school ranked fourth among the ten four-year public institutions in Arkansas in terms of fall enrollment in 2001. Since 1997, fall enrollment at UCA has decreased 6.0 percent.

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.

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

III. Infrastructure

Ports

There are no ports on the White River in Boone County. However, the river is navigable on a seasonal basis by a nine-foot channel from Newport, located in Jackson County, to the Mississippi River, a distance of approximately 255 miles.

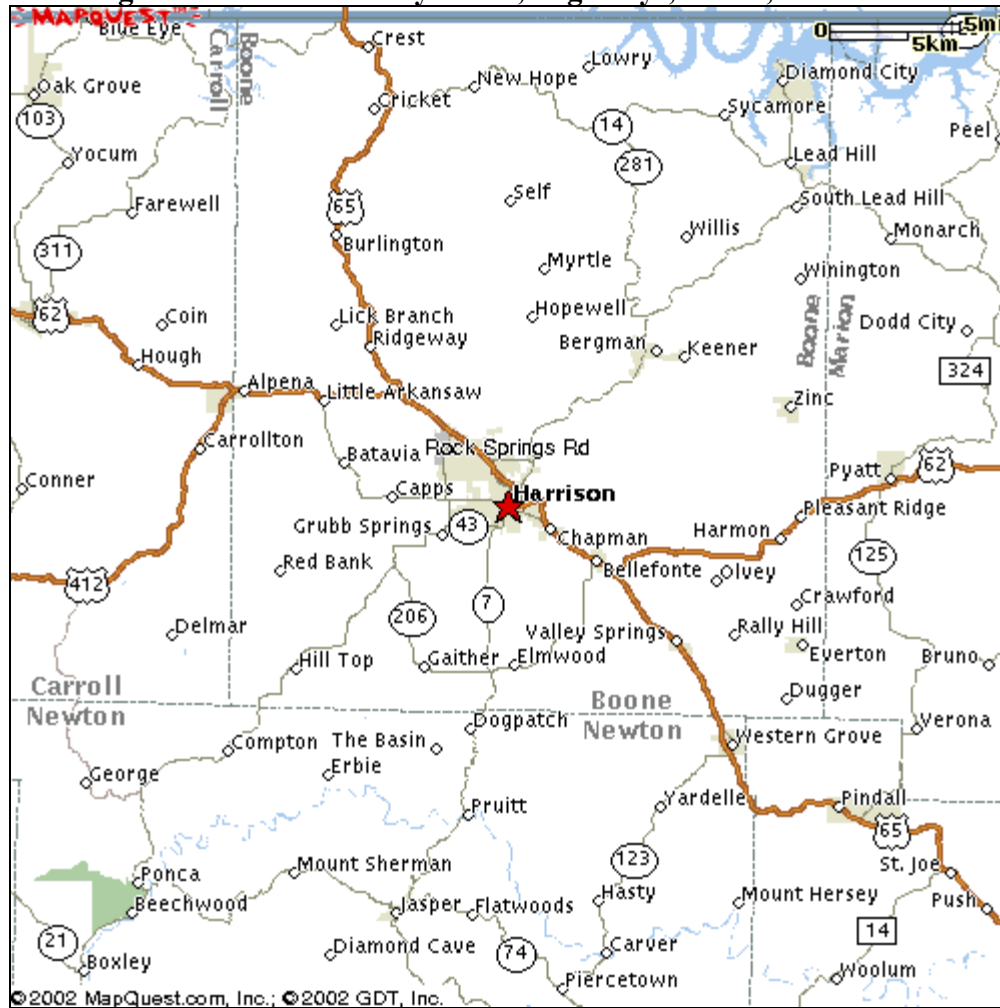
Source:

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

Highways

Figure 2 displays the major cities, highways, lakes, and rivers found in Boone County. In 2003, 2.7 miles of passing lanes are planned to be added to U.S. Highway 65.

