

An Economic Report To the Governor of the State of Tennessee On the State's Economic Outlook

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Foreword

This 1998 volume, *An Economic Report to the Governor of the State of Tennessee*, is the twenty-second in a series of annual reports compiled in response to requests by state government officials for assistance in achieving greater interdepartmental consistency in planning and budgeting efforts sensitive to the overall economic environment. Both short-term, or business cycle-sensitive forecasts, and longer-term, or trend forecasts, are provided in this report.

The quarterly state forecast through the first quarter of 2000 and annual forecasts through 2006 represent the collective judgement of the staff of the Center for Business and Economic Research, College of Business Administration, at The University of Tennessee, Knoxville, in conjunction with the Quarterly and Annual Tennessee Econometric Models. The national forecasts were prepared by the WEFA group. Both the quarterly U.S. forecast and the annual U.S. forecast are current as of November 1997. Tennessee forecasts, also current as of November 1997, are based on an array of assumptions, particularly at the national level, which are described in Chapter 1. Chapter 2 provides detailed evaluations for major sectors of the Tennessee economy, and Chapter 3 presents the long-run forecast and outlook for the state. This year Chapter 4 concerns the issue of tourism in Tennessee.

The primary purpose of this annual volume—published, distributed, and financed through the Tennessee Department of Economic and Community Development, Department of Revenue, and Department of Employment Security—is to provide wide public dissemination of the most current possible economic analysis to planners and decision-makers in the public and private sectors.

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EXECUTIVE SUMMARY

U.S. ECONOMY

The 1997 U.S. economy outperformed the expectations of most analysts, as we experienced the best economy in a decade. Gross domestic product (GDP) rose 3.8 percent and inflation was a modest 2.3 percent. This occurred in spite of the East Asian financial crises and a rather large correction in the U.S. stock market during October (that was later erased). Further, the economy ran near full employment without igniting inflation.

The U.S. economy will slow down somewhat in 1998 as the Asian crisis continues to deteriorate our trade balance and as investment growth moderates. Still, the overall picture remains healthy, with the economy being driven by continued good growth in consumption and investment. The growth path will be sufficient to keep the U.S. economy at full employment. Tax revenues have been spurred by the robust economy, and the federal government will run a surplus in 1998, the first time in decades.

Highlights of the forecast for the U.S. economy in 1998 include:

- Inflation-adjusted GDP will grow at a modest 2.5 percent annual rate.
- The civilian unemployment rate will be 4.6 percent.
- Inflation as measured by the CPI will average 2.2 percent.
- The Federal Funds rate will equal 5.7 percent.
- The federal government will run a budget surplus of \$2 billion.

TENNESSEE'S SHORT TERM ECONOMY

The Tennessee economy entered 1998 at or near its full employment productive capacity. Growth rates had slowed during 1996 but began to reaccelerate at the end of 1997, and the state's economic fundamentals remain strong. The economy continues to expand, with growth occurring in both jobs and income. As with last year at this time, the prospects for a sharp upturn or downturn in economic activity seem slim.

March of 1998 entered as a lion, as data revisions prepared as part of the Department of Employment Security's annual benchmarking process indicated a much stronger 1997 job picture than was portrayed by the preliminary data. Although the data became available before this report was released, CBER has not revised the forecast contained here due to the time-intensive nature of economic forecasting. Job growth for 1997 was initially reported to be 0.9 percent, but the revisions show a much stronger growth rate of 1.9 percent. The data show strong growth in service jobs and good growth in construction jobs, though somewhat less than previously thought. Since the forecast has not been revised, it should be taken as a worst-case scenario for the state's short-term prospects. Job growth will likely exceed initial estimates by at least one-half a percentage point.

Based on other economic data, the state's economy appears to have closed out 1997 on a reasonably strong note. Inflation-adjusted personal income is expected to have advanced 2.8 percent for the year. Personal income growth may also be revised upward at some future point. The state unemployment rate, once revised, came in at 5.4 percent (slightly higher than the 5.2 percent

figure registered in 1996). Sales tax collections have also been expanding at a rapid 6.1 percent pace, second-fastest in the southeast.

As is typically the case, economic growth shows considerable variation across the state. Some sectors of the economy, most notably manufacturing, have had some growing pains. The revised data indicate 0.5 percent contraction in overall manufacturing employment, as 1.0 percent growth in the durable goods sector was swamped by 2.3 percent contraction in the nondurable goods sector.

Different regions of the state also have shown divergent growth patterns. During most of the 1990's, the state's metropolitan regions have outgrown their rural counterparts. For example, between 1990 and 1995, the state's metropolitan areas saw jobs expand by 13.8 percent, while rural counties saw slower growth of 7.9 percent. This continued in 1997, as rural counties grew less than one-half as fast as metropolitan counties. The metropolitan areas of the state also display higher levels of per capita personal income (a good measure of economic well being), lower unemployment rates, more rapid population growth and a larger retail sales tax base.

The short-term economic outlook for 1998 and 1999 calls for reasonably strong economic growth. Barring any unforeseen shocks to the national economy that might jar the state from its current trajectory, the next two years will look a lot like the revised situation for 1997. Selected highlights of the initial (unrevised) short-term outlook for Tennessee include:

- Nonagricultural jobs will advance at least 1.2 percent in 1998, improving to 1.4 percent growth in 1999.
- Employment in the manufacturing sector will be approximately flat in 1998 and should be better in 1999. Jobs in nondurable goods manufacturing will slip 1.3 percent in the current year and will fall at the same pace in 1999. Jobs in the durable goods sector will expand 0.9 percent in 1998 and 1.6 percent in 1999.
- The state's unemployment rate will average 5.3 percent in both 1998 and 1999.
- Nominal personal income is expected to rise 5.1 percent in 1998 and 5.5 percent in 1999. Nominal per capita personal income should grow 3.9 percent and 4.2 percent in 1998 and 1999, respectively.
- Taxable sales are projected to grow 8.0 percent in the current fiscal year. Taxable sales growth will subside to 4.1 percent in fiscal year 1998/99, aligning more closely with underlying economic growth.
- Actual job growth and personal income in 1998 and 1999 will be somewhat stronger than reported in the tables and in these bullet points, in light of recent job growth revisions.

TENNESSEE'S LONG TERM FUTURE

An evaluation of the long-run growth rate of the Tennessee economy is important because economic growth is a good measure of improvements in overall economic well-being. Equally important is understanding the determinants of the long-run economic growth

rate: the growth rate of the state's labor force, the growth rate in the state's capital stock (*e.g.*, equipment, structures, and public infrastructure), and the rate of growth in technology (the productivity of labor and capital). Any policy designed to have a long-term positive impact on economic growth in the state must target these long-run determinants if the policy is to be effective.

Tennessee output has grown strongly in the last 25 years, and has consistently outpaced output growth in the nation as a whole. As a result, Tennesseans have enjoyed an improved standard of living that is getting ever closer to the national standard. Growth rates have diminished in the nation as a whole over time and declined in Tennessee during the 1970s and 1980s; however, the Tennessee economy has reversed the pattern and seen very strong growth in the 1990s. In the 1970s and 1980s growth in employment, capital stock, and productivity made balanced contributions to the state's economy, but in the 1990s, Tennessee economic growth has been mostly driven by gains in employment and productivity.

By continuing to invest in its people through human capital formation, maintaining an attractive business environment through infrastructure maintenance and expansion, and encouraging an inflow of new private capital and technology, the State of Tennessee can ensure a vibrant economy that will yield balanced growth over the long term.

Generally, the state's growth path will trend upward from the current pace of economic growth. By the year 2000, the Tennessee economy is anticipated to return to its long-term trend. Output growth is expected to be fairly

robust and is anticipated to keep employment levels up and personal income growth strong. Employment growth should strengthen over the forecast period, allowing the state to maintain healthy unemployment rates. Selected highlights of the long-term forecast include:

- Tennessee inflation-adjusted gross state product (GSP) is expected to grow at a compound annual rate (CAGR) of 3.4 percent over the forecast period (1997-2006), with annual growth rates increasing slightly in the latter half of the period.
- Tennessee nonagricultural employment is projected to see solid growth over the forecast horizon of 2.5 percent (CAGR), creating 625,700 net new jobs.
- Both the Tennessee and U.S. unemployment rates are expected to see a moderate increase. The Tennessee unemployment rate, which stood at 5.1 percent in 1997, is expected to be around 5.6 percent in 2006. The state's economy is anticipated to remain fully employed.
- After adjusting for inflation, Tennessee personal income is projected to grow at a healthy pace of 3.2 percent (CAGR), slightly faster than the growth rate anticipated for U.S. personal income (2.0 percent, CAGR).
- Inflation and interest rates are expected to remain at historically low levels over the forecast period.

TOURISM IN TENNESSEE

Tourism is rapidly becoming a more prominent sector in the Tennessee economy, as it enjoyed growth rates averaging 5.8 percent from

1990 to 1995. The growth has been sparked by the rapid development of music theaters in Pigeon Forge, the Tennessee Aquarium in Chattanooga, the revitalization of downtown Nashville, as well as the increased interest in outdoor activities such as camping and hiking. Tennessee plays home to a vast array of tourist attractions and, as a result, has the opportunity to attract visitors from a wide spectrum of demographic characteristics. As tourism continues to become increasingly crucial to the state's economy, it is imperative that community leaders and developers understand both the advantages and the limitations of the sector so that successful tourism development can be realized.

The tourism "industry" is a complex web of intermingled businesses and governments, providing many challenges for those charged with overseeing its development, evaluation, and assessment. The first step to understanding the industry is to clearly define what constitutes tourism and the tourism industry. Unfortunately, the failure to agree upon an universally acceptable definition continues to plague researchers in the field. As a result, the data reported in tourism research is subject to many inconsistencies and biases. These shortcomings aside, the industry continues to be a viable development option for many communities in Tennessee.

Tourism development results in many benefits to the state and its local communities. Benefits include increases in income, employment, and tax revenue as well as a more diverse offering of local activities and public services. However, the benefits do not come without costs. Costs include the need for more public infrastructure and safety personnel, congestion, and an increase in the cost

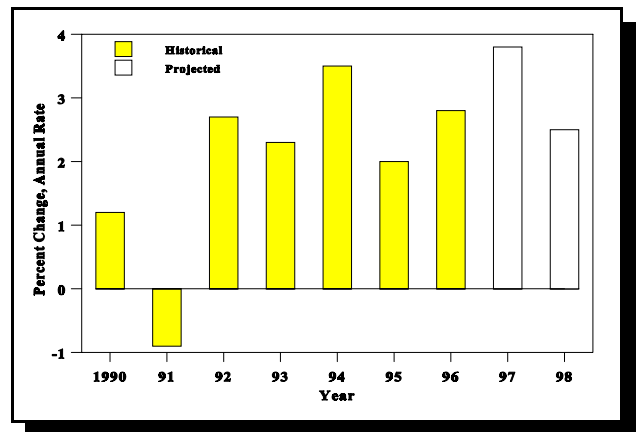
of living. Controlling these offsetting costs is an essential task facing public officials and can be accomplished through the utilization of financial analysis, strategic management policies, engineering controls, and information on carrying capacity. The extent to which the state will be successful in controlling the negative effects, while enjoying the maximum benefits, will hinge in part on the quality of the relationship between state and local government officials and those being impacted by the alterations to their community as a result of tourism development.

CHAPTER 1

THE U.S. ECONOMIC OUTLOOK

As of November 6, 1996, inflation-adjusted gross domestic product (GDP) was expected to finish the year with a 2.3 percent annual rate of growth.¹ The unemployment rate during 1996 was expected to come in at 5.4 percent, and inflation, as measured by the urban consumer price index (CPI) was expected to finish at 2.9 percent. In fact, the economy finished 1996 with a somewhat stronger performance than anticipated. Inflation-adjusted GDP growth came in at 2.8 percent, the unemployment rate at 5.4 percent, and CPI inflation at 2.9 percent.

FIGURE 1.1--U.S. Inflation-Adjusted Gross Domestic Product



Similarly, as of November 6, 1996, inflation-adjusted GDP was expected to finish 1997 with a modest 2.1 percent annual rate of growth, while the unemployment rate was expected to come in at 5.5 percent, and CPI inflation was expected to finish at 2.8 percent. The economy is now anticipated to finish 1997 with an even stronger performance. As of November 1997, inflation-adjusted GDP growth is expected to finish 1997 at an annual rate of 3.8 percent, the unemployment rate at 4.9 percent, and CPI inflation at 2.4 percent. This soothing scenario of strong growth with low inflation has been made possible by stronger-than-expected productivity growth. Output per hour worked is now anticipated to finish 1997 with 1.4 percent annual growth. The last time it finished higher was during the early post-recession expansion in 1992.

All in all, analysts expect 1998 to be a year of moderate growth. Inflation-adjusted GDP is anticipated to finish 1998 with 2.5 percent annual growth; the unemployment rate is anticipated to decline to 4.6 percent; and CPI inflation is likewise anticipated to decline to 2.2 percent.

These comforting anticipations come in the wake of some seemingly unsettling events. First, the financial problems of the East Asian economies—Hong Kong, Indonesia, Japan, Malaysia, the Philippines, South Korea, and Thailand—have had a deleterious impact on world stock and financial markets. In particular, the U.S. Standard and Poor Stock Price Index fell dramatically on Monday, October 27, 1997. While a number of analysts initially worried this correction could hamper consumer spending, Federal Reserve Chairman Alan Greenspan referred to it as a "salutary" event for the U.S.

economy. Indeed, WEFA believes the U.S. stock market is still overvalued by approximately 5 percent! However, the October stock market correction should dampen Fed fears that the economy is overheating, which is anticipated to postpone hikes in the Federal Funds interest rate until at least the second quarter of 1998.

The second event, the year 2000 computer problem (i.e., computer calendars unequipped to handle the end of the millennium) could dampen growth as companies scramble to identify and fix the computer bugs necessary to make their systems compliant with year 2000. It is expected that large companies will be compliant by the year 2000, while smaller companies may not. This could reduce the profitability of these smaller companies due to the attending accounting and payroll difficulties they will face. However, even though salaries for computer programmers have already begun to rise, most analysts do not believe the year 2000 computer problem will have a major impact on growth.

The Index of Leading Economic Indicators (LEI) seems to be in line with predictions for moderate growth in 1998. In September 1997, the LEI rose 0.2 percent for the second-straight month, with the gains primarily attributable to a substantial drop in initial unemployment claims and an increase in the M2 money supply. In fact, the LEI has increased on average by 0.2 percent per month during the first nine months of 1997, bolstering the anticipation of sustained economic growth for the U.S. in the months ahead.

While inflation-adjusted construction spending fell 1.3 percent in September, new orders for manufactured goods increased by 0.4 percent during the same month. Nondurable goods

orders, which rose 0.8 percent, were the primary reason for this fourth-consecutive monthly increase in new orders. Durable goods orders also rose, albeit by a mere 0.1 percent. June through September saw exceptionally strong growth in new orders.

The overall picture for the 1997 and 1998 U.S. economies appears to be one of strong growth in 1997 followed by moderate growth in 1998. The current U.S. expansion has persisted over 60 months, but shows few signs of impending recession.

A convenient format for this chapter involves examining the components constituting GDP. In particular, GDP can be broken down into four categories: personal consumption expenditures, gross private domestic investment, government consumption and gross investment, and net exports (i.e., exports of U.S. goods and services minus imports of foreign goods and services). The first section examines the largest component of GDP—personal consumption expenditures. The

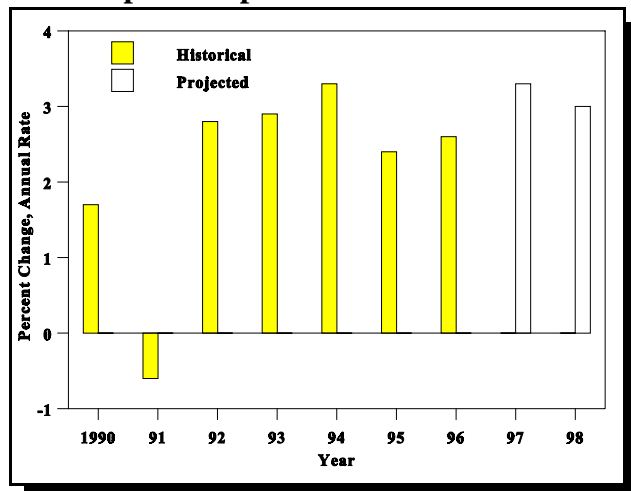
second section examines the historically most volatile component of GDP—gross private domestic investment, and the third section examines government spending. The fourth section examines our nation's international sector, and the chapter concludes with a summary of the outlook for the U.S. economy.

Consumption

Personal consumption expenditures account for about two-thirds of GDP. Current consumption expenditures may merely reflect consumer expectations concerning more fundamental growth prospects. On the other hand, they may be indicative of structural changes in consumer behavior. Regardless of the interpretation, the sheer bulk of the consumption category ensures that it is an important factor in GDP growth.

In the near term, the consumer appears to be an engine of growth. Consumer confidence, as measured by both the University of Michigan and the Conference Board, recently hit 30-year high levels. While the stock market correction of October has reduced consumer wealth, it is anticipated to have only a mild downward impact on consumer spending, and the stock market has come back to record highs. During this time it was primarily the institutional investors who were selling off, while the small investors led the rebound in buying. As a whole, consumption expenditures are expected to finish 1997 with inflation-adjusted annual growth of 3.3 percent, followed by 3.0 percent annual growth in 1998. By historical standards, these rates represent moderately strong growth in consumption. The

FIGURE 1.2--U.S. Inflation-Adjusted Personal Consumption Expenditures



expected growth for 1997 is 0.7 percentage points higher than growth in 1996.

Durable goods and services consumption are expected to finish robustly with inflation-adjusted annual growth rates of 5.5 percent and 3.4 percent, respectively, during 1997 followed by rates of 5.5 percent and 3.2 percent during 1998. While durable goods as a whole are expected to perform well, motor vehicle and parts are anticipated to finish 1997 with anemic inflation-adjusted growth of 0.1 percent. August marked the high point in 1997 monthly auto sales, coming in at an annualized rate of 15.6 million units. The market then slipped to an annualized rate of 15.0 million units in September and down further to a 14.6 million unit annualized rate in October.

The big three U.S. auto producers—Chrysler, Ford, and General Motors—bore the brunt of the slack October sales. Relative to a year ago, General Motors' sales were off 4.0 percent, Ford's sales were down by 2.1 percent, and Chrysler's were down a dismal 8.3 percent. On the other hand, the large Japanese producers—Honda, Mazda, Nissan, Subaru, and Toyota—sold well, and October was a particularly strong month for Mercedes-Benz whose sales came in a whopping 82.0 percent higher than in October 1996. This exceptional performance by Mercedes-Benz was fueled by its new M Class Sport Utility vehicle which has taken the U.S. by storm.

Consumer debt includes installment debt (credit cards, vehicle loans, and personal loans) and mortgage debt. Each of these debt forms require monthly payments of principal and interest. While these payments, along with vehicle lease payments, have risen relative to disposable income and are approaching their pre-recession

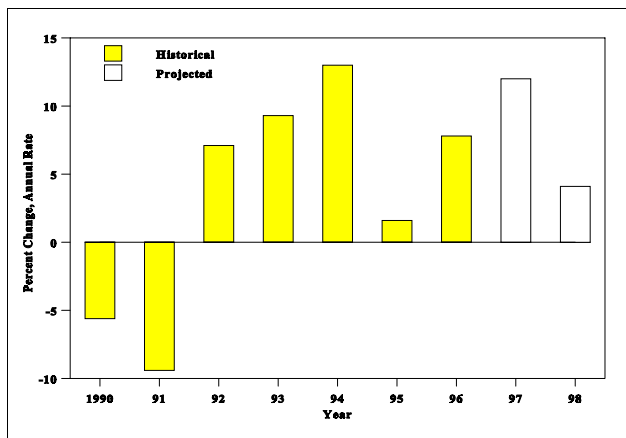
peak of 1989, some of the rise is due to the increasing tendency of consumers to use credit cards in place of cash and checks for ordinary, nondurable expenditures such as groceries. Often, these debts are paid within the month, so that no interest charges are incurred. Thus, the fact that consumer debt payments account for 18.0 percent of disposable income is somewhat misleading and need not indicate that consumers have overextended themselves. However, personal bankruptcies have been rising rapidly and further increases in the consumer debt to personal income ratio would likely slow consumption growth.

In summary, anticipate the consumer to continue as an engine of growth despite a currently high consumer debt to personal income ratio and a decline in consumer wealth caused by the October stock market correction. Consumer confidence is high, and employment and income growth remain robust. With a hike in the Federal Funds rate anticipated during 1998 if any signs of inflation show up, price inflation will remain under control. The consumption sector does not appear to signal recession in 1998.

Investment

Gross private domestic investment consists of fixed investment and changes in business inventories. Fixed investment can, in turn, be broken down into nonresidential structures and residential structures. Gross private domestic investment is historically the most volatile component of U.S. GDP. While typically constituting less than one-fifth of GDP, it is also considered by many to be the most important GDP category since downturns in business investment spending often precede downward cyclical

FIGURE 1.3--U.S. Inflation-Adjusted Gross Private Domestic Investment



movements in GDP. Further, recent breakthroughs in economic growth theory emphasize the importance of investment in determining the trend component of inflation-adjusted GDP. In particular, changes in current investment can have long-lasting effects on the growth path of the economy.

Following a boom in 1992, 1993, and, especially 1994, growth in inflation-adjusted gross private domestic investment plunged to a mere 1.6 percent in 1995. However, analysts' fears were quelled by a better 7.8 percent performance in 1996. Inflation-adjusted gross private domestic investment is anticipated to finish 1997 with very strong annual growth of 9.7 percent followed by a very healthy annual growth of 7.9 percent in 1998. The anticipated strong growth in gross private domestic investment is due to growth expected in producers durable equipment. During the third quarter of 1997, inflation-adjusted investment in nonresidential structures came in at \$873 billion, up an annualized 19.0 percent from the second quarter. Among producers durable equipment, investment in computer equipment was up a whopping 34.0 percent in the third quarter of

Stock Prices and Business Investment

The October 27 stock market correction was long overdue. One question on the minds of a number of analysts is whether the strong growth in business investment will be affected also. Stock prices and business investment are strongly correlated. As a whole, business investment is less volatile than stock prices in the short run. However, in the long run, stock price movements have been quite informative about future movements in business investment. In particular, declining stock prices have preceded all major declines in business investment during the postwar years.

Do stock price declines cause declines in business investment? That is, other things equal, should we expect an event like the October correction to lead to a decline in business investment? A number of analysts have argued that, in the long run, stock prices should indeed exert an independent influence on business investment because declining stock prices raise the cost of capital. On the other hand, short run movements in stock prices are often attributed to changes in "market sentiment" and such changes may have little to do with the fundamentals determining the long run profitability of firms. As such, managers who focus on the long-run profitability of an investment should pay little heed to fluctuations in the stock market unless they are indicative of a trend. To the extent that the October correction appears to have been a transitory interruption in a still growing stock market, it should have little impact on business investment.

1997. After a strong second quarter, inventories fell \$52 billion in the third quarter.

Following strong growth between 1992-1994 and a decline in 1995, inflation-adjusted residential structures performed moderately in

1995 with annual growth of 5.9 percent. In 1997 and 1998, inflation-adjusted annual growth in residential structures is expected to fall to a rate of 2.1 percent in each year. New home sales declined by 0.3 percent to an 800,000 unit annual rate in September of 1997. This decline followed a 2.3 percent fall in August sales. While inflation-adjusted annual growth is anticipated to be slightly negative in 1997, the level of new single-family home sales is quite high by historical standards. The average annual rate through the third quarter of 1997 is 803,000 units, which is the highest average seen since 1978. The effective mortgage rate averaged 7.72 percent during 1996, and is anticipated to fall by two basis points to 7.70 percent in 1997 followed by an increase to 8.02 percent in 1998. The anticipated rise in 1998 is conditioned on moves by the Fed to increase the Federal Funds rate in 1998.

In summary, gross private domestic investment is anticipated to be an engine of growth in 1997 and 1998, with especially strong gains in 1997. Since declines in gross private domestic investment often lead recessions, this bodes well for the 1998 U.S. economy.

Government

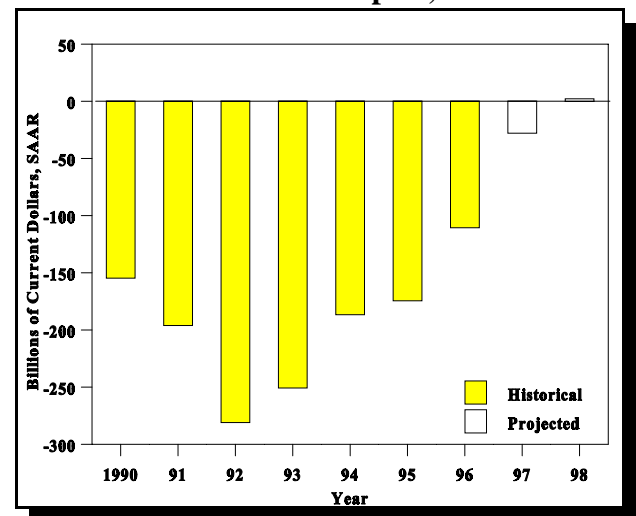
Federal, state, and local government purchases of goods and services account for less than one-fifth of GDP. However, there are good reasons to believe that government spending and borrowing decisions are important determinants of economic growth. Governments can influence GDP through three channels: taxes, spending, and interest rates. Taxes affect GDP by influencing consumption and investment decisions. Government spending impacts GDP directly through the government

purchases of goods and services category of GDP. Governments influence interest rates both through their direct participation in capital markets and indirectly through the Federal Reserve's response to government spending and tax decisions.

At the aggregate level, inflation-adjusted government consumption and gross investment are expected to grow at an annual rate of 0.9 percent in 1997 followed by 1.3 percent growth in 1998. Consistent with the recent trend, the slow growth in government expenditures is occurring with declines in federal government expenditures but increases in state and local government expenditures. Indeed, each year between 1991-1996, inflation-adjusted annual growth in federal government expenditures has been negative while that for state and local governments has been positive. The fact that total government expenditures have been growing more slowly than GDP makes it possible for reductions in the federal deficit even as the overall tax burden declines.

The federal budget deficit has been declining annually since 1993. It is anticipated that the

FIGURE 1.4--Federal Surplus, NIPA Basis



federal deficit will continue to decline in 1997 from \$110.5 billion to \$27.3 billion. This anticipated large drop in the deficit is due primarily to a better than previously expected economy. Additionally, the strength of the stock market has resulted in substantially higher capital gains tax revenues. Strikingly, the federal government is anticipated to run a \$2.2 billion surplus (NIPA Basis) in 1998. The federal Treasury recorded a \$49.3 billion surplus in September, which was substantially higher than the \$35.3 billion surplus during September of 1996. Federal receipts grew a robust 10.9 percent, while federal outlays grew merely 2.5 percent relative to last September. The strong growth in federal receipts is primarily due to increases in personal tax collections which were up almost 14 percent relative to the previous year's level.

During fiscal year 1997, federal spending grew unevenly. Medicare outlays rose a rapid 9.0 percent. On the other hand, defense expenditures were up a mere 1.3 percent, interest payments by less than 1.0 percent, and income security payments by 2.2 percent. In the coming years, entitlements are anticipated to be the primary contributors to growth in federal expenditures. Medicare and Medicaid outlays are anticipated to grow fastest, well above the rate of inflation. Nondefense expenditures are anticipated to grow at about the rate of inflation, while defense expenditures are anticipated to grow less rapidly than inflation.

The prospect of a federal budget surplus in 1998 already has many politicians and analysts questioning where such dollars will be spent. Given the still massive federal debt, a number of analysts argue that any surpluses should go toward

debt reduction. However, a more basic question involves whether the anticipated surplus will even materialize. In particular, the rosy anticipations could weaken congressional resolve toward deficit reduction. The verdict is still out on this issue.

The International Sector

The international sector includes exports of U.S. goods and services and imports of foreign goods and services. A rise in exports of U.S. goods and services increases U.S. GDP, while a rise in imports of foreign goods and services decreases U.S. GDP. Due to trade liberalization efforts and reductions in transactions costs of international trade, net exports (i.e., exports of U.S. goods and services minus imports of foreign goods and services) are becoming increasingly important to U.S. economic growth.

Due primarily to rapid economic growth in the U.S. relative to the rest-of-world index, inflation-adjusted import growth is anticipated to exceed inflation-adjusted export growth in 1997. Inflation-adjusted exports are now anticipated to finish 1997 up 12.4 percent, while inflation-adjusted imports are anticipated to finish 1997 up 14.1 percent. As a whole, inflation-adjusted net exports are anticipated to decline from -\$114.5 billion in 1996 to -\$145.4 billion in 1997. Similar expectations are held for 1998 where inflation-adjusted exports are anticipated to rise by 6.4 percent while inflation-adjusted imports are anticipated to rise by 10.2 percent. Consequently, the trade deficit is anticipated to widen in both 1997 and 1998 relative to its 1996 level.

