An Economic Assessment:

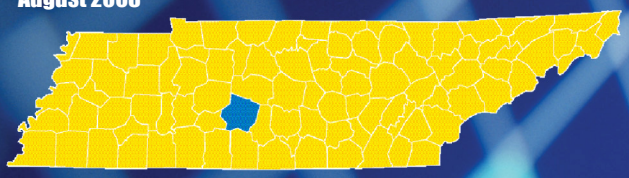
Findings & Challenges

Maury County, Tennessee

Prepared by David A. Penn, director
Business & Economic Research Center
Middle Tennessee State University

Sponsored by Maury Alliance

August 2008



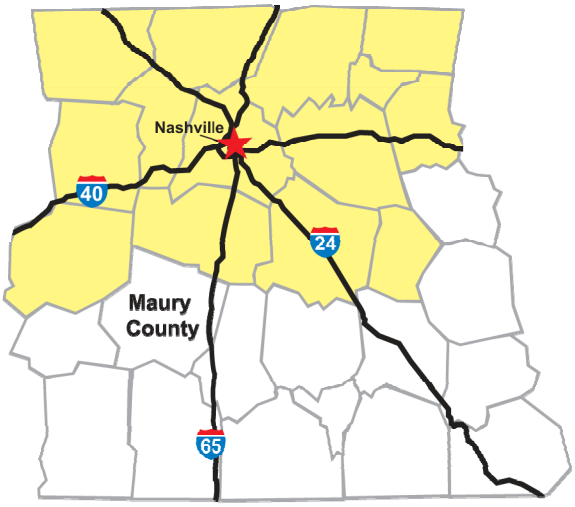
An Economic Assessment of Maury County, Tennessee* Findings & Challenges

Business and Economic Research Center
Jennings A. Jones College of Business
Middle Tennessee State University

Introduction

Maury County is unique. Located in southern Middle Tennessee (Figure 1), the county has important natural assets including the Duck River and a pleasing countryside. It has both very large employers and small employers; both suburban and rural characteristics are present in the county; it is sizable, but one can find a small-town ambience. In fact, Maury County gives the impression of embracing both urban and rural culture, not sure which way to jump.

Figure 1: Maury County and Middle Tennessee



This study outlines important demographic and economic facts and trends about Maury County and how the county compares with surrounding and competing counties. Demographic characteristics are presented early in the study, followed by a discussion of economic characteristics including income, employment, and industry structure. A brief discussion of our forecast and findings concludes the study.

*Principal investigator: David A. Penn, Director and Associate Professor of Economics and Finance. dpenn@mtsu.edu.

The uniqueness of the county makes valid comparisons with other counties difficult, since no other county in the state has similar important attributes. Offering a context typically involves comparing trends for one area with those of one or more other areas that share similar characteristics. The uniqueness of Maury County immediately causes problems with this, as other counties closest in population size to Maury are either not in Middle Tennessee or have other unique attributes that make comparisons dicey at best. Therefore, we have chosen to compare Maury County against two groups of counties, a metropolitan group (the Nashville MSA) and a rural group. This comparison keeps us in Middle Tennessee, and recognizes the split urban/rural character that characterizes Maury County. The Nashville MSA consists of thirteen counties in north Middle Tennessee (Cannon, Cheatham, Davidson, Dickson, Hickman, Macon, Smith, Sumner, Trousdale, Robertson, Rutherford, Wilson, and Williamson), while our rural county group is comprised of seven counties bordering or nearby Maury County (Bedford, Giles, Lawrence, Lewis, Lincoln, Marshall, and Moore). The study will draw comparisons and contrasts of Maury County relative to the Nashville MSA and the rural counties whenever feasible.

Saturn/GM adjustment

Our view is that it is important to adjust the data as much as possible for the effects of the Saturn/GM plant in order to get at the underlying background level of economic activity. This can be done either by taking Saturn/GM payroll and employment out of the county totals, or by holding Saturn/GM payroll and employment constant. This adjustment is important for two reasons: 1) it offers a view of the county without the overwhelming effect of Saturn/GM, and 2) it shows job and payroll changes for industries over which economic development efforts can have some influence. Local officials have little influence on the existence, size, and operations of the Saturn/GM plant; these decisions are made in Detroit and are beyond the control of local policymakers. Local policy can, however, have an affect on employment and payroll in many other industries through growth policy and recruiting policy.

Demographic Characteristics

Maury County is the sixth largest county in Middle Tennessee and the largest Tennessee county not included in a metropolitan statistical area (MSA).[1] With 79,966 residents in 2007, Maury County ranks 16th in size among Tennessee's 96 counties, smaller than Sevier County (83,527) but larger than Anderson County (73,471).

Maury County has grown rapidly in comparison with most other Tennessee counties, especially since 2000. Maury County's population increased 14.7 percent 2000-2007, the 11th fastest rate of growth in the state and nearly double the Tennessee average (Table 1). While growing fast, Maury's growth rate was much more manageable than that experienced in nearby Williamson County and Rutherford County. Housing has also grown quickly, with the number of housing units increasing 18.1 percent 2000-2006, the state's fifth highest growth rate (Table 2).

Table 1: Counties with highest population growth rates, 2000-07

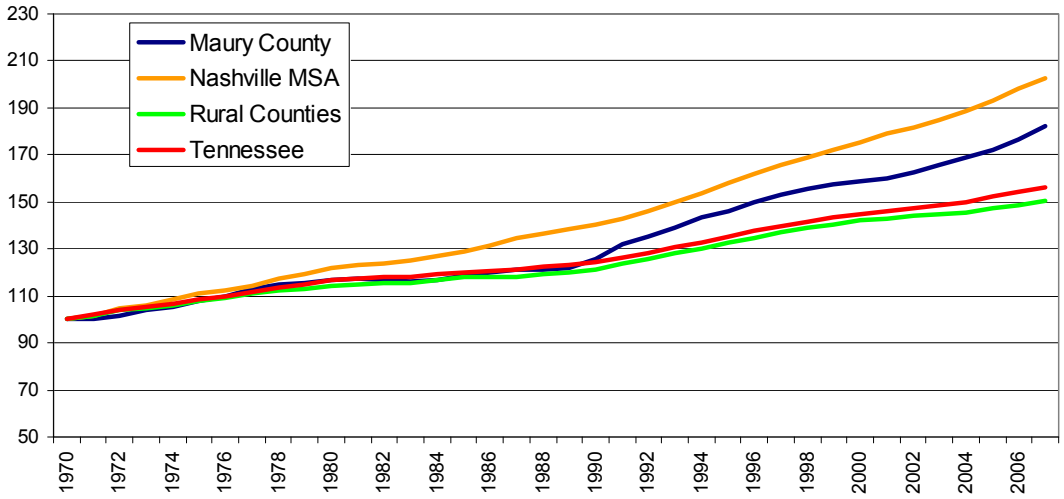
Rank	Area	Percent growth
1	Rutherford County	31.50%
2	Williamson County	29.70%
3	Fayette County	27.80%
4	Wilson County	19.10%
5	Sequatchie County	17.00%
6	Bedford County	16.50%
7	Sevier County	16.50%
8	Sumner County	16.40%
9	Loudon County	15.90%
10	Robertson County	15.50%
11	**Maury County**	**14.70%**
12	Monroe County	14.50%
13	Montgomery County	14.20%
	Tennessee	7.90%
Source: Census Bureau		

[1] Two MSAs are located in Middle Tennessee: the Nashville-Davidson-Murfreesboro-Franklin MSA, and the Clarksville MSA.

Table 2: Counties with the highest housing growth rates, 2000-06	
Area	**Percent growth**
Rutherford County	32.80%
Williamson County	25.10%
Montgomery County	21.20%
Fayette County	19.20%
Maury County	**18.10%**
Wilson County	18.00%
Tennessee	9.50%
Source: Census Bureau	

Long-term population trends are presented in Figure 2 for the period 1970-2007. Maury County's population growth experienced a major shift in 1990 with the opening of the Saturn plant. Prior to the Saturn plant, Maury's growth trend was very similar to that of the rural counties; after the Saturn plant, Maury's growth more resembled that of the Nashville MSA.

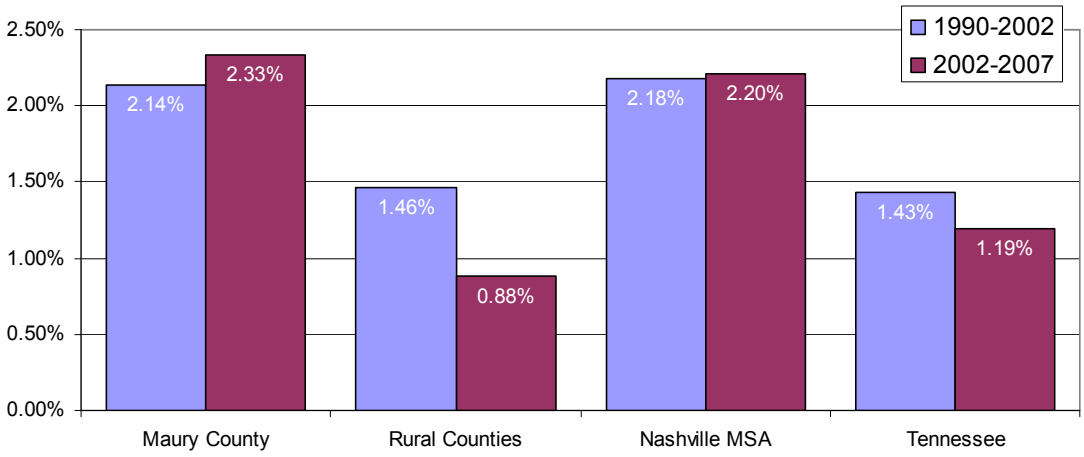
Figure 2: Population trends 1970-2007 (1970=100)



During the 1990-2002 interval, Maury County's growth rate was about the same as the Nashville MSA (Figure 3). Since 2002, Maury's growth accelerated, surpassing that of the Nashville MSA, rural counties, and the state average, as can be seen in Figure 1 as an increase in the slope of Maury County's trend from 2002 on. In fact, the 2006-

2007 population growth rate is the highest experienced by Maury County since 1994 when population rose 3.4 percent.

