

**APPENDIX B  
DEMOGRAPHIC ANALYSIS**

**Introduction**

Characteristics such as age, income, employment status, educational attainment and corresponding locational information provide a basis for which to make recommendations regarding land use in a city. For instance a large portion of retirement age residents in a city will require different services from a city than a younger population. An analysis of these characteristics as they apply to the City of Texarkana is provided in this report.

The U.S Census Bureau defines a Metropolitan Statistical Area (MSA) as an area with a “...large population nucleus, together with adjacent communities that have a high degree of economic and social integration with that nucleus.” The City of Texarkana serves as that nucleus for the MSA, which includes Bowie County, TX and Miller County, AR, The city provides a number of goods and services to the area. For comparative purposes the City of Texarkana is compared to the Texarkana MSA and in some instances to the States of Texas and Arkansas.

**Population Analysis and Projection**

According to census data from the Regional Economic Information System (REIS) and analysis using linear regression, the City of Texarkana’s population<sup>1</sup> has grown from 31,836 in 1990 to an estimated 33,746 in 1997. This represents an annual increase of about 0.5% (6% for the decade). The MSA registered a 0.4% annual increase (about 5% for the decade) in population during the same period (Ref. Table1, Graph1).

A comparison of population growth indices shows that the City of Texarkana and the MSA are not growing as fast as the State of Texas or the State of Arkansas (Ref. Graph 1). The States of Texas however, has been experiencing a 1.5 % annual growth rate and is projected to maintain it in the future.

**Table 1: Population Projections**

	Projected Population				Growth rate per Decade		
	1990	2000	2010	2020	1990-2000	2000-2010	2010-2020
<b>City of Texarkana*</b>	31,836	33,746	35,771	37,917	6.00%	6.00%	6.00%
<b>Texarkana MSA</b>	120,323	126,086	133,537	140,989	4.79%	5.91%	5.58%
<b>Bowie County, TX</b>	81,842	85,863	91,504	97,146	4.91%	6.57%	6.17%
<b>Miller County, AR</b>	38,481	40,223	42,033	43,843	4.53%	4.50%	4.31%
<b>Arkansas</b>	2,354,343	2,568,140	2,757,520	2,946,900	9.08%	7.37%	6.87%
<b>Texas</b>	17,044,714	19,595,890	22,794,520	25,993,150	14.97%	16.32%	14.03%

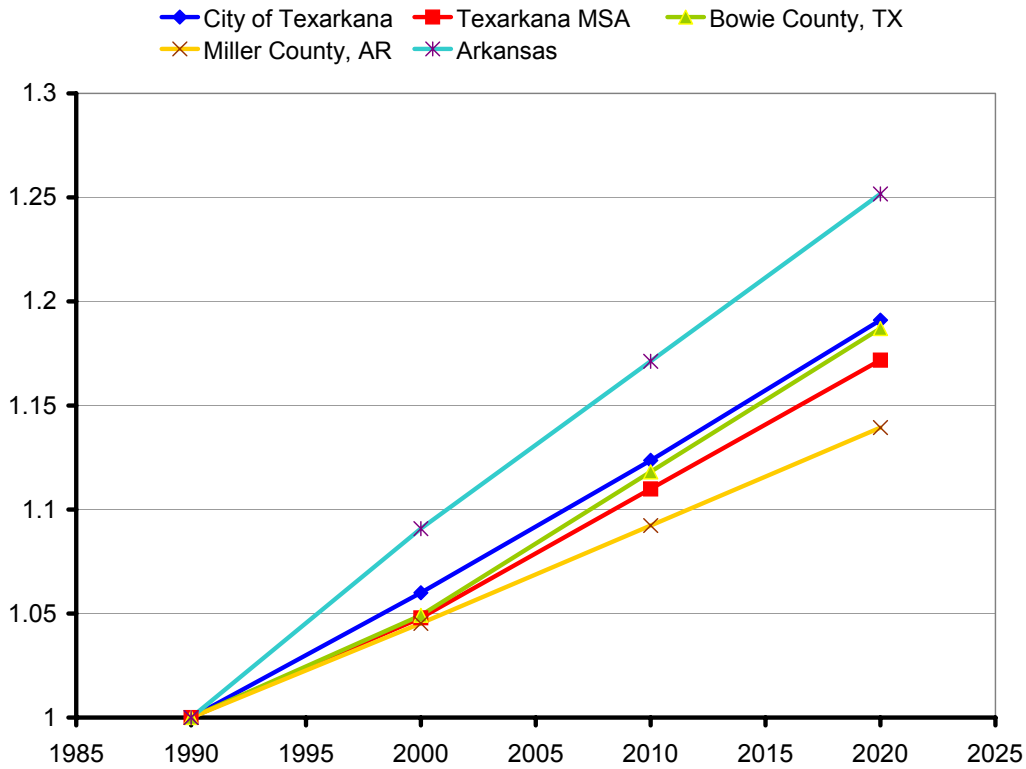
Source: REIS, US Census 1990, BWR Corp

\* The City of Texarkana projections are based on the 1990 Census numbers and a linear regression based on growth rates of Texarkana MSA.