Due to tensions in the Middle East, crude oil prices surged upward in October. Prior to Iraq's barring of U.S. arms inspectors from the country,

The East Asian Financial Crisis

From the point of view of a country, asking the International Monetary Fund for help is essentially declaring national bankruptcy. Nevertheless, that is precisely what South Korea did in late November. South Korea is merely the latest victim of a financial crisis plaguing a number of East Asian countries-- Hong Kong, Indonesia, Japan, Malaysia, the Philippines, South Korea, and Thailand. The extent to which this crisis is prolonged will depend on a number of factors.

These countries are traditionally strong exporters. Indonesia, Malaysia, the Philippines, and Thailand experienced a dramatic currency devaluation which makes the prospects of rebounding in the near term good. However, even if all countries experienced similar devaluations, long-term prospects will depend on whether some more fundamental problems are addressed. Troubled financial institutions will need to be consolidated. Wasteful spending by governments will have to be reigned in. Banks will have to be made accountable for their loans. Finally, governments will need to allow more open capital flows and institute floating exchange rates. It is anticipated that the East Asian crisis will take at least until to the end of 1998 before it is resolved.

The impact of the East Asian crisis on U.S. economic performance is anticipated to come primarily through a decline in our exports. Devaluations in East Asia make U.S. products more expensive there. Further, many Asian countries are now experiencing slow growth, further reducing U.S. export potential. It is anticipated that U.S. exports to East Asia will decline by \$20 to \$30 billion in 1998. At the same time, East Asian goods are becoming increasingly cheap in the U.S. While U.S. imports from these countries will rise, it is also anticipated that such imports will "crowd out" imports from other countries (e.g., Mexico). As a whole, the East Asian crisis should have a small impact on aggregate U.S. imports. On balance, the East Asian crisis is anticipated to reduce inflation-adjusted U.S. GDP growth by about 0.5 percent in 1998.

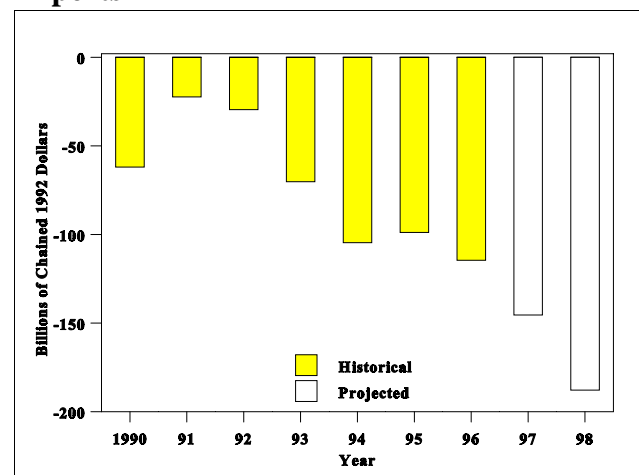
many analysts speculated that a loosening of restrictions on Iraqi oil exports was imminent. In addition to the Iraqi oil-for-aid arrangement, analysts were forecasting that the revenue ceiling on Iraqi oil exports could soon be raised to \$3 billion for the next six months. Even without settlement of the Iraq crisis, the price of oil has plummeted, falling by more than 25 percent since October.

Forecast Summary and Conclusion

The U.S. economy grew very rapidly in 1997, and this is expected to be followed by moderate growth in 1998. Inflation is expected to remain under control with the Fed stepping in if necessary. Expect the 1998 U.S. economy to be characterized by the following: (1) inflation-

adjusted GDP will grow at a modest 2.5 percent annual rate; (2) the economy will be near full employment with a civilian unemployment rate of 4.6 percent; (3) inflation as measured by the CPI

FIGURE 1.5--U.S. Inflation-Adjusted Net Exports



will average 2.2 percent; (4) the Federal Funds rate will equal 5.5 percent; and, (5) in nominal terms (i.e., without inflation-adjustment), the federal government will run a surplus of \$2.2 billion.

ENDNOTES

1. CBER bases its U.S. forecast on that provided by the WEFA group. Unless otherwise stated, inflation-adjustment is performed using the new chain-weighted method.

CHAPTER 2

THE TENNESSEE SHORT-TERM ECONOMIC OUTLOOK

INTRODUCTION

As the Tennessee economy entered 1998, it found itself operating at or near its full employment potential. The economy enjoyed exceptionally strong growth earlier in the decade, with growth decelerating in 1995. The economic data available when the Tennessee short-term and long-term forecasts were prepared (most notably, data on nonagricultural jobs) suggested lethargic growth through 1997. Since completion of the state economic forecast, the state has completed and released its annual average estimates according to established guidelines. Instead of the 0.9 percent job growth reported in the preliminary data, the annual averages show a job growth of 1.9 percent for 1997. CBER has not revised the recent historical data nor the forecast contained in this *Report* due to the time-intensive nature of economic forecasting. However, the text of this chapter does reveal some of the changes to recent historical data. The forecast, in the face of the revised data, should be viewed as a worst-case scenario: economic growth, especially growth in nonagricultural jobs, should be stronger than is suggested by the detailed forecast tables.

Ultimately the state's economic fortunes hinge on economic prospects for the nation as a whole. As discussed in greater detail in Chapter 1 of this report, the U.S. economy is fundamentally strong and will continue to expand through

the near term. This in turn will help support stable growth in Tennessee through the next two years. The primary problem confronting the national economy as this report goes to press is the currency crisis in southeast Asia. On the one hand, weaker growth in southeast Asia will aggravate Tennessee's efforts to export its products abroad. At the same time, interest rates in the U.S. will likely remain relatively low in order to avoid significant currency outflow from southeast Asia to the U.S. (Low inflation at the consumer and producer levels also will help support lower domestic interest rates.) The maintenance of low interest rates will foster growth in interest-sensitive sectors of the state's economy, especially durable goods manufacturing.

The remainder of this chapter is broken into three components. The first section focuses on variations in economic conditions across counties in Tennessee. This discussion reveals that Tennessee counties vary significantly in levels of economic well-being and rates of economic growth. The second section presents the short-term economic forecast for the state economy. As noted above, the short-term economic outlook suggests a continuation of stable and modest growth. The final section of this chapter explores the state's agricultural sector and its near-term outlook.

Sub-State Economic Growth in Tennessee

Tennessee continues to enjoy generally healthy economic growth. At the same time, striking differences in economic conditions emerge at the sub-state level. In particular, Tennessee's metropolitan areas are reaping the

benefits of, and are the primary source of, the state's strong economy. Meanwhile, nonmetropolitan areas have seen relatively stagnant economic growth in recent years. This chapter focuses on the divergent pattern of economic growth across Tennessee's metropolitan and nonmetropolitan counties. A variety of measures of economic performance are used as illustrations: job distribution and job growth, unemployment rates, population growth, personal income, taxable sales, and education expenditures.

The distinction between metropolitan and nonmetropolitan areas follows from the U.S. Office of Management and Budget's definition of a Metropolitan Statistical Area (MSA). Tennessee contains seven MSAs: Chattanooga, Clarksville-Hopkinsville, Jackson, the Tri-Cities (Johnson City-Kingsport-Bristol), Knoxville, Memphis, and Nashville-Davidson. The 27 counties which comprise these MSAs are designated as metropolitan counties, while the remaining 68 counties in Tennessee are nonmetropolitan counties. Figure 2.1 shows the distribution of metropolitan and nonmetropolitan counties throughout the state.

Employment Distribution and Job Growth

The distribution of employment by industry by county can be prepared using 1995 Bureau of Economic Analysis data. Three sectors of the state's economy—manufacturing, trade (wholesale and retail), and services—account for the lion's share of jobs. The distribution across the entire state of jobs in these three major industries shows a 27.0 percent share in the service industry, a 21.9 percent share for trade, and a 17.6 percent share in manufacturing. Job

distribution in the state's metropolitan counties, which account for 73.0 percent of the state's total jobs, is similar to the state average, with services, trade, and manufacturing accounting for 29.0 percent, 23.2 percent, and 13.6 percent of jobs, respectively, though the services and trade sectors are somewhat above average and the manufacturing sector is below average. A significantly different picture emerges across nonmetropolitan counties. The smaller nonmetropolitan counties, which account for 27.0 percent of total Tennessee jobs, are dominated by manufacturing activity. In 1995, 28.7 percent of full- and part-time jobs in nonmetropolitan counties were in manufacturing, while trade and services jobs accounted for 16.9 and 18.4 percent of jobs, respectively. Figure 2.2 illustrates these county-level differences in job distribution.

Tennessee has experienced dramatic changes in industry structure over a relatively short period of time. In 1990, 24.5 percent of Tennessee's jobs were in services, 21.4 percent in trade, and 18.9 percent in manufacturing. Similar to the U.S. trend, Tennessee employment is becoming more services and trade-oriented, while

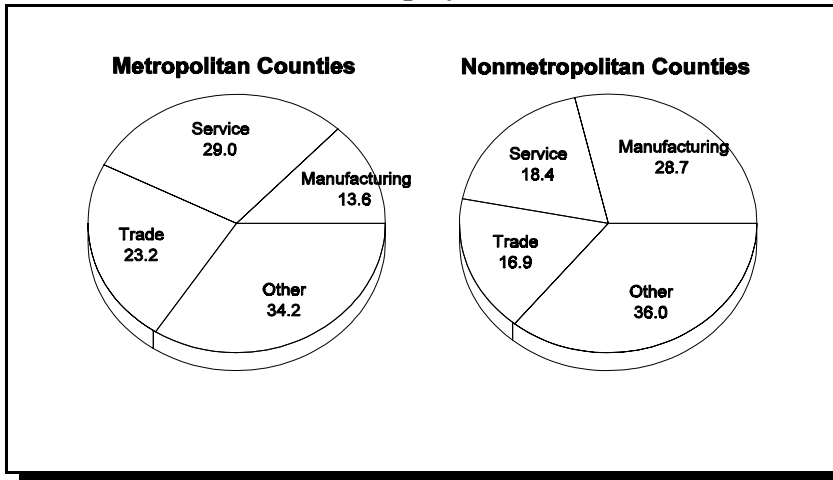
a smaller percentage of jobs are in manufacturing. Figure 2.3 shows the rate of job growth in Tennessee between 1990 and 1995 for each of the three major industries. While the total number of jobs in Tennessee increased 12.1 percent between 1990 and 1995, the most dramatic rate of job creation was in the service industry, which saw job growth of 23.9 percent. The trade industry experienced a slower, but nonetheless strong, 14.6 percent pace of job growth. The manufacturing sector, on the other hand, experienced significantly less job growth, growing only 4.5 percent.

Tennessee's total job growth between 1990 and 1995 was primarily driven by job creation in metropolitan areas, in particular by job creation in the Nashville area. Jobs increased 13.8 percent in metropolitan counties, while nonmetropolitan job growth was only 7.8 percent. While metropolitan and nonmetropolitan areas differ in the distribution of jobs and the rate of total job growth, they are similar in that the fastest to slowest growing industries are the services, trade and manufacturing sectors, respectively, for both metropolitan and nonmetropolitan counties.

FIGURE 2.1—Tennessee Metropolitan Statistical Areas



FIGURE 2.2—Tennessee Employment Distribution, 1995



Williamson County led the state in total job growth with a 43.9 percent jump between 1990 and 1995, driven by an 85.4 percent increase in the number of trade jobs and a 47.6 percent increase in services jobs. Sevier, Rutherford, and Cheatham Counties also experienced job growth of at least 30.0 percent.

The total number of jobs declined in 10 nonmetropolitan counties and in one metropolitan county (Unicoi County) between 1990 and 1995. The loss of manufacturing jobs accounted for the fall in total jobs in 10 of these 11 counties. For example, Cannon County lost 11.5 percent of its total jobs because of the loss of nearly 500 manufacturing jobs.

Unemployment

Tennessee's average unemployment rate for 1997 was 5.4 percent, moderately higher than the national figure of 4.9 percent, though the state's unemployment rate has been lower than the nation's for much of the 1990s. During the past several years, Tennessee's unemployment rate has generally stabilized in a range around 5.0 percent,

at least in part because the economy is fully employed. Tennessee's 4.4 percent unemployment rate in January 1998 was below the nation's 4.7 percent, reverting to the previous pattern.

While statewide unemployment remains relatively low, the state continues to be characterized by high unemployment in some areas, particularly the state's nonmetropolitan counties. As depicted in Figure 2.4, the 27

metropolitan counties enjoyed an average unemployment rate of 4.3 percent in 1997, below both the state and national average. Conversely, the average nonmetropolitan county experienced a significantly higher unemployment rate of 7.8 percent.

Of the 27 metropolitan counties, only 9 had unemployment rates higher than the state average, with the highest recorded in Sevier County, which had an average rate of 8.4 percent. (Interestingly, Sevier County had one of the

FIGURE 2.3—Tennessee Job Growth by Industry, 1990-1995

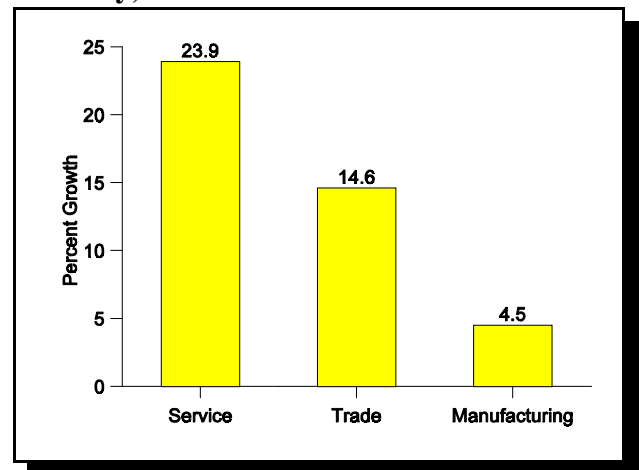
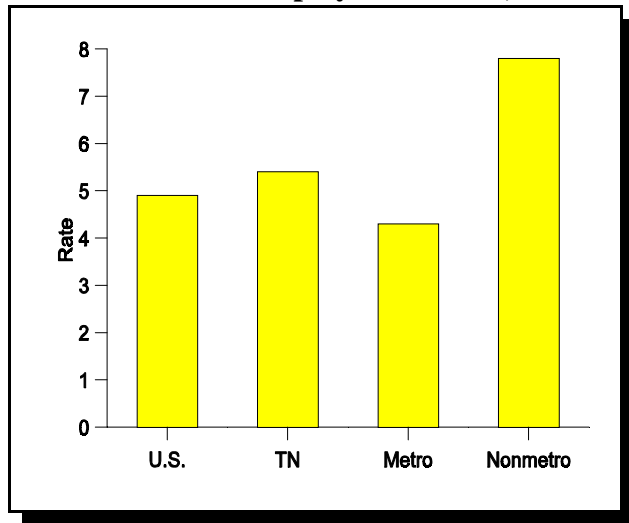


FIGURE 2.4—Unemployment Rates, 1997



state's fastest job growth rates.) However, 65 of Tennessee's 68 nonmetropolitan counties had an unemployment rate higher than the state average. Double-digit unemployment rates were recorded in 12 of these counties, with the highest average annual rate of 27.6 percent in Clay County in middle Tennessee. Sustained high rates of unemployment are problematic in terms of both social consequences and economic losses. Severe unemployment is preventing many of these nonmetropolitan counties from realizing their potential levels of economic performance.

Population

Tennessee's population grew 6.2 percent during the 1980s. So far this decade (through 1997), the state's population has expanded 10.1 percent. Metropolitan counties have grown 9.3 percent, while nonmetropolitan counties have seen slightly slower growth at 8.7 percent. These population gains have translated into strong rates of job, income, and tax base growth for most of the state. Rapid population growth also has created growing pains in some communities,

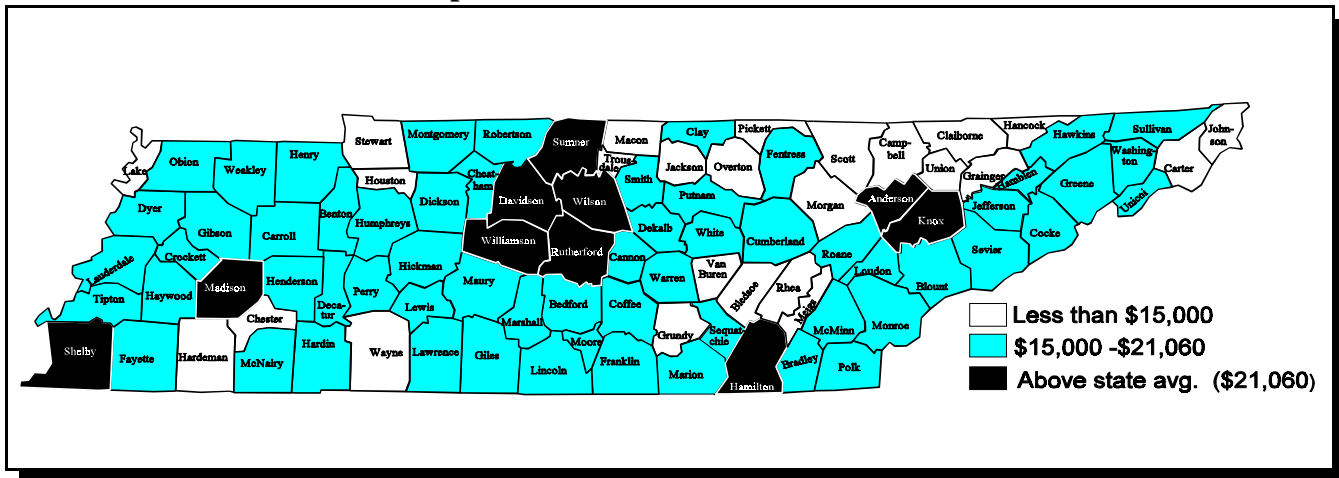
putting pressure on local infrastructure and public schools.

Middle Tennessee continues to exhibit the fastest population and economic growth. Four of the five fastest growing counties are in middle Tennessee—Williamson, Rutherford, Cheatham, and Maury (through 1996). Sevier County in East Tennessee rounds out the top five. Williamson and Rutherford Counties have experienced the most dramatic growth this decade, with growth rates of 31.0 percent and 30.2 percent, respectively. None of the state's 95 counties have experienced a population contraction this decade, though 12 nonmetropolitan counties have seen population growth of less than 3.0 percent. The slowest growing counties are Obion in west Tennessee, 1.1 percent, and Clay and Jackson Counties in middle Tennessee, each with a 1.2 percent population increase.

Personal Income

Per capita personal income in Tennessee grew 5.4 percent in 1995, to \$21,060. (Note that 1995 is the most recently available year for county-level personal income data.) The uneven performance of the Tennessee economy across metropolitan and nonmetropolitan counties prevails, as well, in terms of both per capita personal income growth and the level of per capita personal income. Per capita personal income in metropolitan counties increased 6.0 percent in 1995, while per capita personal income in nonmetropolitan counties grew at a much slower 4.0 percent pace. The average person residing in metropolitan counties had personal income of \$23,073, a 37.4 percent premium above the \$16,784 for the average nonmetropolitan county

FIGURE 2.5—Tennessee Per Capita Personal Income



resident. Personal income translates into access to goods and services. As such, the contrasting economic performance of metropolitan and nonmetropolitan counties reveals broad differences in the standard of living for Tennessee's residents.

Ten metropolitan counties enjoyed per capita income levels greater than the state average, while all nonmetropolitan counties were below the state average. Figure 2.5 illustrates the dramatic differences in per capita personal income across Tennessee. Williamson County recorded the highest level of per capita personal income in the state at \$31,480. Three nonmetropolitan counties had per capita personal income of less than \$12,000—Hancock (\$11,479), Johnson (\$11,948), and Lake (\$11,342).

Seven metropolitan counties and 17 nonmetropolitan counties experienced income growth above the state average of 5.4 percent. Montgomery and Hardin Counties enjoyed the greatest growth at 11.3 and 9.1 percent, respectively. Of the 24 counties with above-average growth, 19 had below state average levels

of per capita income. Only Davidson, Hamilton, Madison, Shelby, and Williamson Counties (all metropolitan counties) had both above-average income growth and above-average per capita income.

Only four counties experienced a contraction in per capita personal income, DeKalb, Marshall and Stewart counties of middle Tennessee, and Meigs County in east Tennessee. The largest percentage decrease in per capita personal income was 1.6 percent in Stewart County, where per capita personal income fell from \$14,984 in 1994 to \$14,751 in 1995.

Taxable Sales

Statewide per capita taxable sales increased 6.3 percent, from \$11,517 for fiscal year 1996 to \$12,240 for fiscal year 1997. The average level of per capita taxable sales for the state's metropolitan counties was \$12,916, which is 74.7 percent higher than the \$7,393 average reported for nonmetropolitan counties. Generally, the state's metropolitan areas are a magnet for consumers and retail sales. At the same time, only

7 of the 27 metropolitan counties had per capita taxable sales higher than the state average, while the same was true for only 3 of the 68 nonmetropolitan counties. The fact that only 10 counties in Tennessee have above-average per capita taxable sales illustrates how overall sales are concentrated in a small number of places. Sevier County, with its strong tourism trade, led the state in per capita taxable sales with \$23,150.

The average growth in per capita taxable sales in 1997 for metropolitan counties was 4.8 percent, compared to 4.0 percent for nonmetropolitan counties. While five metropolitan and five nonmetropolitan counties experienced growth rates of at least 10 percent, Williamson County is notable for its strong growth (12.2 percent) as well as its above-average level of per capita taxable sales (\$15,012 for fiscal year 1997). The other counties with the strongest growth all have per capita taxable sales levels well below the state average. Throughout the state, eight counties experienced a contraction in per capita taxable sales. Anderson was the only metropolitan county to see per capita taxable sales

decrease, while the nonmetropolitan counties Carroll, Hickman, Weakley, Humphreys, Gibson, Marshall, and Jackson all had negative per capita taxable sales growth in 1997. Jackson County was the most dramatic, with a 12.4 percent fall from \$3,249 in fiscal year 1996 to \$2,846 in fiscal year 1997. See Figure 2.6 for a comparison of fiscal year 1996 and fiscal year 1997 per capita taxable sales across selected areas.

Education Expenditures

The dichotomy between metropolitan and nonmetropolitan areas is also evident in education spending, despite the equalization that takes place under the Basic Education Program. For the school year ended June 30, 1996, the statewide average per pupil expenditure was \$4,715, which is 76.6 percent of the national average of \$6,157. Figure 2.7 depicts the large difference in per pupil education expenditures between Tennessee and the nation as a whole. Also evident in Figure 2.7 is a substantial difference in per pupil education expenditures across metropolitan and nonmetropolitan counties.

FIGURE 2.6—Per Capita Taxable Sales, Selected Regions, FY96 and FY97

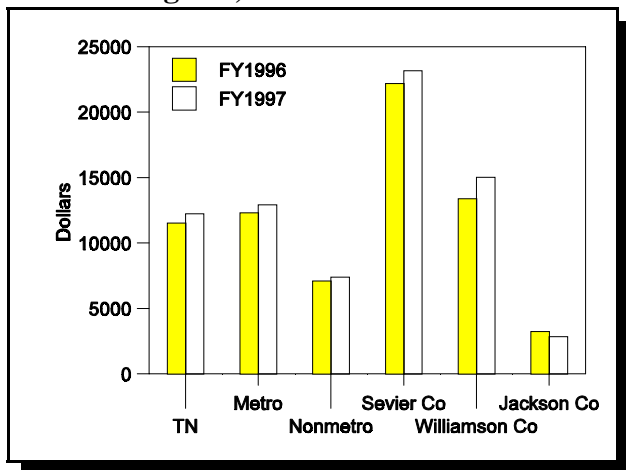
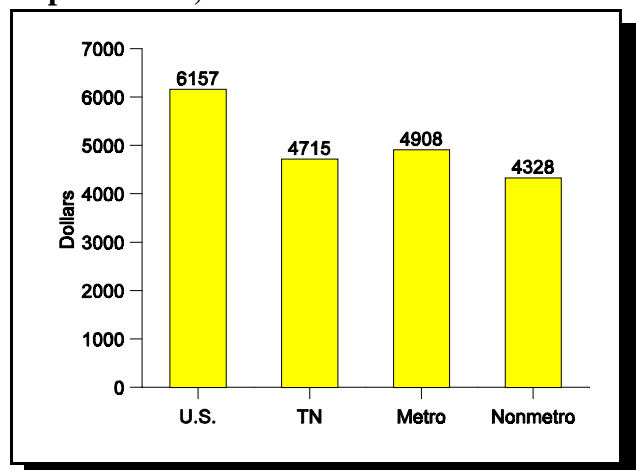


FIGURE 2.7—Per Pupil Education Expenditures, School Year Ended June 96



The average student residing in a nonmetropolitan county receives an annual expenditure of \$4,328, while the average metropolitan county student enjoys 13.4 percent higher spending of \$4,908. The Oak Ridge school system in Anderson County ranks first in per pupil expenditures at \$6,794. The Dayton system of Rhea County operated with the state's lowest expenditures of \$3,433 per pupil, or 50.5 percent of Oak Ridge per pupil expenditures. Education expenditures represent an investment in human capital, which is an important determinant in economic growth. The fact that areas experiencing relatively poor economic performance tend to also have lower per pupil education expenditures is an obstacle to improving economic conditions in these areas.

SHORT-TERM FORECAST

Recent Economic Conditions

Recent historical data and the short-term forecast for the Tennessee economy are summarized in Table 2.1. (Further detail on the economic outlook, as well as additional historical information on the state's economic performance, is provided in Appendices A and B of this report.) Revised data show annual job growth of 1.4 percent in 1996 and 1.9 percent in 1997, meaning that state growth improved over 1996. The original forecast indicated nominal personal income would close out 1997 with growth of 4.9 percent, somewhat better than the 4.6 percent recorded in 1996. Strong personal income growth in the first three quarters of 1997, coupled with upward revisions in the job growth picture,

suggest that personal income growth will be noticeably higher than 5.0 percent in 1997.

The state's manufacturing sector, which suffered a 3.1 percent job setback in 1996, was expected to contract by 1.4 percent in 1997. Revised jobs data suggest a much slower 0.5 percent pace of job contraction in 1997. The revised data evidence that after a 0.5 percent job loss in durable goods manufacturing in 1996, 1.0 percent job growth occurred in 1997. The rate of job loss in nondurable goods manufacturing was cut in half, from a decline of 6.0 percent in 1996 to a revised dip of 2.3 percent in 1997. Within the nondurable goods sector, jobs are projected to decline in the tobacco, textiles, apparel, chemicals, and leather industries. Over 15,000 jobs were lost in nondurable goods manufacturing between 1995 and 1996, with an additional revised loss of 5,300 jobs between 1996 and 1997. The construction sector, which accounts for about 4.6 percent of all nonagricultural jobs in the state, has shown exceptional strength in recent years. However, the data revisions indicate a much lower growth than previously thought, at 2.9 percent in 1997. The services sector, which had been the source of considerable job growth in the 1990s, showed revised 3.7 percent job growth in 1997.