Figure 3: Recent population growth rates



As Table 3 demonstrates, the age composition of Maury County's population differs somewhat from that of the Nashville MSA and the rural counties. In particular, Maury has smaller population shares for two age categories: 1) young children (younger than 5 years), and young workers (20-39 years). Maury's share of experienced workers (40-59 years) is about the same as for the Nashville MSA, 29.4 percent compared with 29.0 percent, respectively. But Maury has larger population shares in two categories: 1) near retirement (60-69 years), and retirement (70+ years). Taken together, 16.5 percent of Maury's population was 60 years and older in 2006, somewhat higher than the Nashville MSA (14.8 percent) but much lower than the rural counties (19.2 percent).

Table 3: Age distribution for Maury County and comparison areas (2006)

Age category	Maury County	Nashville MSA	Rural Counties
Less than 5 years	6.5%	7.1%	6.6%
School age (5-19)	20.1%	20.0%	19.6%
Young worker (20-39)	27.5%	29.1%	27.0%
Experienced worker (40-59)	29.4%	29.0%	27.6%
Near retirement (60-69)	7.9%	7.7%	9.3%
Retirees (70+)	8.6%	7.2%	9.9%

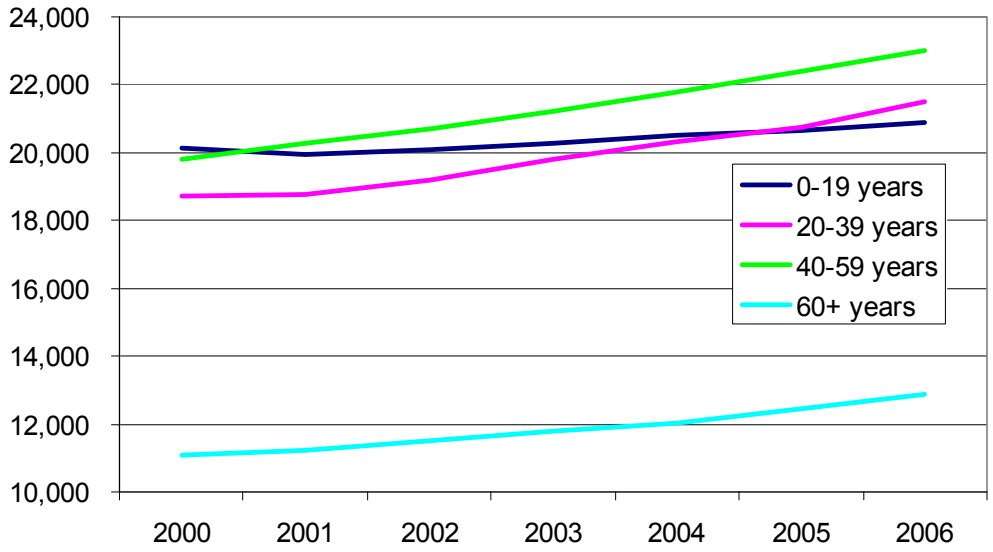
Source: Census Bureau

The relatively small proportion of very young children less than five years is of no great significance; the figure suggests a somewhat lower rate of growth of school enrollment, discussed in more detail in the next section. The larger portion of retirees is of more consequence, as retirees tend to spend less per capita for retail items and more for health care goods and services that have a lower sales tax potential.

Population growth by age

Trends since 2000 show growth in the working age population and in the older population, but little growth of the school age population (Figure 4). With the exception of one year (2001), the younger working-age population (20-39 years) and the older working age population (40-59 years) have progressed along similar paths. The older age population (60+ years) has also grown, starting from a much lower level.

Figure 4: Population trends by age group, Maury County



Net population change over the 2000-2006 interval presented in Figure 5 shows that the older working age population increased somewhat faster than the younger working age population, a gain of 16.3 percent and 14.9 percent respectively. Again, the only difference between the two is that the younger working age population grew very little from 2000 to 2001; after 2001, the growth paths are very similar. The older population increased at about the same rate over the interval as the working age

population (16.3 percent), but the lack of growth in the school-aged population is striking by comparison, an increase of just 3.7 percent over the six-year period.

Figure 5: Growth of population 2000-2006 by area and age group

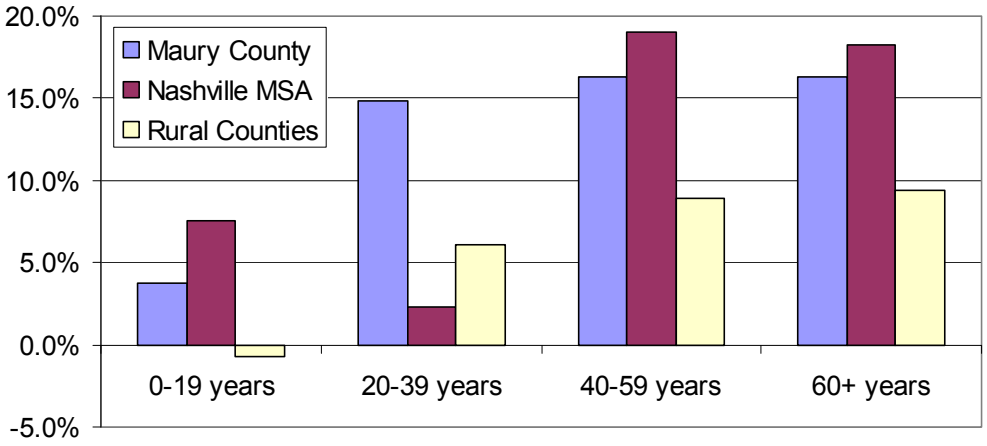


Table 4: Population growth 2000-2006

Category	Maury County	Nashville MSA	Rural counties
Less than 5 years	7.4%	13.6%	6.3%
School age (5-19)	2.6%	5.5%	-2.9%
Young worker (20-39)	14.9%	2.3%	6.1%
Experienced worker (40-59)	16.3%	19.0%	8.9%
Near retirement (60-69)	21.9%	27.5%	14.5%
Retirees (70+)	11.5%	9.8%	5.0%
Total	12.3%	10.5%	5.6%

Source: Census Bureau

More striking is the contrast between Maury County, the Nashville MSA, and the rural counties (Figure 5 and Table 4). The younger working-age population (20-39 years) in Maury County is growing much faster compared with the other two areas, and the difference is not remotely close; this age group increased just 2.3 percent in the Nashville MSA over the 2000-2006 period, and rose 6.1 percent in the rural areas, compared with a 14.9 percent gain for Maury County. *The evidence is compelling: Maury County is experiencing much more growth in its younger working-age population than the Nashville MSA. The fast growth of this population is an important competitive asset; employers searching for a growing pool of young workers might well choose Maury County over the Nashville MSA. Maury County should focus on providing the retail,*

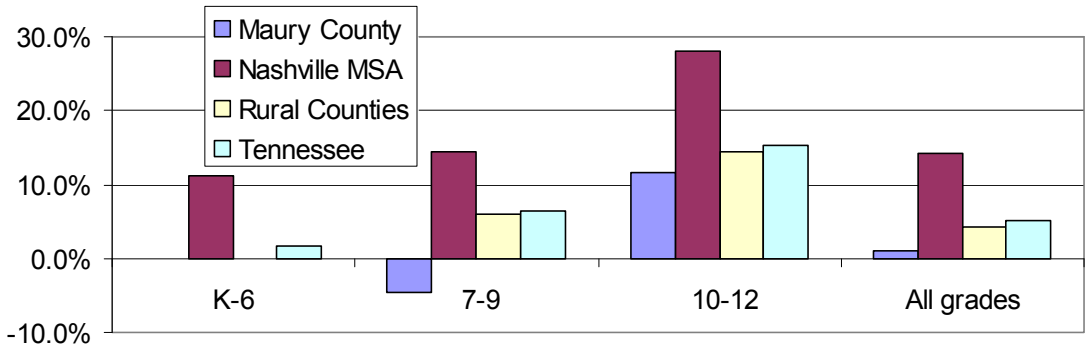
service, and recreational amenities that will help retain these young people and capture more of their spending dollars.

Why the big difference? First, we should acknowledge that Maury County's birth rate and death rate are about the same as other counties, so we need to find other explanations. The answer must be that households moving into the county have fewer children than do resident households. Another possibility is that workers moving out of the county have more children than those remaining.

The county's age distribution has several implications for the workforce, for the demand for public services, and for the demand for private-sector services. First, a large number of workers will approach the retirement age within the next five to ten years. These workers undoubtedly have occupational skills and experience built up over several decades that is not easily replaced. These potential retirements would be less of an issue if younger workers are waiting in the wings to take these jobs; unfortunately, as noted earlier, they are not: the supply of moderately experienced workers in their 30s and 40s is very low in Maury County. Second, as workers enter retirement, demand for public services does not diminish; yet a retiree typically spends less and generates less sales tax revenue as compared with working population. Thus, local governments may experience lower rates of growth of sales tax revenue while providing the same quantity of services (police, fire, recreation, and so on). Finally, retirees will demand much more in the way of health services, recreation, and perhaps a different mix of housing as compared with the working age population. These shifts in demand offer challenges to the private sector.