Figure 2 – Boone County Cities, Highways, Lakes, and Rivers



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 Boone County.⁴

⁴ GPD = Gallons Per Day

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

City	Water Surplus Capacity	Waste Water Surplus Capacity	Electricity Provider	Natural Gas Provider
Harrison	4.036 million GPD	N/A	Entergy	Arkansas Western Gas
Diamond City	N/A	N/A	Entergy	None
Bergman	N/A	N/A	Entergy	Arkansas Western Gas

Sources:

Roger Smith, Water Maintenance Supervisor, City of Harrison, Arkansas.

City of Diamond City, Arkansas.

City of Bergman, Arkansas.

Railroads

The Missouri and Northern Arkansas Railroad passes through Bergman in its 527-mile route from Kansas City, Missouri to Newport, Arkansas. The railroad 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:

RailAmerica, Inc., North American Rail Group.

http://www.railamerica.com/html/missouri_northern_arkansas_r.html

RailAmerica, Inc. North American Rail Group.

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

Airports

The Boone County Airport is the only airport serving Boone County. The airport, located three miles northwest of Harrison, has two grooved asphalt runways, each 6,161 feet in length, which can accommodate a 30,000-pound single-wheel aircraft and a 50,000-pound double-wheel aircraft. Big Sky Airlines has three daily flights from the Boone County Airport to Dallas/Fort Worth, two daily flights to Hobbs, New Mexico, and three daily flights to Hot Springs, Arkansas. Hertz provides rental car services at the airport. There is no control tower at this airport. Services offered at the Boone County Airport include: aviation fuel, aircraft parking (hangars and tiedowns), airfreight, charter flights, flight instruction, aircraft rental, and aircraft sales.

The four major airports closest to Boone County are Springfield-Branson Regional Airport in Springfield, Missouri (roughly 80 miles northwest of Harrison), Northwest Arkansas Regional Airport in Bentonville, Arkansas (roughly 80 miles west of Harrison), Adams Field Airport in Little Rock, Arkansas (roughly 160 miles south of Harrison), and Kansas City International Airport in Kansas City, Missouri (roughly 250 miles northwest of Harrison).

Sources:

AirNav, LLC. Boone County Airport: Harrison, Arkansas.

<http://www.airnav.com/airport/KHRO>

Boone County Airport. Flight Schedules. <http://www.harrison-boonecoairport.com/flight.html>

<http://www.harrison-boonecoairport.com/flight.html>

Boone County Airport. Car Rentals. <http://www.harrison-boonecoairport.com/hertz.html>

IV. Labor Force

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

Table 8 – Covered Employment for Boone County, 2001 Annual Averages

North American Industry Classification System Industry Group	Average Employing Units	Average Covered Employment
Construction	94	648
Manufacturing	75	2,586
Trade, Transportation & Utilities	271	4,259
Wholesale Trade	55	1,026
Retail Trade	167	1,947
Transportation, Warehousing & Utilities	49	1,286
Information	20	447
Financial Activities	88	590
Professional & Business Services	115	519
Education & Health Services	106	938
Leisure & Hospitality	70	997
Local Government	46	1,893
State Government	20	552
Other	81	328
Boone County - Total	986	13,757

The manufacturing sector accounted for 18.8 percent of total covered employment in Boone County in 2001, compared to the state's figure of 20.5 percent. In terms of the proportion of covered employment attributed to the manufacturing sector, the county ranked 52nd among the 71 counties in Arkansas for which data were available and 13th ahead of Newton County and Searcy County among the 15 counties in Northwest Arkansas for which data were available. For the state, the proportions ranged from 62.4 percent (Calhoun County) to 5.1 percent (Perry County); for Northwest Arkansas, the proportions ranged from Marion County's 48.2 percent to Newton County's 8.3 percent.

The wholesale trade sector accounted for 7.5 percent of total covered employment in Boone 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 4th among the 68 counties in Arkansas for which data were available and 1st 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 14.2 percent of total covered employment in Boone 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 15th among the 74 counties in Arkansas for which data were available and 3rd behind Baxter County and Searcy County 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 9.3 percent of total covered employment in Boone 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 7th among the 69 counties in Arkansas for which data were available and 4th 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.