The Labor Market Outlook

In light of the higher job growth in 1997 than was previously thought, the 1998 increase will also be higher than we initially forecast, with growth a bit lower than 2.0 percent. Prior to the data revisions, nonagricultural job growth was projected to accelerate from the preliminary 0.9 percent growth rate in 1997 to 1.2 percent in 1998. Job growth for the national economy is forecast to

TABLE 2.1--Selected U.S. and Tennessee Economic Indicators

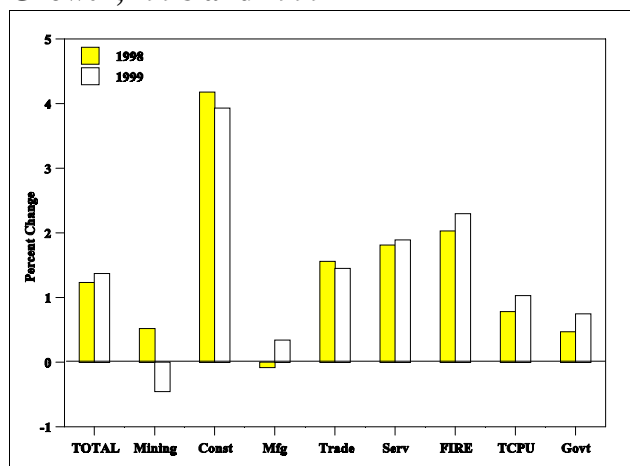
	SEASONALLY ADJUSTED													
	HISTORY			FORECAST - DATA								ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
US GDP (BIL92\$) SAAR.....	7221.8	7279.6	7316.9	7350.0	7384.5	7421.9	7461.2	7514.1	7564.8	7613.9	7647.9	7190.6	7368.3	7538.5
% CHG PREV QTR SAAR.....	3.52	3.24	2.07	1.82	1.89	2.04	2.14	2.87	2.73	2.62	1.80	3.79	2.47	2.31
% CHG SAME QTR LAST YR.....	4.00	3.74	3.03	2.66	2.25	1.95	1.97	2.23	2.44	2.59	2.50	3.79	2.47	2.31
US GDP (BIL\$) SAAR.....	8131.7	8230.8	8324.1	8409.1	8501.5	8596.7	8694.8	8810.8	8927.9	9041.1	9136.8	8082.6	8457.9	8868.7
% CHG PREV QTR SAAR.....	4.94	4.96	4.61	4.15	4.47	4.56	4.64	5.44	5.43	5.17	4.30	5.85	4.64	4.86
% CHG SAME QTR LAST YR.....	5.94	5.62	4.92	4.67	4.55	4.45	4.45	4.78	5.02	5.17	5.08	5.85	4.64	4.86
IMPLICIT DEFLATOR,GDP.....	112.6	113.1	113.8	114.4	115.1	115.8	116.5	117.3	118.0	118.7	119.5	112.4	114.8	117.6
% CHG PREV QTR SAAR.....	1.36	1.68	2.50	2.27	2.54	2.45	2.44	2.53	2.62	2.46	2.48	1.99	2.12	2.49
% CHG SAME QTR LAST YR.....	1.86	1.82	1.84	1.95	2.25	2.44	2.43	2.49	2.51	2.51	2.52	1.99	2.12	2.49
US PERS CONS DEFL (1992=100)....	112.9	113.4	114.0	114.6	115.3	116.2	117.0	117.8	118.6	119.5	120.3	112.7	115.0	118.2
% CHG PREV QTR SAAR.....	1.43	1.75	2.21	2.05	2.64	2.98	2.75	2.94	2.81	2.93	2.74	2.06	2.02	2.79
% CHG SAME QTR LAST YR.....	1.89	1.59	1.60	1.86	2.16	2.47	2.61	2.83	2.87	2.86	2.86	2.06	2.02	2.79
TN PERSONAL INCOME (MIL92\$) SAAR	108254	108968	111632	112554	111421	112246	114418	115320	114335	115470	117866	108680	111963	114886
% CHG PREV QTR SAAR.....	-3.80	2.66	10.14	3.35	-3.97	3.00	7.96	3.19	-3.37	4.03	8.56	2.83	3.02	2.61
% CHG SAME QTR LAST YR.....	1.97	2.37	3.18	2.97	2.92	3.01	2.50	2.46	2.62	2.87	3.01	2.83	3.02	2.61
US PERSONAL INCOME (BIL92\$) SAAR	6120.8	6165.3	6216.6	6265.6	6296.9	6333.1	6379.2	6422.5	6464.4	6502.6	6544.6	6092.3	6278.0	6442.2
% CHG PREV QTR SAAR.....	3.33	2.94	3.37	3.19	2.01	2.32	2.94	2.74	2.64	2.39	2.60	3.62	3.05	2.61
% CHG SAME QTR LAST YR.....	3.67	3.97	3.40	3.21	2.88	2.72	2.62	2.50	2.66	2.68	2.59	3.62	3.05	2.61
TN PERSONAL INCOME (MIL\$) SAAR..	122208	123548	127261	128965	128501	130408	133834	135870	135647	137987	141805	122529	128784	135835
% CHG PREV QTR SAAR.....	-2.43	4.46	12.57	5.47	-1.43	6.07	10.93	6.23	-0.65	7.08	11.54	4.94	5.10	5.48
% CHG SAME QTR LAST YR.....	3.90	3.99	4.83	4.88	5.15	5.55	5.17	5.35	5.56	5.81	5.96	4.94	5.10	5.48
US PERSONAL INCOME (BIL\$) SAAR..	6909.8	6990.3	7086.9	7179.1	7262.2	7357.8	7461.7	7566.9	7669.4	7770.6	7873.8	6868.8	7221.5	7617.2
% CHG PREV QTR SAAR.....	4.81	4.74	5.65	5.30	4.71	5.37	5.77	5.76	5.53	5.39	5.41	5.75	5.13	5.48
% CHG SAME QTR LAST YR.....	5.62	5.62	5.05	5.13	5.10	5.26	5.29	5.40	5.61	5.61	5.52	5.75	5.13	5.48
TN NONAGRIC JOBS (THOUS).....	2553.1	2568.5	2583.2	2581.3	2585.7	2606.0	2618.2	2617.1	2620.0	2642.8	2657.9	2557.4	2589.0	2624.5
% CHG PREV QTR SAAR.....	0.08	2.44	2.30	-0.28	0.68	3.17	1.89	-0.17	0.45	3.52	2.31	0.87	1.24	1.37
% CHG SAME QTR LAST YR.....	0.77	0.73	1.08	1.13	1.28	1.46	1.36	1.38	1.33	1.41	1.52	0.87	1.24	1.37
US NONAGRIC JOBS (MIL).....	122.5	123.3	123.8	124.3	124.8	125.2	125.6	126.0	126.4	126.7	127.1	122.2	124.5	126.2
% CHG PREV QTR SAAR.....	2.28	2.37	1.83	1.69	1.46	1.32	1.19	1.28	1.28	1.18	1.14	2.24	1.91	1.30
% CHG SAME QTR LAST YR.....	2.20	2.33	2.21	2.04	1.84	1.57	1.41	1.31	1.27	1.23	1.22	2.24	1.91	1.30
TN UNEMPLOYMENT RATE (%).....	5.3	5.1	5.2	5.2	5.5	5.2	5.3	5.3	5.6	5.3	5.3	5.1	5.3	5.3
US UNEMPLOYMENT RATE (%).....	4.9	4.7	4.6	4.5	4.6	4.7	4.9	4.9	5.0	5.0	5.1	4.9	4.6	5.0
BANK PRIME INTEREST RATE (%)....	8.5	8.5	8.5	8.7	8.9	9.0	9.0	9.0	9.0	9.0	9.0	8.4	8.8	9.0
TN MFG JOBS (THOUS).....	512.8	513.3	516.1	515.3	513.6	514.5	517.6	516.8	516.2	516.0	519.4	515.3	514.9	516.6
% CHG PREV QTR SAAR.....	-2.38	0.37	2.22	-0.62	-1.30	0.68	2.40	-0.61	-0.46	-0.18	2.69	-1.35	-0.08	0.34
% CHG SAME QTR LAST YR.....	-1.48	-1.45	-0.60	-0.12	0.16	0.24	0.28	0.28	0.50	0.28	0.35	-1.35	-0.08	0.34
TN TAXABLE SALES (MIL92\$).....	15437	14423	14838	14975	15196	14947	15138	15284	15268	15341	15524	58510	59955	61031
% CHG PREV QTR SAAR.....	31.85	-23.79	12.01	3.74	6.03	-6.39	5.21	3.93	-0.43	1.94	4.86	6.57	2.47	1.79
% CHG SAME QTR LAST YR.....	12.96	3.74	4.17	3.95	-1.56	3.63	2.02	2.07	0.47	2.64	2.55	6.57	2.47	1.79
TN TAXABLE SALES (MIL\$).....	17427	16353	16915	17158	17525	17365	17707	18008	18114	18333	18677	65968	68964	72161
% CHG PREV QTR SAAR.....	33.73	-22.45	14.48	5.86	8.84	-3.60	8.10	6.98	2.37	4.93	7.74	8.76	4.54	4.64
% CHG SAME QTR LAST YR.....	15.09	5.38	5.83	5.88	0.56	6.19	4.68	4.95	3.36	5.57	5.48	8.76	4.54	4.64
TN AVG ANNUAL WAGE, NONAG (92\$)..	24250	24329	25030	25222	24650	24713	25289	25490	24922	25012	25544	24447	24904	25178
% CHG PREV QTR SAAR.....	-7.77	1.31	12.03	3.10	-8.76	1.03	9.66	3.21	-8.62	1.45	8.80	2.32	1.87	1.10
% CHG SAME QTR LAST YR.....	0.69	1.05	2.32	1.92	1.65	1.58	1.04	1.06	1.10	1.21	1.01	2.32	1.87	1.10
TN AVG ANNUAL WAGE, NONAG (\$)....	27376	27584	28534	28899	28429	28712	29581	30032	29567	29889	30733	27562	28644	29767
% CHG PREV QTR SAAR.....	-6.45	3.08	14.50	5.21	-6.35	4.04	12.67	6.24	-6.05	4.43	11.78	4.41	3.93	3.92
% CHG SAME QTR LAST YR.....	2.59	2.66	3.95	3.82	3.85	4.09	3.67	3.92	4.00	4.10	3.89	4.41	3.93	3.92

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climb 1.9 percent in 1998. Tennessee job growth was initially expected to accelerate further to 1.4 percent in 1999, while job growth for the national economy will decelerate to 1.3 percent in the same year.

The (unrevised) Tennessee job situation for 1998 and 1999 is portrayed in Figure 2.8 for broad sectors of the state economy. Manufacturing employment, initially expected to contract slightly in 1998 and expand 0.3 percent in 1999, should show somewhat better growth. The nondurable goods sector will continue to show job losses for the next two years, although the pace of job loss will subside. Unfortunately, textiles, apparel and leather will bear the brunt of the job losses. Job contraction also will take place in the food, paper, printing and publishing, chemicals and petroleum refining sectors. The durable goods manufacturing sector will fare considerably better, with (unrevised) job growth of 0.9 percent projected in 1998 and growth of 1.6 percent anticipated in 1999. In 1998, only the furniture and fixtures, fabricated metals and miscellaneous sectors will lose jobs; in 1999, all broad sectors are expected to show expansion.

FIGURE 2.8--Projected Nonagricultural Job Growth, 1998 and 1999



The strong growth that was projected for construction (with anticipated gains of 4.2 percent and 3.9 percent expected in each of the next two years) will likely be closer to 2.0 percent, consistent with the revised history. The trade sector, which comprises nearly 24.0 percent of all nonagricultural jobs in the state, will likely grow somewhat better than the initial estimates of 1.6 percent in 1998 and 1.5 percent in 1999. Service sector jobs will advance much faster than the initial 1.8 percent and 1.9 percent estimates for 1998 and 1999, respectively.

The state unemployment rate averaged 5.2 percent in 1996 and rose to a revised 5.4 percent during 1997. The unemployment rate is forecast to be 5.3 percent in 1998 and to sustain this rate in 1999, though the reality is likely to be slightly lower than the forecast. The state unemployment rate continues to reflect an economy at or near its full employment capacity.

Personal Income, Inflation and Interest Rates

Personal income for the state economy reflects income received by Tennessee residents, as opposed to the amount of income created within the state's borders. For example, the income earned by a Tennessean working in Kentucky is counted as personal income in Tennessee. The primary components of total personal income are wages and salaries; "other" labor income; proprietors' income (including farm and nonfarm income); rent, interest and dividends; and transfer income. Wage and salary income is the single largest component of personal income, accounting for nearly 60 percent of the total. Proprietors' income accounts for over 8.5 percent of total personal income while rent, interest and

dividend income accounts for nearly 14.5 percent of total personal income.

Growth in nominal personal income is projected at 5.1 percent for 1998, an improvement over the 4.9 percent gain that was initially forecast for 1997. Data revisions lead to the view that the actual growth will be noticeably above 5.0 percent in 1997. Similarly, 1998 will be better than we initially expected. Growth in personal income for 1999 will advance somewhat faster at 5.5 percent. Growth in wage and salary income for the state will be 5.2 percent and 5.4 percent in 1998 and 1999, respectively. Growth in proprietors' income is forecast at 4.2 percent in 1998 with a slight deceleration expected in the following year. Inflation-adjusted personal income will advance 3.0 percent in 1998 and 2.6 percent in 1999. The forecast indicates that personal income growth in Tennessee will lag the nation in 1998 and will ease ahead of the nation in 1999, but Tennessee will probably exceed the nation during both years. Nominal per capita personal income should rise 3.9 percent in 1998 and 4.2 percent in 1999, an improvement over the pattern of 1996 and 1997.

The rate of inflation, as measured by the implicit deflator for gross domestic product, will advance 2.1 percent in 1998, accelerating slightly to 2.5 percent in 1999. There is little, if any threat of sharply escalating prices in the near term.

The bank prime interest rate, which averaged 8.4 percent in 1997, will rise slightly to 8.8 percent in 1998. Moderating inflation should help sustain low interest rates through the short-term forecast horizon.

Taxable Sales

Nominal taxable sales are expected to slow in 1998 and 1999, as sales tax growth returns to a growth path that is more consistent with historical patterns. Overall growth of 4.5 percent is anticipated for 1998, with marginal improvement to 4.6 percent growth in 1999.

Auto dealer sales growth will improve to 3.7 percent and 2.7 percent in 1998 and 1999, following lethargic growth of 0.4 percent in 1997. The category including other retail and services, which accounts for over 27 percent of total taxable sales, will show slower growth of 3.4 percent in 1998 and 4.2 percent in 1999, relative to the 5.4 percent growth registered in 1997. Per capita taxable sales will climb 3.3 percent in 1998 and 3.4 percent in 1999.

TENNESSEE AGRICULTURE: ITS CHANGING DEFINITION AND FUTURE OUTLOOK

A comparison of the Tennessee agricultural climate in 1930 to that of the 1990s reveals some not-so-startling information about the changing definition of Tennessee agriculture. Not unlike the situation for the U.S. agricultural sector, Tennessee agriculture has developed from being a highly diversified, labor-intensive, sole-supportive way of life to more of a single-commodity producing, input-intensive type of "big business." (See Table 2.2.) In other words, whereas a farmer in 1930 might separate milk and sell directly to local markets, fertilize the feed grain portion of their operation with manure from the dairy herd, and plow fields using real "horse" power, today that same farmer would use diesel-powered tractors and combines and, after harvest,

TABLE 2.2--Comparing Tennessee Agriculture, 1930 and Today

	1930	1990s
Typical kind of operations	Mixed activity	Single commodity
Land in Farms	18 million acres	12 million acres
Number of Farms	245,657 farms	82,000 farms
Average Farm Size	73.3 acres	149.0 acres
Farm population	46.4 percent	3.5 percent
Four leading crops (ranked by value)	1. Corn for grain 2. Cotton 3. All hay 4. Tobacco	1. Cattle & calves 2. Cotton 3. Dairy Products 4. Tobacco

Sources: Allred et al. (1933), Luebke et al. (1939), Tennessee Agricultural Statistics Service (1996), USDA (1997).

sell their production to companies which process crops and meat into microwave dinners and potato chips. Consumption of these products occurs more often than not from a grocery store chain or restaurant. A further comparison reveals that while less and less of the population are working on farms (3.5 percent in 1994 compared to 46.4 percent in 1930), the average size of the Tennessee farm has doubled, growing from 73.3 acres in 1930 to 149 acres in the 1990s due to consolidation of farm operations. However, the total land area in farms has decreased from 18 million acres to 12 million acres during the same time period.

According to the 1930 Census of Agriculture, horses and mules comprised 1.4 percent of total farm value in the state. Nearly half of all Tennesseans farmed on an average 73-acre farm. Nationwide, in fact, during much of the first half of this century most aspects of food

production occurred on the farm. Today, a mule on a farm might be considered a tourist attraction!

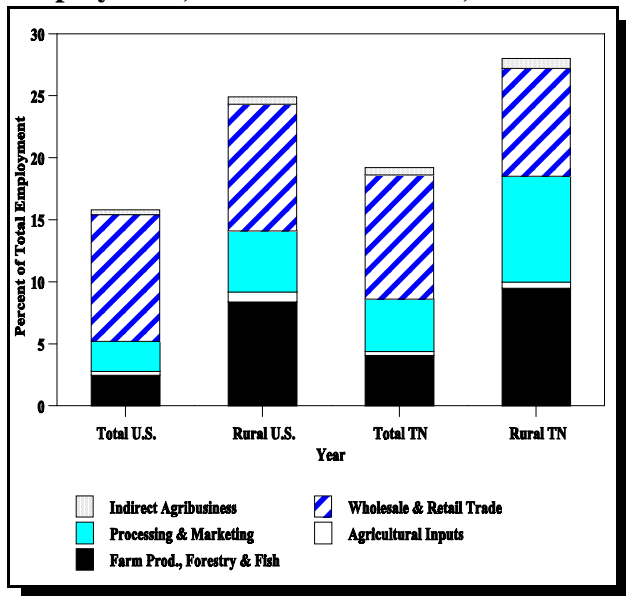
Measured against the overall Tennessee economy, what usually counts as agriculture—the actual production of agricultural commodities—accounts for only a few percentage points of Tennessee’s gross state product. Measured with those activities which traditionally were considered agricultural activities, perceptions regarding the importance of Tennessee agriculture change considerably.

The Food and Fiber System

For the purposes of this discussion, agriculture can be thought of as a food and fiber system (FFS) composed not only of the farm sector but also of the following activities: inputs, processing and marketing, wholesale and retail trade, and indirect agribusiness [USDA, 1996]. Viewed as such, agriculture in Tennessee comprised almost one-fifth of the state’s total jobs and 28 percent of all rural Tennessee employment in 1994 (Figure 2.9). In rural Tennessee, farm production and similar activities remain the largest employer for the entire FFS, but for the state as a whole, more than half of Tennessee FFS employment goes to wholesale and retail trade activities.

Considered over a longer period, total FFS employment for the USDA’s Appalachian region comprised of Tennessee, North Carolina, Kentucky, West Virginia, and Virginia has grown 9 percent between 1975 and 1992 (Figure 2.10). While wholesale and retail trade employment has doubled during that time, employment in farm production activities has fallen by nearly one-quarter. A similar trend can be seen in terms of the

FIGURE 2.9—Food and Fiber System Employment as a Percent of Total Employment, U.S. and Tennessee, 1994



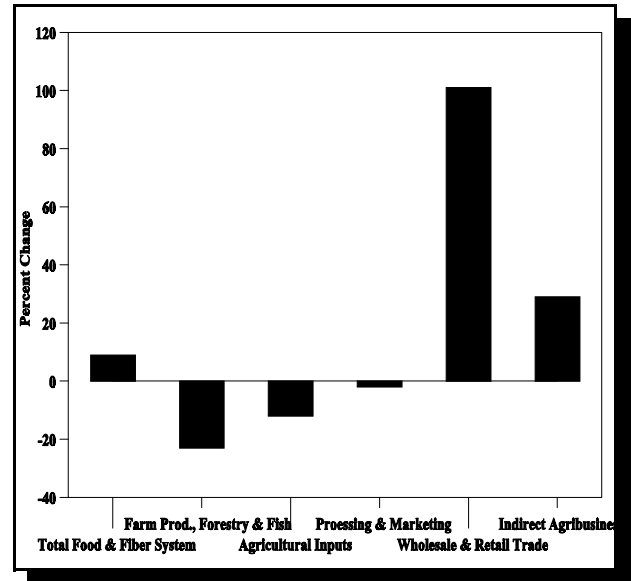
contribution to the gross domestic product evidenced by the U.S. food and fiber system (Figure 2.11). Here, the value added to food and fiber on the front end (through agricultural inputs) and on the back end (through processing, trade, etc.) easily outpaces the economic value generated by the farm sector.

When an analysis of the agricultural sector is undertaken, the focus generally falls on farm production, ignoring the broader food and fiber system extending from production to consumption. One reason is that the linkages between FFS sectors are not well understood. Moreover, forecasting the agricultural economy, itself requires complex analytical processes. Nonetheless, these linkages should not be ignored.

Tennessee Agriculture: 1998-2007

This year, farmers in Tennessee and across the country will be concerned about the potential

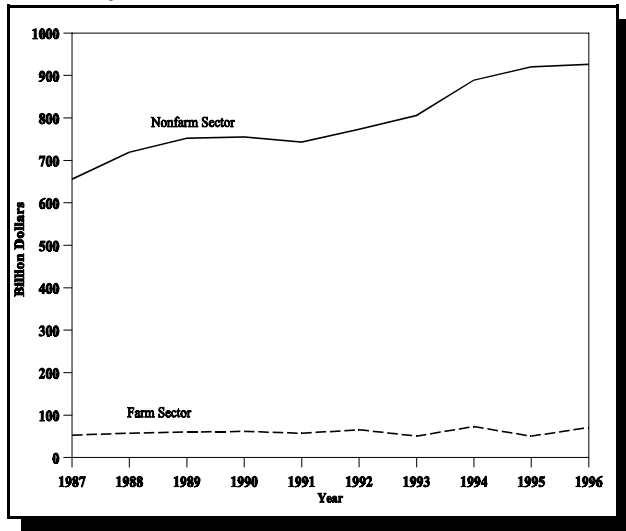
FIGURE 2.10--Change in Appalachian Food and Fiber System Employment by Category, 1975-1992



impacts of the El Niño weather phenomenon on crop yields. A review of historical weather data shows that Tennessee weather tends to be somewhat colder and drier during the winter months, but weather generally returns to normal by March (Orvis, 1997). A separate analysis by the Agricultural Policy Analysis Center of El Niño weather patterns and their effects on Tennessee agriculture indicates that yields may experience some increase during El Niño years.

For soybeans, corn, cotton, and wheat, harvested acreage trends flat to somewhat higher during the projection period of 1998-2007 (Figure 2.12). Within these projections, it should be noted that gains in corn and cotton acreage are registered early in the projection and do not recede. The results for corn, in particular, may represent more or less permanent cropping shifts, suggesting that this acreage may have been “trapped” in another crop by federal commodity

FIGURE 2.11--Value-Added to the U.S. Economy by Components of the Food and Fiber System, 1987-1996, Billion Dollars



program participation before the greatly increased cropping flexibility which is characteristic of the 1996 Farm Bill.

Tennessee crop prices will increase slowly and steadily throughout 1998-2007 (Figure 2.13),

FIGURE 2.12--Harvested Acreage for Selected Tennessee Crops, 1992-2007

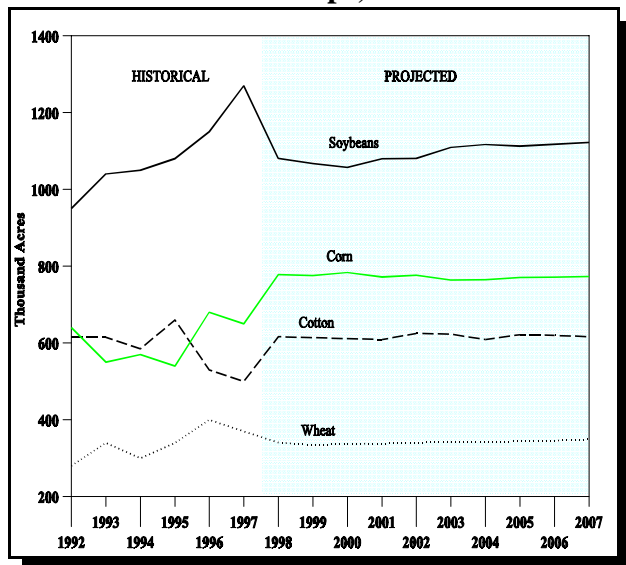
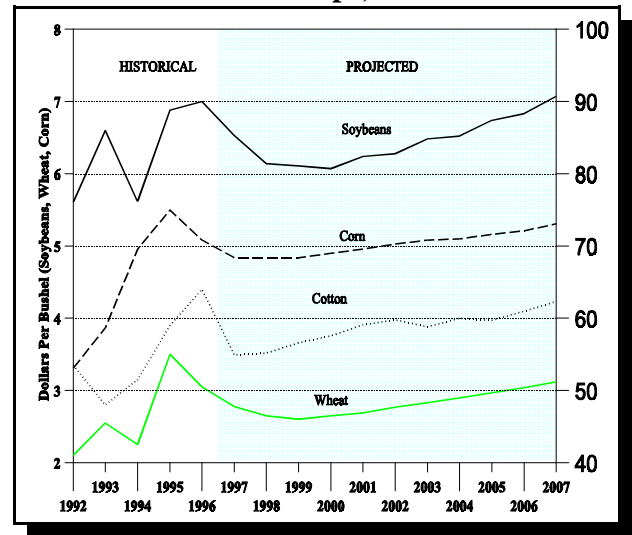


FIGURE 2.13--Season Average Price for Selected Tennessee Crops, 1992-2007

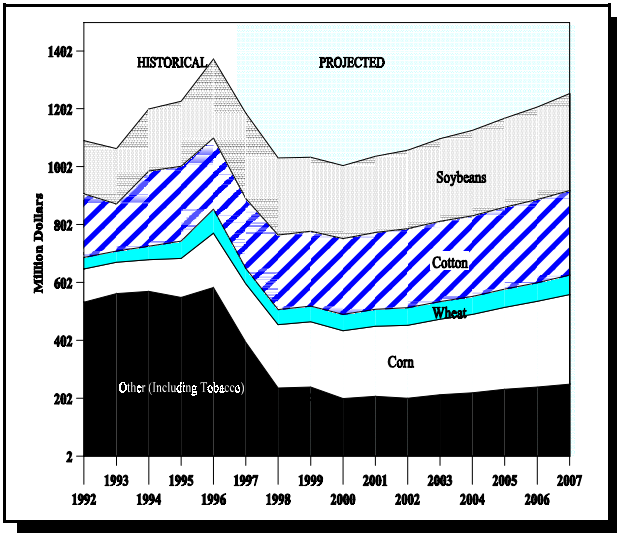


though prices will remain below their 1995-96 peaks for much of the forecast horizon. Soybeans will experience the greatest increase over time, rising from a projected \$6.14 per bushel to \$7.07 per bushel during the study period. Corn prices will remain below \$3.00 per bushel until 2006, and cotton prices will be below 70 cents per pound until 2002.

As a result of flat acreage and higher prices, crop cash receipts will also trend higher during the projected period (Figure 2.14). Total livestock receipts will exceed one billion dollars in 1999-2000, but will range between \$972 million and \$997 million for the remainder of the projection period. Thus, the results for livestock receipts generally are within the range experienced during the rest of this decade.

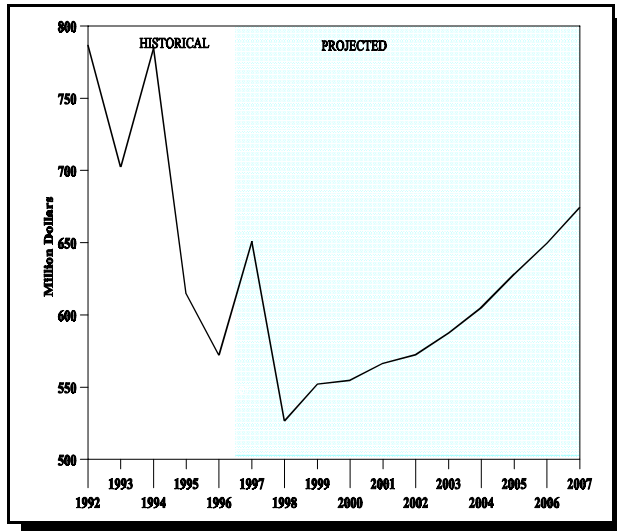
The impact of these factors ultimately is positive on total net cash income for the Tennessee food and fiber system's farm sector (Figure 2.15). The forecast indicates that in 1998, income will continue the general decline

FIGURE 2.14--Cash Receipts for Selected Tennessee Crops, 1992-2007



Tennessee has experienced since 1994. Income will bottom out in 1998 and then will begin a steady climb, reaching \$674.7 million by 2007. Despite the positive trend, however, net cash income in 2007 will be below income averaged over the first half of the 1990s (\$698 million).

FIGURE 2.15--Net Cash Income for the Tennessee Farm Sector, 1992-2007



REFERENCES

Allred, Charles E., S.W. Atkins, and W.P. Cotton. "Economic Aspect of Agriculture, Land Utilization, and Forestry in Tennessee." The University of Tennessee, Agricultural Experiment Station, 1933.

Luebke, B.H., S.W. Atkins, C.E. Allred, and W.J. Roth. "Types of Farming in Tennessee." Tennessee Agricultural Experiment Station, Bulletin No. 169, April 1939.

Orvis, Kenneth H. Personal communication. The University of Tennessee Department of Geography. October 28, 1997.

Schluter, Gerald. Personal communication. U.S. Department of Agriculture, Economic Research Service. October 21, 1997.

Tennessee Agricultural Statistics Service. *Tennessee Agricultural Statistics 1996*. Tennessee Department of Agriculture, various years.

U.S. Department of Agriculture. "Rural Conditions and Trends." USDA Economic Research Service, 1996.

U.S. Department of Agriculture. "Tennessee Fact Sheet." USDA Economic Research Service, November 19, 1997.

