

## **SECTION 2 - CHAPTER 2 LABOR FORCE CHARACTERISTICS**

### **LABOR FORCE**

The civilian labor force in the Meramec Region increased 36.9 percent between 1980 and 2000, while the civilian labor force in Missouri grew 22.3 percent for the same time. The bulk of that growth occurred as more and more women entered the labor force. From 1980 to 2000, the male civilian labor force in Missouri increased by 12.5 percent compared to 25.1 percent in the Meramec Region, while the female civilian labor force increased by 35.3 percent statewide but 53.7 percent for the region.

Tables 2-1 through 2-10 illustrate the labor force characteristics for Missouri, the Meramec Region, and each of the eight counties in the region for 1980 through 2000. The source of statistics for these tables is the 1980, 1990 and 2000 census.

In Crawford County (Table 2-3), the civilian labor force increased by 30.5 percent from 1980 to 2000, while the percentage of unemployed persons went from 8.2 percent in 1980 down to 6.0 percent in 2000. Factors influencing this change in the growth in the labor force and steady decline in the number of unemployed persons from 1980 to 2000 include a concentrated effort to draw additional and diversified industry to the county and the expansion of the labor market.

In Dent County (Table 2-4), the civilian labor force decreased by about 10 percent between 1980 and 1990, but increased overall by 7.8 percent from 1980 to 2000. In addition, the percentage of unemployed persons rose from 6.8 percent in 1980 to 7.1 percent in 2000. The unemployment rate has continued to rise in Dent County through 2000. Factors possibly influencing this trend include the closing of mining operations in counties surrounding Dent County and a lack of industrial growth and new business start-ups.

As shown in Table 2-5, Gasconade County's civilian labor force increased by 20.1 percent, and the unemployed person percentage decreased from 6.7 percent in 1980 to 4.1 percent in 2000. Of significance is the female civilian labor force percentage of unemployed, which dropped from 6.2 percent in 1990 to only 3.8 percent in just ten years.

Maries County's civilian labor force, as shown in Table 2-6, increased by 71.9 percent from 1980 to 2000. The unemployed persons percentage declined from 13.4 percent in 1980, to 5.7 percent in 1990. That percentage dropped again to 3.6 percent in 2000. The female civilian labor force unemployed person percentage in Maries County remained steady just under 4 percent between 1990 and 2000, while the corresponding percentages for the male civilian labor force unemployed dropped from 7.1 percent to 3.6 percent.

Osage County's civilian labor force (Table 2-7) increased by 29.1 percent from 1980 to 2000. Its unemployed decreased from 5.4 percent in 1980 to 2.6 percent in 1990, but increased by a tenth of a percent to 2.7 percent in 2000. The male civilian labor force unemployment remained relatively the same, hovering above 3 percent from 1990 to 2000, the same category for females decreased from 4.8 to 2.4 percent.

As shown in Table 2-8, Phelps County's civilian labor force increased by 32.6 percent from 1980 to 2000. The unemployed persons percentage remained virtually the same, 6.9 to 6.5 percent between 1980 and 2000. When comparing 1990 and 2000 data, the unemployed persons percentage variations between male and female were slight with the unemployed persons percentage for males rising from 7.1 percent to 7.5 percent and the rate for female unemployed dropping from 6.6 percent to 5.2 percent. However, the civilian labor force for males increased by 13.4 percent and 25.3 percent for females from 1990 to 2000.

As shown in Table 2-9, Pulaski County's civilian labor force increased by 37 percent, and the unemployed person percentage had a sharp decrease from 11.2 percent in 1980 to 6.8 percent in 2000. The female civilian labor force percentage of unemployed dropped from 12.9 percent in 1990 to 8.0 percent in 2000. The male civilian labor force unemployment decreased by almost half, from 9.5 percent in 1990 to 5.6 percent in 2000.

Washington County's civilian labor force, as shown in Table 2-10, increased by 116 percent from 1980 to 2000. This was the highest increase in the region. The male civilian labor force rose by 84.6 percent while the female civilian labor force rose by 171 percent. The unemployed persons rate decreased from 18.6 percent in 1980 to 13.4 percent in 1990. The rate, at 7.8 percent in 2000, was still the highest in the region and higher than the state rate of 5.3 percent (see Table 2-1). Both male and female unemployed rates dropped several percentage points each from 1990 to 2000.