<sup>1</sup> The City of Texarkana projections are based on the 1990 Census numbers and a linear regression based on growth rates (Source: REIS) of Texarkana MSA. Decisionmark projected the City of Texarkana to grow at a higher rate than the MSA, therefore a slightly higher rate of growth has been used for the City of Texarkana

**Graph 1 : Population Growth Index**

Note: 1990 population is set at 1 for index comparison purposes.



Source: Regional Economic Information System (REIS), BWR Corp.

**Male-Female Ratio**

Male- Female Ratios for the City of Texarkana and for the MSA are and have been stable for the last ten years. The male to female ratio for the City has been around 46–54 and for the MSA around 48-52 (Ref. Table 2).

**Table 2: Population by Gender**

City of Texarkana	1990	% of Total	1997	% of Total	2002	% of Total
Female Population	17,297	54%	17,934	54%	18,207	55%
Male Population	14,539	46%	14,977	46%	15,151	45%
<b>Total</b>	<b>31,836</b>	<b>100%</b>	<b>32,911</b>	<b>100%</b>	<b>33,358</b>	<b>100%</b>

MSA Texarkana	1990	% of Total	1997	% of Total	2002	% of Total
Female Population	62,354	52%	64,467	52%	65,391	52%
Male Population	57,778	48%	59,336	48%	59,975	48%
<b>Total</b>	<b>120,132</b>		<b>123,803</b>		<b>125,366</b>	

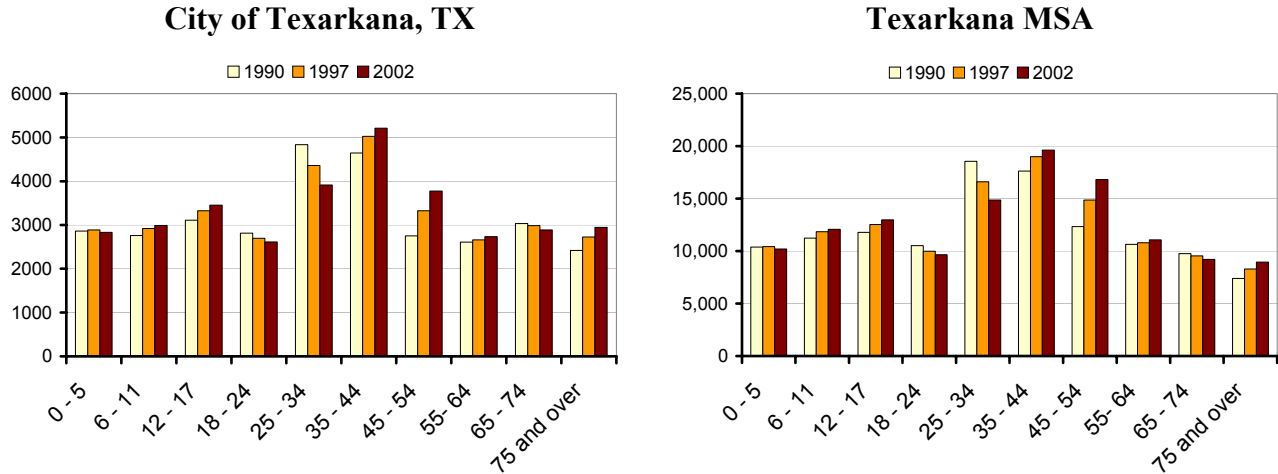
Source: Decisionmark Corp. US Census 1990, BWR Corp

**Age Distribution**

The age distribution in the past and over the next few years shows that the City of Texarkana is a proportionately more attractive place for the older population than the MSA as a whole (Ref. Table 3 and Graph 2). In 1990 about 55.5% of the City’s population belonged to the working age group and about

17% were elderly. While the working age population remains stable the elderly population in the City is expected to increase somewhat by the 2002.

**Graph 2: Population Distribution by Age (90, 97, 02)**



Source: Decisionmark Corp., US. Census, BWR Corp.