CHAPTER 3

THE TENNESSEE LONG-TERM ECONOMIC OUTLOOK

The previous two chapters in this volume focused on short-term trends for the U.S. and Tennessee economies, and the analysis emphasized the position of the Tennessee and national economies in the current short-term business cycle. This chapter takes an alternative view of the Tennessee economy, focusing on long-term economic growth and structure rather than on periodic fluctuations in economic activity.

The chapter begins with a historical overview of the Tennessee economy from the perspective of economic growth. Historical trends in Tennessee output will be examined, paying special attention to the factors that contribute to the state's long-run economic growth rate. Long-term trends in Tennessee employment, capital accumulation, and productivity will then be examined, followed by a discussion of long-term prospects for Tennessee through the year 2006.

LONG-RUN GROWTH PATTERNS IN THE TENNESSEE ECONOMY

In examining the long-run growth of the Tennessee economy, the goal is to explain the general upward path of the state's economic activity over time, ignoring the shorter-term fluctuations in economic activity that are characteristic of recessions and boom periods. In essence, the long-term economic growth rate can be viewed as the average growth rate of the economy over an extended period of time.

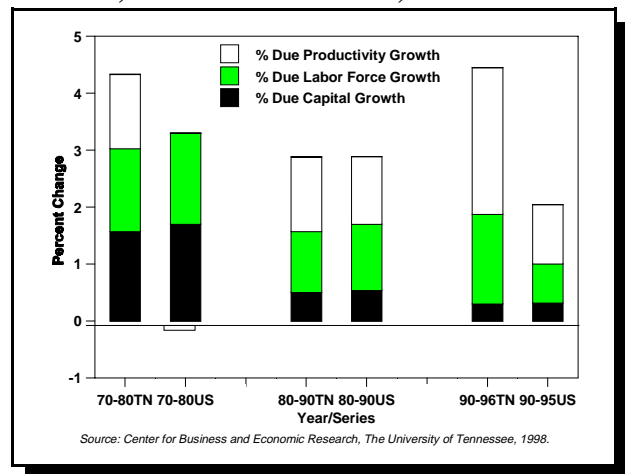
An evaluation of the long-run growth rate of the Tennessee economy is important because economic growth is a good measure of improvements in overall economic well-being. Equally important is understanding the determinants of the long-run economic growth rate. Any policy designed to have a long-term positive impact on economic growth in the state must target these long-run determinants if the policy is to be effective.

The rate of economic growth can be broken down into three broad components: the growth rate of the state's labor force, the growth rate in the state's capital stock (*e.g.*, equipment, structures, and public infrastructure), and the rate of growth in technology (the productivity of labor and capital). Figure 3.1 shows compound annual growth rates (CAGRs) of the Tennessee economy by decade and by component since 1970.

Growth in Output

As illustrated in Figure 3.1, Tennessee output has seen strong growth in the last 25 years and has consistently outpaced output growth in the

FIGURE 3.1--Decomposition of Economic Growth, Tennessee and U.S., 1970-1995



The Efficacy of Long-Run Economic Growth Rates

Even modest differences in rates of economic growth can have a dramatic impact on economic well-being over the long term. For example, a long-run growth rate difference of only 6 percent allowed per capita income in the south to grow from roughly 40 percent of per capita income in the north just after the Civil War to approximately 90 percent today.

nation as a whole. As a result, Tennesseans have enjoyed an improved standard of living that is getting ever closer to the national standard. Growth rates have diminished in the nation as a whole over time and declined in Tennessee during the 1970s and 1980s; however, the Tennessee economy has seen very strong growth in the 1990s.

In the 1970s, economic growth in Tennessee, as measured by expansions in output, was approximately 4.2 percent (CAGR), while the comparable national figure was around 3.1 percent (CAGR). Tennessee economic growth was approximately 3.1 percent (CAGR) in the 1980s but roughly 4.5 percent (CAGR) in the current decade.¹

In the 1970s and 1980s, growth in employment, capital stock, and productivity made balanced contributions to the state's overall economic growth, but in the 1990s, Tennessee economic growth has been mostly driven by gains in employment and productivity. Each of these economic growth factors are discussed in more detail in the following sections.

Labor Force Growth

As shown in Figure 3.2, the Tennessee civilian labor force and Tennessee nonagricultural employment have been growing steadily over the last 25 years (approximately 2.0 percent, CAGR). As demonstrated by the corresponding trend lines, growth in Tennessee employment has been more volatile than growth in the state's labor force, due to the cyclical behavior of overall economic activity and the relative stability of population growth.

In previous decades, the Tennessee labor force grew rapidly as a result of the mass exodus of women from the home to the workplace following World War II and the entry of a sizeable baby boom generation into the state's labor pool. In the more recent past, labor force growth has been constrained to growth in the state's population, a trend that will continue into the future--not only for Tennessee, but for other states as well. Employment growth in the state will thus be limited to some degree by the slowdown in labor force growth. Nevertheless, the growth in Tennessee employment has managed to outpace

labor force growth in the 1990s. Since 1990, Tennessee nonagricultural employment (which counts a person holding two jobs twice) has grown 2.4 percent (CAGR), while the state's labor force has expanded at a compound annual rate of 1.4 percent. Unemployment rates have accordingly seen a healthy decline from around 6.7 percent to about 5.0 percent. Because the Tennessee economy is now at or near full employment, employment growth is not likely to outperform labor force growth to such a degree in coming years.²

Growth in the Capital Stock

Figure 3.3 shows the levels of new capital expenditures by manufacturing firms and total capital outlays by Tennessee state government over the period 1972-1994. Total inflation-adjusted investment, as given by the sum of these public and private measures, has trended upward over the last 25 years, from approximately \$2.0 billion in 1972 (1987 dollars) to approximately \$3.5 billion in 1994 (1987 dollars). While this measure does not reflect the totality of investment

FIGURE 3.2--Tennessee Labor Force and Employment, 1970-1996

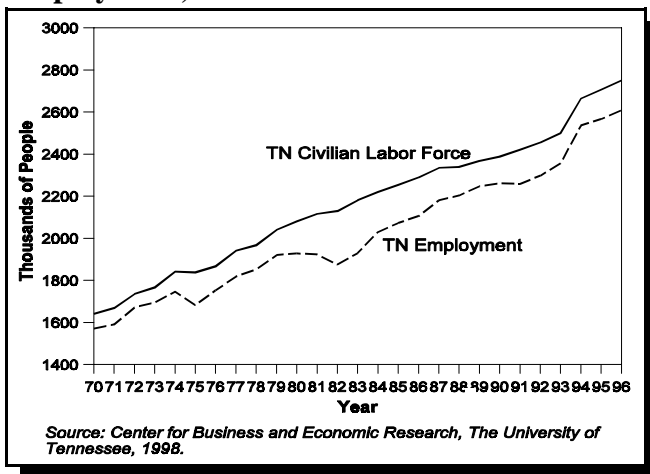
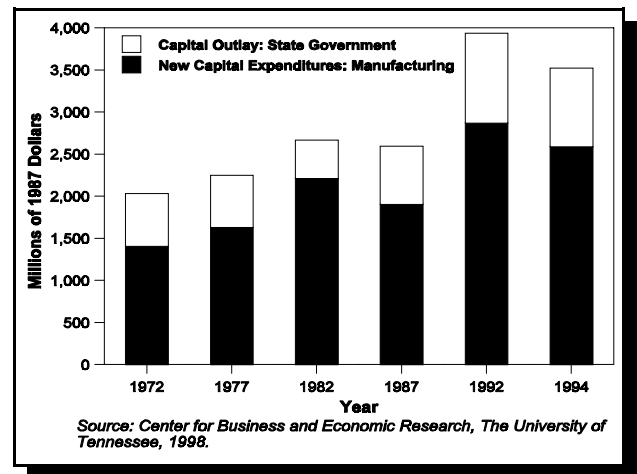


FIGURE 3.3--Tennessee Capital Investment, 1972-1994



in Tennessee, it does give some indication of the direction of investment in the state.

Although Tennessee investment saw a general rise over the 1972-1994 period, investment is the most volatile component of GSP, and not surprisingly, investment has seen some degree of fluctuation over these years. Especially noteworthy is the substantial increase in total capital outlays by Tennessee state government after 1987. In the 1980s, Tennessee significantly raised taxes on gasoline and other fuels to fund the building of highways and other road systems, and the level of state government capital outlays reflects this policy.

Capital expenditures by manufacturing firms are mostly a response to expected economic conditions in the future and the ability to sell final products. When the future looks bright for business, firms generally will invest more heavily in capital equipment. Thus, growth in capital expenditures represents optimism by Tennessee manufacturers.

Growth in Productivity and Technological Progress

For a given stock of labor and capital, the amount of output that Tennessee can produce in a given time period is determined by the state of technology. Advances in technology make workers, machines, and factories more productive, and thus technological progress allows a greater amount of output to be produced with the same amount of capital and labor. Included in technological progress are factors that make labor more productive (such as education and training) and factors that make capital more productive (such as research and development).

*Labor Productivity*³. While in the past, Tennessee's economic growth has been fueled in large part by growth in its labor force, the quality of the state's workforce, or its productivity, has become increasingly important as labor force growth has diminished over time. This has especially been the case in the last few years when the state's labor force was nearly fully employed.

Very important factors in labor force productivity are the level and quality of formal education among Tennessee workers. Research has demonstrated that education goes much further in improving the earnings and employment prospects of workers than any type of specific training. Moreover, the consensus opinion of U.S. employers is that there is a need for better-educated workers who can be trained on the job, rather than a pool of workers with a set of specific skills. This opinion reflects the need for highly adaptable workers, that is characteristic of today's rapidly changing and global economy.

During the last four decades, Tennessee has made great strides in improving the educational attainment of its labor force. In 1960, 30.4 percent of Tennesseans over the age of 25 had at least a high school diploma. By 1990, that figure had reached 67.0 percent. At the same time, the number of Tennesseans age 25 or older with less than an eighth-grade education declined sharply from 53.3 percent to 16.0 percent. The educational attainment of the Tennessee adult population is likely to continue to improve in coming years, as younger people growing up in a more education-valued environment enter the state's workforce. Of course, the productivity of Tennessee's labor force will be enhanced as formal education continues to be encouraged in

the state. Moreover, significant variations in educational attainment still exist across counties, and much work remains to be done in order to get these lagging counties up to statewide standards.

Given the competitive nature of economic development in recent years, Tennessee's labor force must meet or exceed the standards of other states in the Southeast and the nation as a whole if it is to continue to prosper. As Table 3.1 indicates, Tennessee's labor force continues to lag behind that of the Southeast and the nation in terms of educational attainment, despite gains in recent years.

Equally important to the educational attainment of Tennessee workers is the quality of the education they receive. Tennessee has made solid efforts to improve primary and secondary education in the state, as evidenced by recent legislation such as the *Basic Education Program* (BEP) and the *21st Century Schools Plan*, but there is still room for improvement. As Table 3.2 shows, Tennessee falls behind the Southeast and the nation as a whole in some important measures of education quality.

Tennessee mathematics proficiency scores are on par with the Southeast average, but they fall

slightly behind the U.S. average. In other measures of education quality, Tennessee lags behind both the Southeast and the nation. Tennessee's per pupil education expenditure is significantly lower than the Southeast and U.S. averages. At the same time, Tennessee's capacity to fund education, as measured by per capita personal income in the state, is at about the average for the Southeast (\$21,949 in 1993 for Tennessee vs. \$22,016 for the South) but below the national figure (\$24,426). At least within the South, Tennessee's spending reflects a lack of *effort* rather than a lack of *capacity*. The pupil-teacher ratio in the Southeast is on par with the national average, but Tennessee's is considerably higher. Fortunately, Tennessee has made efforts to enhance its education funding through the BEP, and reducing its pupil-teacher ratio is a primary objective in the *21st Century Schools Plan*. Both per-pupil expenditures and pupil-teacher ratios should see improvements in the near term now that the BEP is fully funded. Finally, a much smaller percentage of Tennessee students receive gifted and talented program services than in other Southeastern states, which suggests that Tennessee may not be developing its especially

TABLE 3.1--Educational Attainment, Population 25 and Older, 1990 (Percent)

Region	Not a High School Graduate	High School Graduate	Some College, No Degree	Associates Degree	Bachelors or Higher Degree
Tennessee	33.0	30.0	16.9	4.2	15.9
Southeast	29.7	29.7	17.5	5.4	17.7
United States	24.8	30.0	18.7	6.2	20.3

SOURCE: U.S. Department of Commerce, Bureau of the Census, 1990 Census of Population, CPH-L 96

bright students to the extent that it could.

Although Tennessee has done a better job in educating its labor force in recent years, especially in light of its fixed resources, it must also keep in mind the poorly trained workers who are transitioned out of the labor force through structural changes in the economy. Special training and adult education programs can be made available to alleviate some of this burden. There is some question as to whether jobs will come to those individuals and communities that fail to invest sufficiently in obtaining high quality education.

Capital Productivity. Capital productivity is much more difficult to measure than labor productivity because government agencies generally do not keep as detailed accounts of the factors that tend to enhance capital productivity as they do of the factors that tend to enhance labor productivity (e.g., education and training statistics). Nevertheless, there are some available measures of capital productivity, and perhaps the

best measure is expenditures on research and development (R&D). Figure 3.4 shows trends in expenditures for research and development by Tennessee and the nation over the period 1985-1993.⁴

Inflation-adjusted R&D expenditures in Tennessee were low relative to the U.S. in 1985 (compared to the 1987 base year), but spiked in 1989. Since then, R&D expenditures have diminished in the state, and both Tennessee and the United States have been spending roughly the same level of funds in inflation-adjusted terms as they did in 1987. The compound annual growth rate for R&D expenditures over the period 1985-1993 was approximately 3.0 percent for Tennessee and 2.0 percent for the nation as a whole.

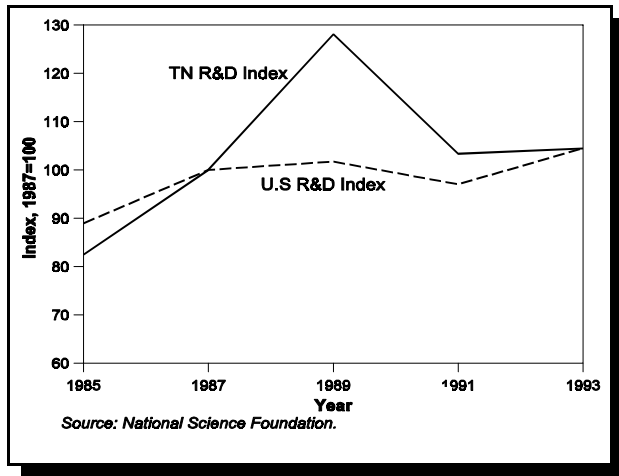
In the last several years, Tennessee has made great strides in improving the attractiveness of the state to new and existing industry. Nevertheless, the work of economic development is never done. Tennessee must continue to make

TABLE 3.2--Comparisons of Education Quality, Tennessee, the Southeast, and the U.S.

Region	Expenditure per Pupil (1993)	Pupil-Teacher Ratio (1991)	Pupils Receiving Services in Gifted Programs (1989-90)	Math Proficiency (1992)
Tennessee	4,149	19.4	1.9	258
Southeast	4,652	17.4	4.9	258
United States	5,767	17.3	N/A	266

SOURCES: U.S. Department of Education, National Center for Education Statistics, *The Digest of Education Statistics 1996*, Table 165; Council of State Directors of Programs for the Gifted, *The 1990 State of the States Gifted and Talented Education Report*; U.S. Department of Education, National Center for Education Statistics, *Common Core of Data Surveys*; U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *1992 NAEP Mathematics Report Card for the Nation and States*.

FIGURE 3.4--Expenditure Index, Research and Development, Tennessee and U.S., 1985-1993



investments in human capital if the state is to remain competitive in the increasingly global economy. Moreover, the state must make a concerted effort to attract new private capital that embodies new technology and must ensure that its public infrastructure is conducive to economic growth. By continuing to invest in its people through human capital formation, maintaining an attractive business environment through infrastructure maintenance and expansion, and encouraging an inflow of new private capital and technology, the state of Tennessee can ensure a vibrant economy that will yield balanced growth over the long term.

THE LONG-TERM TENNESSEE FORECAST

In the discussion that follows, the long-term trend forecast for Tennessee is presented through the year 2006. This forecast is intended as a long-term projection of the state's likely growth path rather than a year-to-year projection

of economic performance that might be characterized by recession and recovery. No recession is projected for the short term, but readers should keep in mind that recessions can and often do occur during a long time series, such as that considered here. Aside from any deviations arising from a recession or ensuing recovery, the long-term projection of Tennessee economic activity is expected to be in line with the following forecast.

Generally, the state's growth path will trend upward from the rather slow current pace of economic growth. By the year 2000, the Tennessee economy is anticipated to return to its long-term trend. Output growth is expected to be fairly robust and is anticipated to keep employment levels up and personal income growth strong. Employment growth should strengthen over the forecast period, allowing the state to maintain healthy unemployment rates. Details of the forecast are presented below.

Output

Tennessee inflation-adjusted gross state product (GSP) is expected to grow at a compound annual rate of 3.4 percent over the forecast period (1997-2006), with annual growth rates increasing slightly in the latter half of the period. Growth in U.S. inflation-adjusted gross domestic product (GDP) is anticipated to remain below that of Tennessee, growing at a significantly slower rate of 1.9 percent (CAGR). Table 3.3 shows projected growth in GSP by sector and expected changes in the sectoral distribution over the forecast period.

Manufacturing will continue to make the largest contribution to Tennessee GSP (although

TABLE 3.3--Projected Tennessee Gross State Product, Sectoral Distribution and Growth Rates, 1997-2006

	Output (Millions of 1992 Dollars)		Share of Total Output		Compound Annual Growth Rate
	1997	2006	1997	2006	
Gross State Product	133,060.3	179,199.6	100.0	100.0	3.4
per capita	24,697.3	29,842.4			2.1
Agriculture	1,779.1	2,663.9	1.3	1.5	4.6
Mining	445.4	722.3	0.3	0.4	5.5
Construction	5,235.3	5,508.4	3.9	4.5	5.0
Manufacturing	31,550.1	41,531.5	23.7	23.2	3.1
TCPU	11,462.7	16,508.3	8.6	9.2	4.1
Trade	26,446.9	34,693.9	19.9	19.4	3.1
FIRE	17,196.4	21,922.9	12.9	12.2	2.7
Services	24,360.0	36,009.4	18.3	20.1	4.4
Government	14584.4	17,003.2	11.0	9.5	1.7

Note: TCPU is transportation, communications, and public utilities; FIRE is finance, insurance, and real estate.

it ranks third in terms of contribution to nonagricultural jobs) and is expected to grow at a rate of 3.1 percent (CAGR) over the forecast period. Manufacturing should see its *share* of GSP decline slightly, however, from 23.7 percent in 1997 to 23.2 percent in 2006. Durable goods manufacturing is anticipated to see much stronger growth in inflation-adjusted output (4.0 percent CAGR) than is the case for nondurable goods manufacturing (1.9 percent CAGR).

The services sector, which comprised 18.3 percent of Tennessee GSP in 1997, will continue to see its share of total state output expand, climbing to approximately 20.1 percent by 2006. Other sectors expected to see strong growth in output are agriculture, mining, construction, and TCPU (transportation, communications, and public utilities). The trade, government, and FIRE (finance, insurance, and real estate) sectors are expected to see more moderate growth.

Employment

Tennessee nonagricultural employment is projected to see solid growth of 2.5 percent (CAGR) over the forecast horizon, creating 625,700 net new jobs in the next decade. The construction and services sectors should see especially strong growth of 4.0 percent (CAGR) and 4.1 percent (CAGR), respectively, while employment growth in the mining and manufacturing sectors is expected to be weak. The mining sector, which provided less than 0.2 percent of total Tennessee nonagricultural employment in 1997, is projected to see a decline in employment on the order of 0.5 percent (CAGR). The manufacturing sector is projected to suffer some employment losses in the near term, but is expected to return to a modest growth path later in the forecast period (0.5 percent CAGR).

Both the Tennessee and U.S. unemployment rates are expected to see a moderate increase over the forecast period. The Tennessee unemployment rate, which stood at 5.1 percent in 1997, is expected to be around 5.6 percent in 2006, while the national unemployment rate is projected to increase from 4.9 percent to 5.7 percent.

Inflation, Interest Rates, and Income

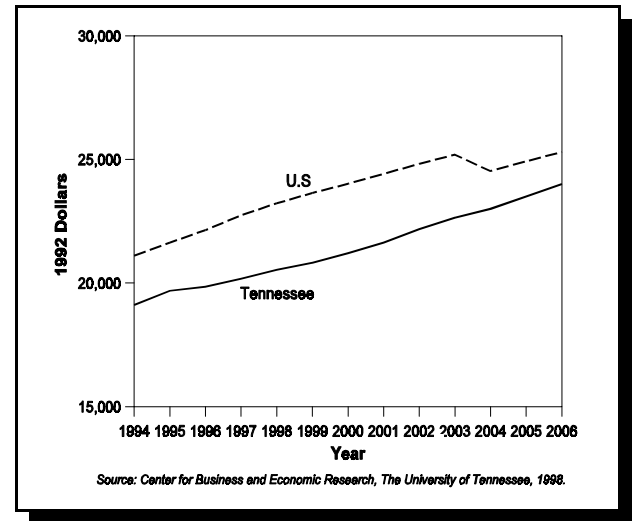
Inflation is projected to remain at historically low levels over the forecast period but is expected to see a modest increase from 2.0 percent in 1997 to around 2.7 percent in 2006. Bank prime interest rates, which are also relatively low by historical standards, are expected to rise slightly from 8.4 percent to 9.0 percent in the near term (1999), but are anticipated to fall to 7.8

percent by 2006. Low inflation and interest rates should help stimulate economic growth for Tennessee and the nation over the forecast period, especially in the construction and durable goods sectors.

After adjusting for inflation, Tennessee personal income is projected to grow at a healthy pace of 3.2 percent (CAGR) from 1997 to 2006, slightly faster than the growth rate anticipated for U.S. personal income (2.0 percent, CAGR). *Per capita* personal income in the state should see growth of 2.0 percent (CAGR), compared to 1.2 percent for the nation. Accordingly, the convergence of the Tennessee and national economies in per capita income will continue during the forecast period: Tennessee per capita personal income as a percentage of U.S. per capita personal income is expected to improve from 88.7 percent in 1997 to 94.9 percent in 2006 (see Figure 3.5).

Inflation-adjusted wages and salaries, the largest component of Tennessee personal income, is projected to see robust growth of 3.5 percent

FIGURE 3.5--Projected Per Capita Personal Income, 1994-2006



(CAGR) from 1997 to 2006, increasing its share of total (inflation-adjusted) personal income from 58.1 percent to 59.9 percent. Nevertheless, because employment is anticipated to see strong growth over the same period, *per worker* wage and salary gains will be more modest. In 1997, the average Tennessee worker earned \$24,443 (in 1992 dollars) in wage and salary income. By 2006, that figure is expected to rise to \$26,843, growing at a rate of only 1.0 percent (CAGR).

ENDNOTES

1. GSP is quite volatile, and therefore it is not too surprising to find huge growth rates that coincide with strong personal income and job growth.

2. “Full employment,” as used here, excludes *frictional unemployment* such as that which occurs when workers willingly change jobs. The full-employment level of unemployment is estimated to be around 5 percent.

3. See “Workforce Development in Tennessee: Options for the Future,” *An Economic Report to the Governor of the State of Tennessee on the State’s Economic Outlook 1997*, CBER for a complete discussion of the issues of workforce development in Tennessee.

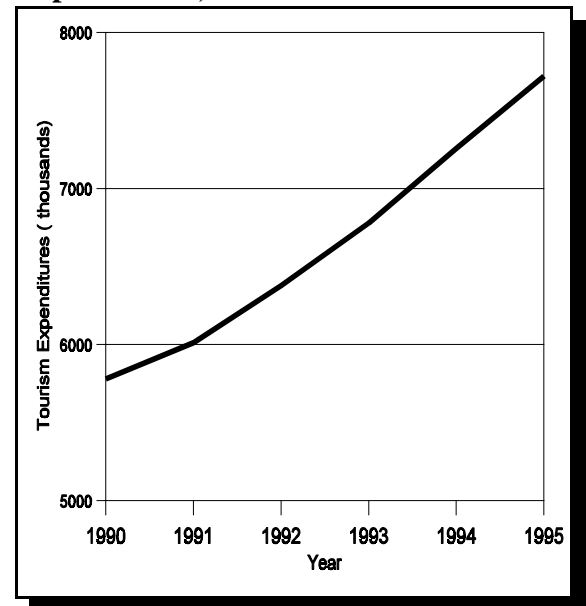
4. State data are only available from 1985. Expenditures reflect funds from the federal government, industry, colleges and universities, and non-profit organizations. The data source is the U.S. National Science Foundation, *Science and Engineering Indicators*, various years. Indexes were calculated by CBER.

CHAPTER 4

TENNESSEE TOURISM

Tourism is rapidly gaining visibility as an important industry for the U.S. and the state's economic activity and development because of strong growth in tourism-related revenue. In 1995, direct traveler spending within the U.S. by domestic and international travelers climbed to over \$421 billion, or 5.7 percent of the nation's gross domestic product. In Tennessee alone, tourism contributed almost \$8 billion to the state's economy in the same year. Additionally, tourism supported almost 139,000 jobs and generated more than \$600 million in state and local tax revenue, making it a significant factor in the economic progress of the state.¹ Tourism's contribution to the statewide economy has been increasing steadily over the last several years. Tennessee ranked fourteenth nationally in both 1994 and 1995 for tourism expenditures generated in the state. The state's Tourism Department budget, with an estimated budget of \$9,108,800, also ranked fourteenth nationally in 1995.²

FIGURE 4.1—Tennessee Tourism Expenditures, 1990-1995



The substantial magnitude of the tourism industry in Tennessee, as evidenced by the fact that it is the second largest industry in the state in terms of expenditures and number of employees and is the third largest in terms of the payroll (see Table 4.1), lends justification for the need to resolve issues hindering progress in tourism research.

Despite its significance as a viable economic activity, the tourism industry continues to be plagued by a lack of awareness and appreciation in many aspects of public policy. As a noted

comedian might say, tourism “gets no respect.” Given the wide array of businesses and industries affected by tourism, it is surprising that many business executives, public officials, and the public at large have been slow to realize the significance of travel and the industry as a development alternative. Often, it is the vast array and diversity of the firms that comprise the sector that creates many of the obstacles facing the industry. Tourism does not have a unique base as an industry, but encompasses widely disparate firms and organizations from many industries which serve customers that possess a variety of tastes, incomes, and objectives. However, it is this same diversity that often gets touted as the strength or advantage of the tourism industry. Consequently, in many regions and countries, tourism has become a dominate sector, often replacing manufacturing, agriculture, or distribution-based activities as a major source of income, employment, and tax revenue generation.

The first section of this chapter provides an in-depth analysis of the tourism industry, its impacts on the economy, and the implications of tourism as an economic development strategy for the state of Tennessee. The following section contains an overview of the tourism industry including the challenges it faces, the kinds of firms which comprise the industry, and selected industry statistics. Section 3 details the characteristics of tourism in Tennessee. Section 4 investigates the impacts of tourism, and section 5 discusses tourism as a development strategy. Section 6 concludes the chapter with a brief summary.

TABLE 4.1--Tennessee Employment by Major Sector, 1995¹

Industry	Payroll (in millions)	Employment (in thousands)
Health Services	\$6807.7	229.5
Wholesale Trade/ Durable goods	2653.4	78.3
Travel/Tourism	2575.7	143.4
Business Services	2416.8	142.7
Engineering/ Management	2226.3	79.4
Eating/Drinking Establishments*	1529.5	114.4

1. It is important to note that the Travel/Tourism industry is not assigned a Standard Industrial Classification Code (SIC); therefore, the data reported for the industry are based on assumptions made by the researcher and are subject to imprecision. These considerations should not be overlooked when evaluating the reliability of the data.

*Excludes jobs attributable to tourism.
Source: U.S. Travel Data Center, 1996.

