

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



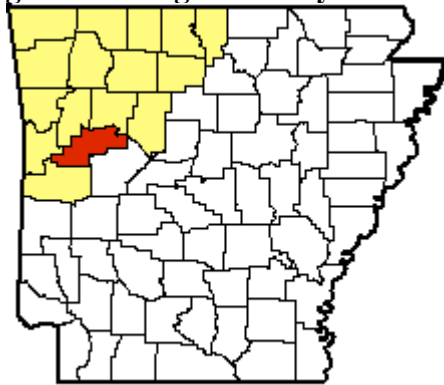
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An Economic Analysis of Logan County in Northwest Arkansas

I. Geographic Description

Logan County is comprised of 710 square miles and is located in the south-central portion of Northwest Arkansas in the physiographical region known as the Arkansas Valley. Figure 1 highlights the counties that comprise the Northwest Arkansas region, as defined by the Arkansas Department of Development. Logan County is shown in red; all other counties in the region are shown in yellow.

Figure 1 -- Logan County's Location



The Ozark National Forest is located in central and eastern Logan County, and the Ouachita National Forest is located in extreme southern Logan County. Logan County is home to the state's highest point above sea level, Mount Magazine (2,753 feet). Blue Mountain Lake is located southeast Logan County. The Arkansas River constitutes the county's northern border with Franklin County and Johnson County.

Sources:

United States Census Bureau. State and County QuickFacts.

<http://quickfacts.census.gov/qfd/states/05/05083.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 Logan County was 20,144 persons. The county ranked 35th in terms of population among Arkansas' 75 counties and eighth among the 16 counties in Northwest Arkansas. By 1990, the population of the county had increased 2.1 percent to 20,557 to rank 32nd among Arkansas' counties and eighth 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

Logan County stood at 22,486, an increase of 9.4 percent from 1990. The county was the 34th most populous county in Arkansas and the tenth most populous county in Northwest Arkansas in 2000. The five most populous cities in Logan County and their populations in the year 2000 were Booneville (4,117), Paris (3,707), Magazine (915), Subiaco (439), and Caulksville (233). The county seat for Logan County is split between Booneville and Paris.

DRI-WEFA, an economic analysis consulting firm, projects the population of Logan County will decrease by 4.4 percent to 21,490 people in the year 2010. If the projections are realized, Logan County will be the 36th most populous county in Arkansas and the tenth most populous county in Northwest Arkansas.

The gender makeup of Logan 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 49.6 percent and 50.4 percent, respectively, compared to 48.8 percent and 51.2 percent, respectively, for the state.

In the year 2000, Logan County had the 31st oldest median age, the 26th highest proportion of residents under age 18, and the 30th highest proportion of residents age 65 and older among all Arkansas counties. In the year 2000, the median age of residents in Logan County was 38.0 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 27.0 percent to 25.9 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 17.0 percent to 16.0 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 Logan County is decidedly more Caucasian than the population for the state on the whole. In 2000, the proportions of Logan County's population comprised of Caucasians, African Americans, American Indians and Native Alaskans, and Asians were 96.5 percent, 1.0 percent, 0.7 percent, and 0.1 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 Logan County who were Hispanic was 1.2 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/05005083.pdf>

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

Table 1 – Logan County Income Statistics

Income Statistic	Logan County	Percent of State	Arkansas			Northwest Arkansas		
			Rank	Range		Rank	Range	
				Low	High		Low	High
1999 Median Household Income	\$28,344	88.1%	43	\$20,510	\$42,569	9	\$21,397	\$40,281
1999 Median Family Income	\$33,732	87.2%	42	\$25,846	\$48,717	9	\$27,580	\$45,235
2000 Per Capita Personal Income	\$18,252	83.0%	45	\$14,303	\$30,447	8	\$14,303	\$25,358

Table 2 presents poverty statistics for different resident groups in Logan 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 48th among the counties in Arkansas and 7th 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 – Logan County Poverty Rates, 1999

Poverty Statistic	County Rate	Arkansas Rate	Arkansas			Northwest Arkansas		
			Rank	Range		Rank	Range	
				Low	High		Low	High
Individuals	15.4%	15.8%	48	7.2%	32.7%	7	10.1%	23.8%
Families with Related Children	16.1%	18.1%	60	7.8%	40.8%	10	11.2%	26.4%
Individuals 65 and Older	19.6%	13.8%	20	7.3%	27.6%	2	8.6%	26.6%

Table 3 presents average weekly earnings for covered employment in Logan County in the year 2001. The table also displays average weekly earnings as a proportion of the state’s figure and ranks Logan 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, Logan County ranked 37th among the 71 counties in Arkansas for which data were available and 7th among the 15 counties in Northwest Arkansas for which data were available.