**Table 3: Population by Age Groups (as a % of total population)**

		1990	1997	2002
<b>City of Texarkana</b>	<b>0-17</b>	27.42%	27.74%	27.81%
	<b>18-64</b>	55.45%	54.90%	54.70%
	<b>65 and over</b>	17.13%	17.35%	17.49%
<b>MSA Texarkana</b>	<b>0-17</b>	27.78%	28.09%	28.12%
	<b>18-64</b>	57.96%	57.51%	57.40%
	<b>65 and over</b>	14.26%	14.40%	14.47%

Source: Decisionmark Corp., US. Census, BWR Corp.

**Housing**

The City of Texarkana experienced an annual increase of 0.6% in the total number of housing units from 1990 to 1997 and is expected to see a 0.2% annual increase from 1997 to 2002. The rate for the city is slightly higher than for the MSA as a whole (Ref. Table 4). The average household size for the City and the MSA is 2.5. Occupancy rates in the City are lower than the MSA by about two percentage points, while the Owner occupancy is higher by about eleven percentage points (Ref. Table 4).

**Table 4: Summary of Housing Statistics**

<b>Housing Units</b>					
	<b>1990</b>	<b>1997</b>	<b>2002</b>	<b>Annual Increase 97/90</b>	<b>Annual Increase 02/97</b>
<b>City of Texarkana</b>	14253	14882	15020	0.63%	0.19%
<b>MSA Texarkana</b>	50406	52318	52755	0.54%	0.17%

<b>Average Household Size</b>			
	<b>1990</b>	<b>1997</b>	<b>2002</b>
<b>City of Texarkana</b>	2.6	2.5	2.5
<b>MSA Texarkana</b>	2.6	2.5	2.5

<b>Occupancy rates</b>			
	<b>1990</b>	<b>1997</b>	<b>2002</b>
<b>City of Texarkana</b>	87.24%	87.27%	87.25%
<b>MSA Texarkana</b>	89.01%	88.99%	89.00%

<b>Owner Occupancy as a % of total occupancy</b>			
	<b>1990</b>	<b>1997</b>	<b>2002</b>
<b>City of Texarkana</b>	70.01%	71.86%	73.76%
<b>MSA Texarkana</b>	59.31%	60.10%	62.32%

Source: Decisionmark Corp., US. Census, BWR Corp.

**Education**

Educational attainment records have improved in the City at a faster pace than the MSA. In 1990 44% of the City’s population had at least some college level education. In 1997 that figure rose to 47%. The corresponding figures for the MSA were 38% in 1990 to 42% in 1997.

**Table 5: Educational Attainment**

<b>City of Texarkana</b>	<b>1990</b>	<b>% of Total</b>	<b>1997</b>	<b>% of Total</b>	<b>2002</b>	<b>% of Total</b>
Less Than High School	6073	30%	5826	28%	5636	26%
High School	5395	27%	5982	28%	5652	26%
Some College	5272	26%	5555	26%	6009	28%
College	2355	12%	2559	12%	2887	13%
Graduate Degree	1197	6%	1158	5%	1282	6%
<b>MSA Texarkana</b>	<b>1990</b>	<b>% of Total</b>	<b>1997</b>	<b>% of Total</b>	<b>2002</b>	<b>% of Total</b>
Less Than High School	23,215	30%	22,110	28%	21,490	27%
High School	24,403	32%	26,917	34%	25,667	32%
Some College	18,874	25%	19,830	25%	21,707	27%
College	6,307	8%	6,847	9%	7,844	10%
Graduate Degree	3,452	5%	3,339	4%	3,775	5%

Source: Decisionmark Corp., US. Census, BWR Corp.

**Per Capita Income**

Per Capita Income has shown a steady rise in the City of Texarkana and follows the regional trends to a large extent. The City has shown a steady annual per capita income increase of about 4% over the last fifteen years (Ref. Graph 3, Table 6).