The information sector accounted for 3.2 percent of total covered employment in Boone County in 2001, compared to the state's figure of 1.9 percent. In terms of the proportion of covered employment attributed to the information sector, the county ranked 2nd behind Pulaski County among the 56 counties in Arkansas for which data were available and 1st among the 12 counties in Northwest Arkansas for which data were available. For the state, the proportions ranged from 3.6 percent (Pulaski County) to 0.3 percent (Little River County); for Northwest Arkansas, the proportions ranged from Boone County's 3.2 percent to Johnson County's 0.4 percent.

The financial activities sector accounted for 4.3 percent of total covered employment in Boone County in 2001, equivalent to the state's figure. In terms of the proportion of covered employment attributed to the financial activities sector, the county ranked 20th among the 73 counties in Arkansas for which data were available and 4th among the 14 counties in Northwest Arkansas for which data were available. For the state, the proportions ranged from 7.5 percent (Pike County) to 1.9 percent (Nevada County); for Northwest Arkansas, 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 3.8 percent of total covered employment in Boone 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 25th among the 68 counties in Arkansas for which data were available and 7th 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 6.8 percent of total covered employment in Boone 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 64th among the 74 counties in Arkansas for which data were available and 14th ahead of Crawford County and Benton County 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 7.2 percent of total covered employment in Boone 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 31st among the 73 counties in Arkansas for which data were available and 7th among the 16 counties in Northwest Arkansas. 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 Boone County's largest employers is presented in Table 9 below.

Table 9 – Boone County's Largest Employers

Company Name	City	Product	Employees
Milbrook Distribution Service	Harrison	General Merchandise Wholesaler	D
Federal Express	Harrison	Transportation	D
North Arkansas Medical Center	Harrison	Hospital	D
Wabash Wood Products	Harrison	Transportation Bodies	C
North Arkansas College	Harrison	College	C
Claridge Products and Equipment	Harrison	School Boards	C
Pace Industries, Inc.	Harrison	Aluminum Die Casting	C
Wal-Mart	Harrison	Retail	C
Flexsteel Industries	Harrison	Wood Products	B
Alltel	Harrison	Telecommunications	B
White Rodgers	Harrison	Industrial and Commercial Fans	B

Employee Codes – B: 100-250; C: 251-500; D: 501-1,000

Figure 3 displays the annual unemployment rates for Boone County, the State of Arkansas, and the United States for the period 1995 through 2001. Since 1996, Boone County experienced unemployment rates above the state and national averages; in 1998, the annual unemployment rate in Boone County, 7.5 percent, was 2.0 percent above the annual unemployment rate for the state and 3.0 percent above the annual unemployment rate for the U.S. for the period. In 2001, the unemployment rate in Boone County was 6.0 percent, compared to the state and national figures of 5.1 percent and 4.8 percent, respectively. Boone County had the 32nd highest unemployment rate among Arkansas' 75 counties in 2001 and 2nd highest unemployment rate behind Newton County 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