Table 3 – Logan 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	\$502.34	87.5%	37 / 71	\$260.75	\$894.22	7 / 15	\$312.98	\$587.60
Wholesale Trade	\$326.96	45.6%	63 / 68	\$214.77	\$995.14	12 / 14	\$214.77	\$995.14
Retail Trade	\$276.73	81.4%	58 / 73	\$215.61	\$439.32	12 / 15	\$244.32	\$358.05
Information	\$543.72	80.6%	23 / 56	\$306.77	\$869.54	7 / 12	\$348.10	\$832.62
Financial Activities	\$479.28	75.7%	32 / 73	\$282.76	\$829.55	8 / 14	\$282.76	\$622.20
Professional and Business Services	\$571.60	91.4%	13 / 68	\$218.14	\$955.05	3 / 15	\$256.91	\$955.05
Education and Health Services	\$348.32	64.3%	55 / 74	\$231.49	\$668.35	12 / 16	\$231.49	\$649.85
All Sectors	\$411.55	79.4%	51 / 75	\$316.63	\$681.93	11 / 16	\$316.63	\$631.34

Table 4 presents the share of personal income in Logan 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 Logan 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, Logan County ranked 31st among the 73 counties in Arkansas for which data were available and 6th among the 15 counties in Northwest Arkansas for which data were available.

Table 4 – Disposition of Personal Income in Logan 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	7.5%	4.9%	24 / 75	0.1%	15.9%	5 / 16	0.4%	15.9%
Manufacturing	15.8%	1.5%	31 / 73	1.3%	77.9%	6 / 15	3.4%	27.1%
Transportation and Utilities	2.0%	-3.7%	64 / 71	1.3%	14.5%	14 / 15	1.8%	14.5%
Wholesale Trade	0.9%	-2.6%	55 / 67	0.2%	11.4%	10 / 15	0.4%	5.9%
Retail Trade	4.5%	-3.3%	51 / 75	1.4%	24.4%	11 / 16	2.4%	24.4%
Finance, Insurance, and Real Estate	2.1%	-1.3%	36 / 71	0.8%	8.0%	8 / 15	1.1%	3.5%
Services	6.0%	-8.9%	58 / 75	3.3%	29.0%	14 / 16	4.8%	29.0%
Business Services	0.5%	-2.1%	49 / 65	0.1%	10.5%	12 / 14	0.2%	5.5%
Health Services	2.7%	-3.5%	48 / 72	0.5%	14.4%	11 / 16	0.5%	14.4%
Hotel and Lodging	0.05%	-0.25%	54 / 55	0.04%	1.9%	14 / 14	0.05%	1.9%
Amusement and Recreation Services	0.03%	-0.27%	48 / 48	0.03%	1.0%	10 / 10	0.03%	1.0%

The sale of livestock accounted for 97.2 percent of Logan County’s cash receipts from farm marketings in the year 2000. Livestock cash receipts and total cash receipts for Logan County in the year 2000 were \$93.9 million and \$96.5 million, respectively; the county ranked 13th in terms of the former and 17th in terms of the latter among Arkansas’ counties. Cash receipts for crops and government payments for Logan County in the year 2000 totaled \$2.7 million and \$1.0 million, respectively; the county ranked 40th in terms of the former and 41st in terms of the latter among Arkansas’ counties. Logan County produced 318,000 bushels of corn for grain, 180,000 bushels of wheat, and 200,000 bushels of soybeans in 2001; the county ranked 18th, 35th, and 36th, in terms of corn production, wheat production, and soybean production among Arkansas’ counties, respectively. The county ranked 33rd among Arkansas’ counties in terms of total production expenses in the year 2000, \$71.7 million. As of January 1, 2002, Logan County had a total of 46,000 cattle and calves and 23,000 beef cows; the county ranked 10th in terms of the former and 9th in terms of the latter 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/05005083.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/logan.PDF>

Education

Logan County contains the following four school districts, with October 1, 2000 enrollment found in parentheses: Booneville (1,448), Magazine (546), Paris (1,168), and Scranton (391). 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 Logan County Schools, 2000-2001 School Year

School District	ACT Composite Score	Attendance Rate	Dropout Rate	Graduation Rate	College Remediation Rate
Booneville	20.7	92.1%	5.8%	78.2%	38.0%
Magazine	17.7	94.4%	1.2%	98.0%	43.0%
Paris	20.4	92.9%	2.2%	82.0%	53.0%
Scranton	20.5	95.5%	1.6%	100.0%	27.0%
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 Logan County ranked as follows: Booneville (tied for 74th), Magazine (tied for 261st), Paris (tied for 94th), and Scranton (tied for 86th); 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 Logan County ranked as follows: Booneville (29th), Magazine (69th), Paris (tied for 37th), and Scranton (tied for 34th). 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 Logan County ranked as follows: Booneville (tied for 28th), Magazine (tied for 218th), Paris (tied for 143rd), and Scranton (tied for 187th);

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 Logan County ranked as follows: Booneville (tied for 4th), Magazine (tied for 53rd), Paris (tied for 25th), and Scranton (tied for 42nd); 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 Logan County ranked as follows: Booneville (251st), Magazine (17th), Paris (tied for 213th), and Scranton (tied for 1st). Among the 72 school districts in Northwest Arkansas, the graduation rates for the school districts in Logan County ranked as follows: Booneville (64th), Magazine (3rd), Paris (55th), and Scranton (tied for 1st). 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 Logan County ranked as follows: Booneville (tied for 207th), Magazine (tied for 179th), Paris (tied for 113th), and Scranton (tied for 257th); 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 Logan County ranked as follows: Booneville (tied for 48th), Magazine (tied for 38th), Paris (tied for 16th), and Scranton (63rd); 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 Booneville School District, all three of the district's schools are accredited by the North Central Association of Secondary Schools and Colleges (NCASSC). In the Magazine School District, neither of the district's schools is accredited by the NCASSC. In the Paris School District, all three of the district's schools is accredited by the NCASSC. In the Scranton School District, neither of the district's schools is accredited by the NCASSC.