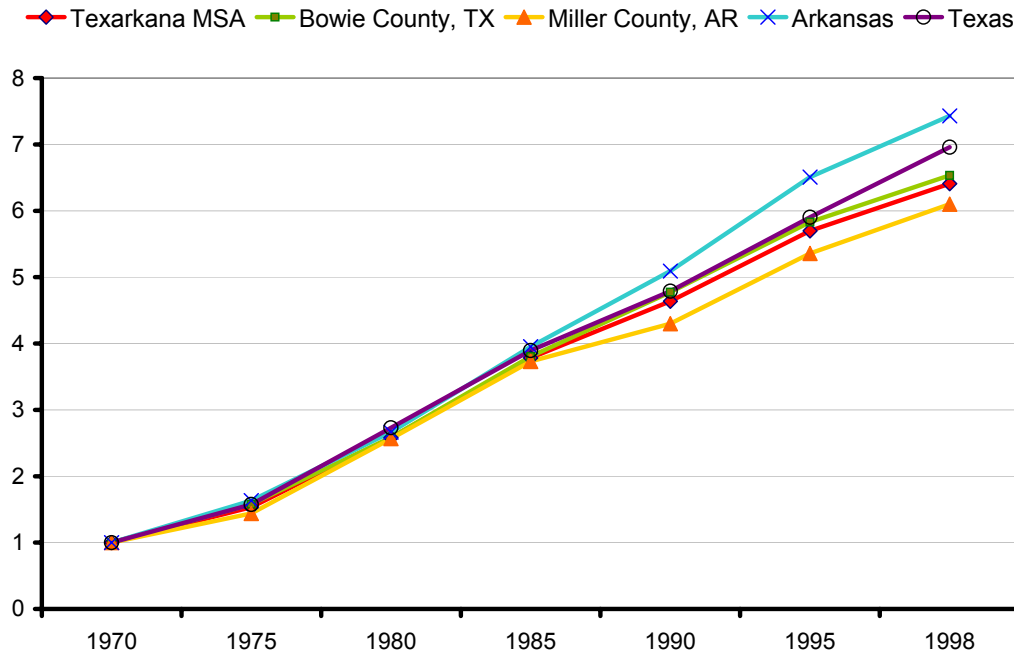
**Table 6: Per Capita Income Annual Growth Rate**

	75/70	80/75	85/80	90/85	95/90	98/95
<b>Texarkana MSA</b>	10.64%	13.68%	9.34%	4.51%	4.57%	4.17%
<b>Bowie County, TX</b>	11.54%	12.82%	9.42%	5.09%	4.43%	4.02%
<b>Miller County, AR</b>	8.80%	15.66%	9.05%	3.06%	4.91%	4.61%
<b>Arkansas</b>	12.68%	12.59%	9.70%	5.76%	5.56%	4.71%
<b>Texas</b>	11.48%	14.71%	8.51%	4.60%	4.66%	5.95%

Source: Regional Economic Information System (REIS), BWR Corp.

**Graph 3: Per Capita Income Growth Index**

Note: 1970 per capita income is set at 1 for index comparison purposes.



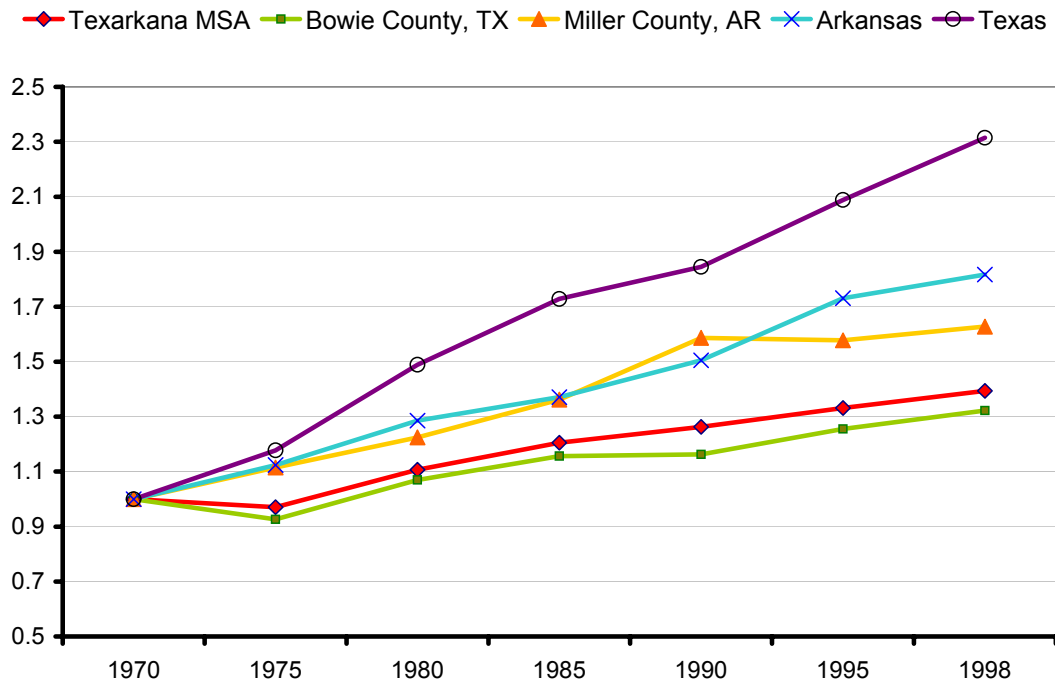
Source: Regional Economic Information System (REIS), BWR Corp.