Maury County's very low school enrollment growth mirrors the low rate of growth of the school-aged population. Figures from the Tennessee Department of Education show that average daily attendance rose by just 0.9 percent total from 2001 to 2007 (Figure 6), compared with a 5.2 percent gain in Tennessee, 4.3 percent in the rural counties, and 14.3 percent in the Nashville MSA. Remarkably, attendance growth for all areas declines significantly for the younger age groups, suggesting that high school attendance will grow more slowly for at least the next decade.

Figure 6: Growth of school enrollment (average daily attendance), academic years 2001-2007



Maury County attendance actually fell for the 7th-9th grades, while the K-6th grades experienced no net growth at all; only the high school grades (10th-12th) experienced an enrollment increase during the 2001-2007 period. The very low growth of school attendance is very much at odds with fast growing population and housing construction observed for Maury County; in other counties (Williamson, Rutherford, Wilson, Sumner), population and school attendance have grown hand-in-hand. Not so for Maury County. We may conclude that an above average number of in-migrating householders do not have children. *Given current age cohort trends, Maury County can expect little growth in the number of high school graduates during the next decade. Net job growth will have to be supplied by net in-migration to the county. Quality of life inducements for in-migrants will be even more important in the future.*

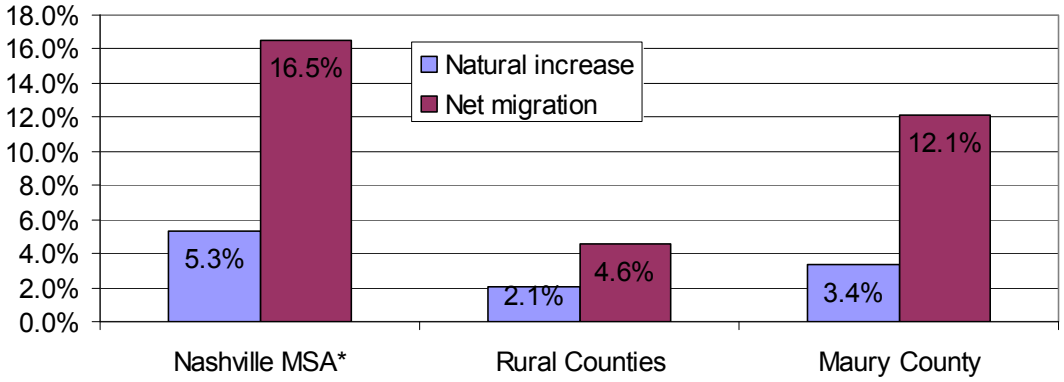
Migration

An area's population growth can be attributed to two factors: 1) a natural population increase (when the number of births is greater than the number of deaths), and 2) net migration (when the number of persons migrating into an area is greater than the number migrating out). The vast majority of Maury County's population growth can be attributed to net in-migration (Figure 7), with the natural increase in population contributing a much smaller amount of growth.

Net in-migration for Maury County is about 8,400 persons over the 2000-2007 period, generating nearly 80 percent of the county's population growth. The natural

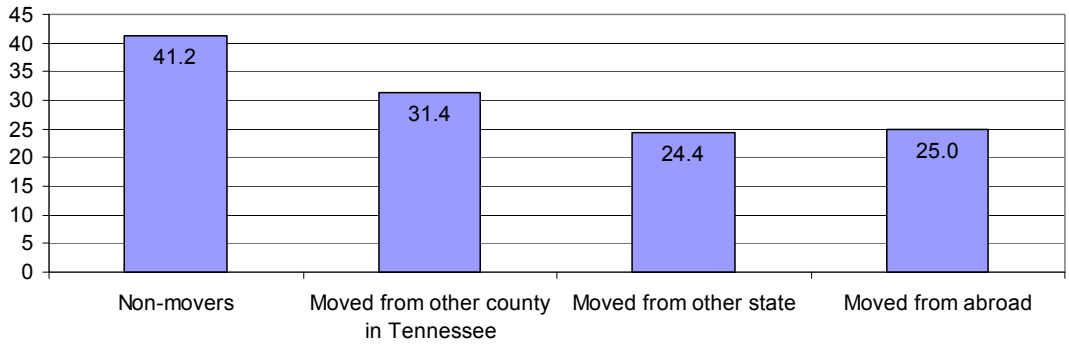
population increase was 1,800, about 20 percent of total growth. Figured as a percent of population in 2000, Maury County experienced a higher growth rate than the rural counties, but substantially slower growth than the suburban counties in the Nashville MSA. *Once again we have evidence of the urban/rural tension at work in Maury County, with migration stronger than the rural counties but not as strong as the suburban counties in the Nashville MSA.*

Figure 7: Source of population growth 2000-2007 (percent of 2000 population)



The American Community Survey, a product of the U.S. Census Bureau, provides a snapshot of the characteristics of migrants to Maury County for 2006. Unfortunately, details are not available for the county in other years. In any event, the 2006 data offer at least a glimpse of the characteristics of migrants to Maury County. Median ages for the migrating population and total population are presented in Figure 8 for 2005-2006.

Figure 8: Median age of migrants and total population, Maury County 2006



The data show that in-migrants are substantially younger than current residents, especially those moving to Maury County from other states: the total median age for non-movers is 41.2 years, while in-migrants from other counties in Tennessee have a median age of 31.4 years, and those moving from other states are substantially younger, with median age of 24.4 years.

Educational attainment

More and more employers are searching for workers who are skill-ready and well-grounded in the fundamental skills of reading, reasoning, and mathematics. Educational attainment is an important measure of the human capital for a workforce. On this measure, Maury County has both strengths and weaknesses compared with competitors. On the plus side, Maury County has experienced a large decline in the portion of the working-age population who do not have at least a high school diploma, falling from 22.1 percent in 2000 to 17.2 percent in 2006 (Table 5).

Table 5: Educational attainment 2000 and 2006

	Maury County		Nashville MSA		Tennessee	
Highest level of education	**2000**	**2006**	**2000**	**2006**	**2000**	**2006**
Less than 9th grade	8.2%	4.8%	6.2%	5.3%	9.6%	7.6%
9th to 12th grade, no diploma	13.9%	12.4%	12.4%	9.6%	14.5%	11.5%
High school graduate (includes equivalency)	36.4%	37.9%	28.1%	30.7%	31.6%	34.4%
Some college, no degree	21.7%	19.2%	21.3%	20.2%	20.0%	19.2%
Associate's degree	6.2%	8.6%	5.1%	6.0%	4.7%	5.7%
Bachelor's degree	8.8%	12.6%	18.2%	19.2%	12.8%	14.1%
Graduate or professional degree	4.8%	4.4%	8.6%	9.1%	6.8%	7.5%
No high school diploma	22.1%	17.2%	18.6%	14.8%	24.1%	19.1%
Bachelor's degree or better	13.6%	17.0%	26.9%	28.3%	19.6%	21.7%

Source: 2000 Census and American Community Survey (2006).

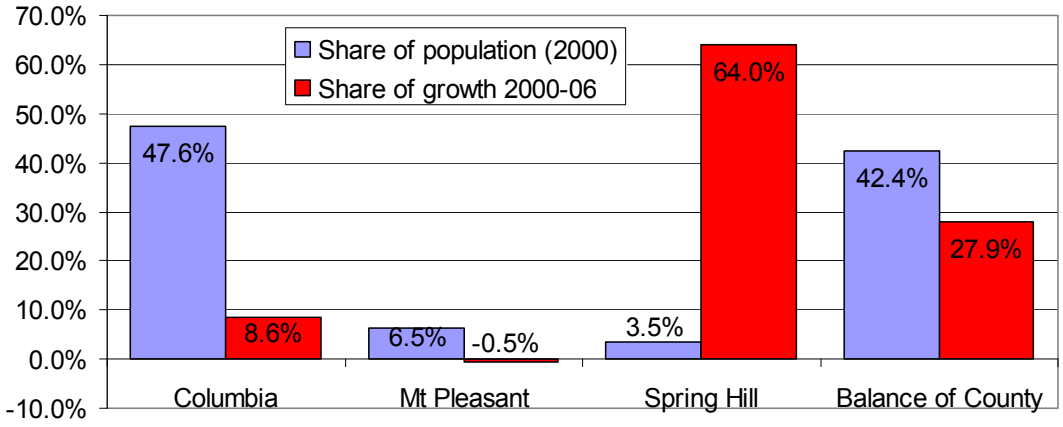
Other areas (Tennessee and the Nashville MSA) also show declines in the no diploma population, but Maury County has improved more on this measure. An additional strength is that Maury County compares very well in terms of the population with some college or an Associate's degree, with the prevalence of both at or exceeding that for

Tennessee and the Nashville MSA. *A significant weakness is the low proportion of Bachelor's degrees or higher; although improving rapidly, Maury County still lags far behind the Nashville MSA in this measure. However, if the current growth rate continues, the county may be approaching the Tennessee Bachelor's degree prevalence rate by 2010.*

Population growth within the county

The largest portion of population growth for Maury County since 2000 has occurred in Spring Hill and in unincorporated areas; Columbia and Mt. Pleasant have experienced little population change. Figure 9 emphasizes this point by comparing shares of 2006 population with the shares of population growth 2000-2006 for the major areas of Maury County.