Table 6 displays the proportion of persons 25 years of age or older in Logan 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.

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.

For example, Logan County ranked 53rd among Arkansas' counties and 13th 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 Logan County, 2000

Level of Education	County	Arkansas	Arkansas			Northwest Arkansas		
			Rank	Range		Rank	Range	
				Low	High		Low	High
Bachelor's Degree	6.6%	11.0%	53	4.2%	18.0%	13	5.4%	14.8%
Graduate or Professional Degree	2.8%	5.7%	63	1.8%	10.1%	16	2.8%	9.8%
Bachelor's Degree or Higher	9.4%	16.7%	62	6.3%	28.1%	14	8.4%	24.5%
High School Diploma or Higher	69.8%	75.3%	43	56.2%	84.4%	12	65.4%	80.4%

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

Arkansas Tech University (ATU), located in Russellville, Arkansas in Pope County, is a four-year public university. 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 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.

Garland County Community College (GCCC), located in Hot Springs, Arkansas is a two-year public college. The AHECB has approved the dissemination of the following academic degrees and certificate programs at GCCC: technical certificates in 11 program areas and associate degrees in 9 program areas. Opening fall enrollment for GCCC was 2,422 persons in 2001, 9.1 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. The school ranked fifth among the 23 two-year public institutions in Arkansas in terms of fall enrollment in 2001. Since 1997, fall enrollment at GCCC has increased

24.8 percent, compared to a 16.6 percent increase for two-year public institutions in Arkansas.

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.

Rich Mountain Community College (RMCC), located in Mena, Arkansas, in Polk County, is a two-year public college. The AHECB has approved the dissemination of the following academic degrees and certificate programs at the RMCC: certificates of proficiency in 5 program areas, technical certificates in 10 program areas, and associate degrees in 17 program areas. Opening fall enrollment for RMCC was 1,003 in 2001, 4.0 percent greater than fall 2000. The school ranked 17th among the 23 two-year public institutions in Arkansas in terms of fall enrollment in 2001. Since 1997, fall enrollment at RMCC has increased 29.8 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.

In January 2002, Westark College, located in Fort Smith, Arkansas in Sebastian County, joined the University of Arkansas system, changed its name to the University of Arkansas at Fort Smith (UAFS), and became a four-year institution. The AHECB has approved the dissemination of the following academic degrees and certificate programs at UAFS: certificates of proficiency in 28 program areas, technical certificates in 17 program areas, associate degrees in 34 program areas, an advanced certificate in industrial automation, and baccalaureate degrees in eight program areas. Opening fall enrollment at UAFS was 5,673 in 2001, 8.3 percent greater than fall 2000. Since 1997, fall enrollment at UAFS has increased 0.7 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.

Sources:

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

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Hendrix College. <http://www.hendrix.edu/abouthendrix/glance.htm>

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

III. Infrastructure

Ports

There are no public ports on the Arkansas River in Logan County. The river travels along the northern border of Logan County, and is navigable on a year round basis offering a 9-foot ice-free channel. The 450-mile McClellan-Kerr Arkansas River Navigation System runs through the heart of the nation. The waterway not only connects all the public ports in Arkansas to the ports of the world, but also with America's entire inland waterway system, from Houston to New Orleans, to Pittsburgh and Minneapolis.

The Arkansas River provides navigation through Arkansas to Catoosa, Oklahoma, near Tulsa. Some 313 miles of channel are located in Arkansas. Public ports are located at Pine Bluff, Little Rock, and Fort Smith. An estimated \$3 billion in private investments have been made on the navigation system since it was opened in 1971.