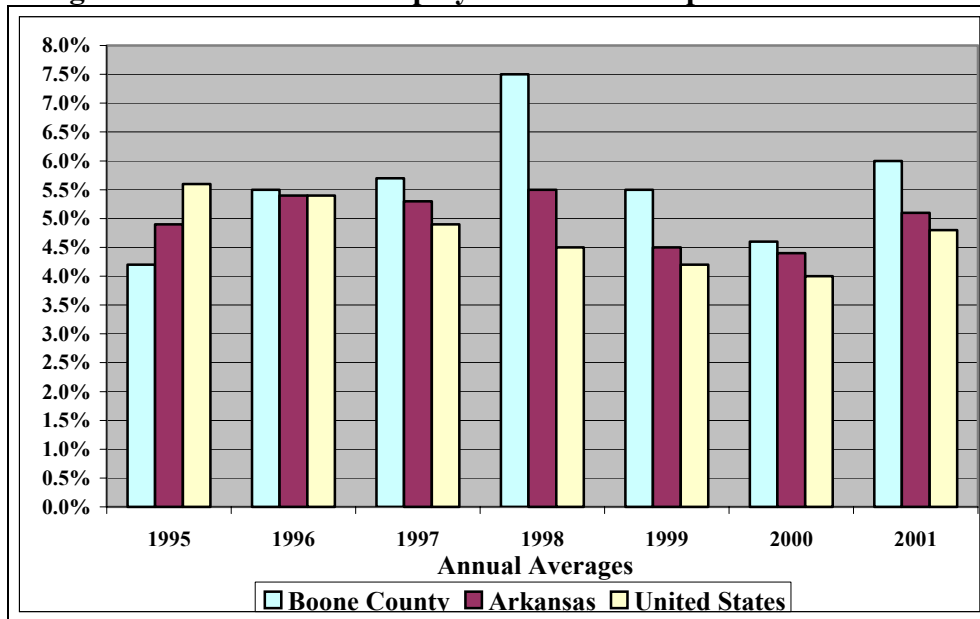
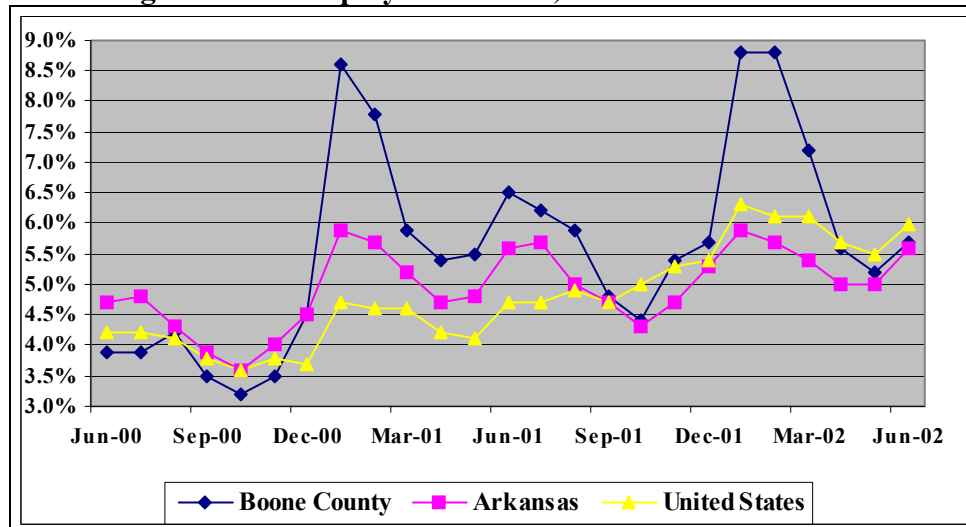


Figure 4 displays the monthly unemployment rates for Boone County, Arkansas, and the United States from June 2000 to June 2002.⁵

Figure 4 – Unemployment Rates, June 2000 – June 2002



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 currently two available industrial sites in Boone County. The first property is located outside the city limits of Diamond City and is owned by Sugarloaf Industrial Development Corporation of Northern Boone County. There are 37 acres of available land within the property priced at \$4,000 per acre. The site is 75 percent cleared farmland with a slope that varies from one to five percent. American Strap Manufacturing is the only firm with a presence on the site (lots 10 & 11). Arkansas Highway 7 directly services the property to the west, and Interstate 44 is 85 miles northwest of the site. The Missouri and Northern Arkansas railroad has a line 12 miles south of the site. Commercial air service is available 24 miles south of the site at the

⁵ Note: Data are not seasonally adjusted.

Harrison Airport. There are also port facilities with a barge rail terminal, loading docks, and warehouse at the Port of Dardanelle 100 miles south of the site. The Diamond City Water System provides water service to the site through an eight-inch main with a normal line pressure of 50 pounds per square inch (psi). The Sugarloaf Wastewater Treatment District provides sewer service to the site through an eight-inch main. The Entergy Corporation provides electricity to the site with a voltage of 13.0 kilovolts.