TABLE 4.2-Defining Tourism and the Tourism Industry

Tourism	Tourism Industry
Umbrella term for a variety of products and services offered to and desired by people while away from home. ¹	The collection of all businesses that directly provide goods or facilitate business, pleasure, and leisure activities away from home. ²
A term encompassing travelers away from home and the businesses and people who serve them by expediting or otherwise making the travel easier or more enjoyable. ³	The entire spectrum of government and business activities that provide and manage the needs, wants, and desires of travelers. This includes agencies and groups seeking to promote tourism, the residents of the destination area, and educational institutions seeking to provide qualified industry personnel. ⁵
Any overnight stay away from home with exception to military, students, diplomats, and people working away from home. ⁴	The collection of firms and government entities providing tourism oriented goods and services. ⁷
Travel which takes a person at least 100 miles away from home for the purpose of business or pleasure. ⁶	
The promotion or encouragement of touring. ⁸	

1. Metelka, C. J. *The Dictionary of Hospitality, Travel, and Tourism*, Albany, N.Y., 1990.
2. Smith, S. J. "Defining Tourism: A Supply Side View," *Anal of Tourism Research*, Vol. 15, 1988.
3. Lundberg, D. E., et al. *Tourism Economics*, New York, 1995.
4. Quoted as U.S. government's lexicon in *Tourism Economics*, D. E. Lundberg et al., 1995.
5. Metelka, C. J. *The Dictionary of Hospitality, Travel, and Tourism*, Albany, N.Y., 1990.
6. Official definition of the United States Census Bureau.
7. P. O., Sung Soo, et al. "A Linear Expenditure Model for Tourism Demand," *Anal of Tourism Research*, Vol. 18, 1991.
8. *Webster Collegiate Dictionary*, 1996 edition.

OVERVIEW OF THE TOURISM INDUSTRY

Defining Tourism

What is tourism? What constitutes the tourism industry? These are common questions that have a wide array of answers. Table 4.2 provides a partial listing of commonly used definitions in tourism and the tourism industry.

The inability of observers and industry participants to agree upon an acceptable definition to be used as the standard is an underlying source of many of the hurdles the industry faces. There are two primary shortcomings of most definitions

of tourism. First, is the failure of the definitions to adequately portray tourism as an industry. Secondly, most definitions, even if they do hint that tourism is an industry, fail to conform to existing definitional standards and conventions used in other fields of research. For example, the data reported in Table 4.1 are not drawn from conventional employment statistics. The lack of a proper industrial definition leads to regrettable consequences for tourism, one of the most serious being that tourism persistently suffers from a poor reputation in the eyes of policy and economic

analysts, government officials, and industry leaders not involved in tourism.

Collection of Tourism Data

Developing the appropriate data proves troublesome because the relevance of the data changes with each of the definitions and with each individual's perception of tourism. Collecting appropriate data is costly and often problematic due to the nature of the industry. Firms of different size and structure engage in different methods of record keeping, with some being more precise than others. A more practical and potentially serious problem of collecting data on tourism is distinguishing buyers at the point of sale, given that a majority of the firms participating in the tourism sector do not receive all of their revenue from tourism. For example, restaurants and gas stations serve both the local consumer and travelers, and allocating sales between the two groups is often impractical.

The data problems imbedded in tourism research translate into uncertainties regarding the magnitude and overall significance of travel and tourism on the economy. As a result, many researchers contend that the industry data often underestimate the true magnitude of tourism. Regardless of the obstacles facing tourism research, the industry (as a major player in our economy) is too prominent to overlook.

In practice, the tourism industry is a business responsible for providing goods and services to travelers and involves any expenditure incurred by or for a visitor for his or her trip. It is an outreaching industry comprised of hundreds of component businesses (including airlines, cruise lines, railroads, rental car agencies, travel

marketers, lodging, restaurants, and convention centers). There are also travel reception services, commercial campgrounds, retail shops, food shops, and service stations. A more detailed listing of the component businesses is provided in Table 4.3. Additionally, government has the function of taxing, regulating, and promoting tourism.

The firms making up the tourism industry can be broken down into six major categories of goods and services used by travelers consisting of accommodations, transportation, travel services, food services, recreation/entertainment, and retail goods. The categories of commodities can be classified into Tier 1 and Tier 2. Tier 1 commodities are basically "pure tourism" goods and services. Businesses providing Tier 1 commodities would cease to exist in the absence of tourism. They could include amusement parks, travel agencies, and airlines depending on the specific definition of tourism being utilized. Tier 2 commodities, on the other hand, are mixed commodities. They provide goods and services to both tourists and residents, and they would continue to exist, albeit at reduced levels, even without tourism. Table 4.4 provides a brief listing of selected Tier 2 businesses along with statistics for these Tennessee businesses in 1995. Criteria for deciding if an industry is a Tier 1 or a Tier 2 industry can be derived using a tourism ratio. The tourism ratio can be calculated as a percentage of revenues associated with tourism relative to total revenues.³ Tourism ratios for the major classes of tourism commodities have been estimated for Tennessee for 1995 and are depicted in Table 4.5. These estimates are statewide averages and would vary from county to county. For example, the

tourism ratio for food services in Sevier County would be much greater than that of other, less tourism dependent, counties.

CHARACTERISTICS OF TOURISM

General Characteristics

Tennessee harbors a spectrum of tourism activities, from west to east, including Graceland in Memphis, the Grand Ole Opry in Nashville,

the Tennessee Aquarium in Chattanooga, Dollywood in Pigeon Forge, and vast state and national forests and parks.

Characteristics of tourism within a given area have a substantial impact on the economic benefits derived from the activity, most directly by altering what is referred to as the carrying capacity. Carrying capacity refers to the level of tourism a region can adequately accommodate given the economic, physical or environmental, and social subsystems of the region. The characteristics relevant to determining carrying capacity can be divided into two main categories—characteristics of the tourist and characteristics of the destination area. Table 4.6 provides a summary of the breakdown of relevant characteristics for each of the two categories.

Tourist characteristics are important because they influence the magnitude, frequency, and kind of

TABLE 4.3--Component Businesses Relevant to the Tourism Industry

Accommodations:

- Hotels and motels
- Tourist courts and cabins
- Guest houses and tourist homes
- Campgrounds and trailer parks
- Hunting and fishing camps

Transportation:

- Airlines
- Passenger railroads
- Passenger water transportation
- Ferries
- Ship chartering
- Intra urban buses
- Inter-urban buses
- Sightseeing and charter buses
- Airport limousines
- Taxicabs
- Rental cars

Travel Services:

- Federal tourism promotion programs
- State tourism development programs
- Local tourist bureaus
- Travel agencies
- Travel marketers
- Insurance companies
- Time sharing corporations

Retail outlet stores

- Liquor/Wine Stores
- Automobile Dealers
- General Merchandise stores

Food Services:

- Restaurants
- Food Stores
- Bars, taverns, and nightclubs
- Vending machine operators

Amusement and Recreation:

- Museums and galleries
- Professional sports clubs
- Horse race tracks
- Other race tracks
- Golf Courses
- Ski facilities
- Marinas
- Theme parks
- Zoos and botanical gardens
- Theaters

Retail Goods:

- Motor home dealers
- Boats and boat accessories
- Motorcycle/snowmobile dealers
- Gasoline service stations
- Sporting goods stores
- Cameras/ photo supply stores
- Gift and souvenir shops
- Luggage stores

Source: Smith, S.L.J. "Defining Tourism: A Supply Side View," *Analys of Tourism Research*, Vol. 15, 1988.

TABLE 4.4--Statistics for Tier 2 Tennessee Businesses, 1995

Industry	Number of Establishments	Revenue (in millions)
Eating/Drinking Establishments	7,726	\$ 4,663.7
Hotel/Lodging	1,182	1,413.7
Motion Pictures	824	1,730.0
Food Stores	4,129	8360.9
General Merchandise	954	7,071.2
Service Stations	4,842	2,829.1

Source: Tennessee County Business Patterns, 1995.

interaction with the physical attributes of the destination area and its residents. Socioeconomic characteristics of the tourists include age, gender, income levels, motivations for travel, racial and ethnic backgrounds, family size, educational attainment, and perceptions of resource quality. Together, these variables contribute to interpersonal style when dealing with residents, as well as expectations of the destination area. The types of tourist activities will have the obvious effect of impacting the type of traveler or tourist and determining the duration of the stay, thus, illustrating the interdependency of the characteristics.

Characteristics of the destination area and its residents also affect the capacity at which a destination is able to absorb all of the demands imposed upon it. Environmental characteristics of the destination area vary from region to region depending on the physical environment, with the most notable distinction being natural as opposed to the man-made environment. While some

TABLE 4.5--Selected Tennessee Tourism Ratios, 1995

Industry Class	Tourism Ratio
Transportation Services	.96
Hotel/Lodging	.92
Entertainment	.59
Foodservice	.23
General Retail	.21

Tourism ratios were calculated using data from a 1996 U.S. Travel Data Center report. The tourism ratio is the share of total expenditures in the category that is made by tourists.

regions experience an influx of travelers based primarily on the natural features of the area, for example the Great Smoky Mountains, other areas depend upon man-made attractions such as Dollywood and outlet shopping in Pigeon Forge.

Perhaps the primary destination characteristic in Tennessee is the natural environmental features. These features describe natural destinations and include geographic landscapes such as mountains, lakes, deserts, and beaches, as well as climate.

Equally important in impacting carrying capacity is the economic structure and development of the destination area, which incorporates the diversity of the economic base, the spatial characteristics of development, patterns of investment, and the ability of a destination to generate revenue. Nashville, for example, has been targeting the revitalization of its downtown district by funneling both private and public investment into the area, with the most recent project being the building of a new arena for the hockey team.

Social structure, which includes the demographic profile of the destination area, the

TABLE 4.6--Characteristics of Tourism Relevant to Carrying Capacity

I. Characteristics of the Tourist

- Socioeconomic traits
- Level of tourist satisfaction
- Level of usage of facilities/activities
- Types of tourist activities
- Duration of stay

II. Characteristics of Destination Area

- Environmental features
- Economic structure
- Political organization
- Level of tourist development
- Social structure and organization

strength of the local culture, and availability and quality of local amenities, is the third group of characteristics important in determining carrying capacity. These characteristics are important because the presence of host irritations, which can be caused, for example, by the presence of tourists of diverse cultures, are constraints on local amenities, and can lead to a resistance to tourism development within the community.

Other important features of the destination area are political organizations, or the role of state and local tourism organizations in influencing tourism impacts and development. Tourism development organizations are charged with the task of establishing the degree of local involvement in the tourist industry, the nature and diversity of attractions, and the rate of development. Because of its encompassing nature, political organization plays a key role in tourism development of any destination area, whether it is natural or man-made. Evidence of the importance of political organization can be found in research showing that host community

resentment is likely to be high in destination areas with a highly developed tourism industry but with limited local involvement.⁴ The combination of these characteristics determines to the extent to which a community will be successful in developing a viable tourism base.

Characteristics of Tennessee Tourism

The characteristics of tourists visiting Tennessee vary across cities and regions. In 1996, Johnson City, one of the three cities comprising the Tri-Cities metropolitan area, drew the largest percentage of its visitor's business travelers with 25 percent. Nashville and Memphis drew 20 and 10 percent, respectively. Pigeon Forge hosted the highest share of trips with children at 48 percent while Memphis hosted the lowest share at 35 percent.⁵ Table 4.7 provides additional statistics on duration of stay, purpose of trip, and satisfaction ratings. Table 4.8 provides a summary of sociodemographic characteristics of visitors to selected cities in Tennessee for 1996.

For Tennessee, the most visited destinations are located primarily in seven cities or regions including Nashville, Knoxville, Memphis, Chattanooga, Pigeon Forge, Gatlinburg, and the Tri-Cities. Figure 4.2 provides a comparative breakdown of trips to these selected cities for 1994 and 1995. These regions also serve as hubs for facilitating travel to other destinations within the state.

Tennessee provides a variety of destination areas taking advantage of both the natural and the man-made environment. Tennessee continues to enhance its prospects for attracting additional tourism dollars by expanding its visibility in the sports arena with the addition of a professional

TABLE 4.7--Summary Statistics of the Tennessee Tourist

		Nashville	Knoxville	Memphis	Gatlinburg	Chattanooga	Pigeon Forge	Tri-Cities
Purpose of Trip	Pleasure	65%	65%	62%	80%	66%	76%	53%
	Business	20%	14%	19%	19%	13%	12%	14%
	Other	14%	17%	10%	10%	15%	10%	33%
Duration of Stay (days)	Includes no Overnight	3.1	2.0	2.9	2.4	2.0	1.7	1.4
	Excludes no Overnight	3.7	3.0	3.3	3.1	2.9	2.6	2.3
Level of Satisfaction	Satisfied	82%	74%	72%	86%	75%	83%	62%
	Dissatisfied	4%	5%	5%	4%	4%	6%	18%

* Data reported for the Tri-Cities region represents the mean of data for Johnson City, Kingsport, and Bristol.

football team—the Tennessee Oilers—and as the future home of the Women’s Basketball Hall of Fame to be located in Knoxville. Table 4.9 provides a listing of the top 10 destinations for Tennessee tourism in 1995.

Undoubtedly, the greatest resource of Tennessee tourism is the natural destination areas enhanced by the scenery of the national and state parks located throughout the state. Along with the breathtaking view offered by these natural surroundings comes a wealth of alternative activities. Figure 4.3 provides a map of the national and state parks located throughout the state, and Tables 4.10 and 4.11 provide statistics on popular activities available in Tennessee’s two largest national parks, the Cherokee National Forest and the Great Smoky Mountains.

The predominate advantage of the diversity found in Tennessee’s tourism destinations is the ability to attract tourists of all socioeconomic characteristics. Some visitors prefer camping and hiking in the mountains, while others enjoy the comfort and elegance of the Peabody Hotel.

Destination-area orientation ranges from the family-style fun of Pigeon Forge to the New Orleans flavored nightlife of Beale Street in Memphis. Additionally, the close proximity of the natural destinations to the man-made destinations has enabled Tennessee to capitalize on the appeal of the diversity of activities available. This is evidenced by the fact that Tennessee ranked third in 1992 among the Southeastern states in revenue generated by visitors to state parks and recreation areas (see Table 4.12). The magnitude of visitors and the revenue generated by the national and state parks illustrate the growing attraction of ecotourism and its importance to Tennessee as a tourism destination.

Another unique asset of the state which provides opportunities for tourism generation is its Civil War heritage. Civil War heritage has become increasingly popular as a tourist attraction, as interest in the American Civil War is at the highest level since the war commemorated its centennial 30 years ago. Especially popular are the battle reenactments, as evidenced by the

TABLE 4.8--Sociodemographic Characteristics of Tourist to Selected Tennessee Cities in 1996

		Nashville	Knoxville	Memphis	Gatlinburg	Chattanooga	Pigeon Forge	Tri-Cities
Family Size	1	30%	31%	36%	18%	27%	14%	29%
	2-3	53%	52%	50%	60%	50%	61%	51%
	4 or more	17%	16%	14%	21%	22%	25%	20%
Marital Status	Single	25%	22%	35%	25%	26%	24%	24%
	Married	69%	71%	53%	70%	67%	72%	65%
Gender	Male	57%	66%	61%	57%	61%	57%	63%
	Female	43%	34%	39%	43%	39%	43%	37%
Education	< HS	7%	4%	7%	6%	8%	7%	6%
	HS	25%	29%	20%	27%	25%	28%	21%
	College	66%	65%	71%	66%	64%	64%	70%
Income	< \$20,000	6%	7%	3%	7%	8%	6%	9%
	20- 39,999	26%	32%	23%	29%	26%	29%	24%
	40-74,999	28%	28%	29%	32%	32%	30%	24%
	> \$75,000	20%	16%	18%	13%	17%	12%	16%

* Source: U.S. Travel Data Center, Profile of U.S. Travelers to Selected Tennessee Cities, 1996.

successful reenactment of the Battle of Murfreesboro which drew more than 11,500 spectators and raised more than \$32,000 in 1992, and the 1995 reenactment of “1864 Campaign” at Spring Hill Battlefield, which raised more than \$90,000.⁶

IMPACTS OF TOURISM

Three Classes of Impacts

Impacts arising from tourism can be divided into three categories—economic, physical, and social. Economic effects include personal income, employment, and fiscal impacts. Physical effects consist of alterations to the natural environment including land, air, water, and wildlife, as well as the man-made infrastructure such as wider

roadways and increased public utilities in highly visited areas. Social impacts refer to changes in

FIGURE 4.2--Number of Visitors for Selected Tennessee Cities

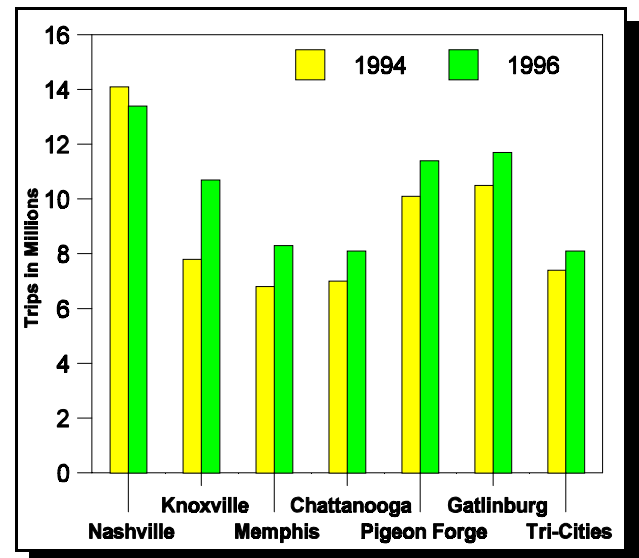


TABLE 4.9--Top Ten Tennessee Destinations, 1995

Destination	Number of Visitors
Great Smoky Mtns	9,080,422
Dollywood Theme Park	2,190,000
Opryland Theme Park	2,100,000
Tennessee Aquarium	1,126,516
Ober Gatlinburg Park	1,050,196
Gaylord Entertainment*	1,000,000
Chattanooga Choo Choo	876,074
Casey Jones Village	855,000
Memphis Zoo	827,155
Graceland	753,962

* Includes performances at the Grand Ole Opry, Nashville on Stage, and Ryman Auditorium.

Source: Tennessee Department of Tourism Development.

the way of life of the residents of destination areas. Balance between positive and negative impacts is essential for the viability of tourism development. For example, the economic gains to a community must more than offset any negative physical impacts in order for tourism business to be a profitable venture.

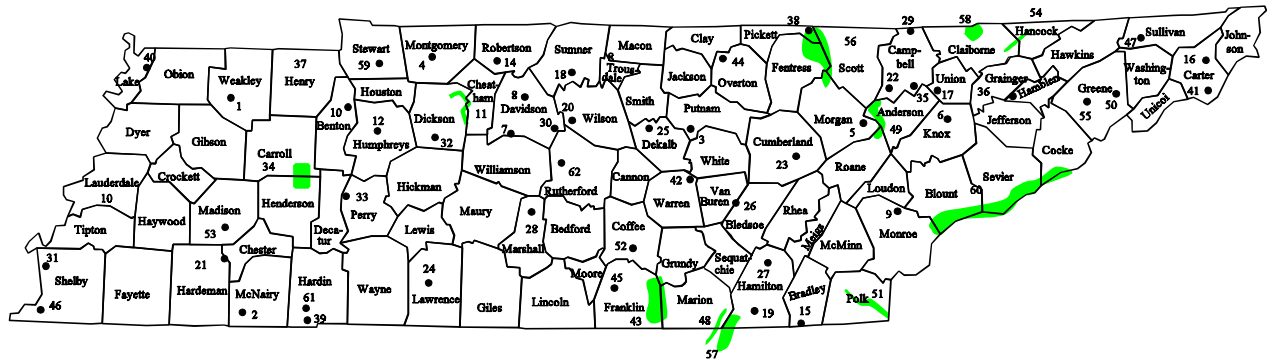
Oftentimes, social and physical impacts enter into tourism analysis as unquantifiable costs or benefits that are ignored, with the emphasis being placed on economic or fiscal impacts. The most common effects associated with the physical environment are the negative implications tourism has on the natural environment such as water and air quality, damage to wildlife, and deterioration of historical sites. For example, sightseeing helicopters flying over the Smoky Mountains have contributed to a reduction in air quality for that region.

On the other hand, tourism can also be viewed as a means to raise necessary funds to renovate, restore, or enhance the natural environment as with the entry fees into public parks and historic Civil War battlegrounds. The city of Franklin and the Williamson county Chamber of Commerce sponsor an annual Franklin Battlefield Preservation Conference and have been able to preserve existing sites and reclaim some sites lost to development, partially through the use of tourism-generated revenue.⁷

The man-made environment is also affected both negatively and positively. For example, the public roadways get congested in the Smoky Mountains and downtown Chattanooga, and they need expanding or repaired as a result of the increased volume of tourism-related traffic. Tax dollars attributable to tourism can help finance such infrastructure.

Social influences occur in many forms and can vary across regions based on the type and magnitude of the tourism development. Social costs of tourism include congestion, increased cost of living for residents, increased crime, and fewer resources for other types of development. In Sevier County, the cost of housing and property is elevated in response to a thriving tourism sector. Social benefits arising from tourism include more public and private amenities in the community, potentially better public schools, and increased infrastructure. These benefits accrue from expansions in the tax base and increases in tax revenue. The increase in the number and types of private businesses results from the increase in the consumer base that tourism provides.

FIGURE 4.3--Tennessee National and State Parks



State Natural Areas

- 1 Big Cypress Tree
- 2 Big Hill Pond
- 3 Burgess Falls
- 4 Dunbar Cave
- 5 Frozen Head
- 6 House Mountain
- 7 Radnor Lake

State Historical Areas

- 8 Bicentennial Capitol Mall
- 9 Fort Loudoun
- 10 Fort Pillow
- 11 Harpeth River
- 12 Johnsonville
- 13 Nathan Bedford Forrest
- 14 Port Royal
- 15 Red Clay
- 16 Sycamore Shoals

State Parks and Recreation Areas

- 17 Big Ridge
- 18 Bledsoe Creek
- 19 Booker T. Washington
- 20 Cedars of Lebanon
- 21 Chickasaw
- 22 Cove Lake
- 23 Cumberland Mountain
- 24 David Crockett
- 25 Edgar Evins
- 26 Fall Creek Falls
- 27 Harrison Bay
- 28 Henry Horton
- 29 Indian Mountain
- 30 Long Hunter
- 31 Meeman-Shelby Forest
- 32 Montgomery Bell
- 33 Mousetail Landing
- 34 Natchez Trace

- 35 Norris Dam
- 36 Panther Creek
- 37 Paris Landing
- 38 Pickett
- 39 Pickwick Landing
- 40 Reelfoot Lake
- 41 Roan Mountain
- 42 Rock Island
- 43 South Cumberland¹
- 44 Standing Stone
- 45 Tims Ford
- 46 T.O. Fuller
- 47 Warrior's Path

Other State Areas

- 48 Cumberland State Scenic Trail I
- 49 Cumberland State Scenic Trail II
- 50 Davy Crockett Birthplace
- 51 Hiwassee State Scenic River
- 52 Old Stone Fort State Archaeological Area
- 53 Pinson Mounds State Archaeological Area
- 54 Trail of the Lonesome Pine

National Parks

- 55 Andrew Johnson
- 56 Big South Fork
- 57 Chickamauga
- 58 Cumberland Gap
- 59 Fort Donnelson
- 60 Great Smoky Mountains
- 61 Shiloh
- 62 Stones River



Trail or River
Location of largest parks

Note: Does not include national forests.

1. South Cumberland is comprised of seven separate parks and state areas.

Source: Tennessee Department of Tourist Development and Tennessee Department of Conservation, direct correspondence.

TABLE 4.10--Statistics for the Cherokee National Forest, 1993

Acreage	628,265
Total Visitors	9,985,000
Activity	Number of Visitors*
Bicycling	71
Boating and Sailing	251
Automobile Travel	1,776
Camping	2,124
Fishing/Hunting	1,278
Hiking/Walking	450
Horseback Riding	102
Picnicking	798
Resorts/Summer Homes	215
Sports and Games	152
Swimming Related Activities	785
Viewing Scenery	670
White-water Activities	485
Other	393

Source: Tennessee Statistical Abstract, 1996/97.

The best documented effects of tourism are economic. Unfortunately, most attention is placed on the benefits of tourism, while the costs are often ignored. The reasons for an economic emphasis center on the belief that tourism can provide rapid and substantial returns and can be a remedying force in areas facing economic problems because of insufficient economic activity or resources. Another reason for the focus on economic benefits is the ease of which they can be measured. Negative consequences such as the lack of economic diversity and infrastructure congestion, are often longer term. More problematic still are the physical and social impacts, consequences that do not lend themselves to easy identification and qualification.

TABLE 4.11--Statistics for the Great Smoky Mountains National Park, 1995

Acreage	241,206
Total Visitors	9,080,400
Activity	Number of Visitors
Campground Campers (in tents)	226,016
Campground Campers (in trailers or campers)	166,249
Campers in Organized Groups	23,791
Backcountry Campers	101,872

Source: Tennessee Statistical Abstract, 1996/97.

Economic Impacts of Tourism in Tennessee

In addition to the spending of tourists, measurement of the overall economic impact accounts for how a dollar spent by a tourist ripples through the economy to create income, jobs, and tax revenue. Economic impacts include direct, indirect, and multiplier effects. The direct effects result from expenditures during the tourist's visit. These expenditures are for lodging, food and beverages, amusement, transportation, gifts and souvenirs, and other miscellaneous items. The direct economic effect generates state and local tax revenue, such as amusement taxes on theme park admissions and sales taxes on retail purchases.

Of course, the tax revenue is the benefit side of tourism. There are also fiscal costs involved in a region having a sizable tourism base. These costs include the need to fund more public infrastructure, such as roadways and parks, as well as ongoing expenditures for more safety

TABLE 4.12--Statistics for State Parks and Recreation Areas for the Southeastern States, 1992

State	Acreage (1,000)	Visitors (1,000)	Receipts (1,000)
Tennessee	133	27,360	20,270
Alabama	50	6,268	23,427
Arkansas	47	6,725	12,406
Florida	444	12,232	18,061
Georgia	57	16,284	15,029
Kentucky	43	27,831	36,529
Louisiana	39	1,226	2,142
Mississippi	23	4,033	5,607
North Carolina	135	9,713	2,108
South Carolina	80	7,876	10,995
Virginia	66	3,975	2,635
West Virginia	202	8,753	14,806

Source: Tennessee Statistical Abstract, 1996/97.

personnel. There also may be government subsidies extended to specific recreational activities (such as sports facilities). These costs are often not evaluated because of difficulties in assessing what portion of government expenditures on these public goods and services can be attributed to the level of tourism in an area.

The indirect economic impacts of tourism arise from the expenditures of the businesses and agencies directly involved in the tourism industry. For example, the restaurants and lodging establishments in Gatlinburg must employ workers and purchase supplies for the operation of their businesses. A portion of these supplies come from within the community or state, supporting additional jobs and income. The extent to which indirect effects expand the local and state economy depends on the amount of leakages in the economy. For example, crafts made from

locally produced materials will be more beneficial for the community and state than those made with supplies from outside the state.

The indirect stimulus generates local and state taxes, including the local property, gross receipts, business, sales, amusement, and corporate income taxes. Again, there are additional costs, as the businesses and their employees require public services, from roads to schools.

Finally, there are multiplier or induced impacts. Multiplier effects occur as the direct and indirect income is spent and respent within the local or state economy. For example, when business owners that are servicing tourists pay their employees wages and salaries, those employees spend a portion of their income in the local community on goods and services such as housing, food, and clothing. In turn, owners of the businesses receiving these payments will pay their employees and the cycle continues. During each subsequent round of spending, a portion of the direct and indirect income leaks out of the local and state economy through taxes, payments to non-residents, and savings.

The effect of tourism dollars depends upon the specifics of the industry and the community or region in which the dollars are spent. The total effect is not the same for all businesses involved since the direct or first-round effect differs across business sectors. For example, in Tennessee, each dollar spent in lodging and eating establishments leads to the creation of \$0.43 in personal income (i.e., wages, salaries, rents, and proprietors' income) to residents of the state.⁸ The 43 percent is referred to as the personal income factor (PIF). Larger PIFs mean greater economic effects in Tennessee. Table 4.13 depicts a partial listing of

TABLE 4.13--Personal Income Factors for Various Industries In Tennessee

Amusement and Recreation Services	.29
Hotel/Motel/Eating Establishments	.43
Gasoline Stations	.11
General Merchandise Stores	.15
Travel Services	.41
Automotive Repair/Parking	.25
Food Stores	.14

Note: PIFs were calculated using data from the 1996/97 Tennessee Statistical Abstract.

PIFs for other tourism-related industries in Tennessee.

The income created in the first round via the PIFs is only beneficial to the state's economy if the tourism dollars being spent are new dollars coming in from outside the state or to the extent that home-state tourism substitutes for out-of-state tourism. For example, when a resident of Memphis chooses to go to the Grand Ole Opry in Nashville instead of Branson, Missouri, this prevents leakages from the state's economy. Unfortunately, data regarding the origination of tourist dollars are often unavailable. The exporting of tourism is crucial to its success because if the tourists are residents of the state, the income created is not additional income in the state but merely represents a redistribution.