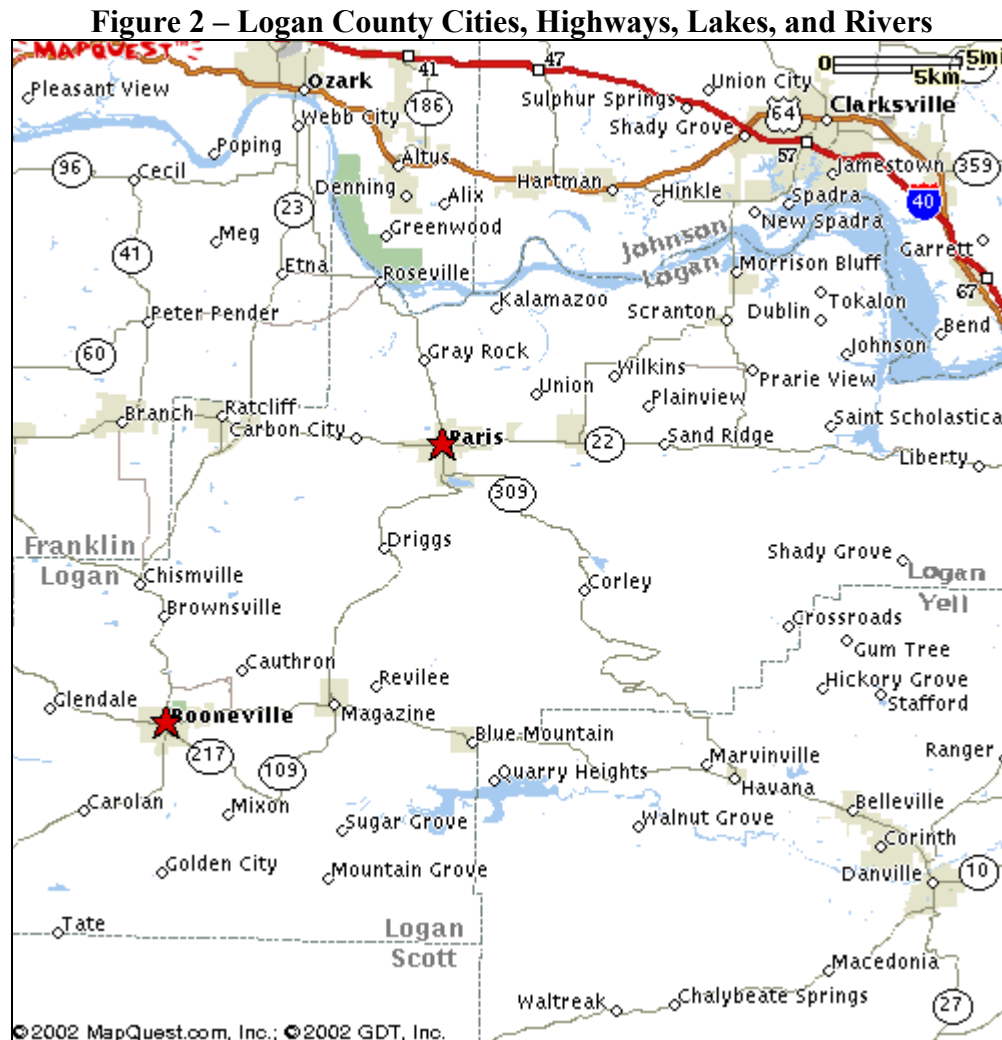
Sources:

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

Highways

Figure 2 displays the major cities, highways, lakes, and rivers found in Logan County.



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 five most populous cities in Logan County.⁴

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

City	Water Surplus Capacity	Waste Water Surplus Capacity	Electricity Provider	Natural Gas Provider
Booneville	1.1 million GPD	4 million GPD	Arkansas Electric Power Company / Southwestern Electric Power Company	Arkansas Oklahoma Gas Company
Paris	0.5 million GPD	21 million GPD/ 16 acre lagoon	Oklahoma Gas & Electric and Paris Municipal Light & Water	Arkansas Western Gas Company
Magazine	N/A	N/A	AEP / SWEPCO	Arkansas Oklahoma Gas Company

The City of Booneville is currently in the process of increasing the capacity of its water plant from 3.0 million gallons per day to 7.0 million gallons per day.

Sources:

David Hardin, City of Booneville, Arkansas.

Jason Cauthron, City of Paris, Arkansas.

Magazine Municipal Waterworks, City of Magazine, Arkansas.

Railroads

The Union Pacific Railroad has a line running from its hub in Little Rock north of the Arkansas River through Russellville, Clarksville, Ozark, Van Buren, and Fort Smith to a mainline junction in Muskogee, Oklahoma.

The Dardanelle & Russellville Railroad, located in Russellville in Pope County, is a five-mile short-line providing direct access to the Port of Dardanelle, local industry, and the Union-Pacific Railroad Railroad's main line. The D&R Railroad also owns available industrial sites with rail access.

The Arkansas & Missouri Railroad junctions with the Kansas City Southern Railroad in Fort Smith in Sebastian County, with the Union Pacific Railroad in Van Buren, Arkansas, and with the Burlington Northern Santa Fe Railroad in Monette, Missouri.

Sources:

Union Pacific Railroad. <http://www.uprr.com/aboutup/usguide/usa-ar.shtml>

⁴ GPD = Gallons Per Day

Russellville Economic Development Partnership, Inc.

<http://www.russellville.org/enter/transportation.htm>

Arkansas & Missouri Railroad. <http://www.arkansasmissouri-rr.com/map.html>

Airports

There are two airports serving Logan County: the Booneville Municipal Airport and the Paris Municipal Airport.

The Booneville Municipal Airport, located three miles east of Booneville, has two asphalt runways, each 3,250 feet in length. There is no control tower at this airport. Services offered at the Booneville Municipal Airport include aviation fuel, aircraft parking (hangars and tie-downs), flight instruction, and aircraft rental.

The Paris Municipal Airport, located two miles east of the central business district, has two asphalt runways, each 2,700 feet in length, that can accommodate a 10,000-pound single-wheel aircraft. There is no control tower at this airport. Services offered at the Paris Municipal Airport include aviation fuel and aircraft parking (tie-downs).