The second property is located within the city limits of Harrison and is owned by the Boone County Industrial Development Corporation. There are 35 acres of available land within the property priced at \$10,000 per acre. The site is cleared with a slope of eight to 20 percent. Five firms have a presence on the site: Rock-Tenn, Cloud Corporation, UPS, Anchor Die Cast, and Johnson Manufacturing. Interstate 40 is 75 miles to the south of the site by way of US Highway 65. The Missouri and Northern Arkansas Railroad has a line seven miles north of the site, and the Boone County Airport is 0.75 miles north of the site. There are also public port facilities with warehouse facilities and Foreign Trade Zone #14 available at Little Rock, 150 miles to the south of the site. The City of Harrison provides water service to the site through an 8-inch main with a normal line pressure of 80 psi. The City of Harrison also provides an 8-inch sewer main to the site. The Arkansas Louisiana Gas Company provides natural gas service to the site through a 2-inch main with a normal line pressure of 100 psi. Entergy Corporation provides electricity to the site with a voltage of 13.8 kilovolts.

There are three available industrial buildings in Benton County. The first building, constructed in 1993, is located in Lead Hill and was previously occupied by Rhema Dura Screen. The metal facility has 37,626 square-feet of space (31,367 square-feet of manufacturing space and 6,259 square-feet of office space) on 4-inch concrete floors and is accompanied by 4 acres of land. Clearance under the beams ranges from 7 feet, 6 inches to 15 feet, 11 inches; the span between the beams ranges from nine feet, nine inches to 15 feet, 11 inches. Ceiling clearance at the side walls is 9 feet, 9 inches. The facility is serviced by the Missouri and Northern Arkansas railroad ten miles from the site. The facility has two floor-level doors, one dock-high door, and 40 gravel parking spaces. The City of Lead Hill provides the facility with water service through an eight-inch main with normal line pressure of 50 psi. The City of Lead Hill also provides sewer services through an eight-inch sewer main. The Entergy Corporation provides the facility with electricity. The facility is for sale at a price of \$552,000. A lease is also negotiable with all or part of the building.

The second building, constructed in 1972, is located in Harrison at 3220 Highway 65 North and was previously occupied by Rorrer Supply. The exterior walls are constructed with blocks, and the roof is metal. The facility has 18,400 square-feet of space (16,000 square-feet of manufacturing space and 2,400 square-feet of office space) on 6-inch concrete floors and is accompanied by 8.68 acres of land. Clearance under the beams ranges from 16 feet, 0 inches to 17 feet, 11 inches; the span between the beams ranges from 17 feet, 7 inches to 22 feet, 1 inch. The facility is serviced by the Missouri and Northern Arkansas Railroad eight miles from the site. The facility has 1 floor-level door, 2 dock-high doors, and 200 gravel parking spaces. A well supplies the facility with water

service, and a septic system provides the facility with sewer services. The Entergy Corporation provides the facility with electricity. The facility is for sale at a price of \$1,000,000 or for lease at \$15,000 per month or \$3.26 per square-foot per year.

The final building, constructed in 1989, is located in Diamond City at 1 Industrial Park and was previously occupied by American Strap, Inc. The metal facility has 10,769 square-feet of space on four-inch concrete floors and is accompanied by one acre of land, with an additional acre available for purchase. Clearance under the beams ranges from nine feet, one inch to 12 feet, 2 inches; the span between the beams ranges from 12 feet, 0 inches to 14 feet, 0 inches. The facility is serviced by the Missouri and Northern Arkansas Railroad 12 miles from the site. The facility has 1 dock-high door and 25 gravel parking spaces. The City of Diamond provides the facility with water and sewer services through an eight-inch main. The Entergy Corporation provides the facility with electricity. The facility is for sale at a price of \$200,000.