Figure 9: Population growth in Maury County 2000-2006



The divergences are striking: Columbia had 47.6 percent of the county's population in 2000, but generated just 8.6 percent of the county's population growth from 2000 to 2006. On the other hand, Spring Hill started with just a 3.5 percent share of population, but experienced 64.0 percent of the county's growth. Population growth in the unincorporated areas (balance of county) also is disproportionate compared with the share of population. *Maury County's population center of gravity is moving away from Columbia and the center of the county north towards Spring Hill and the unincorporated areas of the county. The demand for public services will grow in this area, particularly for schooling, roads, and law enforcement.*

Current Economic Overview

As with other counties in Middle Tennessee, Maury County is showing the effects of the current economic slowdown experienced in the U.S. economy. Whether we will come to know this period as a recession is immaterial at present, since the evidence strongly indicates very slow, even negative, growth for the next few months, recession or no recession.

Analyzing the effect of the slowdown on Maury County is greatly complicated by a major event: the brief shutdown of the Saturn (GM) manufacturing plant in Spring Hill. The plant was shut down temporarily in April 2007 for major capital investment and retooling, and 2,400 workers were laid off.[2] The plant will soon resume operations and build the Chevrolet Traverse vehicle. At the end of 2007, the plant employed approximately 4,000 workers, considerably fewer workers compared with the period just before retooling commenced.

Current economic status

Maury County has not yet fully recovered from the GM plant retooling that began in April of 2007, but the most recent data for the first quarter 2008 show improvement (Table 6). The effect of the GM shutdown is very clear: the unemployment rate began rising in 2007.2, peaked at 9.5 percent in 2007.4, then declined to 7.6 percent in the first quarter, still considerably above the pre-shutdown figure of 5.1 percent.

Table 6 presents similar indicators for the Nashville Metropolitan Statistical Area (MSA) and the rural counties nearby Maury County (Bedford, Giles, Lawrence, Lewis, Lincoln, Marshall, and Moore). The Nashville MSA and rural counties show more adverse effect of the general economic slowdown than does Maury County: unemployment has increased in three straight quarters as has the unemployment rate. Particularly striking is the sharp decline in employment in the first quarter of 2008, with employment down 0.6 percent from the fourth quarter.

[2] *The Tennessean*, March 29, 2007.

Table 6: Current labor force and employment indicators (seasonally adjusted)

	2007				2008
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr
Maury County					
Labor force	36,532	36,483	36,647	36,636	37,602
Employment	34,719	33,676	33,160	33,242	34,718
Unemployment	1,812	2,806	3,487	3,395	2,884
Unemployment rate	5.00%	7.70%	9.50%	9.30%	7.70%
Nashville MSA					
Labor force	783,974	786,661	794,134	795,036	797,177
Employment	754,028	757,891	762,503	761,273	761,341
Unemployment	29,946	28,770	31,631	33,763	35,836
Unemployment rate	3.80%	3.70%	4.00%	4.20%	4.50%
Rural counties					
Labor force	91,517	91,073	91,730	92,242	92,519
Employment	86,496	85,883	86,026	86,344	86,460
Unemployment	5,022	5,190	5,704	5,898	6,059
Unemployment rate	5.50%	5.70%	6.20%	6.40%	6.50%

Maury County is certainly affected by the same depressing economic forces as the peer counties, yet Maury shows improvement in the first quarter 2008 (2008.1) while the comparison counties sink. The inference is that had the GM plant not returned to production in 2008.1, Maury would have experienced a setback similar to that of the comparison counties. It is true that Maury's unemployment rate remains high in the first quarter; the high unemployment rate can be attributed to a combination of factors: 1) the general economic slowdown, 2) some GM employees remain out due to the retooling, and 3) unemployed workers in businesses that relied on ripple-effect spending by GM employees such as in retail, restaurants, personal services, real estate, and others. News reports indicate that the GM plant will not be fully staffed until June of 2008; thus, the county's economic picture will probably continue to improve in the second quarter as more workers are added at the GM plant.

Working and living – commuting patterns

Since the end of World War II, relatively inexpensive transportation fuel and the growing sophistication of highways linking the suburbs to the central city caused a steady rise in

the demand for suburban housing. Over the decades since the war, we tended to live in locations where housing is plentiful and commute to work in the city.

Commuting is very important for Maury County; several thousand workers come and go from the county on a daily basis, both outbound (commuting from Maury to other counties) and inbound (commuting from other counties to Maury). Our most recent figures show that, of the total number of persons employed in the county, nearly one-third commute inbound each day from other counties. Not surprisingly, Williamson County is the major source of inbound commuters, followed by Lawrence County, Marshall County, and Davidson County.

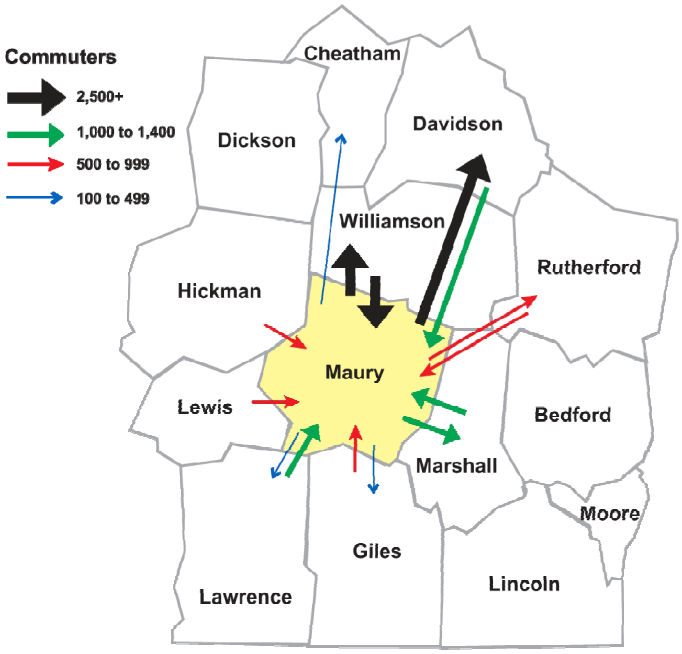
Many Maury County residents also commute to jobs in other counties, about 10,000 workers in 2000. By far, the two largest destinations are Williamson County and Davidson County, with Marshall County also significant. Table 7 provides details for 2000, our most recent figures. Commuting patterns are shown graphically in Figure 10.

Table 7: Primary commuting patterns for Maury County (2000)

Inbound commuters		***Outbound commuters***	
County	**Workers**	**County**	**Workers**
Williamson	2,511	Williamson	3,934
Lawrence	1,382	Davidson	3,077
Marshall	1,311	Marshall	1,369
Davidson	1,020	Rutherford	336
Lewis	938	Lawrence	218
Giles	920	Cheatham	166
Hickman	525	Giles	120
Rutherford	413		
Bedford	181		

Source: Census Bureau

Figure 10: Commuting patterns for Maury County (2000)



As we are painfully aware, petroleum and gasoline prices have climbed greatly in the past several months, owing to rising world demand and slow supply growth from producers. The era of inexpensive transportation fuel may be over. Barring a significant worldwide recession, global demand for petroleum products will continue to rise for the foreseeable future, putting more upward pressure on fuel prices in the coming years.

Households, businesses, and government consumers are adjusting by reducing the number of trips and switching to more fuel-efficient vehicles, but full adjustment will take time. Consumers have already made clear their preference for fuel efficient vehicles by slashing purchases of SUVs, minivans, and pickup trucks in favor of fuel efficient vehicles. Over the long-run, we also expect householders to adjust their living arrangements by moving to neighborhoods and cities closer to where they work; some of this is already happening. Higher fuel costs will create pain for Maury County households and businesses, but will also create an opportunity to capture households who work, but not live, in Maury County.

Income

At $2.25 billion in 2006, total personal income for Maury County ranks 16th largest for the state and 7th largest in Middle Tennessee, larger than Robertson County but substantially smaller than Wilson County. Dividing total income by population gives us a rough comparative measure of the standard of living for a particular area. In 2006, Maury County's per capita income was $29,046, ranking 21st in the state and 9th in Middle Tennessee, above Moore County but lower than Rutherford County.

Total income is comprised of earned income (wages, salaries, and self-employed income) and unearned income (dividends, interest, and rent and transfer payments). As shown in Table 8, shares of earned and unearned income have been relatively stable over time. Differences are notable within these categories, however. For example, within unearned income, transfer payments (mostly retirement income) has grown as a share of income, while dividends, interest, and rent have declined. The rise of retirement income is not surprising, given the aging of the working population that is occurring nationwide.

Table 8: Shares of total personal income, Maury County (percent)

	1980	1990	2000	2006
Unearned income	29.1	32.9	28.1	28.5
Transfer payments	14	15	14.7	18.3
Income maintenance	1.5	1.4	1.3	1.8
Unemployment insurance compensation	0.8	0.4	0.2	0.2
Retirement and other	11.6	13.2	13.2	16.3
Dividends, interest, and rent	15.1	17.9	13.4	10.2
Net earned income	70.9	67.1	71.9	71.5
Residence adjustment*	-7.5	-26.6	-27.1	-19
Wage and salary disbursements	59.1	69.3	70.8	60.9
Supplements to wages and salaries	11	15.2	18.3	17.2
Proprietors' income	8.3	9.2	9.9	12.4

*Residence adjustment takes into account commuting to and from Maury County. Residence adjustment is defined as earnings of workers commuting from Maury County less earnings of commuters to Maury County, expressed as a percent of total income. A negative figure indicates net leakage of earned income to residents of other counties.