**Employment**

The City has shown a steady rise in employment since 1975 at a slower rate than the region. A major shift in employment has occurred from the Manufacturing and Agricultural sector to the Services sector. (This has also been a regional and nationwide phenomenon). Wholesale trade in the 1990s has occupied a major share of the City’s economy, which was not the case in the 1980s. The share of government and government enterprises has reduced (Ref. Graph 4 and 5). Graphs 6,7,8 and 9 show the regional growth indices for four major sectors, viz. the Construction sector, the Manufacturing sector, the Retail trade Sector and the Services sector.

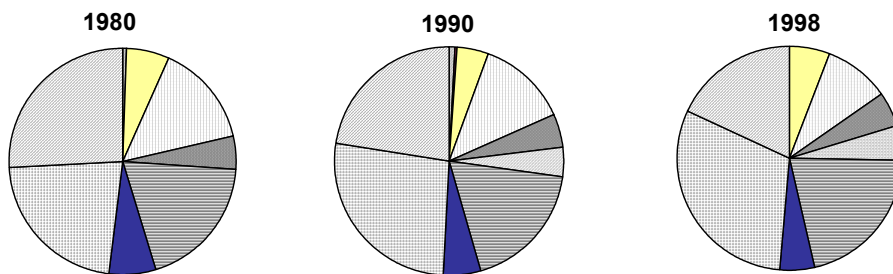
**Graph 4: Total Full and Part-time Employment Index**

Note: 1970 employment is set at 1 for index comparison purposes.



Source: Regional Economic Information System (REIS), BWR Corp.

**Graph 5: Employment by Sector (1980, 1990, 1998)**

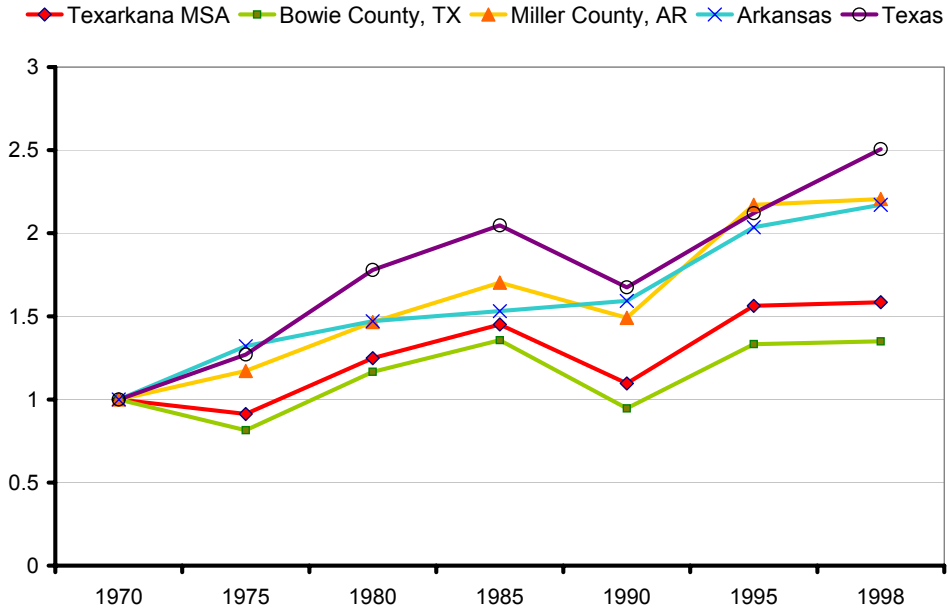


- Ag. serv., forestry, fishing, and other
- Mining
- Construction
- Manufacturing
- Transportation and public utilities
- Wholesale trade
- Retail trade
- Finance, insurance, and real estate
- Services
- Government and government enterprises

Source: Decisionmark Corp., US. Census, BWR Corp.