Sources:

Available Building and Site Database for Arkansas Communities, Arkansas Department of Economic Development.

http://www.1800arkansas.com/Buildings_Sites/Site.asp?SiteNumber=DIA001

Available Building and Site Database for Arkansas Communities, Arkansas Department of Economic Development.

http://www.1800arkansas.com/Buildings_Sites/Site.asp?SiteNumber=HARI001

Available Building and Site Database for Arkansas Communities, Arkansas Department of Economic Development.

http://www.1800arkansas.com/Buildings_Sites/Building.asp?BldNumber=649

Available Building and Site Database for Arkansas Communities, Arkansas Department of Economic Development.

http://www.1800arkansas.com/Buildings_Sites/Building.asp?BldNumber=844

Available Building and Site Database for Arkansas Communities, Arkansas Department of Economic Development.

http://www.1800arkansas.com/Buildings_Sites/Building.asp?BldNumber=816

VI. Economic Goals

Boone County has been enjoying moderate levels of economic growth. With a diversified industry base that depends on four drivers the county is positioned for continued economic success. Tourism, manufacturing, agriculture, and relocation work together to buffer the county from any single industry's risks. Additionally, North Arkansas College in Harrison is available to help train the labor pool for the wide variety of jobs that these industries provide.

Because per capita income is not as high as the state average, Boone County should focus on attracting high quality service and professional jobs to the area. With a solid workforce base already in place, Boone County should work to maintain the presence of existing corporations and work for expansion of product lines within the county.

Boone County is on the path for many tourists who are traveling from southern states to Branson or St. Louis, Missouri. Boone County should continue to work to take advantage of the situation and plan for the future when other north-south routes may take precedent over existing highways. Investing in U.S. Highway 412 as a major east-west corridor and the airport will continue to bring traffic through the county.

VII. Opportunities for Future Business Development

Transportation

The evolution of electronic commerce has changed the way companies sell and ship their goods. The e-commerce segment that is radically altering the transportation industry is business-to-consumer. Traditionally, goods travel in a chain, from raw materials producer to manufacturer, distributor, retailer, and finally to consumer. But the Internet has shortened this process, essentially eliminating the middleman. This changing pattern will hurt full truckload carriers as shipments between manufacturers, distributors, and retailers are eliminated and as smaller lots prevail. On the other hand, package delivery, airfreight express, and less-than-truckload carriers will become beneficiaries of e-commerce. Currently, the first choice of Internet carriers is United Parcel Service (UPS) with a 55 percent share of all e-commerce transactions, according to Zona Research, a consulting firm based in Redwood City, California.

A shortage of qualified drivers has plagued the trucking industry's long-haul truckload segment since the early 1990s. As recently as 2001, an estimated 80,000 driver slots remained unfilled. Among many factors contributing to the shortage include low pay, long absences of truck drivers from their families, and disrespectful treatment by shippers and carriers. The high turnover rates and driver shortages in the truckload industry can push up carriers' costs. With industry turnover rates of about 100 percent, recruitment and training expenditures can cost some \$3 billion annually. Further, the hiring of inexperienced drivers leads to an increase in accident rates, insurance costs, and claims paid out for damaged cargo, as the less experienced drivers tend to have more accidents than drivers with more tenure.

Trucking companies are coping with the driver shortage by avoiding long-haul freight or by routing such freight through intermodal rail service. Additionally, by harnessing sophisticated computer software, carriers can match drivers with loads moving in the direction of their domiciles. Many companies have installed on-board computers that link drivers to dispatchers and their families via satellite. Such devices steer drivers around congested roads, help them obtain faster road service, and let them communicate with their families and dispatchers without leaving the highway. These devices may become mandatory equipment for all vehicles if the Department of Transportation implements its proposed hours of service regulations.

Intermodal traffic is the movement of general freight, such as consumer goods and light industrial products, in trailers or containers by means of two or more transport modes. Though intermodal rail service fell out of favor with shippers in 2000 and likely in 2001,

Standard and Poor's believes this is temporary and that it will eventually become the preferred transport mode in certain markets. Some 35 percent of the intermodal market goes to truckload carriers, such as J.B. Hunt Transport and Schneider National (which together claim about 10 percent of the market), and to intermodal marketing companies, which are third-party intermediaries.