The four major airports closest to Logan County are Northwest Arkansas Regional Airport in Bentonville, Arkansas (roughly 120 miles northwest of Booneville), Adams Field Airport in Little Rock, Arkansas (roughly 130 miles southeast of Booneville), Tulsa International Airport in Tulsa, Oklahoma (roughly 150 miles northwest of Booneville), and Springfield-Branson Regional Airport in Springfield, Missouri (roughly 240 miles northeast of Booneville).

Sources:

AirNav, LLC. Booneville Municipal Airport: Booneville, Arkansas.

<http://www.airnav.com/airport/4M2>

AirNav, LLC. Paris Municipal Airport: Paris, Arkansas.

<http://www.airnav.com/airport/7M6>

IV. Labor Force

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

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

North American Industry Classification System Industry Group	Average Employing Units	Average Covered Employment
Natural Resources & Mining	12	68
Construction	31	121
Manufacturing	29	2,003
Trade, Transportation & Utilities	124	969
Wholesale Trade	19	85
Retail Trade	78	793
Transportation, Warehousing & Utilities	27	91
Information	9	49
Financial Activities	39	250
Professional & Business Services	33	83
Education & Health Services	45	588
Leisure & Hospitality	30	317
Other Services	29	93
Local Government	23	763
State Government	15	447
Logan County - Total	417	5,750

The manufacturing sector accounted for 34.8 percent of total covered employment in Logan 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 12th among the 71 counties in Arkansas for which data were available and 4th 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 1.5 percent of total covered employment in Logan 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 54th among the 68 counties in Arkansas for which data were available and 9th 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 13.8 percent of total covered employment in Logan 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 17th among the 74 counties in Arkansas for which data were available and 4th 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 1.6 percent of total covered employment in Logan 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 64th among the 69 counties in Arkansas for which data were available and 12th ahead of Marion County and Baxter County 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 0.9 percent of total covered employment in Logan 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 33rd among the 56 counties in Arkansas for which data were available and 10th ahead of Johnson County and Scott County 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 Logan 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 19th among the 73 counties in Arkansas for which data were available and 3rd behind Marion County and Searcy County 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 1.4 percent of total covered employment in Logan 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 61st among the 68 counties in Arkansas for which data were available and 13th ahead of Scott County and Franklin County 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 10.2 percent of total covered employment in Logan 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 41st among the 74 counties in Arkansas for which data were available and 7th 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 5.5 percent of total covered employment in Logan 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 56th among the 73 counties in Arkansas for which data were available and 15th ahead of Madison County 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 Logan County's largest employers is presented in Table 9 below.

Table 9 – Logan County's Largest Employers

Company Name	City	Product	Employees
Excel Corporation	Booneville	Frozen Meat	D
Tyson Foods	Scranton	Poultry	C
Cloyes Gear	Paris/Subiaco	Automotive Gears and Sprockets	C
Stark Manufacturing	Paris	Automotive Headers	B
Wal-Mart	Paris	Retail	B
Magnetics	Booneville	Magnetic Ferrite Cores	B
Today's Plastics	Booneville	Plastic Toys	B

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

Figure 3 displays the annual unemployment rates for Logan County, the State of Arkansas, and the United States for the period 1995 through 2001. For the period, Logan County experienced annual unemployment rates that ranged from 0.3 percent below to 0.8 percent above the state's annual unemployment rate and from 0.6 percent below to 1.8 percent above the national annual unemployment rate for the period. In 2001, the unemployment rate in Logan County was 5.4 percent, compared to the state and national figures of 5.1 percent and 4.8 percent, respectively. Logan County had the 35th lowest unemployment rate among Arkansas' 75 counties in 2001 and the 5th 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