**Graph 6: Construction Sector Index**

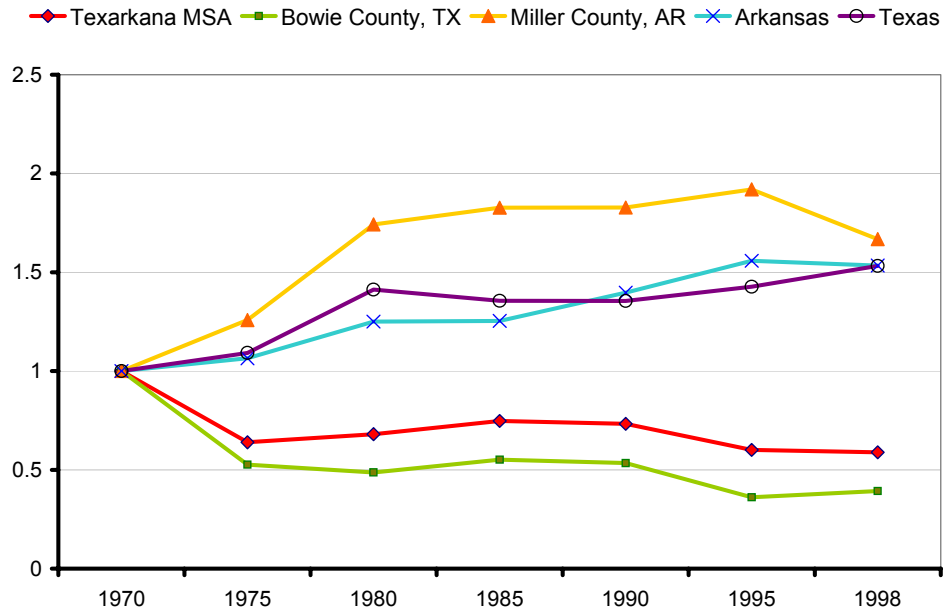
Note: 1970 employment in the construction sector is set at 1 for index comparison purposes.



Source: Regional Economic Information System (REIS), BWR Corp.

**Graph 7: Manufacturing Sector Index**

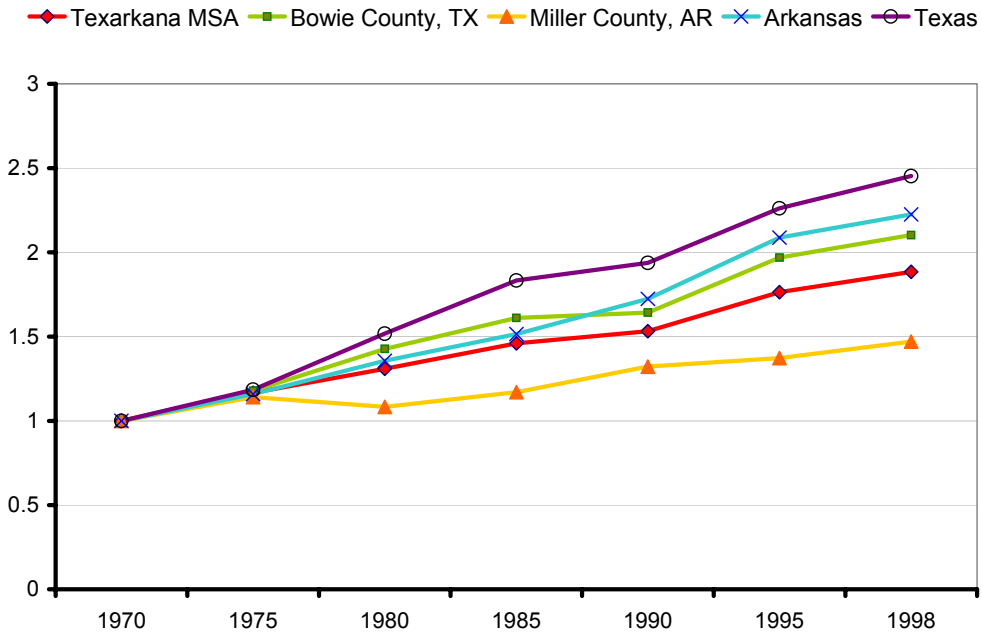
Note: 1970 employment in the manufacturing sector is set at 1 for index comparison purposes.



Source: Regional Economic Information System (REIS), BWR Corp.