The future of the intermodal segment — the railroad industry's fastest-growing business — is tied directly to the level of world economic activity, not to heavy industry or mining. Between 1980 and 1999, intermodal railroad traffic soared 196 percent — a compound annual rate of 5.9 percent. In April 2000, the Association of American Railroads, a Washington, D.C.-based trade organization, projected that 3.08 million trailers and 7.80 million containers would be moved by intermodal rail in 2004. This total of 10.88 million units would be up 33.8 percent from the 8.13 million units moved in 1994 (4.38 million containers and 3.75 million trailers). In the longer term, intermodal's prospects are bright, as import/export business between the United States and the rest of the world grows and fuel prices and driver shortages push up truckload rates and force business onto the rails. Standard and Poor's projects that once intermodal's operations are smoothed out, with frequent departures and high on-time reliability, a large portion of e-commerce will be sent via intermodal transportation, since surveys demonstrate online purchasers' willingness to sacrifice time for low costs.

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.

Capital Goods

The capital goods industry has a number of trends and themes: consolidation; customers' ever-growing demands for improved value and service; e-commerce initiatives; and the cyclical nature of the overall capital goods industry.

Consolidation remains a long-term trend in many capital goods sectors. Service companies, such as those in engineering and construction, can expand their geographic range or acquire specialty firms that extend their capabilities. Acquisitions are considered by these companies as a mean to add to a business' portfolio. Through acquisition, the operating subsidiaries may optimize the use of the parent company's capital and to provide the most favorable returns to investors.

To meet customers' demand, capital goods makers have applied sophisticated electronics to mechanical systems in order to enhance productivity, increase precision, facilitate maintenance, and provide operators with more complete information on the equipment's operating status. Reducing the complexity of the capital equipment is another tactic used by manufactures to improve the equipment's quality and reliability, while cutting the cost to buy and operate it.

The Internet is revolutionizing the way many capital goods manufacturers conduct business. The Internet will affect capital goods manufacturers positively or negatively, and to different degrees, based largely on whether a manufacturer produces price-sensitive, commodity-like products, or proprietary, hard-to-duplicate products. Makers of commodity products, such as nuts and bolts for the auto- and aircraft-manufacturing industries, are probably most vulnerable to the profit-squeezing potential of the Internet. While companies that make sophisticated, hard-to-duplicate industrial goods probably will not be affected much by the Internet.

The cyclical pattern for industrial machinery and equipment demand generally follows the strength of the economy. Growth in industrial equipment sales cooled dramatically over the past few years. Based on U.S. Census statistics, non-military, nonaircraft industrial equipment sales grew at only a 0.25 percent annual rate from 1999 through

2001. The slowing global economy, as well as global industrial overcapacity, forced many manufacturing businesses to reduce production rates dramatically.

Aluminum

The aluminum industry is particularly dependent on the fortunes of the automobile and construction industries, which, combined, accounted for 45.6 percent of shipments in 2000. Containers (mostly beverage cans) and packaging are a critical market for aluminum, accounting for 20.4 percent of shipments in 2000.

The imperative to reduce vehicle weight and thereby improve gas mileage gives automakers a powerful incentive to substitute aluminum for steel. According to an informal agreement between the Clinton administration and the Big Three automakers (General Motors Corp., Ford Motor Co., and DaimlerChrysler AG), called the Partnership for a New Generation of Vehicles, automakers committed to producing a passenger vehicle capable of traveling 80 miles per gallon. By 2004, each company is expected to produce a prototype vehicle. It is estimated that a 50 percent weight reduction will be needed to produce a vehicle with that gas mileage capability. To obtain such a weight reduction while meeting recycling goals, it will be necessary to substitute aluminum for steel.

In the near term, it is unlikely that aluminum will further displace steel usage in the auto industry. This is partly because more steel than aluminum is used in several strong-selling models. Since the early 1990s, sales of light trucks, vans, and sport-utility vehicles have grown much more quickly than sales of passenger cars. For all vehicles, the amount of steel per vehicle increased to 1,781 pounds in 2001 from 1,717 pounds in 1990. As long as these vehicles remain popular, steel usage in the auto industry will remain high.

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.