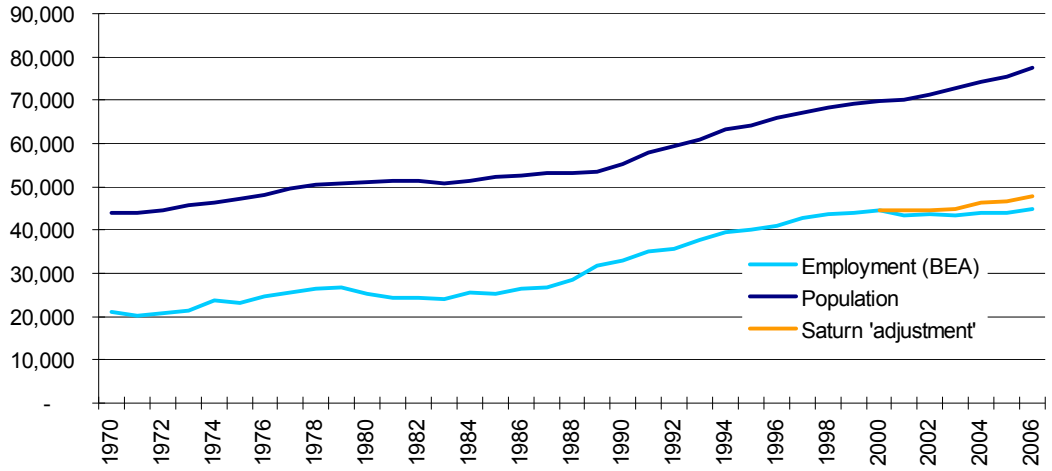
Wages and salaries show little net change in income share from 1980 to 2006, but two other portions of earned income have changed dramatically. First, proprietor's income (self-employed income) has increased greatly as a share of total income, from 8.3 percent in 1980 to 12.4 percent in 2006. The rising share of proprietor's income could be

interpreted as an indicator of entrepreneurial climate; the fact that this income is rising suggests that entrepreneurs are finding a favorable climate for growth in Maury County. Second, the residence adjustment share is large, 19.0 percent in 2006. The fact that the residence adjustment is negative shows that some wages earned in Maury County are being leaked out to other counties; the residence adjustment is a measure of the net earnings leakage. Since commuters travel both to and from Maury County, earned income is also moving in and out of the county. The residence adjustment measures the net effect of the movement of earnings; in this case, more earnings are moving out of the county than in due to commuting. In 2006, 19.0 percent of total income amounted to the not insignificant sum of $427 million; this is the amount of earnings generated by work in Maury County but lost to other counties in the course of one year. Much of this leakage is undoubtedly attributable to the Saturn/GM plant; obviously, capturing some this income would help boost Maury County's growth and per capita income. However, doing so would also make the county even more vulnerable to downturns in this single, yet very large, employer; diversity of income sources would suffer.

Employment and earnings

Maury County employment grew 2.5 percent annually from 1970 to 2000, averaging 780 new jobs per year. During this period, employment rose more quickly than population (1.6 percent average growth), causing the population/employment ratio to drift lower. Population and employment trends are presented in Figure 11.

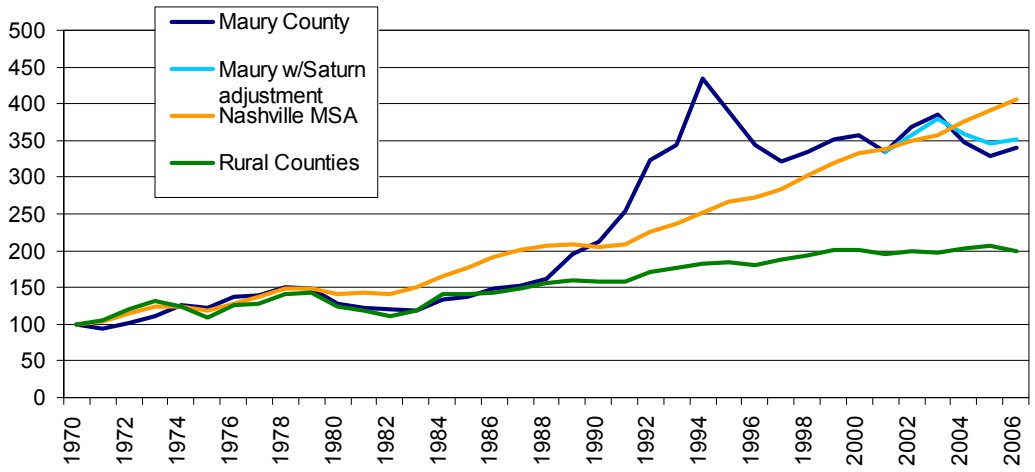
Figure 11: Population and employment trends for Maury County



After 2000 this trend had reversed: employment grew more slowly than population, causing the population/employment ratio to rise. From 2000 to 2006, population grew by 1,300 per year, while employment growth was essentially zero. It is interesting to note that Maury County experienced a similar period of a rising population/employment ratio in the 1980s; both employment and population growth were modest, but population grew slightly faster than employment. With the opening of the Saturn plant in 1990, the population/employment ratio reverted to its long-run trend.

The county's inflation-adjusted earned income has grown over the long-term, but since 2003 has lagged behind the Nashville MSA (Figure 12). Earned income, or

Figure 12: Trend for real earnings by place of work (Index 1970=100)



earnings, is the sum of wages, salaries, and self-employed income generated during a given period of time, usually three months or a year.

Earnings by place of work are earned income *received* by workers in a particular area, whether the workers live in the area or not. Thus, the wages earned by a worker at the GM plant are counted as place of work earnings for Maury County, regardless of the fact that she commutes from Davidson County.

We adjust for inflation using the Consumer Price Index (CPI). Over the long-term 1970-2006, real earnings grew at about 3.5 percent annually, a rise of $1.2 billion since 1970 and $0.67 billion since 1990. By about 2000, much of the growth in real earnings had ceased; in fact, from 2002 to 2006, real earnings have actually declined by 2.0 percent annually. Even after holding Saturn's payroll constant at its 2001 level, real earnings are nearly flat (decline 0.2 percent annually) from 2002-2006, as shown by the Saturn adjustment in Figure 12.

The Saturn/GM Effect

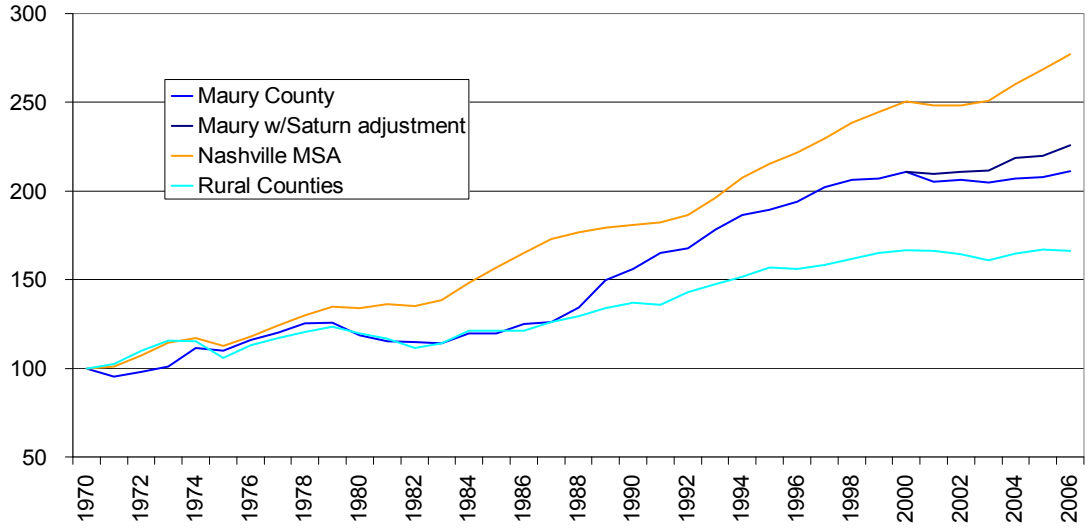
The direct contribution of the Saturn/GM plant to Maury County employment and payroll is nothing less than enormous. In 2006, for example, the plant directly generated 15 percent to 20 percent of the county's private sector employment and 30 percent to 40 percent of private sector payroll in the county.[3] These are the direct contributions of the plant; these figures do not include the effect of local suppliers to the plant and the effect of employment induced by payroll spending. Thus, the actual influence is undoubtedly larger than suggested by these percentages. Even so, the direct effect of the plant has diminished substantially since 2001 due to downsizing of plant employment and payroll. In 2001, for example, Saturn employment accounted for 25 percent to 30 percent of county private sector employment and 40 percent to 50 percent of county private payrolls.

Nothing lasts forever; corporate priorities, consumer preferences, technology, and competitive pressures will change over time. No county in the state (or any other state) could easily weather the potential closing of a plant the size of the Saturn plant. The county can, however, take steps to cushion the blow by building up industries that pay well, have growth potential, and already have a presence in the area. More on this issue later in the report.

[3] Due to nondisclosure requirements, we must provide a range of importance instead of the actual figures.

Downsizing and employee buyouts related to the Saturn/GM plant in 2000 and forward accounts for virtually all of lagging employment and rising population/employment ratio for Maury County. To demonstrate this, we recalculated total employment for the county assuming the number of workers at the Saturn/GM plant is held constant at its level in 2001. Presented in Figure 12 and Figure 13, the Saturn adjustment accounts for most of the slower growth of employment post-2000. More explicitly, netting out the Saturn job reductions produces a moderate positive gain in jobs for Maury County.