**Graph 8: Retail Trade Index**

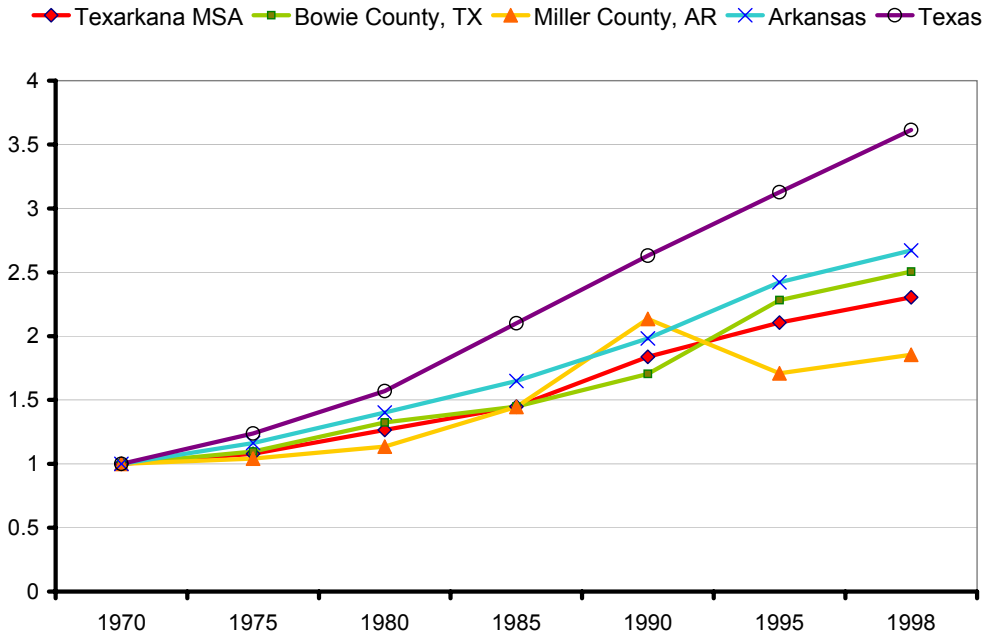
Note: 1970 employment in the retail trade sector is set at 1 for index comparison purposes.



Source: Regional Economic Information System (REIS), BWR Corp.

**Graph 9: Services Sector Index**

Note: 1970 employment in the services sector is set at 1 for index comparison purposes.



Source: Regional Economic Information System (REIS), BWR Corp.



**Addendum**

**Table A1: Population**

	1970	1975	1980	1985	1990	1995	1998
<b>Texarkana MSA</b>	102,088	107,673	113,379	119,271	120,323	122,533	122,813
<b>Bowie County, TX</b>	68,600	71,289	75,510	80,607	81,842	83,489	83,287
<b>Miller County, AR</b>	33,488	36,384	37,869	38,664	38,481	39,044	39,526
<b>Arkansas</b>	1,930,077	2,158,291	2,288,738	2,327,046	2,354,343	2,480,121	2,538,202
<b>Texas</b>	11,236,772	12,568,182	14,338,208	16,272,722	17,044,714	18,679,706	19,712,389

Source: Regional Economic Information System (REIS), BWR Corp.

**Table A2: Per Capita Personal Income (in dollars)**

	1970	1975	1980	1985	1990	1995	1998
<b>Texarkana MSA</b>	3,221	4,935	8,310	12,190	14,937	18,347	20,640
<b>Bowie County, TX</b>	3,327	5,246	8,608	12,663	15,885	19,400	21,741
<b>Miller County, AR</b>	3,004	4,326	7,714	11,204	12,921	16,095	18,321
<b>Arkansas</b>	2,849	4,655	7,586	11,264	14,509	18,546	21,167
<b>Texas</b>	3,646	5,738	9,957	14,196	17,458	21,526	25,369

Source: Regional Economic Information System (REIS), BWR Corp.

**Table A3: Total full- and part-time employment**

	1970	1975	1980	1985	1990	1995	1998
<b>Texarkana MSA</b>	47,660	46,256	52,728	57,428	60,175	63,454	66,445
<b>Bowie County, TX</b>	36,410	33,716	38,952	42,107	42,323	45,703	48,136
<b>Miller County, AR</b>	11,250	12,540	13,776	15,321	17,852	17,751	18,309
<b>Arkansas</b>	805,269	904,880	1,035,187	1,103,955	1,211,734	1,394,239	1,463,142
<b>Texas</b>	5,045,478	5,938,406	7,510,665	8,720,129	9,306,974	10,539,009	11,678,353

Source: Regional Economic Information System (REIS), BWR Corp.