The direct income generated for Tennessee residents from tourism can be estimated using the PIFs for the industry and the data on expenditures attributed to tourism for each industry. Calculations of the direct income impact from various tourism industries in Tennessee for 1995 are presented in Table 4.14. As can be seen, the greatest expenditures are in the food service

TABLE 4.14--First-Round Income Effects of Tourism in Tennessee for Selected Industries, 1995

Industry	Expenditures* (in millions)	Direct Impact (in millions)
Travel Services	\$2171.3	\$ 890.2
Hotel/Lodging	1476.9	635.1
Foodservice	2508.9	715.0
Recreation	849.2	246.3
General Retail	977.6	146.6

* Expenditures attributable to tourism, U.S. Travel Data Center, 1996.

industry, but the greatest direct economic effect is from the travel services industry.

The total economic benefit of tourism, broken down into income, employment, and tax revenue impacts, can be computed by summing up the direct, indirect, and multiplier effects. Table 4.15 provides a summary of the positive economic impacts of tourism in the state for 1995. These data indicate that during 1995, the average tourism dollar generated an additional 63 cents in output for Tennessee's economy and 43 cents in income for residents of the state. Additionally, every one million dollars of tourism expenditures supported 31.8 jobs.⁹

Controlling the Impacts

Given that there exist both positive and negative impacts, the key to successful tourism development lies in the ability of the state and local governments to control and mitigate negative impacts. This can be accomplished using financial analysis, strategic management policies, information on carrying capacity guidelines, and engineering controls. Financial analysis includes

TABLE 4.15--Economic Benefits of Tourism for Tennessee, 1995

Impact Measure	Total Benefit
Income	\$ 13,046,800,000
Employment (FTE)	262,800,000
Tax Revenue	
State	\$ 436,000,000
Local	200,100,000
Total	636,100,000

Source: U.S. Travel Data Center, 1996.

analyzing and monitoring the fiscal costs and the benefits attributable to tourism activity. The annual economic impact study conducted for the Tennessee Department of Tourism Development by the U.S. Travel Data Center provides a detailed computation of the benefits derived from tourism. At the same time, there is no detailed cost-benefit analysis of the investment in tourism for Tennessee. In order to fully control for the impacts from a financial aspect, the costs incurred as a result of tourism would have to be computed. Again, the most difficult problem with conducting such an analysis is accurately measuring the portion of these costs attributable to tourism development.

Strategic management policies consist of deciding what type of tourism to target, how to allocate resources to tourist destinations, and how to prepare residents and businesses for the influx of visitors. These types of policy activities normally come under the control of state and local governments and tourism agencies. In Tennessee, the Tennessee Department of Tourism Development and the Tennessee legislature have

the responsibility for allocating the state's resources to the various counties and activities. In addition, the Department of Tourism Development provides support through advertising and promotions, data collection, and the operation of 13 welcome/information centers throughout the state. There are also local and regional tourism organizations in individual counties and cities with the responsibility of monitoring the allocation of resources and developing the tourism opportunities of the area.

The third tool is information on carrying capacity guidelines. By obtaining reliable data on carrying capacities, communities can more accurately anticipate needs and undertake appropriate measures to plan for these needs. Planning may cover the need for additional labor market participants, housing, public transportation and utilities, and public protection services. Failure to properly assess carrying capacity can lead to limitations on the ability to expand the tourism base in an area. For example, Sevier County is currently experiencing growing pains as expansion of the tourism industry is testing the county's ability to adequately meet the demands placed on it. Specifically, the current level of affordable residential housing is insufficient to support the needs of would-be labor force participants required by firms wishing to locate in the region.

Responsibility for assessing carrying capacity usually falls under the discretion of the local government, and may include several branches such as planning, financing, and development. Multiple and overlapping governments can, through the lack of cooperation, compromise the ability to identify and mitigate problems.

Engineering controls are a final tool. Engineering controls consist of building codes, zoning, road construction, and factors dealing primarily with the physical attributes of the destination area. Implementation of zoning codes that concentrate retail and entertainment activities in certain areas are often a proper use of engineering controls. Such zoning would enable the community to economize on the provision of infrastructure and promote smoother road usage. Most commonly these controls are a mixture of state and local government oversight. Therefore, engineering controls, like the other three, involve interaction between different agencies across state and local governments. They also involve the interaction of government decision makers with area business leaders and residents. The extent to which the state can be successful in controlling for the impacts resulting from tourism will hinge on the quality of the relationship between state and local government officials and those being impacted by tourism development.

TOURISM AS AN ECONOMIC DEVELOPMENT STRATEGY

Tourism development has been the target of much debate in recent years. The debate stems from the pros and cons of utilizing tourism as a primary development strategy rather than relying on the traditional means of development such as targeting manufacturing or distribution firms (See Table 4.16.).

On the upside, the proponents of tourism development argue that tourism provides a revitalization to rural areas at a time when traditional industries such as forestry, agriculture,

TABLE 4.16--Benefits and Costs Associated with Tourism

Benefits

Economic

- Generation of Income
- Generation of Jobs
- Generation of Tax Revenue
- Improvement of Economic Structures
- Encouragement of Entrepreneurial Activity

Physical

- Increase in Infrastructure
- Increase in Restoration/Conservation Projects
- Increase in Amenities
- Revitalization of Existing Communities

Social

- Increase in Public Services
- Increase Quality of Public Schools
- Increase in Leisure Activities

Costs

Economic

- Increased Demand for Public Services
- Tourism Development Agency
- Increase in Demand for Infrastructure
- Lost Revenue from Tax Incentives
- Loss of Other Revenue Generating Enterprises

Physical

- Damages to Wildlife and Vegetation
- Increased Congestion
- Increased Air, Water, and Noise Pollution
- Increased Wear on Public Buildings

Social

- Increased Congestion in Infrastructure, Accommodations, and Services
- Increase in Undesirable Activities such as Crime, Prostitution, and Gambling
- Increased Costs of Living for Residents
- Increased Stress in Daily Lives
- Gradual Erosion of Local Culture

and mining are declining.¹² Jobs are created, income is increased in the community, and tax revenue is generated with the tax burden often

being exported to residents outside the state. In such cases, the costs of foregone development in favor of tourism are not as substantial as in other cases, at least in the short run. For example, agritourism operates on the rural landscape, and as an economic venture, it contributes to the preservation of a rural way of life and the survival of agricultural practices such as stock rearing, forestry, and the crop production. Farm-based vacations provide an opportunity for Tennessee's farm families and communities to combine annual activities with additional seasonal value-added programs. The appeal of such vacations come from the natural beauty of the area, farm-fresh produce, and the hospitality of farm families.¹³

The opposition to tourism stems primarily from the type of jobs created, the potential for crowding out of other economic activity, and the seasonal and cyclical nature of the industry (including jobs and tax receipts). The jobs created in tourism fall primarily in the service and retail trade sector and are often lower paying jobs relative to manufacturing jobs. For example, in Tennessee, the average annual income for a durable goods manufacturing job in 1994 was \$29,170 whereas the average comparable figure for the foodservice and lodging industries is \$19,340.¹⁰ In reality, the wages of local employees are even lower since the higher paying executive and managerial jobs are often occupied by individuals who moved from or reside outside the area.

Tourism-based activities tend to be both seasonal and cyclical. The degree of seasonality of the tourism industry hinges on the nature of the destination areas and types of tourist activities. For example, in Tennessee, the tourism industry peaks during the summer months with a sharp

decline during the winter months. In 1996, all the major destination cities in Tennessee peaked in the summer, except for Kingsport which peaked during the autumn.¹¹ Table 4.17 provides a breakdown of the seasonal travel for selected Tennessee cities in 1996. However, in an effort to curtail the seasonality of their tourism industry, many areas are developing off-season strategies. For example, Sevier County has established a cooperative effort between Dollywood, Pigeon Forge, and Gatlinburg to develop a year-round tourism business through their Winterfest promotion.

TABLE 4.17--Seasonal Tourism for Selected Tennessee Cities, 1996

City/Region	Spring	Summer	Fall	Winter
Nashville	18%	40%	22%	14%
Knoxville	22%	33%	25%	11%
Memphis	17%	34%	24%	20%
Chattanooga	18%	30%	23%	14%
Pigeon Forge	14%	37%	32%	10%
Gatlinburg	16%	34%	30%	12%
Kingsport	10%	22%	33%	20%
Johnson City	13%	29%	27%	8%
Bristol	23%	38%	15%	10%

** The remaining visitors could not remember the season of their visit or did not respond.*

Source: Profile of U.S. Travelers to Selected Tennessee Cities 1996, U.S. Travel Data Center.

Seasonality of tourism is a major concern because it leads to yearly business cycles within the local economy with periods of robust economic activity followed by periods of lethargic activity. The consequences are reduced payrolls, incomes, tax revenues, and significantly higher

unemployment during the off-season. If a community has become too dependent upon tourism as a means of economic prosperity, the seasonality of the industry could lead to economic hardships. In many cases, Tier 1 businesses will even be forced to close during the off-season, while Tier 2 businesses sustain lower sales.

The hardship could be further aggravated by the cyclical nature of the industry. The term cyclical refers to the tendency of the industry to follow the current pattern of the aggregate economy. If the economy is expanding, the tourism industry should prosper. However, if the economy enters a downturn, the tourism industry will sustain a contraction, often to a larger degree than other, more traditional industries such as manufacturing.

The nature of the tourism industry leads to many offsetting costs and benefits, all of which should be considered when determining the tourism development strategy for a given region. While tourism may be the best development strategy for one region, it could hinder development in another. Even in a tourism community, there remains a need for a diversified economy. It is the responsibility of the public officials assigned with the task of economic development to fully assess the viability of tourism, including the positive and negative aspects, as compared to alternative development options when planning the strategy for their community.

CONCLUSION

Tourism in Tennessee continues to grow and prosper as the amount of income, employment, and tax revenue generated from tourists' expenditures has continued to increase throughout

the past decade. Communities such as Pigeon Forge and Gatlinburg have come to depend on tourism as a way of life, while cities such as Chattanooga, Memphis, Nashville, and Johnson City have witnessed a substantial increase in the share of their economic activity resulting from tourism. Given the ever-increasing magnitude of the tourism industry, it is vital to the state's economy that the problems and issues associated with tourism be understood and addressed.

In order to take advantage of the opportunities that a thriving tourism industry can provide, Tennessee must be prepared to accept and meet the challenges that accompany the growth. Many cities and counties throughout the state are already faced with the realization that in order for growth to continue, a balancing of the positive and negative impacts of tourism on the economic, physical, and social landscape of their community is required. Successful tourism development hinges on increased awareness and understanding of the industry and its impacts.

ENDNOTES

1. U.S. Travel Data Center, *The Economic Impact of U.S. Travel of Tennessee Counties 1995*, (Travel Industry Association of America), November 1996.
2. S. R. Waters, *The Big Picture: Travel Industry World Yearbook, 1994-95*, Vol. 38, 1996.
3. S. J. Smith, "Defining Tourism: A Supply Side View," *Analys of Tourism Research*, Vol. 15, 1988.
4. A. Mathieson, and G. Wall, *Tourism: Economic, Physical, and Social Impacts*, New York, 1982.
5. U.S. Travel Data Center, *Profile of U.S. Travelers to Selected Tennessee Cities 1996*, (Travel Industry Association of America), October 1997.

6. W. S. Nelligan, "Civil War Heritage Tourism," *Tennessee's Business*, Middle Tennessee State University Business and Economic Research Center, Vol. 8, No. 1, 1997.

7. Ibid.

8. William Fox and Paula Dowell, "Economic Effects of the University of Tennessee, Knoxville Athletic Department," The University of Tennessee, Center for Business and Economic Research, September 1997.

9. U.S. Travel Data Center, *The Economic Impact of Travel on Tennessee Counties 1995*, (Travel Industry Association of America), November 1996.

10. Data for calculation obtained from the *1996/97 Tennessee Statistical Abstract*.

11. U.S. Travel Data Center, *Profiles of U.S. Travelers to Selected Tennessee Cities 1996*, (Travel Industry Association of America), October 1997.

12. M. R. Botkin, M. L. McGowan, and P. Thistlethwaite, "Economic Impacts and Effects of Types of Travel and Tourism Attractions in Rural Illinois," The Department of Recreation, Park and Tourism Administration, October 1990.

13. Caneta Skelley Hankins, "Agritourism: Profit and Preservation for Tennessee's Rural Landscape," *Tennessee Business*, MTSU Center for Business and Economic Research, Vol. 8, No. 1, 1997.

Appendix A: Forecast Data-Quarterly

Tennessee Econometric Model November 1997 Update

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*Key: SA=Seasonally Adjusted; NSA=Not Seasonally Adjusted
SAAR=Seasonally Adjusted at Annual Rates

TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 1: SELECTED U.S. AND TENNESSEE ECONOMIC INDICATORS
 SEASONALLY ADJUSTED

	HISTORY					FORECAST - DATA						ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
US GDP (BIL92\$) SAAR.....	7221.8	7279.6	7316.9	7350.0	7384.5	7421.9	7461.2	7514.1	7564.8	7613.9	7647.9	7190.6	7368.3	7538.5
% CHG PREV QTR SAAR.....	3.52	3.24	2.07	1.82	1.89	2.04	2.14	2.87	2.73	2.62	1.80	3.79	2.47	2.31
% CHG SAME QTR LAST YR.....	4.00	3.74	3.03	2.66	2.25	1.95	1.97	2.23	2.44	2.59	2.50	3.79	2.47	2.31
US GDP (BIL\$) SAAR.....	8131.7	8230.8	8324.1	8409.1	8501.5	8596.7	8694.8	8810.8	8927.9	9041.1	9136.8	8082.6	8457.9	8868.7
% CHG PREV QTR SAAR.....	4.94	4.96	4.61	4.15	4.47	4.56	4.64	5.44	5.43	5.17	4.30	5.85	4.64	4.86
% CHG SAME QTR LAST YR.....	5.94	5.62	4.92	4.67	4.55	4.45	4.45	4.78	5.02	5.17	5.08	5.85	4.64	4.86
IMPLICIT DEFLATOR,GDP.....	112.6	113.1	113.8	114.4	115.1	115.8	116.5	117.3	118.0	118.7	119.5	112.4	114.8	117.6
% CHG PREV QTR SAAR.....	1.36	1.68	2.50	2.27	2.54	2.45	2.44	2.53	2.62	2.46	2.48	1.99	2.12	2.49
% CHG SAME QTR LAST YR.....	1.86	1.82	1.84	1.95	2.25	2.44	2.43	2.49	2.51	2.51	2.52	1.99	2.12	2.49
US PERS CONS DEFL (1992=100)....	112.9	113.4	114.0	114.6	115.3	116.2	117.0	117.8	118.6	119.5	120.3	112.7	115.0	118.2
% CHG PREV QTR SAAR.....	1.43	1.75	2.21	2.05	2.64	2.98	2.75	2.94	2.81	2.93	2.74	2.06	2.02	2.79
% CHG SAME QTR LAST YR.....	1.89	1.59	1.60	1.86	2.16	2.47	2.61	2.83	2.87	2.86	2.86	2.06	2.02	2.79
TN PERSONAL INCOME (MIL92\$) SAAR	108254	108968	111632	112554	111421	112246	114418	115320	114335	115470	117866	108680	111963	114886
% CHG PREV QTR SAAR.....	-3.80	2.66	10.14	3.35	-3.97	3.00	7.96	3.19	-3.37	4.03	8.56	2.83	3.02	2.61
% CHG SAME QTR LAST YR.....	1.97	2.37	3.18	2.97	2.92	3.01	2.50	2.46	2.62	2.87	3.01	2.83	3.02	2.61
US PERSONAL INCOME (BIL92\$) SAAR	6120.8	6165.3	6216.6	6265.6	6296.9	6333.1	6379.2	6422.5	6464.4	6502.6	6544.6	6092.3	6278.0	6442.2
% CHG PREV QTR SAAR.....	3.33	2.94	3.37	3.19	2.01	2.32	2.94	2.74	2.64	2.39	2.60	3.62	3.05	2.61
% CHG SAME QTR LAST YR.....	3.67	3.97	3.40	3.21	2.88	2.72	2.62	2.50	2.66	2.68	2.59	3.62	3.05	2.61
TN PERSONAL INCOME (MIL\$) SAAR..	122208	123548	127261	128965	128501	130408	133834	135870	135647	137987	141805	122529	128784	135835
% CHG PREV QTR SAAR.....	-2.43	4.46	12.57	5.47	-1.43	6.07	10.93	6.23	-0.65	7.08	11.54	4.94	5.10	5.48
% CHG SAME QTR LAST YR.....	3.90	3.99	4.83	4.88	5.15	5.55	5.17	5.35	5.56	5.81	5.96	4.94	5.10	5.48
US PERSONAL INCOME (BIL\$) SAAR..	6909.8	6990.3	7086.9	7179.1	7262.2	7357.8	7461.7	7566.9	7669.4	7770.6	7873.8	6868.8	7221.5	7617.2
% CHG PREV QTR SAAR.....	4.81	4.74	5.65	5.30	4.71	5.37	5.77	5.76	5.53	5.39	5.41	5.75	5.13	5.48
% CHG SAME QTR LAST YR.....	5.62	5.62	5.05	5.13	5.10	5.26	5.29	5.40	5.61	5.61	5.52	5.75	5.13	5.48
TN NONAGRIC JOBS (THOUS).....	2553.1	2568.5	2583.2	2581.3	2585.7	2606.0	2618.2	2617.1	2620.0	2642.8	2657.9	2557.4	2589.0	2624.5
% CHG PREV QTR SAAR.....	0.08	2.44	2.30	-0.28	0.68	3.17	1.89	-0.17	0.45	3.52	2.31	0.87	1.24	1.37
% CHG SAME QTR LAST YR.....	0.77	0.73	1.08	1.13	1.28	1.46	1.36	1.38	1.33	1.41	1.52	0.87	1.24	1.37
US NONAGRIC JOBS (MIL).....	122.5	123.3	123.8	124.3	124.8	125.2	125.6	126.0	126.4	126.7	127.1	122.2	124.5	126.2
% CHG PREV QTR SAAR.....	2.28	2.37	1.83	1.69	1.46	1.32	1.19	1.28	1.28	1.18	1.14	2.24	1.91	1.30
% CHG SAME QTR LAST YR.....	2.20	2.33	2.21	2.04	1.84	1.57	1.41	1.31	1.27	1.23	1.22	2.24	1.91	1.30
TN UNEMPLOYMENT RATE (%).....	5.3	5.1	5.2	5.2	5.5	5.2	5.3	5.3	5.6	5.3	5.3	5.1	5.3	5.3
US UNEMPLOYMENT RATE (%).....	4.9	4.7	4.6	4.5	4.6	4.7	4.9	4.9	5.0	5.0	5.1	4.9	4.6	5.0
BANK PRIME INTEREST RATE (%)....	8.5	8.5	8.5	8.7	8.9	9.0	9.0	9.0	9.0	9.0	9.0	8.4	8.8	9.0
TN MFG JOBS (THOUS).....	512.8	513.3	516.1	515.3	513.6	514.5	517.6	516.8	516.2	516.0	519.4	515.3	514.9	516.6
% CHG PREV QTR SAAR.....	-2.38	0.37	2.22	-0.62	-1.30	0.68	2.40	-0.61	-0.46	-0.18	2.69	-1.35	-0.08	0.34
% CHG SAME QTR LAST YR.....	-1.48	-1.45	-0.60	-0.12	0.16	0.24	0.28	0.28	0.50	0.28	0.35	-1.35	-0.08	0.34

(Continued on next page)

TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 1: SELECTED U.S. AND TENNESSEE ECONOMIC INDICATORS
 SEASONALLY ADJUSTED

	HISTORY			FORECAST - DATA								ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
TN TAXABLE SALES (MIL92\$).....	15437	14423	14838	14975	15196	14947	15138	15284	15268	15341	15524	58510	59955	61031
% CHG PREV QTR SAAR.....	31.85	-23.79	12.01	3.74	6.03	-6.39	5.21	3.93	-0.43	1.94	4.86	6.57	2.47	1.79
% CHG SAME QTR LAST YR.....	12.96	3.74	4.17	3.95	-1.56	3.63	2.02	2.07	0.47	2.64	2.55	6.57	2.47	1.79
TN TAXABLE SALES (MIL\$).....	17427	16353	16915	17158	17525	17365	17707	18008	18114	18333	18677	65968	68964	72161
% CHG PREV QTR SAAR.....	33.73	-22.45	14.48	5.86	8.84	-3.60	8.10	6.98	2.37	4.93	7.74	8.76	4.54	4.64
% CHG SAME QTR LAST YR.....	15.09	5.38	5.83	5.88	0.56	6.19	4.68	4.95	3.36	5.57	5.48	8.76	4.54	4.64
TN AVG ANNUAL WAGE, NONAG (92\$)..	24250	24329	25030	25222	24650	24713	25289	25490	24922	25012	25544	24447	24904	25178
% CHG PREV QTR SAAR.....	-7.77	1.31	12.03	3.10	-8.76	1.03	9.66	3.21	-8.62	1.45	8.80	2.32	1.87	1.10
% CHG SAME QTR LAST YR.....	0.69	1.05	2.32	1.92	1.65	1.58	1.04	1.06	1.10	1.21	1.01	2.32	1.87	1.10
TN AVG ANNUAL WAGE, NONAG (\$)....	27376	27584	28534	28899	28429	28712	29581	30032	29567	29889	30733	27562	28644	29767
% CHG PREV QTR SAAR.....	-6.45	3.08	14.50	5.21	-6.35	4.04	12.67	6.24	-6.05	4.43	11.78	4.41	3.93	3.92
% CHG SAME QTR LAST YR.....	2.59	2.66	3.95	3.82	3.85	4.09	3.67	3.92	4.00	4.10	3.89	4.41	3.93	3.92

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 2: SELECTED PER CAPITA U.S. AND TENNESSEE ECONOMIC INDICATORS
 SEASONALLY ADJUSTED

	HISTORY					FORECAST - DATA						ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
US GDP (92\$) SAAR.....	26957	27113	27193	27257	27327	27406	27492	27628	27757	27878	27944	26871	27296	27689
% CHG PREV QTR SAAR.....	2.60	2.34	1.19	0.94	1.02	1.17	1.27	1.99	1.87	1.75	0.95	2.86	1.58	1.44
% CHG SAME QTR LAST YR.....	3.06	2.79	2.12	1.76	1.37	1.08	1.10	1.36	1.57	1.72	1.64	2.86	1.58	1.44
US GDP (\$) SAAR.....	30353	30656	30937	31185	31460	31745	32038	32396	32758	33103	33384	30203	31332	32574
% CHG PREV QTR SAAR.....	4.00	4.04	3.72	3.25	3.57	3.66	3.75	4.54	4.55	4.28	3.43	4.91	3.74	3.96
% CHG SAME QTR LAST YR.....	4.98	4.66	4.00	3.75	3.65	3.55	3.56	3.88	4.13	4.28	4.20	4.91	3.74	3.96
TN PERSONAL INCOME (92\$) SAAR...	20052	20131	20569	20688	20394	20491	20833	20944	20679	20833	21195	20172	20535	20822
% CHG PREV QTR SAAR.....	-5.37	1.59	9.00	2.33	-5.57	1.91	6.85	2.16	-4.98	3.01	7.15	1.61	1.80	1.40
% CHG SAME QTR LAST YR.....	0.76	1.15	1.96	1.76	1.71	1.79	1.28	1.24	1.40	1.67	1.74	1.61	1.80	1.40
TN PERSONAL INCOME (\$) SAAR.....	22636	22824	23449	23705	23520	23806	24368	24677	24533	24895	25500	22742	23620	24618
% CHG PREV QTR SAAR.....	-4.02	3.36	11.41	4.43	-3.08	4.95	9.78	5.17	-2.30	6.03	10.08	3.70	3.86	4.23
% CHG SAME QTR LAST YR.....	2.66	2.76	3.58	3.65	3.90	4.30	3.92	4.10	4.31	4.58	4.65	3.70	3.86	4.23
US PERSONAL INCOME (92\$) SAAR...	22847	22963	23104	23236	23302	23386	23506	23615	23719	23809	23912	22766	23257	23662
% CHG PREV QTR SAAR.....	2.41	2.04	2.48	2.30	1.14	1.44	2.07	1.87	1.78	1.52	1.75	2.70	2.16	1.74
% CHG SAME QTR LAST YR.....	2.73	3.02	2.49	2.31	1.99	1.84	1.74	1.63	1.79	1.81	1.73	2.70	2.16	1.74
US PERSONAL INCOME (\$) SAAR.....	25792	26035	26339	26624	26874	27169	27494	27823	28140	28451	28769	25668	26751	27977
% CHG PREV QTR SAAR.....	3.88	3.82	4.74	4.40	3.81	4.47	4.87	4.86	4.65	4.49	4.54	4.81	4.22	4.58
% CHG SAME QTR LAST YR.....	4.67	4.66	4.13	4.21	4.19	4.36	4.39	4.50	4.71	4.72	4.64	4.81	4.22	4.58
TN TAXABLE SALES (92\$).....	2859	2665	2734	2752	2781	2729	2756	2776	2761	2768	2792	10859	10996	11061
% CHG PREV QTR SAAR.....	29.69	-24.59	10.84	2.72	4.26	-7.37	4.12	2.89	-2.09	0.94	3.50	5.30	1.26	0.59
% CHG SAME QTR LAST YR.....	11.62	2.51	2.93	2.73	-2.73	2.40	0.81	0.85	-0.72	1.44	1.29	5.30	1.26	0.59
TN TAXABLE SALES (\$).....	3228	3021	3117	3154	3208	3170	3224	3271	3276	3308	3359	12243	12648	13078
% CHG PREV QTR SAAR.....	31.55	-23.27	13.29	4.82	7.02	-4.61	6.98	5.91	0.67	3.90	6.33	7.47	3.31	3.40
% CHG SAME QTR LAST YR.....	13.73	4.13	4.58	4.64	-0.63	4.93	3.44	3.70	2.13	4.34	4.18	7.47	3.31	3.40

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 3: TENNESSEE PERSONAL INCOME BY COMPONENTS
 SEASONALLY ADJUSTED ANNUAL RATES
 MILLIONS OF 1992 DOLLARS

	HISTORY			FORECAST - DATA								ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
TOTAL PERSONAL INCOME.....	108254	108968	111632	112554	111421	112246	114418	115320	114335	115470	117866	108680	111963	114886
% CHG PREV QTR SAAR.....	-3.80	2.66	10.14	3.35	-3.97	3.00	7.96	3.19	-3.37	4.03	8.56	2.83	3.02	2.61
% CHG SAME QTR LAST YR.....	1.97	2.37	3.18	2.97	2.92	3.01	2.50	2.46	2.62	2.87	3.01	2.83	3.02	2.61
WAGES AND SALARIES.....	62521	63106	65284	65741	64379	65049	66863	67366	65959	66771	68569	63134	65113	66740
% CHG PREV QTR SAAR.....	-7.67	3.79	14.53	2.83	-8.03	4.23	11.63	3.05	-8.10	5.02	11.22	3.01	3.14	2.50
% CHG SAME QTR LAST YR.....	1.27	1.69	3.42	3.07	2.97	3.08	2.42	2.47	2.45	2.65	2.55	3.01	3.14	2.50
OTHER LABOR INCOME.....	7137	7188	7413	7471	7331	7429	7659	7740	7625	7742	7994	7233	7411	7692
% CHG PREV QTR SAAR.....	-9.87	2.86	13.16	3.16	-7.33	5.47	12.97	4.32	-5.81	6.28	13.69	-0.64	2.46	3.79
% CHG SAME QTR LAST YR.....	-2.21	-0.81	1.81	2.00	2.71	3.35	3.31	3.60	4.02	4.22	4.38	-0.64	2.46	3.79
PROPRIETORS INCOME.....	9467	9489	9466	9679	9697	9707	9731	9758	9776	9788	9996	9434	9637	9763
% CHG PREV QTR SAAR.....	0.03	0.94	-0.99	9.34	0.71	0.42	0.99	1.14	0.72	0.52	8.76	2.43	2.15	1.31
% CHG SAME QTR LAST YR.....	2.96	3.27	1.64	2.25	2.42	2.29	2.80	0.81	0.82	0.84	2.73	2.43	2.15	1.31
RENT INTEREST DIVIDENDS.....	15658	15759	15922	16042	16201	16210	16143	16317	16515	16629	16606	15556	16094	16401
% CHG PREV QTR SAAR.....	4.46	2.61	4.19	3.04	4.03	0.22	-1.65	4.40	4.93	2.79	-0.55	4.02	3.45	1.91
% CHG SAME QTR LAST YR.....	4.17	4.55	3.93	3.57	3.47	2.86	1.39	1.72	1.94	2.58	2.87	4.02	3.45	1.91
TRANSFER PAYMENTS.....	19586	19600	19883	20011	20110	20210	20541	20708	20925	21088	21415	19496	20054	20816
% CHG PREV QTR SAAR.....	2.25	0.29	5.90	2.60	1.98	2.02	6.71	3.30	4.25	3.16	6.35	2.86	2.86	3.80
% CHG SAME QTR LAST YR.....	3.43	3.53	2.91	2.74	2.67	3.11	3.31	3.48	4.05	4.34	4.26	2.86	2.86	3.80
LESS:PERS CONT FOR SOC INS.....	5105	5160	5302	5351	5269	5324	5467	5513	5419	5494	5640	5160	5312	5473
% CHG PREV QTR SAAR.....	-7.51	4.36	11.45	3.76	-5.99	4.27	11.13	3.43	-6.64	5.68	11.04	2.44	2.93	3.05
% CHG SAME QTR LAST YR.....	0.76	1.68	2.55	2.79	3.21	3.19	3.11	3.03	2.85	3.19	3.17	2.44	2.93	3.05
RESIDENCE ADJUSTMENT.....	-1011	-1015	-1035	-1039	-1027	-1034	-1052	-1057	-1045	-1054	-1075	-1013	-1034	-1052
% CHG PREV QTR SAAR.....	-5.34	1.73	7.80	1.66	-4.46	2.61	7.18	1.98	-4.40	3.58	7.94	5.33	1.98	1.79
% CHG SAME QTR LAST YR.....	3.92	4.25	3.19	1.35	1.59	1.81	1.67	1.74	1.76	2.00	2.18	5.33	1.98	1.79
PER CAPITA PERSONAL INCOME (\$)...	20052	20131	20569	20688	20394	20491	20833	20944	20679	20833	21195	20172	20535	20822
% CHG PREV QTR SAAR.....	-5.37	1.59	9.00	2.33	-5.57	1.91	6.85	2.16	-4.98	3.01	7.15	1.61	1.80	1.40
% CHG SAME QTR LAST YR.....	0.76	1.15	1.96	1.76	1.71	1.79	1.28	1.24	1.40	1.67	1.74	1.61	1.80	1.40