A review of the above data indicates a significant increase in women entering the workforce over the past 20 years. An additional 348, 535 women—12,572 in the Meramec Region—joined the workforce from 1980 to 2000. With this transition came many changes to individuals and families across the region.

## **UNEMPLOYMENT**

Unemployment in the Meramec Region, when viewed over time, has been consistently higher than state averages, which are typically lower than national averages. Table 2-11 shows unemployment rates for the eight counties in the Meramec Region, the state of Missouri and the nation. It should be noted that the labor force data on Tables 2-1 through 2-10 came from 1980, 1990 and 2000 Census data, which is an absolute count of persons unemployed at the time of the census. However, the data provided on Table 2-11 is from the Missouri Department of Economic Development's Economic Research and Information Center for 2000 through 2004 and US Census data from 1990. The Department of Economic Development data uses unemployment averages and it should be noted that unemployment rates do not include those individuals who are no longer looking for work.

According to the Missouri Department of Economic Development information, unemployment for the United States has dropped from 7.1 percent in 1980 to 5.5 percent in 2006. The Missouri rates closely mirror those percentages and usually are a few tenths of a point less than the national figure. In the Meramec Region, all counties have seen a decrease in the unemployment rate from 1990-2004, with the exception of Osage County, whose unemployment rate rose by .3 of a percent. Maries, Osage, Phelps, and Pulaski counties all had unemployment rates lower than the 2006 national level (4.8 percent).

Washington County has had double-digit unemployment rates from 1983 into the mid-1990s, with 1983 being the highest year with 27.3 percent. This situation was initiated by the closing and decreased production of lead, barite and other mines in the county, which did not have a well-diversified economy. The county has made considerable strides in diversification. Currently, Washington County is showing an unemployment rate of 7.9 percent, which is still the highest for the Meramec Region. There is some consideration that Washington County's figure is heavily influenced by residents who work construction outside the county and these jobs are seasonal and impacted by weather and

job conditions. Most counties hit their peak unemployment rates in 1983 and showed a slow decline until 2000, then increased until 2004, declining again in 2005

Another interesting item to note is Gasconade County, with a strong German work ethic and relatively high number of manufacturers. Gasconade County unemployment rate is typically one of the lowest in the region. The year 1993 jumps off the chart with 10.9 percent unemployment. This was due to the great flood of 1993 that severely impacted northern Gasconade County. One Hermann industry—Stevens Manufacturing—was washed away and workers were unemployed until a new factory was built.

## **LABOR NEEDS AND SUPPLY**

### WAGES

Tables 2-11 through 2-17 were taken from a Labor Study conducted by Growth Services for MRPC and funded by USDA Rural Development and EDA in 2001. A more recent study was completed under the supervision of the Fort Leonard Wood Commerce and Growth Association, but data covers the Pulaski County labor market only. Table 2-14b was taken from the Pulaski County study, completed by Growth Services, Jefferson City, MO.

Table 2-12 reflects the average wage rates for the counties in the Meramec Region. The highest paid occupations reflected in this data for the region (using average wages as comparison) are: industrial production managers in the management sector; electrical engineers in the professional/technical sector; accountants/bookkeeper clerks in the clerical sector; plumbers, pipe fitters and steamfitters in the production/maintenance sector; hairdressers and cosmetologists in the service sector; and sales representatives in the sales sector.

Tables 2-12 and 2-13 show comparisons of the Meramec Region's average wage rate in selected occupations to those of the nation, the state of Missouri, and the St. Louis, Kansas City, Boston, and San Jose market areas. In these selected occupations, the Meramec Region's wage rates run from 79 to 89 percent of the state's wages. Professional and technical employees earn about 89 percent of the state average. Compared to national averages, the region's employees earn about 73 to 83 percent as much. Sales positions earn about 83 percent of the national average. Meramec employees

earn from 72 to 86 percent of those in the St. Louis market area and from 76 to 86 percent of those in the Kansas City market area.