**Table A4: Employment by Major Sectors (1970-1998)**

<b>Construction</b>							
	<b>1970</b>	<b>1975</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>1998</b>
<b>Texarkana MSA</b>	2354	2148	2938	3417	2580	3681	3730
<b>Bowie County, TX</b>	1707	1390	1990	2315	1615	2276	2303
<b>Miller County, AR</b>	647	758	948	1102	965	1405	1427
<b>Arkansas</b>	38863	51302	57159	59505	61914	79128	84372
<b>Texas</b>	297059	377291	528627	608283	497478	629990	744552
<b>Manufacturing</b>							
	<b>1970</b>	<b>1975</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>1998</b>
<b>Texarkana MSA</b>	10164	6495	6916	7598	7452	6105	5982
<b>Bowie County, TX</b>	8599	4526	4189	4738	4591	3101	3372
<b>Miller County, AR</b>	1565	1969	2727	2860	2861	3004	2610
<b>Arkansas</b>	171773	182843	214776	215394	240009	267583	263589
<b>Texas</b>	756047	825794	1068106	1025175	1024401	1079079	1158313
<b>Retail trade</b>							
	<b>1970</b>	<b>1975</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>1998</b>
<b>Texarkana MSA</b>	7048	8216	9223	10288	10798	12433	13284
<b>Bowie County, TX</b>	4627	5455	6602	7454	7598	9111	9726
<b>Miller County, AR</b>	2421	2761	2621	2834	3200	3322	3558
<b>Arkansas</b>	113008	130880	153223	171207	194803	235922	251515
<b>Texas</b>	789554	935095	1198155	1447665	1529856	1785476	1937032
<b>Services</b>							
	<b>1970</b>	<b>1975</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>1998</b>
<b>Texarkana MSA</b>	8418	9083	10655	12184	15469	17721	19399
<b>Bowie County, TX</b>	5820	6379	7707	8427	9922	13281	14580
<b>Miller County, AR</b>	2598	2704	2948	3757	5547	4440	4819
<b>Arkansas</b>	135482	157495	189875	223458	268560	328176	361774
<b>Texas</b>	950880	1176580	1492891	1997864	2500396	2973350	3436273

Source: Regional Economic Information System (REIS), BWR Corp.

**Table A5- New Construction Permit Activity**

**1990 – 1999 City Of Texarkana**

Year	UNITS		COSTS	
	Single-Family Residential	Higher Density Residential	Residential	Non-Residential
1990	45	16	\$3.57	\$7.72
1991	55	--	4.11	9.78
1992	83	--	6.10	63.02
1993	79	--	6.04	25.42
1994	64	--	4.38	22.13
1995	70		5.20	24.47
1996	51	21	5.20	4.89
1997	76	--	4.69	17.76
1998	64	--	8.30	15.60
1999	85	--	6.82	17.27

**Table A6 - Additions/Alterations/Repairs Permit Activity**

**1990 – 1999 City Of Texarkana**

Year	PERMITS/COSTS (in \$ millions)	
	Residential	Non-Residential
1990	285 / \$1.47	148 / \$2.06
1991	271 / \$1.66	178 / \$7.85
1992	279 / \$2.16	268 / \$8.56
1993	270 / \$1.71	164 / \$3.80
1994	152 / \$1.30	137 / \$7.61
1995	151 / \$1.24	109 / \$4.27
1996	125 / \$1.16	129 / \$7.43
1997	93 / \$1.86	109 / \$6.59
1998	161 / \$1.97	123 / \$5.57
1999	106 / \$1.31	91 / \$3.19

**Table A7 Building Permits in Excess of \$1 million 1990 – 1999 (in \$ millions)**

<b><u>FACILITY</u></b>	<b><u>COST (in million \$)</u></b>
<b><u>Medical</u></b>	
1991 Wadley Regional Medical Center .....	\$ 4.86
1991 Rehab Hospital Services Corporation .....	\$ 5.56
1991 Walsh-Lumpkin .....	\$ 1.20
1992 St. Michael Hospital .....	\$ 51.61
1993 St. Michael Specialty Hospital.....	\$ 7.51
1993 St. Michael Hospital-Sixth Floor .....	\$ 2.47
1994 Texarkana Surgery Center .....	\$ 2.47
1994 Northeast Texas Surgical Center .....	\$ 1.20
1994 KCTV Nursing Centers .....	\$ 1.24
1995 P.O.B. Physicians Office .....	\$ 1.00
1995 Southern Medical Clinic P.O.B. ....	\$ 1.80
<b><u>Office</u></b>	
1993 St. Michael Professional Office Building .....	\$ 10.40
<b><u>Educational</u></b>	
1992 Texarkana Community College .....	\$ 3.27
1994 Texarkana College .....	\$ 1.54
<b><u>Commercial</u></b>	
1992 Brookshire Grocery Company .....	\$ 1.81
1994 Wal-Mart Supercenter.....	\$ 8.27
1995 Lowe’s Home Center .....	\$ 3.40
1995 McLarty Ford/Chrysler Auto Mall.....	\$ 1.50
1996 Albertson’s.....	\$ 2.43
1996 State Line Shopping Center .....	\$ 1.62
<b><u>Senior Housing/Services</u></b>	
1992 Retirement & Senior Care Center .....	\$ 1.35
1995 Methodist Retirement Services .....	\$ 7.25
<b><u>Governmental</u></b>	
1992 Bowie County Medium Security Detention Facility.....	\$ 2.40
1993 Bowie County Substance Abuse Treatment Facility .....	\$ 1.20
<b><u>Other</u></b>	
First Baptist Church .....	\$ 7.25