Figure 13: Trend in employment (Index 1970=100)



Economic structure of Maury County

Taking the direct effect of the Saturn/GM plant out of the county's figures, we find that the distribution of employment and payroll is much more like that of the Nashville MSA than the rural counties (Table 9). Construction and manufacturing are 18.3 percent of payroll for Maury, compared with 21.2 percent for the Nashville MSA and a whopping 53.0 percent for the rural counties. Trade has a larger portion of payroll and employment, but this is likely attributable to the secondary and tertiary effects of the Saturn plant that have not been compensated for in the data.

Table 9: Distribution of private-sector employment and payroll, 2006 (excluding Saturn/GM)

	Employment			Total payroll		
Industry	**Maury County**	**Nashville MSA**	**Rural Counties**	**Maury County**	**Nashville MSA**	**Rural Counties**
Agriculture, mining, utilities	0.4%	0.4%	1.2%	0.7%	0.5%	1.3%
Construction	5.2%	6.0%	5.0%	5.6%	6.4%	5.2%
Manufacturing	9.8%	13.0%	39.0%	12.7%	14.8%	47.7%
Trade	21.4%	19.2%	19.9%	19.0%	16.6%	16.9%
Transportation and Warehousing	4.5%	4.5%	4.0%	6.9%	4.4%	5.3%
Information	5.0%	2.9%	1.4%	7.9%	4.1%	1.6%
Finance, insurance, and real estate	8.5%	7.0%	3.4%	11.2%	9.7%	3.8%
Professional, management, and support services	11.1%	15.3%	7.0%	11.2%	16.6%	5.6%
Health care, social assistance, and educational services	15.7%	15.8%	9.6%	15.2%	18.1%	8.3%
Tourism, accommodation, and food services	12.8%	12.4%	8.0%	5.1%	6.5%	2.9%
Other	5.4%	3.4%	1.7%	4.5%	2.4%	1.4%

Payroll per worker by industry and area is presented in Table 10 for 2006. Saturn has been taken out of the figures for Maury County. Average payroll for Maury County was $31,300 in 2006, somewhat higher than the rural counties but substantially lower than the Nashville MSA average of $41,600. Several industries offer above-average pay including transportation, information, and finance.

Table 10: Payroll per worker, 2006 (thousand dollars)

Industry	Maury County	Nashville MSA	Rural Counties
Agriculture, mining, utilities	52.1	57.4	33.7
Construction	33.3	44.1	31
Manufacturing	40.6	47.2	36.1
Trade	27.8	35.8	25.1
Transportation and warehousing	47.7	40.9	39
Information	49.3	59.1	33.3
Finance, insurance, and real estate	41.1	57.7	32.7
Professional, management, and support services	31.8	45.2	23.8
Health care, social assistance, and educational services	30.3	47.6	25.7
Tourism, accommodation, and food services	12.4	21.9	10.7
Other	26.1	28.4	23
Total	31.3	41.6	29.5

Growth by Industry

Job growth data by industry shows both gains and losses. Most of the job gains have occurred in seven industries from 2001 to 2006:

- Health care, social assistance, and educational services (+817),
- Tourism, accommodations, and food services (+735),
- Trade (+577),
- Finance, insurance, and real estate (+156),
- Transportation and warehousing (+252),
- Professional, management, and support services (+226), and
- Information (+69)

Job losses are focused in three industries:

- Manufacturing (-1,022),
- Construction (-246), and
- Agriculture, mining, and utilities (-81).

As demonstrated by Table 11, the distribution of these employment changes within the county is uneven. Spring Hill generated more than half the county's net job growth during the period, with Columbia accounting for the other half; the remainder of

the county (Mt. Pleasant and unincorporated areas) lost jobs. Spring Hill shows gains in all but three industries (construction, manufacturing, and transportation), while for the rest of the county the job losses are concentrated in manufacturing and construction. Columbia reinforced its position as the financial and health care center of the county with substantial job gains in these two sectors. Some industries show employment gains for all three areas including trade, finance, health care, and tourism.

Table 11: Job growth Maury County 2001-2006 (excluding Saturn)

	Employment change Maury County				Percent growth		
Industry	Total	Columbia	Spring Hill	Other	Maury County	Nashville MSA	Rural counties
Agriculture, mining, utilities	-81	-64	11	-27	-46.9%	-7.3%	10.1%
Construction	-246	3	-16	-232	-18.3%	17.7%	19.6%
Manufacturing	-1,022	-222	-26	-773	-33.2%	-5.6%	-23.4%
Trade	577	249	225	103	14.7%	9.6%	2.1%
Transportation and warehousing	252	-86	235	104	36.4%	17.0%	17.9%
Information	69	100	-33	2	7.0%	-13.7%	0.7%
Finance, insurance, and real estate	175	94	7	74	10.9%	1.0%	8.7%
Professional, management, and support services	226	65	223	-62	10.8%	13.5%	-12.9%
Health care, social assistance, and educational services	817	641	76	100	33.1%	21.9%	21.8%
Tourism, accommodation, and food services	735	288	197	250	37.7%	14.5%	31.0%
Other	89	-151	100	140	8.6%	3.5%	3.8%
Total	1,592	915	998	-321	8.2%	9.2%	-6.6%

Payrolls

Perhaps more important than job gains or losses is the payroll associated with growth, for it is income, not employment, that ultimately shapes the standard of living for a community. Payroll gains depend on growth not only in the number of jobs, but also in the average pay for these jobs. And since the purchasing power of pay is what matters, we measure payroll change after taking out the effects of inflation. Total inflation-adjusted payroll for the county increased by $46 million for the county's private businesses from 2001 to 2006. Trade payroll is the largest contributor to real payroll

growth, followed by health care, financial services and professional, management, and support services; these industries constitute nearly ninety percent of the net real payroll growth.

Also revealing is the growth in real average pay by industry. Across all private sector employers, real average pay rose just 0.7 percent over the five-year period, indicating that the nominal average pay barely kept pace with inflation. This overall figure obscures a great deal of diversity of average pay growth. For example, several industries experienced significant (double-digit) growth in real average pay; some of these industries also experienced job losses, while others had job gains.

The most favorable scenario for a local economy occurs when jobs grow in industries that enjoy both above average pay and experiences above average growth in real pay per employee. When all three occur simultaneously, the economic stars are crossed favorably for the community. At the other extreme, a worst-case scenario consists of job losses in these same industries (high paying and high pay growth). Many other possibilities exist in between these two extremes.

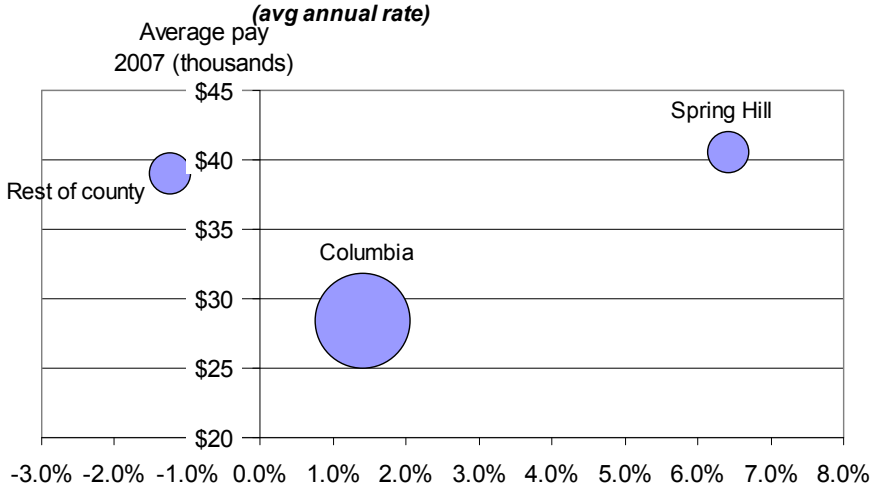
If a community is destined to lose manufacturing jobs, as many are in these times, the community would prefer to lose the manufacturing jobs that pay less, as compared with the better paying factory jobs. Unfortunately, Maury County is losing factory jobs that pay above average, as suggested by the falling average pay for these jobs.

Also important is the general level of prices, because payroll and income are valuable only to the extent that goods and services can be purchased. A rising price level means that a given dollar in income cannot purchase as many goods and services, thus pushing down the standard of living. Consequently, payroll and income figures should be adjusted for inflation when making comparisons over time. During the period of comparison 2001-2006 the general price level as measured by the Consumer Price Index increased 13.8 percent, meaning that the purchasing power of a given dollar of income declined by the same amount. Thus, to maintain the standard of living in inflation-adjusted terms, a worker would need to gain pay raises of at least 13.8 percent during this period.

Compared with the Nashville MSA and the rural counties, Maury County lags far behind in terms of growth of real average pay. While Maury real pay rose by just 0.7

percent, real average pay increased 7.9 percent for the Nashville MSA and 1.1 percent for the rural counties. *Maury County and the rural counties are struggling to maintain the standard of living over time.*

Figure 14: Employment growth 1st quarter 2002-2007 (avg annual rate)



Note: excludes Saturn/GM. Size of bubble represents number of employees in 2007.