The Meramec Region holds a strong competitive position in the area of labor costs. When comparing the Meramec eight-county area with the national averages, the national labor costs are from 20-36 percent higher than local rates. Table 2-14 compares three industry sectors with the “All” industry average. The three industry sectors are Manufacturing, Service and Government. The Service Sector has many components, including: hotels and lodging, personal services, business services, automotive repair and services, miscellaneous repair services, motion picture, amusement and recreation services, health services, legal services, education services, membership organizations, engineering, accounting, research, management and related services, etc. The highest paying sector in the region in 2000 is Government with an average weekly wage of \$509. This is followed by Manufacturing with an average weekly wage of \$467. Services sector comes in third with \$335 average weekly wage. Manufacturing is the highest paying sector in Crawford, Gasconade and Maries counties. Government jobs pay the highest in Dent, Osage, Phelps, Pulaski and Washington counties.

Average wage rates for Pulaski County (Table 2-14b) shows that average weekly wage rates for the county grew 11.9 percent from 2001 to 2004. The manufacturing sector grew by 6.7 percent. Education and health services sector grew 1.5 percent. The 2004 average of \$500 per week was 25 percent lower than the state of Missouri average of \$670 and 36 percent lower than the national average of \$779.

Table 2-15 compares average weekly wages of aggregate federal, state and local government agencies across the region. The local level encompasses cities, county government agencies and local public schools located in a county. Federal employees earn the highest wage, with an average weekly wage of \$746. State employees earn about 63 percent of that, at \$467 per week. Local government employees earn an average of \$335 per week.

## **BENEFITS**

The benefits side of the compensation package is more important for employee retention than recruitment. The wage levels overall in the region are generally better in the private sector (particularly in the large employer group) while benefit levels are generally better in the public sector. In the region, about 92 percent of the employers offer vacation, 66 percent offer seven days or more of paid holidays, 20.3 percent offer sick leave, 53 percent offer court leave, 34 percent offer military leave, 62 percent offer funeral leave and 23 percent offer family leave. Employee health coverage is offered by some 71.3 percent of the employers regionally. Dental plans are offered by about 53 percent of the employers. Short and long term disability and retiree health insurance are, however, offered by less than 32 percent of the employers. A little over half of the employers in the region offer retirement plans and almost a half offer 401Ks. Table 2-16 summarizes the benefits offered by employers in the region.

According to the Waynesville, St. Robert, Pulaski County Area Labor Market Workforce Study, Pulaski County has a variety of benefit programs available to employees. All but 15 of 79 firms contribute to health insurance for employees with 43 firms providing better than 75 percent coverage. Over 53 of the firms provide some pension plan assistance. Over 37 percent contribute 50 percent or more to dental insurance and 23 percent to vision care programs. A salary deduction plan (401K) is offered by 66 percent of the employers, with 75 percent of those companies contributing to the plan. Employees are provided an average of 8.9 paid holidays per year. Employers provide 27.2 percent in contributions to benefits as part of their total compensation package.

## **MEDIAN EARNINGS**

Median earnings from 1980 to 2000 for residents of the Meramec Region have been considerably less than the state as a whole as well as the nation. The difference between male and female earnings in the region followed the state and national trend—representing one of great disparity between the two sexes with women earning far less

than men. However, the gap is narrowing somewhat. In 1979, men's median earnings was about double that of women. (Table 2-18)

The average median personal earnings for all eight Meramec Region counties in 1980 was \$8,340 for men and \$3,955 for women. This average was about 59 percent of the state median earnings of \$14,011 for men and \$6,624 for women. Compared to Missouri median earnings in 1980, men's median earnings were 60.6 percent of the state median and women's median earnings were 57.7 percent.

The average median personal earnings for all eight Meramec Region counties in 1990 was \$21,028 for men and \$13,416 for women. This average was 77.7 percent that of the state median earnings for men and 77.0 percent that for women.

The average median personal earnings for all eight Meramec Region counties in 2000 was \$22,880 for men and \$14,418 for women. This average was 84.2 percent of the state median earning for men and 83.3 percent of the state median for women. Overall, in 2000, Osage County personal median earnings are closer to those of the state and nation, with 99.3 percent of the state median and 89.4 of the nation's. Phelps County had the lowest median earnings with \$26,672—75 percent of the state median and 67.5 percent of the nation's.

## **VOCATIONAL TRAINING**

The Rolla Technical Institute (RTI) and Rolla Technical Center (RTC) are career centers operated as part of Rolla Public Schools. The Rolla Technical Institute has been in operation since 1967. The area served by the school consists of all or parts of four counties within a 50-mile radius of Rolla, including the Meramec counties of Crawford, Dent, Gasconade, Maries, Phelps and the towns of Belle, Bourbon, Cuba, Licking, Newburg, Owensville, Rolla, Salem, St. James, Steelville and Vienna. The vocational school's principal function is to supply skilled labor for the local job market. The total enrollment of the school has grown from 222 in the 1967/68 school year to over 1000 for the 2007-08 school year (Table 2-19).