Furniture

Two reasons for optimism in the appliances and furniture industries are the current U.S. demographics and housing trends. The main population group targeted by the industry is 35-to-64 year-olds, which is the fastest-growing segment in the United States. This group comprises individuals who have reached their peak spending years and who are likely to trade up in the housing market and to replace earlier purchases of major durables, such as furniture and appliances. As consumers enter their prime income-earning years (between 35 and 55 years of age), they are more likely to replace old, inexpensive furniture with new, higher-quality brands and to renovate their kitchens with state-of-the-art appliances. The most popular remodeling projects are those with the biggest payoffs in terms of home values. Topping the list are minor kitchen improvements, followed by major kitchen improvements (both of which foster demand for new appliances) and the addition of a master suite (which spurs demand for bedding and other furnishings).

In the meantime, houses in U.S. are getting larger. More total floor space and a greater number of rooms per house translate into more furniture and appliance sales. In 2000, new homes averaged 2,273 square feet, versus 1,645 square feet in 1975, according to the Census Bureau. Home ownership is also growing. According to the U.S. Census Bureau, the percentage of householders owning houses rose to 68 percent during the fourth quarter of 2001, up from 67.4 percent for all of 2000 and 63.8 percent in 1988. This bodes well for furniture manufacturers, as homeowners generally buy more furniture and spend more dollars per item than do renters.

Demographics also suggest that the housing market for consumers who can afford new homes is fairly saturated. Standard & Poor's forecasts that housing starts will rise only about one percent from 1.61 million (revised) in 2000 to 1.63 million units in 2005. This suggests that during the next five years, furniture and appliance manufacturers will depend more on replacement demand, including remodeling purchases, than in the prior decade. In that environment, companies will need innovative, stylish, and attractively priced products to stimulate sales.

On the distribution side, strategies and channels for both furniture and appliance sales are changing. The number of single-vendor furniture stores - retail outlets that sell just one brand of furniture - has been rising in recent years. The single-vendor retail stores benefit both manufacturers and retailers. For manufacturers, the benefits include attracting a dedicated customer and enjoying more floor space and a higher brand profile than in a multivendor format. By building a network of retail locations, manufacturers create a customer base for their products and enhance their brands. For retailers, the benefits include exclusive distribution territories, the efficiency of working closely with just one vendor, and brand-name recognition. While single-vendor stores may be smaller than

multivendor units, their sites are usually highly trafficked by consumers. The single-vendor stores are usually highly trafficked by consumers, typically resulting in higher sales and profits per square foot than in traditional stores.

A continuing challenge for U.S. manufacturers is to compete for domestic market share with the ever-growing number of foreign producers. Although it is beneficial to U.S. consumers in the form of lower furniture prices, the outsourcing trend means a continued reduction in domestic manufacturing and manufacturing jobs.

Wireless Telecommunications

Globalization is one of the most visible trends in wireless telecommunications. Europe has led the mobile revolution by establishing cross-border ventures. U.S. firms have been less aggressive in globalization in part because they have been tapping the large potential subscriber base in the domestic market. Asia and Latin America have been targets of the expansionary strategies of European and U.S. wireless operators. Although some form of globalization is considered almost a necessity in the wireless market, it has its downsides as well. Such downsides include difficulty in the integration of dispersed assets and increased indebtedness as a result of merger and acquisition.

The third generation (3G) of wireless communications with data and other information-intensive applications will drive growth, with voice revenue becoming a low-margin component of the industry. This is because the voice market has matured due to the product's rising affordability. For example, in the five-year period from mid-1994 to the end of 2000, the number of wireless subscribers in the United States more than quintupled, from 19.28 million to an estimated 109.5 million. With Japan leading, the transition to third-generation wireless service is underway worldwide, promising access to data and video through devices ranging from personal digital appliances to mobile phones to laptop computers. However, 3G wireless holds many risks for operators. They face high up-front costs to obtain licenses and build networks. In addition, the pricing of data services through wireless devices has been quite sporadic in its initial stages and the cost of retrieving information from wireless phones remains high.

Another trend in the wireless telecommunications industry is the influence of satellite broadcasting companies. Some of these companies are already planning to offer Internet services by year-end 2001. Broadcasting and cable services are converging with telecom and Internet technology, so the outcome of this competition will affect all of these industries.

Source: Standard and Poor's NetAdvantage.

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