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 4: TENNESSEE PERSONAL INCOME BY COMPONENTS
 SEASONALLY ADJUSTED ANNUAL RATES
 MILLIONS OF CURRENT DOLLARS

	HISTORY			FORECAST - DATA							ANNUAL			
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
TOTAL PERSONAL INCOME.....	122208	123548	127261	128965	128501	130408	133834	135870	135647	137987	141805	122529	128784	135835
% CHG PREV QTR SAAR.....	-2.43	4.46	12.57	5.47	-1.43	6.07	10.93	6.23	-0.65	7.08	11.54	4.94	5.10	5.48
% CHG SAME QTR LAST YR.....	3.90	3.99	4.83	4.88	5.15	5.55	5.17	5.35	5.56	5.81	5.96	4.94	5.10	5.48
WAGES AND SALARIES.....	70581	71550	74424	75326	74248	75573	78209	79371	78254	79792	82496	71178	74893	78906
% CHG PREV QTR SAAR.....	-6.35	5.61	17.06	4.94	-5.60	7.33	14.70	6.07	-5.51	8.09	14.26	5.12	5.22	5.36
% CHG SAME QTR LAST YR.....	3.18	3.31	5.07	4.99	5.20	5.62	5.09	5.37	5.39	5.58	5.48	5.12	5.22	5.36
OTHER LABOR INCOME.....	8057	8150	8451	8561	8454	8631	8959	9119	9046	9252	9618	8154	8524	9094
% CHG PREV QTR SAAR.....	-8.58	4.66	15.65	5.28	-4.88	8.61	16.08	7.38	-3.16	9.40	16.80	1.41	4.53	6.68
% CHG SAME QTR LAST YR.....	-0.37	0.76	3.43	3.89	4.93	5.90	6.00	6.53	7.00	7.20	7.36	1.41	4.53	6.68
PROPRIETORS INCOME.....	10688	10759	10791	11091	11183	11277	11382	11497	11598	11697	12026	10636	11085	11544
% CHG PREV QTR SAAR.....	1.46	2.70	1.19	11.58	3.37	3.41	3.76	4.12	3.56	3.46	11.74	4.54	4.22	4.13
% CHG SAME QTR LAST YR.....	4.91	4.91	3.26	4.15	4.63	4.82	5.48	3.66	3.71	3.72	5.66	4.54	4.22	4.13
RENT INTEREST DIVIDENDS.....	17677	17868	18151	18381	18685	18833	18882	19225	19593	19871	19979	17539	18512	19393
% CHG PREV QTR SAAR.....	5.95	4.40	6.49	5.15	6.78	3.21	1.05	7.47	7.88	5.81	2.17	6.15	5.55	4.76
% CHG SAME QTR LAST YR.....	6.13	6.21	5.59	5.50	5.70	5.40	4.03	4.60	4.86	5.51	5.81	6.15	5.55	4.76
TRANSFER PAYMENTS.....	22111	22223	22667	22929	23192	23480	24027	24399	24825	25201	25765	21981	23067	24613
% CHG PREV QTR SAAR.....	3.72	2.04	8.24	4.70	4.68	5.06	9.64	6.33	7.18	6.19	9.26	4.98	4.94	6.70
% CHG SAME QTR LAST YR.....	5.38	5.17	4.55	4.65	4.89	5.66	6.00	6.41	7.04	7.33	7.23	4.98	4.94	6.70
LESS:PERS CONT FOR SOC INS.....	5763	5850	6044	6131	6077	6186	6394	6495	6429	6566	6786	5818	6109	6471
% CHG PREV QTR SAAR.....	-6.18	6.18	13.91	5.89	-3.51	7.38	14.18	6.47	-4.01	8.78	14.08	4.54	5.01	5.92
% CHG SAME QTR LAST YR.....	2.66	3.29	4.19	4.70	5.44	5.73	5.80	5.94	5.80	6.14	6.12	4.54	5.01	5.92
RESIDENCE ADJUSTMENT.....	-1141	-1151	-1179	-1190	-1185	-1201	-1230	-1245	-1240	-1260	-1293	-1143	-1189	-1244
% CHG PREV QTR SAAR.....	-3.98	3.50	10.17	3.75	-1.93	5.67	10.13	4.98	-1.71	6.62	10.89	7.49	4.04	4.63
% CHG SAME QTR LAST YR.....	5.88	5.91	4.84	3.24	3.79	4.32	4.31	4.62	4.68	4.92	5.10	7.49	4.04	4.63
PER CAPITA PERSONAL INCOME (\$)...	22636	22824	23449	23705	23520	23806	24368	24677	24533	24895	25500	22742	23620	24618
% CHG PREV QTR SAAR.....	-4.02	3.36	11.41	4.43	-3.08	4.95	9.78	5.17	-2.30	6.03	10.08	3.70	3.86	4.23
% CHG SAME QTR LAST YR.....	2.66	2.76	3.58	3.65	3.90	4.30	3.92	4.10	4.31	4.58	4.65	3.70	3.86	4.23

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 5: TENNESSEE NONAGRICULTURAL EMPLOYMENT BY SECTOR
 THOUSANDS OF JOBS

	HISTORY		FORECAST - DATA									ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
TOTAL NONAGRICULTURAL.....	2555.9	2590.9	2554.3	2587.0	2587.0	2628.8	2588.7	2622.8	2621.4	2665.9	2627.7	2557.8	2589.3	2624.7
% CHG SAME QTR LAST YR....	0.76	0.76	1.07	1.16	1.21	1.46	1.35	1.39	1.33	1.41	1.51	0.93	1.23	1.37
MINING.....	4.7	4.6	4.5	4.7	4.7	4.6	4.5	4.7	4.6	4.6	4.5	4.6	4.6	4.6
% CHG SAME QTR LAST YR....	0.00	1.86	1.60	2.15	-0.91	-0.70	-0.54	-0.44	-0.40	-0.42	-0.46	0.09	0.52	-0.45
CONSTRUCTION.....	122.9	120.7	113.1	123.6	127.5	126.3	116.8	129.2	131.9	131.9	123.7	117.7	122.6	127.4
% CHG SAME QTR LAST YR....	5.19	4.35	3.86	4.48	3.77	4.61	3.23	4.56	3.42	4.46	5.95	4.39	4.18	3.93
MANUFACTURING.....	512.0	513.9	515.0	516.6	512.9	515.1	516.4	518.1	515.4	516.5	518.3	515.3	514.9	516.6
% CHG SAME QTR LAST YR....	-1.49	-1.47	-0.65	-0.10	0.18	0.23	0.29	0.28	0.49	0.28	0.36	-1.31	-0.08	0.34
DURABLE GOODS.....	282.4	286.5	288.3	288.2	285.8	290.2	293.1	292.4	291.0	294.9	297.9	285.7	288.1	292.8
% CHG SAME QTR LAST YR....	-0.84	-0.46	0.26	0.66	1.23	1.29	1.67	1.46	1.81	1.59	1.64	-0.22	0.86	1.63
NONDURABLE GOODS.....	229.6	227.3	226.7	228.4	227.1	224.8	223.3	225.7	224.4	221.6	220.4	229.6	226.7	223.8
% CHG SAME QTR LAST YR....	-2.28	-2.71	-1.78	-1.04	-1.11	-1.10	-1.46	-1.20	-1.16	-1.42	-1.32	-2.63	-1.26	-1.31
TRADE.....	608.7	615.8	600.5	610.8	617.8	628.0	611.7	618.6	625.9	636.6	621.5	604.9	614.3	623.2
% CHG SAME QTR LAST YR....	1.44	0.39	1.30	1.44	1.50	1.98	1.87	1.27	1.31	1.36	1.60	1.44	1.56	1.45
SERVICES.....	675.2	678.1	666.2	680.2	687.5	690.6	678.7	693.0	700.5	703.8	691.3	669.0	681.1	694.0
% CHG SAME QTR LAST YR....	1.55	2.21	1.79	1.81	1.81	1.84	1.87	1.88	1.90	1.91	1.86	2.05	1.81	1.89
FIN,INS,REAL EST.....	120.6	120.8	120.6	122.4	123.5	123.1	123.3	125.1	126.2	126.2	126.0	120.0	122.4	125.2
% CHG SAME QTR LAST YR....	1.69	1.90	1.69	2.08	2.43	1.90	2.23	2.28	2.19	2.49	2.20	2.34	2.03	2.30
TRANS,COMM,PUB UTIL.....	140.8	144.4	142.8	142.7	141.9	145.6	144.7	144.5	142.3	147.4	145.8	142.2	143.3	144.7
% CHG SAME QTR LAST YR....	-1.84	0.36	0.92	0.50	0.79	0.89	1.34	1.23	0.31	1.23	0.70	-0.45	0.78	1.03
GOVERNMENT.....	371.2	392.7	391.5	385.9	371.3	395.5	392.6	389.6	374.5	399.0	396.6	384.3	386.1	388.9
% CHG SAME QTR LAST YR....	0.71	0.61	0.89	0.20	0.03	0.73	0.26	0.95	0.88	0.88	1.04	0.31	0.47	0.74
FEDERAL,CIVILIAN.....	52.7	52.2	53.2	53.2	52.2	51.4	52.9	52.9	51.7	51.2	52.6	53.0	52.5	52.2
% CHG SAME QTR LAST YR....	-2.17	-1.51	-0.59	-0.61	-1.01	-1.59	-0.62	-0.55	-0.89	-0.33	-0.61	-2.02	-0.95	-0.60
STATE AND LOCAL.....	318.5	340.4	338.3	332.7	319.1	344.1	339.6	336.7	322.8	347.8	344.0	331.3	333.6	336.7
% CHG SAME QTR LAST YR....	1.21	0.94	1.13	0.33	0.20	1.09	0.40	1.18	1.17	1.06	1.29	0.70	0.70	0.95

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 6: TENNESSEE DURABLE GOODS MANUFACTURING EMPLOYMENT
 THOUSANDS OF JOBS

	HISTORY					FORECAST - DATA						ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
TOTAL DURABLE GOODS.....	282.4	286.5	288.3	288.2	285.8	290.2	293.1	292.4	291.0	294.9	297.9	285.7	288.1	292.8
% CHG SAME QTR LAST YR.....	-0.84	-0.46	0.26	0.66	1.23	1.29	1.67	1.46	1.81	1.59	1.64	-0.22	0.86	1.63
LUMBER AND WOOD.....	21.9	21.7	21.5	22.0	22.0	21.8	21.6	22.0	22.0	21.9	21.7	21.7	21.8	21.9
% CHG SAME QTR LAST YR.....	-0.91	-0.70	0.88	1.17	0.46	0.36	0.35	0.34	0.34	0.34	0.34	-0.90	0.72	0.35
FURNITURE AND FIXTURES.....	26.6	27.5	27.6	27.7	26.6	27.4	27.6	27.6	26.7	27.5	27.7	27.5	27.3	27.3
% CHG SAME QTR LAST YR.....	-5.34	-3.66	-1.61	-0.22	0.11	-0.18	-0.01	-0.36	0.33	0.25	0.28	-4.14	-0.49	0.05
STONE, CLAY AND GLASS.....	16.4	16.5	16.4	16.6	16.6	16.7	16.5	16.7	16.8	16.9	16.7	16.4	16.6	16.7
% CHG SAME QTR LAST YR.....	0.00	0.85	0.54	1.11	1.15	0.80	0.62	0.68	0.99	1.30	1.40	-0.19	0.90	0.90
PRIMARY METALS.....	16.3	16.6	16.6	16.5	16.5	16.7	16.8	16.7	16.6	17.1	17.0	16.5	16.6	16.8
% CHG SAME QTR LAST YR.....	1.03	0.08	0.64	0.70	1.14	0.48	0.85	1.35	0.71	1.95	1.31	0.07	0.74	1.22
FABRICATED METALS.....	42.5	43.7	43.9	43.0	42.2	43.6	44.7	43.8	43.0	44.3	45.6	43.3	43.2	43.9
% CHG SAME QTR LAST YR.....	-2.30	-1.32	0.33	-0.60	-0.66	-0.17	1.84	1.67	1.93	1.52	2.06	-1.15	-0.27	1.74
NONELECTRICAL MACHINERY.....	42.9	44.0	46.1	45.9	44.2	44.9	47.1	46.8	45.2	45.9	47.4	44.3	45.3	46.3
% CHG SAME QTR LAST YR.....	-0.08	1.09	1.35	2.75	3.09	1.85	2.04	2.02	2.30	2.34	0.74	1.03	2.25	2.17
ELECTRICAL MACHINERY.....	39.9	40.3	39.7	39.8	40.6	41.4	40.6	40.8	42.2	42.2	41.0	40.3	40.4	41.5
% CHG SAME QTR LAST YR.....	-2.60	-3.33	-2.42	-1.13	1.72	2.68	2.23	2.57	3.79	1.99	0.86	-0.89	0.20	2.65
TRANSPORTATION EQUIPMENT.....	53.6	53.7	54.1	54.4	54.6	54.8	55.5	55.2	55.3	55.7	57.3	53.5	54.5	55.4
% CHG SAME QTR LAST YR.....	2.23	1.91	2.05	1.70	1.86	2.02	2.59	1.46	1.34	1.66	3.18	2.19	1.91	1.76
INSTRUMENTS.....	11.1	11.1	11.4	11.5	11.6	11.7	11.7	11.7	11.9	11.8	12.0	11.1	11.5	11.8
% CHG SAME QTR LAST YR.....	4.73	4.11	3.15	3.28	4.74	4.75	2.48	2.48	2.48	1.35	2.47	4.58	3.98	2.19
MISCELLANEOUS.....	11.2	11.2	11.0	10.9	10.9	11.2	11.2	11.0	11.2	11.6	11.7	11.3	11.0	11.2
% CHG SAME QTR LAST YR.....	-3.72	-2.03	-3.34	-3.44	-2.64	0.21	1.54	1.25	3.02	3.00	4.76	-3.70	-2.31	2.21

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 7: TENNESSEE NONDURABLE GOODS MANUFACTURING EMPLOYMENT
 THOUSANDS OF JOBS

	HISTORY		FORECAST - DATA									ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
TOTAL NONDURABLE GOODS.....	229.6	227.3	226.7	228.4	227.1	224.8	223.3	225.7	224.4	221.6	220.4	229.6	226.7	223.8
% CHG SAME QTR LAST YR.....	-2.28	-2.71	-1.78	-1.04	-1.11	-1.10	-1.46	-1.20	-1.16	-1.42	-1.32	-2.63	-1.26	-1.31
FOOD.....	36.2	34.9	34.9	35.6	36.3	34.8	34.9	35.4	35.7	34.3	34.4	35.4	35.4	35.1
% CHG SAME QTR LAST YR.....	1.97	-0.85	-0.09	-0.03	0.31	-0.34	0.17	-0.44	-1.59	-1.41	-1.51	-0.40	-0.03	-0.82
TOBACCO.....	1.1	1.2	1.3	1.1	1.1	1.2	1.3	1.1	1.1	1.2	1.3	1.2	1.2	1.2
% CHG SAME QTR LAST YR.....	0.00	2.81	1.92	0.60	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.72	0.00
TEXTILES.....	18.6	18.3	18.4	18.5	18.3	18.0	18.0	18.2	17.8	17.7	17.7	18.7	18.3	17.9
% CHG SAME QTR LAST YR.....	-3.29	-4.07	-3.54	-2.10	-1.64	-1.83	-2.10	-1.90	-2.93	-1.77	-1.73	-3.03	-2.29	-2.17
APPAREL.....	38.8	38.6	37.9	38.4	36.8	36.6	36.0	36.3	35.0	34.8	34.2	39.6	37.4	35.5
% CHG SAME QTR LAST YR.....	-7.55	-7.62	-6.67	-5.00	-5.03	-5.05	-5.04	-5.32	-5.13	-4.90	-5.00	-7.85	-5.45	-5.10
PAPER.....	21.6	21.1	20.6	21.0	21.3	20.7	20.3	20.6	21.3	20.4	20.0	21.3	20.9	20.6
% CHG SAME QTR LAST YR.....	-1.52	-2.63	-2.54	-1.52	-1.34	-1.78	-1.78	-1.80	-0.12	-1.57	-1.09	-1.01	-1.80	-1.31
PRINTING AND PUBLISHING.....	39.4	39.3	38.8	38.9	39.4	39.4	38.3	39.0	39.6	39.1	38.6	39.1	39.1	39.0
% CHG SAME QTR LAST YR.....	0.60	0.31	-0.09	-0.46	-0.08	0.12	-1.28	0.33	0.55	-0.59	0.83	0.27	-0.13	-0.24
CHEMICALS.....	36.4	36.5	36.7	36.6	35.9	36.3	36.1	36.2	35.7	36.0	36.1	36.6	36.4	36.0
% CHG SAME QTR LAST YR.....	-2.41	-2.13	-0.76	0.09	-1.34	-0.37	-1.46	-1.07	-0.78	-1.01	-0.18	-2.46	-0.59	-1.08
PETROLEUM REFINING.....	1.2	1.1	1.1	1.1	1.1	1.1	1.0	1.1	1.0	1.0	1.0	1.1	1.1	1.0
% CHG SAME QTR LAST YR.....	6.06	1.46	-2.54	-7.25	-6.18	-5.38	-4.99	-4.78	-4.63	-4.44	-4.05	8.25	-5.39	-4.71
RUBBER AND PLASTICS.....	32.3	32.4	33.2	33.3	33.0	33.0	33.9	34.0	33.6	33.6	33.8	32.5	33.1	33.8
% CHG SAME QTR LAST YR.....	-2.61	-1.85	1.65	2.74	2.09	1.93	1.90	2.16	2.02	1.66	-0.34	-2.39	2.10	1.94
LEATHER.....	4.1	4.0	3.8	3.9	3.9	3.8	3.5	3.6	3.7	3.6	3.4	4.1	3.8	3.6
% CHG SAME QTR LAST YR.....	-10.29	-6.55	-8.97	-7.31	-5.01	-4.89	-6.69	-5.67	-4.34	-4.45	-5.10	-8.45	-6.57	-5.29

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 8: TENNESSEE NONAGRICULTURAL EMPLOYMENT BY SECTOR
 THOUSANDS OF SEASONALLY ADJUSTED JOBS

	HISTORY					FORECAST - DATA						ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
TOTAL NONAGRICULTURAL.....	2553.1	2568.5	2583.2	2581.3	2585.7	2606.0	2618.2	2617.1	2620.0	2642.8	2657.9	2557.4	2589.0	2624.5
% CHG PREV QTR SAAR.....	0.08	2.44	2.30	-0.28	0.68	3.17	1.89	-0.17	0.45	3.52	2.31	0.87	1.24	1.37
% CHG SAME QTR LAST YR....	0.77	0.73	1.08	1.13	1.28	1.46	1.36	1.38	1.33	1.41	1.52	0.87	1.24	1.37
MINING.....	4.7	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
% CHG PREV QTR SAAR.....	12.29	-1.30	-1.01	-0.77	-0.57	-0.44	-0.37	-0.38	-0.42	-0.49	-0.55	-0.44	0.52	-0.45
% CHG SAME QTR LAST YR....	0.00	1.86	1.60	2.15	-0.91	-0.70	-0.54	-0.44	-0.40	-0.42	-0.46	-0.44	0.52	-0.45
CONSTRUCTION.....	119.2	119.6	119.6	122.0	123.7	125.1	123.4	127.6	128.0	130.7	130.8	117.7	122.6	127.4
% CHG PREV QTR SAAR.....	8.72	1.17	-0.01	8.33	5.80	4.49	-5.19	14.06	1.24	8.77	0.34	4.16	4.18	3.92
% CHG SAME QTR LAST YR....	5.36	4.35	3.86	4.48	3.77	4.61	3.23	4.56	3.42	4.46	5.95	4.16	4.18	3.92
MANUFACTURING.....	512.8	513.3	516.1	515.3	513.6	514.5	517.6	516.8	516.2	516.0	519.4	515.3	514.9	516.6
% CHG PREV QTR SAAR.....	-2.38	0.37	2.22	-0.62	-1.30	0.68	2.40	-0.61	-0.46	-0.18	2.69	-1.35	-0.08	0.34
% CHG SAME QTR LAST YR....	-1.48	-1.45	-0.60	-0.12	0.16	0.24	0.28	0.28	0.50	0.28	0.35	-1.35	-0.08	0.34
DURABLE GOODS.....	283.7	286.1	288.0	287.2	287.6	289.8	292.8	291.4	292.8	294.5	297.6	285.6	288.1	292.8
% CHG PREV QTR SAAR.....	-1.72	3.43	2.57	-1.08	0.60	3.13	4.09	-1.87	1.97	2.29	4.28	-0.31	0.91	1.63
% CHG SAME QTR LAST YR....	-0.84	-0.65	0.21	0.78	1.37	1.29	1.67	1.46	1.80	1.60	1.64	-0.31	0.91	1.63
NONDURABLE GOODS.....	229.1	227.2	228.2	228.1	226.0	224.7	224.8	225.4	223.4	221.5	221.8	229.8	226.8	223.8
% CHG PREV QTR SAAR.....	-3.19	-3.34	1.78	-0.04	-3.65	-2.38	0.25	1.07	-3.53	-3.35	0.62	-2.62	-1.32	-1.31
% CHG SAME QTR LAST YR....	-2.26	-2.45	-1.61	-1.22	-1.34	-1.09	-1.47	-1.20	-1.17	-1.41	-1.32	-2.62	-1.32	-1.31
TRADE.....	604.9	604.8	613.1	613.1	614.0	616.8	624.5	621.0	622.0	625.2	634.5	604.8	614.2	623.2
% CHG PREV QTR SAAR.....	0.29	-0.04	5.54	0.06	0.54	1.86	5.11	-2.27	0.68	2.07	6.08	1.49	1.55	1.45
% CHG SAME QTR LAST YR....	1.45	0.39	1.30	1.44	1.50	1.98	1.87	1.27	1.31	1.36	1.60	1.49	1.55	1.45
SERVICES.....	668.6	676.9	677.7	676.2	680.7	689.4	690.3	688.9	693.7	702.6	703.1	668.8	681.0	693.9
% CHG PREV QTR SAAR.....	2.72	5.07	0.43	-0.88	2.73	5.18	0.54	-0.82	2.82	5.21	0.32	1.95	1.81	1.89
% CHG SAME QTR LAST YR....	1.56	2.21	1.79	1.81	1.81	1.84	1.87	1.88	1.90	1.91	1.86	1.95	1.81	1.89
FIN, INS, REAL EST.....	119.9	120.8	121.4	122.1	122.8	123.1	124.1	124.9	125.5	126.2	126.9	119.9	122.4	125.2
% CHG PREV QTR SAAR.....	0.89	3.23	2.00	2.21	2.29	1.11	3.33	2.39	1.93	2.30	2.18	2.27	2.03	2.30
% CHG SAME QTR LAST YR....	1.70	1.90	1.69	2.08	2.43	1.90	2.23	2.28	2.19	2.49	2.20	2.27	2.03	2.30
TRANS, COMM, PUB UTIL.....	140.0	143.4	144.3	142.9	141.1	144.7	146.2	144.7	141.6	146.5	147.2	142.2	143.3	144.7
% CHG PREV QTR SAAR.....	-6.13	10.12	2.43	-3.63	-5.05	10.57	4.24	-4.04	-8.43	14.65	2.07	-0.57	0.78	1.03
% CHG SAME QTR LAST YR....	-1.82	0.36	0.92	0.50	0.79	0.89	1.34	1.23	0.31	1.23	0.70	-0.57	0.78	1.03
GOVERNMENT.....	383.0	385.0	386.4	385.0	385.1	387.7	387.4	388.7	388.5	391.1	391.4	384.0	386.1	388.9
% CHG PREV QTR SAAR.....	-1.96	2.11	1.49	-1.39	0.07	2.75	-0.36	1.35	-0.17	2.69	0.28	0.25	0.53	0.74
% CHG SAME QTR LAST YR....	0.75	0.36	0.79	0.05	0.56	0.72	0.26	0.95	0.89	0.87	1.03	0.25	0.53	0.74
FEDERAL, CIVILIAN.....	52.7	53.0	53.1	52.5	52.2	52.2	52.7	52.2	51.8	52.0	52.4	53.0	52.5	52.2
% CHG PREV QTR SAAR.....	-0.62	2.26	0.19	-4.21	-2.07	-0.22	4.20	-3.93	-3.42	2.06	3.05	-2.02	-0.96	-0.60
% CHG SAME QTR LAST YR....	-2.12	-1.47	-0.63	-0.62	-0.99	-1.59	-0.62	-0.55	-0.89	-0.33	-0.61	-2.02	-0.96	-0.60
STATE AND LOCAL.....	332.1	331.9	333.3	332.5	332.9	335.5	334.7	336.5	336.8	339.1	339.0	331.3	333.6	336.7
% CHG PREV QTR SAAR.....	0.88	-0.26	1.70	-0.94	0.42	3.22	-1.05	2.20	0.34	2.79	-0.14	0.70	0.69	0.95
% CHG SAME QTR LAST YR....	1.25	0.93	1.10	0.34	0.22	1.09	0.40	1.18	1.17	1.06	1.29	0.70	0.69	0.95
STATISTICAL DISCREPANCY.....	-1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.0	0.0

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 TABLE 9: TENNESSEE DURABLE GOODS MANUFACTURING EMPLOYMENT
 THOUSANDS OF SEASONALLY ADJUSTED JOBS