The school offers courses for both high school students and adults. There are 873 secondary students and 290 post-secondary students enrolled in programs. Agriculture

has the highest enrollment with 171 students. Information technology and marketing are the next most popular training courses.

The school conducted a survey of its 2005-06 graduates and of the 374 total graduates, some 351 were employed; 265 of those were employed in the areas in which they received training, and 86 were employed outside their area of training. 23 were unemployed. Of the total, 112 were continuing their education, and 14 were unavailable for employment. These figures are shown in Table 2-20.

Linn Technical College was founded in 1961, and operated under the Linn R-2 School District. In 1995, it became Linn State Technical College and is operated by the state of Missouri. The school offers an associate of applied science degree in 25 different fields of study (Table 2-21). The school serves Osage County schools. Students from 114 of Missouri's 115 counties have enrolled at LSTC since 1996.

Linn State Tech includes a Technology Transfer Center that serves as a central source of training in the mid-Missouri area. The center markets training resources to area industries, facilitates the development of customized training programs, and manages special industrial training programs both on and off the Linn State campus. The total enrollment at Linn State for the 2007-08 term was 855 students. Most programs offered by LSTC are located on the main campus in Linn, Missouri, with four programs offered at off-campus locations. The Physical Therapist Assistant program is located in the Capital Region Medical Center in Jefferson City. The Integrated Manufacturing Technology, Laser/Photonics Technology, and Nuclear Technology programs are located in Mexico, Missouri at the Advanced Technology Center (ATC).

The latest LSTC placement statistics indicate that 97 percent of 2001 graduates were placed in jobs and 87 percent of those graduates were in fields directly related to their major program.

Waynesville Technical Academy has been providing adult education opportunities for nearly 30 years. The Academy is operated by the Waynesville R-VI School District. Most of the WTA programs are built around a 1080 hour training period that can be completed in two years attending half days or all day for a full year. These programs are designed for secondary students and adults. Nearly 70 percent of the most recent graduating class went to work or continued their training in their WTA field.

The career and technical education courses offer highly specialized training using state-of-the-art technology and equipment to enable students to acquire the skills, knowledge and work attitudes needed to secure entry-level employment and to advance to the top of their field with additional training or education.

Through collaboration with Ozark Technical College (OTC), completion of WTA programs may convert to college credit at OTC. WTA offers customized training for businesses based on the needs of their employees. Short courses such as Microsoft Excel and Office as well as Welding and Manufacturing have been offered for local businesses. Tables 2-22 and 2-23 show the enrollment totals for 2006-07 and 2006 senior follow-up.

The Arcadia Valley Career Technology Center is located on the campus of the Arcadia Valley R-II School District in Ironton. The school opened in 1974, and today has an enrollment of approximately 200 half-time and hourly students with additional adult students. The Arcadia Valley Career Technology Center has eight cooperating school districts: Arcadia Valley Schools; Bunker Schools; Clearwater Schools; Iron County C-4 (Viburnum); Lesterville Schools; Marquand-Zion Schools; South Iron Schools; and Valley of Caledonia Schools. Most secondary students from the cooperating sending school districts spend up to half of their school day at the Career Technology Center and the other half in their home school district for required and elective courses. Tables 2-24 and 2-25 show the 2006 graduate follow-up and enrollment totals for 2007-2008.

Secondary and adult students attending courses at the Arcadia Valley Career Technology Center are eligible to articulate up to 36 hours of college credit at Mineral Area College, Three Rivers Community College and any institution of higher education in the state of Missouri. (Credit depends on the program that the individual enrolls in at the Career Technology Center.) Secondary, and adult students, enjoy a variety of program options that include paid/unpaid internships (usually reserved for those student in the second semester of their second year), opportunities to receive additional college credit for non-technical classes, participation in the SkillsUSA Leadership and Skills Training competitions and activities, and training in developing and maintaining a successful career portfolio. Learning is primarily measured using competency-based lessons and emphasizes the use of teamwork in completing real world projects.