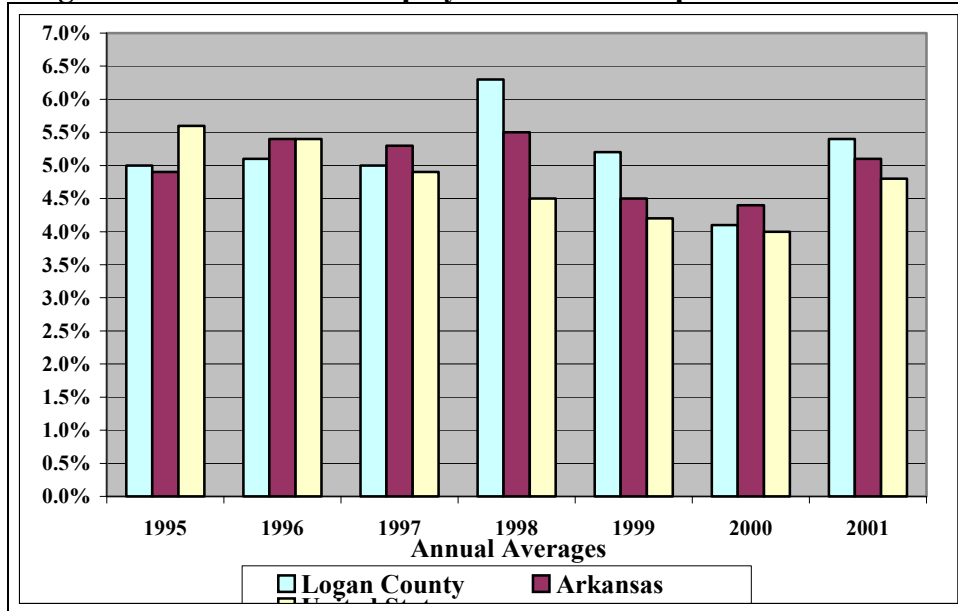
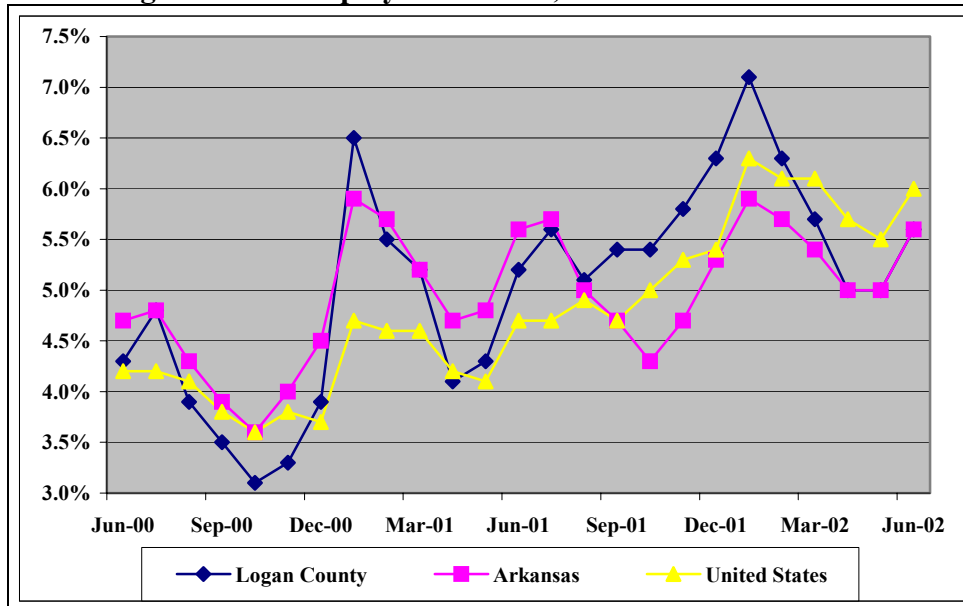


Figure 4 displays the monthly unemployment rates for Logan County, the State of Arkansas, and the United States from June 2000 to June 2002.⁵

Figure 4 – Unemployment Rates, June 2000 – June 2002



⁵ 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 currently two available industrial sites in Logan County. The first property is located within the city limits of Paris and is owned by the City of Paris. There are 53 acres of available land within the property priced at \$5,500, negotiable. The site is cleared and has a slope of less than two percent. The site bordered by the Paris Airport to the east and south of the site; there is a small hangar south of the property. Interstate 40 is 22 miles north of the site. The Dardanelle and Russellville Railroad has a line 30 miles east of the site. Port facilities with a barge-rail terminal are available at the Port of Dardanelle 34 miles east of the site. Water services are provided by the City of Paris through a six-inch main with a normal line pressure of 60 pounds per square inch (psi). The City of Paris is currently constructing a six-inch sewer line to the property. The Arkansas Western Gas Company provides natural gas service to the site through a two-inch main with a normal line pressure of 30 psi. The Oklahoma Gas and Electric Company (OG&E) provides electricity to the site with a voltage of 12.5 kilovolts.

The second property is located within the city limits of Booneville. There are 48 acres of available land within the property priced at \$5,000 per acre, negotiable. The site is 80 percent cleared with a slope of less than two percent. There are no major structures in the area. Arkansas Highway 10 directly services the site, and Interstate 40 is 28 miles north of the site. The Union Pacific Railroad has a line 30 miles west of the site. Commercial air service is available at Fort Smith Airport 28 miles west of the site. A barge-rail terminal, loading docks, and warehouse facilities are available at the Port of Fort Smith 28 miles west of the site. Water service is provided by the City of Booneville through a 12-inch main with a normal line pressure of 80 psi. The City of Booneville also provides an eight-inch sewer main to the site. The Arkansas Oklahoma Gas Company (AOG) provides natural gas service to the site through a 3-inch main with a normal line pressure of 25 psi. The Southwest Electric Power Company (SWEPCO) provides electricity to the site with a voltage of 13.8 kilovolts.

There are four available industrial buildings in Logan County. The first building, constructed in 1993, is located in Booneville at 2932 East Highway 10 and was

previously occupied by Today's Kids. The metal facility has 330,000 square-feet of space on six-inch concrete floors and is accompanied by 12 acres of land, with an additional 20 acres of land available for purchase. Clearance under the beams ranges from 19 feet, 6 inches to 37 feet, 11 inches; the span between the beams ranges from 22 feet, four inches to 41 feet, 0 inches. The Arkansas-Missouri Railroad has a line 38 miles from the site. The facility has one floor-level door, 12 dock-high doors, and 100 paved parking spaces. The City of Booneville provides the facility with water service through a 12-inch main with normal line pressure of 90 psi. The City of Booneville also provides sewer services through an eight-inch sewer main. AOG provides natural gas service to the site through a 4-inch main with normal line pressure of 80 psi. Arkansas Electric Power Company provides the facility with electricity. The building, part of a larger facility, is for sale with a price of \$6.1 million or for lease with a price of \$79,750 per month or \$2.9 per square-foot per year.