Figure 14 shows how the employment growth center of gravity is shifting towards Spring Hill, away from the unincorporated areas of Maury County. During the five year period 2002-2007, private sector payroll employment in the Spring Hill[4] area rose by an average of 6.4 percent annually, with an ending average pay of $40,400 and 3,100 jobs, not including Saturn/GM. Columbia grew at a much lower rate, 1.4 percent, ending with 14,600 jobs in 2007 with an average pay of $28,300, well below the Spring Hill and rest of county averages. The rest of the county (Mt. Pleasant and unincorporated areas) experienced significant job losses, with employment declining by an average of 1.2 percent annually and ending the period with 2,800 jobs in 2007. Jobs in this area pay well, however, averaging $39,000 in 2007. *The job growth engine for the county is shifting to the Spring Hill area, with employment increases with somewhat higher pay than the jobs lost in the rural areas. Columbia, with the lowest paying jobs, is showing little movement.*

[4] Excludes the Saturn/GM plant; includes only the Maury County portion of Spring Hill. Proprietary data obtained from the Tennessee Department of Labor and Workforce Development.

It should be noted that growth of real average pay during this period has been minimal for the entire U.S. economy, not just Maury County and the surrounding rural counties. In fact, the current rate of growth is the poorest for the previous twenty-five years, dating to the major recessions of 1981-1983. Reasons for low growth most likely have to do with technology, globalization, and competition. Will real pay growth pick up again? *Probably, but real pay growth will occur in local economies that are prepared for the future, and punish those that are not prepared.*

Competitiveness

One method routinely used to measure competitive advantage for a local economy is the location quotient. A location quotient (LQ) typically is measured as the share of employment represented by an industry for a given area divided by the share of that industry's employment for the U.S. economy. Thus, an LQ greater than one means that the local economy has more a presence for the industry than does the U.S. economy, suggesting that the industry is an exporter of goods or services from the area to the larger economy. Again, we have taken Saturn/GM out of the calculation for the county. Location quotients for the following industries are greater than one for Maury County (Table 12):

- Transportation and Warehousing
- Information
- Finance and Insurance
- Health care and social assistance, and
- Accommodation and food services.

Table 12: Location quotients for Maury County 2006 (excludes Saturn)

	Location Quotient
Agriculture, natural resources & mining, & utilities	0.36
Construction	0.74
Manufacturing	0.97
Wholesale trade	0.99
Retail trade	1.12
Transportation and warehousing	1.34
Information	1.82
Finance & insurance	1.18
Real estate and rental and leasing	1.02
Professional and technical services	0.46
Management of companies and enterprises	0.72
Administrative and waste services	0.87
Educational services	0.74
Health care and social assistance	1.04
Arts, entertainment, and recreation	0.7
Accommodation and food services	1.12
Other services	1.31

Significant employers for Maury County in these industries include Ryder Integrated Logistics, Electronic Data Systems Corp., Pitney Bowes, Tennessee Farmers' Mutual Insurance Company, and First Farmers & Merchants National.

Another analytical method frequently used for analyzing competitiveness for a local economy is shift-share analysis. In this type of analysis, the change in employment for an area is decomposed into one of three components for each industrial sector: a national component, an industry mix component, and a competitive component. The national component estimates the background employment growth rate; it shows growth in the industry that would occur when the overall economy grows. The second component, industry mix, estimates employment that would occur if the local industry grew at the same rate as the national industry; these growth rates are industry-specific, as compared with the overall growth rate mentioned in the national component. Finally, the competitive component is the difference between the local industry's growth rate and the national industry's growth rate; if the difference is positive, then the competitive component is positive, suggesting that the local industry enjoys a competitive advantage.

The sum of all three components equals the actual employment change during a given time period.

Results for Maury County are presented in Table 13 for the 2001 to 2006 period. According to the estimates, if manufacturing employment had experienced the same job loss as experienced nationally, employment would have declined by 524 jobs; instead, manufacturing lost 987 jobs (exclusive of Saturn/GM) in Maury County, strongly suggesting a competitive disadvantage for these manufacturers. Although the county displays a competitive weakness with the present mix of manufacturers, several other industries show competitive strength as measured by the positive competitive component of employment change. Four of these industries enjoy above average pay, including:

- Transportation and warehousing,
- Information,
- Management of companies, and
- Finance and insurance.

All four industries are exporters with respect to Maury County; they produce goods and services in markets external to Maury County, either elsewhere in Tennessee or in other states.

Table 13: Shift-share analysis results for Maury County (2001-2006, excludes Saturn/GM)

	Actual Change	Industry Mix	National Component	Competitive component
Agriculture, Forestry, Fishing and Hunting	-46	-2	2	-45
Mining, Quarrying, and Oil and Gas Extraction	-35	10	3	-47
Utilities	0	-4	1	3
Construction	-246	122	42	-410
Manufacturing	-987	-524	96	-560
Wholesale Trade	239	-4	27	216
Retail Trade	345	-56	94	308
Transportation and Warehousing	252	-11	22	**241**
Information	69	-180	31	**219**
Finance and Insurance	172	40	37	94
Real Estate and Rental and Leasing	4	11	13	-21
Professional, Scientific, and Technical Services	28	28	20	-20
Management of Companies and Enterprises	138	1	3	**133**
Administrative and Support and Waste Management and Remediation Services	60	54	42	-37
Educational Services	46	38	9	0
Health Care and Social Assistance	771	227	69	476
Arts, Entertainment, and Recreation	151	4	3	144
Accommodation and Food Services	583	129	58	397
Other Services (except Public Administration)	92	7	32	53
Total all industries	1,636	-110	602	1,144

Human capital and competitiveness

The quality of schools for a given area is often cited as a very important factor in the location decisions of footloose industries. Businesses desire a well-educated workforce, and also desire access to quality public schools for their employees' families. Schools are probably the first or second most important criteria for households when choosing to live in one area compared with another. Given the importance of in-migration as a source of labor for the Maury County economy, quality schools, along with affordable housing, are the most important factors in attracting skilled and experienced workers.

Educational system performance can be evaluated in various ways. When compared against performance benchmarks, for example, Maury County performs relatively well. All county schools are accredited by SACS (Southern Association of Colleges and Schools), and all but two are in good standing with No Child Left Behind[5]. Maury County exceeds benchmark performance standards for all students, with the percentage of students achieving proficient or advanced scores higher than the state benchmarks.

However, many of the school systems in competing counties also score above the benchmark, and several score higher than Maury County (Table 14). For example, Maury County performed very well in the 2006-07 scores for math and reading/language for grades K-8, with 88 percent scoring proficient or advanced in math and 90 percent in reading. But competing schools scored higher; among eighteen school systems in nearby counties, Maury County's scores are near the lowest for K-8, and below the group mean for 9-12 math, with reading/language scores for 9-12 near the middle of the group. Maury County's scores are good, but those of other schools are better.

[5] For school year 2006-07.

Table 14: Percent advanced or proficient by school system, three-year average

	K-8 Math 2006	K-8 Math 2007	K-8 Reading 2006	K-8 Reading 2007	9-12 Math 2006	9-12 Math 2007	9-12 Reading 2006	9-12 Reading 2007
Bedford	87	90	89	90	87	88	89	89
Cheatham	91	93	90	92	96	94	95	93
Davidson	79	81	83	84	68	69	86	88
Dickson	91	93	92	94	88	89	94	94
Giles	87	87	88	88	85	84	92	91
Hickman	88	90	90	91	93	92	93	92
Lawrence	92	94	92	94	91	92	90	89
Lewis	90	92	91	92	89	93	91	90
Marshall	91	92	92	93	86	85	93	92
Maury	86	88	87	90	85	87	93	92
Moore	92	94	92	93	84	92	92	90
Rutherford	93	94	93	94	89	89	96	95
Murfreesboro	90	92	91	92				
Sumner	91	92	93	94	86	86	94	93
Williamson	97	98	97	97	93	94	96	96
Franklin	95	96	95	96				
Wilson	92	93	93	95	93	93	94	94
Lebanon	91	93	91	93				
Group median	91	92.5	91.5	93	88	89	93	92

Source: Tennessee Department of Education school system report cards, No Child Left Behind Adequate Yearly Progress portion.

Another measure of educational performance gets at the ability of a school to enhance a student's performance over the school year. Student backgrounds and socio-economic status can vary significantly from county to county; this value-added score measures student progress given the abilities and backgrounds of the students. A higher score indicates that the school system is doing a better job of enhancing student performance than are other school systems, given the mix of students.

By this value-added measure, Maury County achieved a grade of 'B' for match and 'A' for reading/language based on statewide norms for 2006-07. Compared with the 18 competing school systems, Maury County ranks in the middle for math but near the top for reading/language for the 2006-07 school year (Table 15). The figures are not easily interpreted, but a larger figure indicates more improvement. The reading/language score for 2007 represents a very large improvement from the previous year, which also achieved a grade of 'A'. We may conclude that holding constant the mix of students,

Maury County schools perform somewhat lower than the competing average for math but substantially higher for reading/language.

Table 15: Mean gain value-added, three year average

	K-8 Math 2006	K-8 Math 2007	K-8 Reading 2006	K-8 Reading 2007
Bedford	0.1	0.4	1.8	2.1
Cheatham	1.2	1	1.2	2.4
Davidson	0.8	1.3	1.5	2.5
Dickson	2.5	3	2.5	3.7
Giles	1.4	1.4	1.4	2.9
Hickman	0.8	1.9	1.8	3.2
Lawrence	2.7	3.7	2.2	2.8
Lewis	1.3	0.7	1.6	3.2
Marshall	1	1.1	1.4	2.1
Maury	1.3	1.1	1.9	3.4
Moore	3.4	3.9	1.8	2.8
Rutherford	2.1	2.1	1.9	2.8
Murfreesboro	1.4	0.6	2.7	3.3
Sumner	0.3	0.1	1.6	2.2
Williamson	2.6	2.2	2.2	2.4
Franklin	2.4	1.6	2.9	2.5
Wilson	1.1	1.1	1.8	2.4
Lebanon	1	2.5	2.2	3.1
Group median	1.3	1.4	1.8	2.8

Source: Tennessee Department of Education Report Card

Judging from standardized test scores and high school graduation rates, Maury County is facing challenges in its educational system. We view education as a complex system involving not just schools and teachers but also parents, community leaders, major employers, taxing and spending decisions by local and state governments, and attitudes towards education prevalent in the local culture. Thus, education is not just schools; much more is involved.