The second building, constructed in 1957, is located in Paris at 183 Charcoal Road and was previously occupied by the Arkansas Charcoal Company. The metal facility has 287,900 square-feet of space (285,300 square-feet of manufacturing space and 2,600 square-feet of office space) on 6-inch concrete floors and is accompanied by 28 acres of land. Clearance under the beams ranges from 11 feet, 10 inches to 25 feet, 1 inch; the span between the beams ranges from 13 feet, 9 inches to 27 feet, 3 inches. The facility has four dock-high doors. The City of Paris provides the facility with water services through an eight-inch main. Sewer services are provide through a septic system. Questar provides natural gas service to the site through a three-inch main, and OG&E provides the facility with electricity. The facility is for sale, price negotiable.

The third building, constructed in 1955, is located in Booneville at 560 West 2nd Street and was previously occupied by ACE Comb. The brick and metal facility has 180,946 square-feet of space (170,746 square-feet on manufacturing space and 8,600 square feet of office space) on 11-inch concrete floors and is accompanied by 11 acres of land. Clearance under the beams ranges from 10 feet, 8 inches to 24 feet, 9 inches; the span between the beams ranges from 13 feet, 11 inches to 27 feet, 2 inches. The Union Pacific Railroad has a line 30 miles from the site. The facility has seven floor-level doors, 4 dock-high doors, 4 truck wells, 39 paved parking spaces, and 170 gravel parking spaces. The City of Booneville provides the facility with water service through a 3-inch main with normal line pressure of 70 psi. The City of Booneville also provides sewer services through an eight-inch sewer main. AOG provides natural gas service to the site through a four-inch main. SWEPCO provides the facility with electricity. The building, which can be subdivided, is for sale, price negotiable, or for lease with a price between \$1.20 per square-foot per year and \$1.80 per square foot per year.

The fourth building, constructed in 1975, is located in Booneville along Arkansas Highway 10 and was previously occupied by Williams Building, manufacturer of church furniture. The metal facility has 40,728 square-feet of space (40,228 square-feet of manufacturing space and 500 square feet of office space) on 4-inch concrete floors and is accompanied by 7.5 acres of land. Clearance under the beams ranges from 14 feet, 0 inches to 18 feet, 9 inches; the span between the beams ranges from 15 feet, 9 inches to

20 feet, 1 inch. The facility has 1 floor-level door, 1 dock-high door, 1 truck well, and 47 paved parking spaces. The City of Booneville provides water service to the site through a 12-inch main with a normal line pressure of 80 psi. The City of Booneville also supplies the site with sewer service through an eight-inch main. AOG provides the site with natural gas service through a three-inch main, and SWEPCO provides the facility with electricity. The facility is for sale with a price of \$350,000.

Sources:

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

http://www.1800arkansas.com/Buildings_Sites/Site.asp?SiteNumber=PARI007

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

http://www.1800arkansas.com/Buildings_Sites/Site.asp?SiteNumber=BOON001

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

http://www.1800arkansas.com/Buildings_Sites/Building.asp?BldNumber=814

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

http://www.1800arkansas.com/Buildings_Sites/Building.asp?BldNumber=789

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

http://www.1800arkansas.com/Buildings_Sites/Building.asp?BldNumber=602

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

http://www.1800arkansas.com/Buildings_Sites/Building.asp?BldNumber=205

VI. Economic Goals

Logan County is a natural fit for businesses that desire easy access to Interstate 40 and a relatively rural setting. Economic activity in the county centers on manufacturing and agriculture. As a result, per capita personal income is lower than the state average and poverty among the elderly is higher than the state average. Additionally, education levels are lower at all levels than the state averages.

To take advantage of local resources, such as the proximity to major transportation routes, Logan County must invest in the education and training of its workforce. Diversifying away from manufacturing and agriculture will help the local economy weather long-term national trends which show declines in employment in these areas. Economic developers in Logan County should focus on the retention of young people with college degrees, so that industries that focus on knowledge-based enterprise can be attracted to the area. Service and professional jobs will provide an insurance policy against declines in traditional industries for the county.

VII. Opportunities for Future Business Development

Toys

The toy industry is influenced by demographic trends. Based on projections by the U.S. Census Bureau, the number of U.S. children under the age of five is expected to rise only about 6.5 percent between 2000 and 2010, which is not encouraging for toy industry sales. On a positive note, however, the average number of toys bought per child has been on the rise. Smaller families, with Baby Boomer parents in their peak income years, allow more spending on toys per child. In addition, as a result of the higher U.S. divorce rate than in past generations, a greater number of children are members of more than one family, which expands the financial pool for purchases. Parents who do not live with their children also tend to buy more toys per child than live-in parents do. Yet the increase in toys per child is not expected to be sufficient to offset the declining trend in the child population.

Incorporating interactive electronic features in both traditional toy product lines and newer brands is another long-term trend in the toy industry. The dramatic drop in the price of microchips in recent years has made such a change financially feasible. Powered by tiny microchips, toys can now be designed to repeat words, tell jokes, play games, and even ask a child questions and respond to his or her answers. Industry giants Mattel and Hasbro have each increased their presence in the interactive toy arena through acquisitions. Although video games, including TV-formatted as well as hand-held continue to flourish in the toy industry, the leading video game hardware manufacturers for the U.S. market are all Japanese companies - Sony Corp., Nintendo Co. Ltd., and Sega Enterprises Ltd.

The seasonal nature of demand in the toy industry has forced manufacturers to develop product strategies to expand toy life cycles. In an effort to generate and expand interest in toys beyond the holidays, manufacturers and retailers alike stage innovative product introductions and creative marketing programs. For example, retailers and manufacturers promote giving toys and games around secondary holidays and special seasons, including Valentine's Day, Easter, and during the summer. Other methods include licensing agreements that tie toy sales to the release of a popular movie, and developing product extensions, which help stabilize demand by building on familiarity rather than fashion.

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.

Food Production

Demographic changes in the U.S. are reshaping the American food industry. To achieve success in the highly competitive U.S. food industry, companies need a keen understanding of these trends.

The Baby Boom generation- now between the ages of 37 and 55 and accounts for 30 percent of the current U.S. population- creates significant new consumer needs. This generation is at a stage of life in which people usually focus more on nutrition and weight maintenance. Yet in many instances, Baby Boomers' increased work and family responsibilities reduce their time available for exercise. New products seeking to satisfy these needs are "better-for-you" foods that are low-fat, low-sodium, and convenient to prepare. Studies show that average caloric needs for people aged 50 and older decline by about 10 percent every 10 years. At the same time, older adults tend to have a reduced

ability to digest food and absorb nutrients. This factor has led to an expanded market for nutrient-enriched drinks in recent years.

In the over-65 group, nutrition and digestibility remain key dietary concerns. Packaging is also important for this group. Studies show that older consumers prefer packaged food products that are easy to open and have legible labels. Older consumers' demands for nutritionally enriched items may create a new era in processed food industry. Today's food makers say their next step may be to compete with the pharmaceutical industry by offering "nutraceuticals" — processed food products that would replace vitamin supplements and other dietary aids, and eventually release products that will help prevent or even reverse some diseases. Currently under investigation is the role that soy proteins play in inhibiting cancer and heart disease. Also of interest is the potential link between antioxidant compounds — vitamin C, vitamin E, and beta-carotene — and the prevention of cancer, cardiovascular disease, and cataracts.

The population of American children aged five to 17 is projected to total approximately 52.4 million by 2005, according to Census Bureau estimates. This group has significant clout in influencing their parents' purchases. Food manufacturers view these youngsters as important, and they hope to gain lifelong brand-loyal customers.

The increasing diversity of the minority segments of the U.S. population has and will continue to allow U.S. food companies to introduce ethnic cuisines more aggressively. Companies are now trying to make these products "more ethnic" by stressing traditional or "old country" recipes. Beside the established "big three" ethnic cuisines including Mexican, Italian, and Chinese, increasingly popular ethnic food groups will include Indian cuisine and various East Asian cuisines, such as Japanese, Thai, and Vietnamese.

Consumer lifestyles also impact the food industry. Modern consumers face considerable time constraints, raising the demand for foods that are easy to prepare and serve. Food marketers estimate that the average American is willing to spend no more than 15 minutes preparing an ordinary meal. In addition, today's shoppers increasingly want to purchase whole meals. Traditional categories such as frozen dinners have been expanded to include frozen breakfasts and lunches. Products specifically designed for microwave cooking have also proliferated.

As consumers' expenditures on eating out have increased year to year (45.2 percent of total consumer spending on food products in 2001, compared with 44.9 percent in 2000, 42.2 percent in 1990 and 36.5 percent in 1980), food companies have taken advantage of this trend by establishing food service divisions that cater to what were once nontraditional markets — restaurants, schools, airports, corporate cafeterias, and so on. As food companies more frequently distribute their packaged food products through the service outlets, the business lines between food companies and food service outlets are becoming less distinct.

Automotive Parts Manufacturing

The aging of the U.S. automobile population, along with its growing size, should benefit firms producing replacement auto parts. The median age of U.S. passenger cars increased to 8.1 years as of June 30, 2001, up from 6.5 years as of June, 30, 1990, according to R.L. Polk & Co., a research firm based in Southfield, Michigan. All vehicles need maintenance. As they get older and out of warranty, they need general repairs. Typically, during the first three to five years of a vehicle's life, brake pads and batteries need to be replaced. At around seven years, spending rises as belts, hoses, alternators, and starters begin to need replacement. The value of repair spending peaks at around 11 years of age, as parts wear out, but even at that age a fixed-up vehicle could last long enough to make repairs financially worthwhile, versus buying a new vehicle. Given such favorable automobile demographics, demand for repairs and replacement parts is expected to continue to trend upward, which will benefit manufactures of auto accessories and components.

Source: Standard and Poor's NetAdvantage.

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