The second performance measure is the high school graduation rate, presented in Table 16 for the same school systems. Again, Maury County is near the bottom, with only two systems with lower graduation rates (Davidson males and females and Giles males).

Table 16: High school graduation rate by system (percent)

System	2005	2006	2007
Bedford	80.8	88.3	89.7
Cheatham	90.1	92.9	91.4
Davidson	61.9	68.8	70.0
Dickson	80.0	82.2	84.4
Giles	82.0	84.8	76.5
Hickman	86.0	89.3	85.2
Lawrence	82.3	90.0	89.1
Lewis	77.2	88.8	91.8
Maury	73.1	79.2	80.1
Marshall	84.2	91.0	88.0
Moore	-	85.2	89.2
Rutherford	-	87.7	87.5
Sumner	-	85.9	87.7
Williamson	90.2	91.0	93.4
Wilson	91.1	88.5	88.5
Group median	82.2	88.3	88.0
Tennessee	77.9	80.7	81.8

Source: Tennessee Department of Education Report Card 2007

Given increasing worldwide competition and the resulting relentless push for increased productivity, employers will increasingly demand workers who can analyze and work through problems. The era of good paying low skill manufacturing jobs has drawn to an end; manufacturing jobs will survive, but not in their present form. Competitive manufacturing establishments will increasingly rely on automation and technology, requiring more skill and analytical ability on the part of workers than was the case in the past. These employers will locate in areas where workers with these skills are available. Consequently, diagnosing and addressing the performance issues in the educational system is of paramount importance for Maury County. Schools, teachers, families, and governments must work together on this issue. Above all, leadership is required on this issue.

Employers

As part of a larger study of industrial cluster targeting for Middle Tennessee, the Business and Economic Research Center (BERC) interviewed several employers in Maury County. According to these interviews, the quality of the local workforce arose as

one of the most important factors for businesses. When asked about specific areas of concern, employers found weaknesses in the ability of the area to provide skilled workers who are adaptable to new technologies, and in the availability of skilled labor in general.

Underemployment

The BERC also estimated the extent of underemployment for several counties of southern Middle Tennessee. Underemployment may occur when a worker trained for a particular occupation is in fact employed in an occupation with lower educational and training requirements. Or, underemployment may occur when a worker is employed part time or seasonally when full-time permanent employment is desired. The BERC estimates that this second type of underemployment amounts to 16 percent of Maury County's labor force, the highest rate in southern Middle Tennessee.

Underemployment may be reduced when the worker moves to a different county, an option that may not be the best outcome for the county's economy. Or, the worker may be able to retrain in an occupation that *is* in demand locally. The second option presupposes both the demand for workers in desirable occupations and the existence of training / educational opportunities offered by community colleges, technology centers, or online.

Maury County does benefit from the presence of Columbia State Community College, offering more than 50 areas of study. As for training that is more specific and technical, the county does not have a technology center; for this type of training, the student would need to enroll at centers either in Hohenwald or Pulaski, both located in other counties.

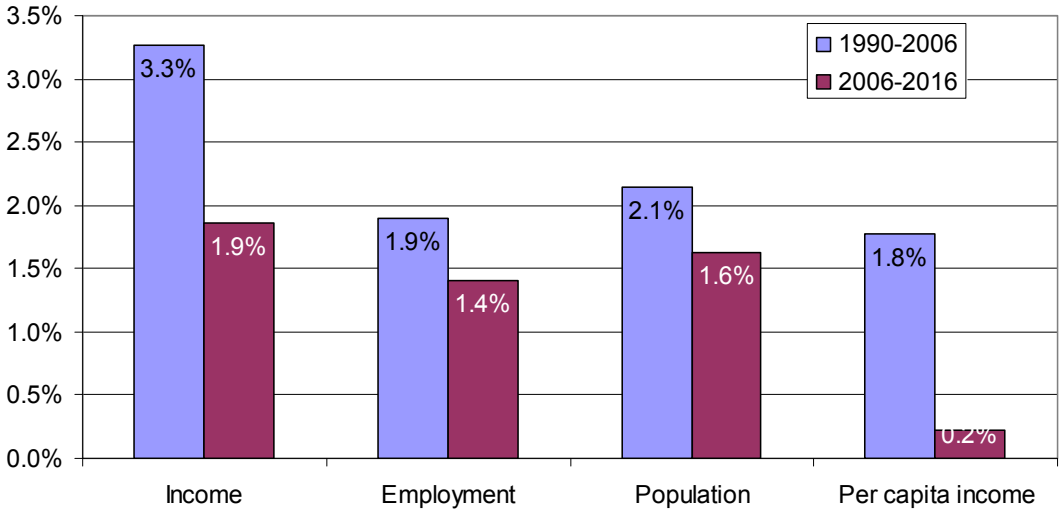
Forecast for Maury County

The future brings a plethora of uncertainties, not the least of which is the future of the GM plant in Spring Hill and the auto industry in Middle Tennessee. Nonetheless, an estimate of the future path for the local economy is helpful to assess likely future economic growth assuming no major structural changes occur. In other words, given current trends, industry structure, skills, commuting patterns, and so on, where will the Maury County economy be in ten years? Our answer to this question involves estimates from a multi-region vector auto-regression model. The model uses past trends and interactions among variables and among regions to generate predictions. In this case, the

regions are Maury County and the Nashville MSA, and the variables are real income, real per capita income, population, and total employment.

Results are presented in Figure 15 in terms of average annual rates of growth forecast for 2006-2016. Growth rates for 1990-2006 are also provided for comparison. According to the forecast, growth for Maury County will slow in the future, with income and per capita income growing but at a lower rate than in the past. Population continues to grow more quickly than employment, meaning that householders will continue to move to Maury County but not necessarily work in the county. The near absence of growth in real per capita income is the most worrisome aspect of this forecast, as growing the purchasing power of income is the path to a higher standard of living in the future.

Figure 15: Maury County growth rates 1990-2006 and forecast for 2006-2016 (annual avg rate; income in constant dollars)



The forecast clearly shows that without significant structural change in industry mix, workforce skills, education, and migration, Maury County will slide sideways during the coming decade, at best. Of course, if the GM plant experiences a significant layoff or shutdown, all bets are off.

Findings and implications

Findings and implications follow by subject area.

Demographics

- Maury County is experiencing rapid population and housing growth, especially since 2002. Much of the growth is in the Spring Hill area.
- Maury's recent growth trend is much more similar to nearby urban areas than surrounding rural areas. Maury's competition is mostly urban, not rural.
- Unlike other suburban counties, population growth has not generated rapid growth in public school enrollment.
- The young worker (20-39 years) population is growing faster than in the Nashville MSA or the surrounding rural counties. This is potentially a big plus for the county, as it demonstrates a growing workforce.

Jobs and income

- Employment and payroll are dominated by the General Motors assembly plant in Spring Hill. Diversification of the employment base away from the auto sector is critical for future employment stability.
- A large number of workers commute to and from Maury County every day. Permanently higher gasoline costs will cause workers to search for housing closer to where they work. Capturing these workers is an important opportunity for Maury County.
- Excluding GM, Maury County is experiencing moderate overall job growth but is losing jobs in traditional manufacturing.
- Growth of average inflation-adjusted pay (excluding GM) is stagnant, trailing behind both the Nashville MSA and the surrounding rural counties.
- Underemployment is high, indicating the presence of a significant number of workers willing to work at jobs that better match their skills.
- Maury County shows competitive strength in transportation, information, finance and insurance, and health care; all these industries enjoy payroll per worker higher than the county average.
- Future growth of average pay will depend on retaining and attracting businesses that hire growing occupations with above-average pay. Financial services and health care have shown potential in Maury County.
- Our forecast shows little long-run improvement in real per capita income given the current economic structure and level of educational attainment.

Education

Maury County's relatively low educational attainment level and the absence of a technology center limit the ability to attract and retain better paying jobs. Maury County has

- Fewer adults with no high school diploma compared with Tennessee.
- Many fewer adults with a college education compared with the Nashville MSA.
- A lower high school graduation rate compared with competing counties.
- No technology center.

An educational system competitive with those in the competing urban counties of the Nashville MSA is vital for the purpose of retaining employers, attracting new employers, and attracting skilled workers from other counties.

Green power

The resurgence of the environmental movement (green power) could be important for Maury County. Maury County has the natural assets and location to capitalize on higher fuel prices and the green movement if it so chooses. It has a growing cohort of young workers who tend to be more interested in all things green. The right mix of residential, commercial, and retail development could be an important draw for these households.

The national and global economies have changed dramatically during the past years, even the past few months. The era of good-paying, relatively low-skilled manufacturing jobs is drawing to a close; competitive workplaces of the future will rely much more on technology and the workers' abilities to adapt and learn. This will require a higher skill level that is prevalent today in much of the workforce, and the expectation that workers will continue to acquire skills and training over their working careers. Important opportunities exist right now for Maury County; what path will Maury County choose?