	HISTORY					FORECAST - DATA						ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
TOTAL DURABLE GOODS.....	283.7	286.1	288.0	287.2	287.6	289.8	292.8	291.4	292.8	294.5	297.6	285.6	288.1	292.8
% CHG PREV QTR SAAR.....	-1.72	3.43	2.57	-1.08	0.60	3.13	4.09	-1.87	1.97	2.29	4.28	-0.31	0.91	1.63
% CHG SAME QTR LAST YR.....	-0.84	-0.65	0.21	0.78	1.37	1.29	1.67	1.46	1.80	1.60	1.64	-0.31	0.91	1.63
LUMBER AND WOOD.....	21.7	21.8	21.8	21.8	21.8	21.8	21.9	21.9	21.9	21.9	21.9	21.7	21.8	21.9
% CHG PREV QTR SAAR.....	3.18	0.81	0.41	0.35	0.35	0.34	0.34	0.34	0.34	0.34	0.34	-0.90	0.72	0.35
% CHG SAME QTR LAST YR.....	-0.87	-0.75	0.88	1.18	0.48	0.36	0.35	0.34	0.34	0.34	0.34	-0.90	0.72	0.35
FURNITURE AND FIXTURES.....	27.1	27.3	27.5	27.4	27.2	27.3	27.5	27.3	27.3	27.3	27.5	27.5	27.3	27.3
% CHG PREV QTR SAAR.....	-4.40	2.60	2.31	-1.23	-2.98	1.25	3.01	-2.60	-0.26	0.92	3.14	-4.15	-0.48	0.05
% CHG SAME QTR LAST YR.....	-5.27	-3.66	-1.65	-0.22	0.15	-0.18	-0.01	-0.36	0.33	0.25	0.28	-4.15	-0.48	0.05
STONE, CLAY AND GLASS.....	16.4	16.5	16.5	16.6	16.6	16.6	16.6	16.7	16.7	16.8	16.9	16.4	16.6	16.7
% CHG PREV QTR SAAR.....	0.59	1.91	1.28	0.95	0.45	0.51	0.56	1.21	1.66	1.76	0.96	-0.21	0.90	0.90
% CHG SAME QTR LAST YR.....	-0.02	0.82	0.48	1.18	1.15	0.80	0.62	0.68	0.99	1.30	1.40	-0.21	0.90	0.90
PRIMARY METALS.....	16.5	16.5	16.6	16.5	16.6	16.6	16.7	16.7	16.8	16.9	17.0	16.5	16.6	16.8
% CHG PREV QTR SAAR.....	2.09	1.70	2.07	-3.00	4.00	-1.00	3.56	-1.06	1.40	3.99	0.96	0.08	0.74	1.21
% CHG SAME QTR LAST YR.....	1.07	0.07	0.63	0.69	1.16	0.48	0.85	1.35	0.71	1.95	1.31	0.08	0.74	1.21
FABRICATED METALS.....	42.7	43.4	43.9	43.1	42.5	43.3	44.7	43.8	43.3	44.0	45.6	43.3	43.2	43.9
% CHG PREV QTR SAAR.....	-5.68	6.31	4.63	-6.98	-5.73	8.28	13.30	-7.60	-4.77	6.54	15.74	-1.15	-0.27	1.74
% CHG SAME QTR LAST YR.....	-2.22	-1.35	0.32	-0.61	-0.62	-0.17	1.84	1.67	1.93	1.52	2.06	-1.15	-0.27	1.74
NONELECTRICAL MACHINERY.....	44.0	44.7	45.2	45.1	45.3	45.5	46.1	46.0	46.3	46.6	46.5	44.3	45.3	46.3
% CHG PREV QTR SAAR.....	0.65	6.68	4.84	-0.86	1.71	1.80	5.63	-0.94	2.81	1.99	-0.82	1.02	2.25	2.18
% CHG SAME QTR LAST YR.....	-0.16	1.10	1.34	2.78	3.05	1.85	2.04	2.02	2.30	2.34	0.74	1.02	2.25	2.18
ELECTRICAL MACHINERY.....	39.8	39.8	39.9	40.2	40.5	40.9	40.8	41.2	42.1	41.7	41.2	40.3	40.4	41.5
% CHG PREV QTR SAAR.....	-7.99	-0.27	1.53	2.57	3.12	3.49	-0.21	3.95	8.11	-3.51	-4.58	-0.88	0.19	2.65
% CHG SAME QTR LAST YR.....	-2.57	-3.36	-2.42	-1.13	1.73	2.68	2.23	2.57	3.79	1.99	0.86	-0.88	0.19	2.65
TRANSPORTATION EQUIPMENT.....	53.6	53.8	54.2	54.2	54.6	54.9	55.6	55.0	55.3	55.8	57.3	53.5	54.5	55.4
% CHG PREV QTR SAAR.....	2.58	1.63	2.59	0.11	3.14	2.24	4.94	-4.23	2.64	3.52	11.38	2.18	1.90	1.76
% CHG SAME QTR LAST YR.....	2.22	1.92	2.01	1.72	1.86	2.02	2.59	1.46	1.34	1.66	3.18	2.18	1.90	1.76
INSTRUMENTS.....	11.1	11.2	11.4	11.5	11.6	11.7	11.7	11.8	11.9	11.8	11.9	11.1	11.5	11.8
% CHG PREV QTR SAAR.....	-1.98	3.58	8.24	3.61	3.61	3.61	-0.83	3.61	3.61	-0.88	3.61	4.57	3.98	2.19
% CHG SAME QTR LAST YR.....	4.74	4.10	3.12	3.30	4.74	4.75	2.48	2.48	2.48	1.35	2.47	4.57	3.98	2.19
MISCELLANEOUS.....	11.2	11.2	11.0	10.9	10.9	11.3	11.2	11.0	11.2	11.6	11.7	11.3	11.0	11.3
% CHG PREV QTR SAAR.....	-1.98	0.63	-8.20	-4.06	1.52	12.77	-3.23	-5.13	8.79	12.71	3.55	-3.70	-2.31	2.21
% CHG SAME QTR LAST YR.....	-3.66	-2.02	-3.36	-3.46	-2.61	0.21	1.54	1.25	3.02	3.00	4.76	-3.70	-2.31	2.21
STATISTICAL DISCREPANCY.....	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0

TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 10: TENNESSEE NONDURABLE GOODS MANUFACTURING EMPLOYMENT
 THOUSANDS OF SEASONALLY ADJUSTED JOBS

	HISTORY					FORECAST - DATA						ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
TOTAL NONDURABLE GOODS.....	229.1	227.2	228.2	228.1	226.0	224.7	224.8	225.4	223.4	221.5	221.8	229.8	226.8	223.8
% CHG PREV QTR SAAR.....	-3.19	-3.34	1.78	-0.04	-3.65	-2.38	0.25	1.07	-3.53	-3.35	0.62	-2.62	-1.32	-1.31
% CHG SAME QTR LAST YR.....	-2.26	-2.45	-1.61	-1.22	-1.34	-1.09	-1.47	-1.20	-1.17	-1.41	-1.32	-2.62	-1.32	-1.31
FOOD.....	35.8	34.8	35.3	35.6	35.9	34.7	35.4	35.4	35.4	34.2	34.9	35.4	35.4	35.1
% CHG PREV QTR SAAR.....	2.65	-10.67	6.22	2.52	4.18	-13.06	8.42	0.06	-0.55	-12.42	7.97	-0.41	-0.04	-0.82
% CHG SAME QTR LAST YR.....	2.02	-0.83	-0.12	-0.04	0.33	-0.34	0.17	-0.44	-1.59	-1.41	-1.51	-0.41	-0.04	-0.82
TOBACCO.....	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
% CHG PREV QTR SAAR.....	2.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.66	0.00
% CHG SAME QTR LAST YR.....	-0.46	2.93	2.09	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.66	0.00
TEXTILES.....	18.6	18.4	18.4	18.4	18.3	18.1	18.1	18.0	17.8	17.8	17.7	18.7	18.3	17.9
% CHG PREV QTR SAAR.....	-2.85	-4.31	0.29	-1.50	-0.93	-5.11	-0.77	-0.71	-5.03	-0.49	-0.60	-3.04	-2.30	-2.17
% CHG SAME QTR LAST YR.....	-3.26	-4.05	-3.57	-2.11	-1.63	-1.83	-2.10	-1.90	-2.93	-1.77	-1.73	-3.04	-2.30	-2.17
APPAREL.....	38.9	38.3	38.2	38.2	37.0	36.4	36.3	36.2	35.1	34.6	34.5	39.6	37.4	35.5
% CHG PREV QTR SAAR.....	-12.24	-5.81	-1.21	-0.35	-12.17	-5.99	-1.16	-1.56	-11.43	-5.08	-1.58	-7.84	-5.45	-5.10
% CHG SAME QTR LAST YR.....	-7.49	-7.64	-6.67	-5.02	-5.00	-5.05	-5.04	-5.32	-5.13	-4.90	-5.00	-7.84	-5.45	-5.10
PAPER.....	21.0	21.1	21.2	21.0	20.7	20.7	20.8	20.7	20.7	20.4	20.5	21.3	20.9	20.6
% CHG PREV QTR SAAR.....	-6.71	1.55	1.55	-2.22	-5.93	-0.39	1.55	-2.29	0.67	-6.05	3.55	-1.00	-1.81	-1.32
% CHG SAME QTR LAST YR.....	-1.46	-2.63	-2.59	-1.52	-1.31	-1.78	-1.78	-1.80	-0.12	-1.57	-1.09	-1.00	-1.81	-1.32
PRINTING AND PUBLISHING.....	39.1	39.1	39.1	39.1	39.1	39.1	38.6	39.2	39.3	38.9	38.9	39.1	39.1	39.0
% CHG PREV QTR SAAR.....	-1.25	-0.50	-0.14	0.08	0.22	0.31	-5.62	6.79	1.11	-4.17	-0.09	0.27	-0.13	-0.25
% CHG SAME QTR LAST YR.....	0.57	0.30	-0.08	-0.46	-0.09	0.12	-1.28	0.33	0.55	-0.59	0.83	0.27	-0.13	-0.25
CHEMICALS.....	36.4	36.6	36.6	36.6	35.9	36.5	36.1	36.2	35.6	36.1	36.0	36.6	36.4	36.0
% CHG PREV QTR SAAR.....	-1.35	2.51	-0.39	-0.36	-6.77	6.45	-4.66	1.25	-5.67	5.47	-1.44	-2.46	-0.59	-1.08
% CHG SAME QTR LAST YR.....	-2.35	-2.14	-0.78	0.09	-1.31	-0.37	-1.46	-1.07	-0.78	-1.01	-0.18	-2.46	-0.59	-1.08
PETROLEUM REFINING.....	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.1	1.1	1.0
% CHG PREV QTR SAAR.....	-9.34	-7.72	-6.20	-5.45	-4.97	-4.89	-4.63	-4.63	-4.37	-4.11	-3.10	8.24	-5.38	-4.71
% CHG SAME QTR LAST YR.....	6.26	1.47	-2.78	-7.19	-6.09	-5.38	-4.99	-4.78	-4.63	-4.44	-4.05	8.24	-5.38	-4.71
RUBBER AND PLASTICS.....	32.4	32.5	33.1	33.2	33.0	33.2	33.8	33.9	33.7	33.7	33.7	32.5	33.1	33.8
% CHG PREV QTR SAAR.....	0.45	2.38	7.65	0.72	-2.19	1.79	7.52	1.77	-2.76	0.39	-0.71	-2.40	2.09	1.93
% CHG SAME QTR LAST YR.....	-2.63	-1.81	1.61	2.76	2.08	1.93	1.90	2.16	2.02	1.66	-0.34	-2.40	2.09	1.93
LEATHER.....	4.0	3.9	3.9	3.9	3.8	3.7	3.6	3.6	3.6	3.6	3.5	4.1	3.8	3.6
% CHG PREV QTR SAAR.....	-17.17	-3.13	-4.02	-4.36	-8.40	-2.67	-11.11	-0.08	-3.13	-3.13	-13.51	-8.45	-6.61	-5.30
% CHG SAME QTR LAST YR.....	-10.27	-6.52	-8.96	-7.36	-5.00	-4.89	-6.69	-5.67	-4.34	-4.45	-5.10	-8.45	-6.61	-5.30
STATISTICAL DISCREPANCY.....	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0

TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 11: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
 1992 DOLLARS

	HISTORY					FORECAST - DATA						ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
TOTAL NONAGRICULTURAL.....	24223	24119	25312	25167	24638	24499	25577	25434	24908	24795	25838	24445	24904	25179
% CHG SAME QTR LAST YR....	0.70	1.02	2.32	1.89	1.71	1.58	1.04	1.06	1.10	1.21	1.02	2.27	1.88	1.10
MINING.....	33685	34114	36510	35268	33819	34308	36837	35607	34203	34757	37352	34708	34976	35351
% CHG SAME QTR LAST YR....	-0.90	-7.70	1.10	1.00	0.40	0.57	0.90	0.96	1.14	1.31	1.40	0.07	0.77	1.07
CONSTRUCTION.....	26058	26576	28901	26982	26445	26896	28768	26919	26662	27166	29084	26917	27306	27379
% CHG SAME QTR LAST YR....	1.97	0.52	1.48	1.60	1.48	1.21	-0.46	-0.24	0.82	1.00	1.10	2.87	1.44	0.27
MANUFACTURING.....	28955	29051	29224	29191	29416	29437	29624	29561	29817	29873	30082	28697	29317	29719
% CHG SAME QTR LAST YR....	2.18	3.70	4.07	1.72	1.59	1.33	1.37	1.27	1.36	1.48	1.54	2.31	2.16	1.37
DURABLE GOODS.....	29985	29865	29912	29896	30213	29996	30042	30006	30356	30183	30266	29607	30004	30147
% CHG SAME QTR LAST YR....	2.57	5.19	3.34	0.89	0.76	0.44	0.44	0.37	0.47	0.62	0.75	3.51	1.34	0.47
NONDURABLE GOODS.....	27689	28025	28349	28302	28412	28715	29076	28985	29117	29461	29832	27566	28444	29160
% CHG SAME QTR LAST YR....	1.62	1.74	4.97	2.76	2.61	2.46	2.57	2.41	2.48	2.60	2.60	0.70	3.19	2.52
TRADE.....	18076	17921	19246	19046	18228	18239	19462	19217	18452	18506	19615	18423	18690	18909
% CHG SAME QTR LAST YR....	-0.67	0.33	1.49	1.68	0.84	1.78	1.12	0.90	1.23	1.46	0.79	1.37	1.45	1.17
SERVICES.....	22834	23090	24737	24434	23265	23678	25171	24782	23619	24045	25518	23458	24028	24404
% CHG SAME QTR LAST YR....	1.20	0.48	2.39	2.89	1.89	2.55	1.76	1.43	1.52	1.55	1.38	2.89	2.43	1.56
FIN,INS,REAL EST.....	30253	30498	31972	32458	31241	30937	32277	32632	31804	31330	32561	31108	31652	32011
% CHG SAME QTR LAST YR....	-3.11	-5.02	1.24	1.12	3.27	1.44	0.95	0.54	1.80	1.27	0.88	0.40	1.75	1.13
TRANS,COMM,PUB UTIL.....	31040	31051	33183	33510	31917	31735	33603	33895	32307	32177	34130	31779	32586	32996
% CHG SAME QTR LAST YR....	0.32	1.85	2.37	2.76	2.83	2.20	1.27	1.15	1.22	1.39	1.57	4.31	2.54	1.26
GOVERNMENT.....	25033	23778	24363	24658	25531	23893	24341	24912	25485	23885	24275	24300	24611	24656
% CHG SAME QTR LAST YR....	1.53	1.32	1.55	1.07	1.99	0.48	-0.09	1.03	-0.18	-0.03	-0.27	2.63	1.28	0.18
FEDERAL,CIVILIAN.....	39006	40227	41396	41294	39913	40487	41736	41595	40219	40818	41572	40271	40772	41092
% CHG SAME QTR LAST YR....	-0.60	1.28	1.06	0.98	2.33	0.65	0.82	0.73	0.77	0.82	-0.39	2.79	1.24	0.78
STATE AND LOCAL.....	22721	21255	21682	21999	23180	21415	21630	22292	23125	21391	21631	21747	22069	22110
% CHG SAME QTR LAST YR....	2.53	1.64	1.92	1.21	2.02	0.75	-0.24	1.33	-0.24	-0.11	0.00	2.92	1.48	0.18

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 12: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
 SEASONALLY ADJUSTED 1992 DOLLARS

	HISTORY					FORECAST - DATA						ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
TOTAL NONAGRICULTURAL.....	24250	24329	25030	25222	24650	24713	25289	25490	24922	25012	25544	24447	24904	25178
% CHG PREV QTR SAAR.....	-7.77	1.31	12.03	3.10	-8.76	1.03	9.66	3.21	-8.62	1.45	8.80	2.32	1.87	1.10
% CHG SAME QTR LAST YR....	0.69	1.05	2.32	1.92	1.65	1.58	1.04	1.06	1.10	1.21	1.01	2.32	1.87	1.10
MINING.....	33925	33865	35710	36046	34060	34058	36031	36392	34447	34503	36534	34700	34969	35343
% CHG PREV QTR SAAR.....	-18.36	-0.71	23.65	3.81	-20.28	-0.03	25.26	4.08	-19.72	0.65	25.70	0.59	0.77	1.07
% CHG SAME QTR LAST YR....	-0.90	-7.70	1.10	1.00	0.40	0.57	0.90	0.96	1.14	1.31	1.40	0.59	0.77	1.07
CONSTRUCTION.....	26852	26823	27336	27336	27251	27147	27211	27272	27475	27419	27509	26879	27268	27344
% CHG PREV QTR SAAR.....	-0.79	-0.43	7.88	0.00	-1.25	-1.52	0.95	0.91	3.00	-0.81	1.33	3.07	1.44	0.28
% CHG SAME QTR LAST YR....	1.81	0.52	1.48	1.60	1.48	1.21	-0.46	-0.24	0.82	1.00	1.10	3.07	1.44	0.28
MANUFACTURING.....	28908	29083	29157	29265	29374	29468	29560	29635	29773	29904	30018	28697	29316	29718
% CHG PREV QTR SAAR.....	1.99	2.44	1.02	1.49	1.49	1.30	1.24	1.02	1.87	1.78	1.53	2.36	2.16	1.37
% CHG SAME QTR LAST YR....	2.17	3.69	4.02	1.73	1.61	1.33	1.38	1.26	1.36	1.48	1.55	2.36	2.16	1.37
DURABLE GOODS.....	29841	29907	29946	30004	30026	30038	30077	30113	30169	30224	30300	29621	30003	30146
% CHG PREV QTR SAAR.....	0.92	0.89	0.52	0.78	0.30	0.15	0.52	0.48	0.74	0.73	1.02	3.60	1.29	0.47
% CHG SAME QTR LAST YR....	2.57	5.38	3.40	0.78	0.62	0.44	0.44	0.36	0.47	0.62	0.74	3.60	1.29	0.47
NONDURABLE GOODS.....	27753	28045	28161	28335	28543	28734	28886	29016	29253	29479	29639	27549	28443	29159
% CHG PREV QTR SAAR.....	3.38	4.27	1.67	2.49	2.98	2.70	2.13	1.82	3.31	3.13	2.19	0.68	3.25	2.52
% CHG SAME QTR LAST YR....	1.59	1.46	4.79	2.95	2.85	2.46	2.57	2.41	2.49	2.59	2.61	0.68	3.25	2.52
TRADE.....	18188	18246	18852	18975	18342	18570	19063	19145	18567	18842	19213	18418	18685	18904
% CHG PREV QTR SAAR.....	-9.76	1.27	13.96	2.64	-12.69	5.07	11.04	1.74	-11.54	6.05	8.11	1.31	1.45	1.18
% CHG SAME QTR LAST YR....	-0.68	0.33	1.49	1.68	0.84	1.78	1.12	0.90	1.23	1.46	0.79	1.31	1.45	1.18
SERVICES.....	23059	23129	24319	24579	23495	23718	24747	24929	23852	24086	25088	23457	24028	24403
% CHG PREV QTR SAAR.....	-13.19	1.22	22.22	4.33	-16.50	3.85	18.50	2.99	-16.19	3.97	17.71	2.98	2.43	1.56
% CHG SAME QTR LAST YR....	1.19	0.48	2.39	2.89	1.89	2.55	1.76	1.43	1.52	1.55	1.38	2.98	2.43	1.56
FIN, INS, REAL EST.....	30430	30498	31766	32530	31424	30937	32070	32705	31990	31330	32352	31119	31664	32023
% CHG PREV QTR SAAR.....	-19.94	0.90	17.70	9.97	-12.93	-6.05	15.46	8.16	-8.46	-8.00	13.71	0.45	1.75	1.13
% CHG SAME QTR LAST YR....	-3.12	-5.02	1.24	1.12	3.27	1.44	0.95	0.54	1.80	1.27	0.88	0.45	1.75	1.13
TRANS, COMM, PUB UTIL.....	31210	31254	32850	33455	32092	31942	33266	33840	32484	32387	33788	31778	32585	32994
% CHG PREV QTR SAAR.....	-15.55	0.57	22.05	7.57	-15.32	-1.86	17.64	7.08	-15.09	-1.19	18.45	4.42	2.54	1.26
% CHG SAME QTR LAST YR....	0.31	1.85	2.37	2.76	2.83	2.20	1.27	1.15	1.22	1.39	1.57	4.42	2.54	1.26
GOVERNMENT.....	24262	24254	24688	24714	24614	24374	24666	24968	24567	24367	24600	24304	24598	24642
% CHG PREV QTR SAAR.....	-2.48	-0.13	7.36	0.41	-1.60	-3.85	4.87	4.99	-6.26	-3.22	3.87	2.71	1.21	0.18
% CHG SAME QTR LAST YR....	1.50	1.57	1.65	1.23	1.45	0.50	-0.09	1.03	-0.19	-0.03	-0.27	2.71	1.21	0.18
FEDERAL, CIVILIAN.....	38969	39610	41536	41823	39868	39866	41877	42128	40173	40192	41712	40269	40773	41093
% CHG PREV QTR SAAR.....	-21.57	6.74	20.91	2.80	-17.43	-0.02	21.75	2.42	-17.31	0.19	16.00	2.81	1.25	0.78
% CHG SAME QTR LAST YR....	-0.64	1.23	1.10	1.00	2.31	0.65	0.82	0.73	0.77	0.82	-0.39	2.81	1.25	0.78
STATE AND LOCAL.....	21786	21800	22006	22013	22221	21964	21953	22305	22169	21939	21954	21731	22051	22092
% CHG PREV QTR SAAR.....	0.63	0.26	3.84	0.12	3.85	-4.55	-0.19	6.56	-2.42	-4.08	0.26	2.92	1.47	0.18
% CHG SAME QTR LAST YR....	2.49	1.65	1.94	1.20	2.00	0.75	-0.24	1.33	-0.24	-0.11	0.00	2.92	1.47	0.18

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 TABLE 13: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
 CURRENT DOLLARS

	HISTORY					FORECAST - DATA							ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999	
TOTAL NONAGRICULTURAL.....	27346	27346	28856	28836	28415	28463	29917	29967	29551	29630	31086	27558	28643	29766	
% CHG SAME QTR LAST YR....	2.60	2.62	3.96	3.79	3.91	4.08	3.68	3.92	4.00	4.10	3.91	4.37	3.93	3.92	
MINING.....	38026	38678	41621	40410	39003	39860	43089	41952	40579	41534	44938	39127	40223	41789	
% CHG SAME QTR LAST YR....	0.97	-6.24	2.71	2.87	2.57	3.05	3.53	3.82	4.04	4.20	4.29	2.10	2.80	3.89	
CONSTRUCTION.....	29417	30132	32947	30916	30499	31248	33650	31715	31632	32463	34991	30344	31403	32365	
% CHG SAME QTR LAST YR....	3.90	2.12	3.10	3.49	3.68	3.70	2.13	2.59	3.72	3.89	3.99	4.98	3.49	3.07	
MANUFACTURING.....	32688	32938	33315	33448	33925	34200	34652	34829	35375	35698	36191	32355	33722	35138	
% CHG SAME QTR LAST YR....	4.11	5.35	5.73	3.60	3.79	3.83	4.01	4.13	4.27	4.38	4.44	4.42	4.22	4.20	
DURABLE GOODS.....	33850	33861	34099	34255	34845	34850	35140	35353	36015	36068	36413	33381	34512	35644	
% CHG SAME QTR LAST YR....	4.50	6.86	4.99	2.77	2.94	2.92	3.05	3.20	3.36	3.50	3.62	5.64	3.39	3.28	
NONDURABLE GOODS.....	31258	31774	32317	32429	32767	33361	34010	34150	34545	35206	35891	31080	32719	34478	
% CHG SAME QTR LAST YR....	3.53	3.35	6.65	4.67	4.83	4.99	5.24	5.31	5.42	5.53	5.53	2.77	5.27	5.38	
TRADE.....	20406	20318	21941	21823	21023	21190	22764	22642	21892	22115	23599	20769	21494	22353	
% CHG SAME QTR LAST YR....	1.20	1.92	3.10	3.57	3.02	4.29	3.75	3.75	4.13	4.36	3.66	3.46	3.49	4.00	
SERVICES.....	25777	26179	28200	27996	26832	27509	29443	29199	28022	28733	30701	26445	27634	28849	
% CHG SAME QTR LAST YR....	3.11	2.07	4.02	4.80	4.09	5.08	4.41	4.29	4.43	4.45	4.27	5.00	4.50	4.40	
FIN,INS,REAL EST.....	34153	34579	36448	37190	36030	35943	37754	38447	37732	37439	39174	35069	36403	37843	
% CHG SAME QTR LAST YR....	-1.28	-3.51	2.85	3.00	5.50	3.95	3.59	3.38	4.72	4.16	3.76	2.43	3.80	3.96	
TRANS,COMM,PUB UTIL.....	35041	35206	37828	38396	36810	36870	39306	39936	38329	38452	41061	35826	37476	39006	
% CHG SAME QTR LAST YR....	2.21	3.47	4.00	4.67	5.05	4.73	3.91	4.01	4.13	4.29	4.47	6.44	4.61	4.08	
GOVERNMENT.....	28260	26960	27774	28253	29445	27759	28471	29351	30236	28542	29205	27396	28308	29150	
% CHG SAME QTR LAST YR....	3.44	2.93	3.17	2.94	4.19	2.96	2.51	3.89	2.68	2.82	2.58	4.73	3.33	2.98	
FEDERAL,CIVILIAN.....	44033	45609	47191	47315	46032	47037	48818	49007	47716	48778	50015	45401	46894	48580	
% CHG SAME QTR LAST YR....	1.28	2.88	2.68	2.86	4.54	3.13	3.45	3.58	3.66	3.70	2.45	4.89	3.29	3.60	
STATE AND LOCAL.....	25650	24098	24718	25207	26734	24880	25301	26264	27436	25562	26024	24518	25384	26141	
% CHG SAME QTR LAST YR....	4.47	3.25	3.54	3.09	4.23	3.24	2.36	4.19	2.63	2.74	2.86	5.03	3.53	2.98	

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TABLE 14: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
SEASONALLY ADJUSTED CURRENT DOLLARS

	HISTORY					FORECAST - DATA						ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
TOTAL NONAGRICULTURAL.....	27376	27584	28534	28899	28429	28712	29581	30032	29567	29889	30733	27562	28644	29767
% CHG PREV QTR SAAR.....	-6.45	3.08	14.50	5.21	-6.35	4.04	12.67	6.24	-6.05	4.43	11.78	4.41	3.93	3.92
% CHG SAME QTR LAST YR....	2.59	2.66	3.95	3.82	3.85	4.09	3.67	3.92	4.00	4.10	3.89	4.41	3.93	3.92
MINING.....	38298	38396	40710	41301	39282	39569	42145	42878	40868	41231	43954	39119	40215	41781
% CHG PREV QTR SAAR.....	-17.19	1.02	26.38	5.94	-18.17	2.96	28.70	7.13	-17.47	3.60	29.14	2.62	2.80	3.89
% CHG SAME QTR LAST YR....	0.97	-6.24	2.71	2.87	2.57	3.05	3.53	3.82	4.04	4.20	4.29	2.62	2.80	3.89
CONSTRUCTION.....	30313	30412	31164	31322	31428	31539	31828	32132	32596	32765	33097	30304	31363	32330
% CHG PREV QTR SAAR.....	0.63	1.31	10.26	2.05	1.36	1.42	3.72	3.87	5.90	2.09	4.11	5.17	3.49	3.08
% CHG SAME QTR LAST YR....	3.73	2.12	3.10	3.49	3.68	3.70	2.13	2.59	3.72	3.89	3.99	5.17	3.49	3.08
MANUFACTURING.....	32635	32974	33239	33532	33877	34236	34576	34916	35322	35736	36115	32355	33721	35137
% CHG PREV QTR SAAR.....	3.45	4.23	3.25	3.57	4.18	4.32	4.03	3.99	4.74	4.76	4.31	4.46	4.22	4.20
% CHG SAME QTR LAST YR....	4.10	5.33	5.68	3.62	3.81	3.83	4.02	4.13	4.27	4.38	4.45	4.46	4.22	4.20
DURABLE GOODS.....	33687	33908	34138	34378	34629	34898	35181	35479	35792	36117	36454	33396	34511	35642
% CHG PREV QTR SAAR.....	2.36	2.65	2.74	2.85	2.95	3.14	3.29	3.44	3.57	3.69	3.78	5.73	3.34	3.28
% CHG SAME QTR LAST YR....	4.50	7.06	5.05	2.65	2.80	2.92	3.05	3.20	3.36	3.50	3.62	5.73	3.34	3.28
NONDURABLE GOODS.....	31331	31797	32104	32466	32919	33383	33788	34187	34706	35228	35659	31061	32718	34477
% CHG PREV QTR SAAR.....	4.86	6.09	3.91	4.59	5.70	5.76	4.94	4.81	6.21	6.15	4.99	2.75	5.33	5.38
% CHG SAME QTR LAST YR....	3.51	3.07	6.46	4.86	5.07	4.99	5.25	5.30	5.43	5.53	5.54	2.75	5.33	5.38
TRADE.....	20533	20687	21491	21742	21154	21575	22298	22557	22028	22516	23115	20764	21490	22350
% CHG PREV QTR SAAR.....	-8.47	3.04	16.47	4.75	-10.39	8.21	14.09	4.73	-9.06	9.16	11.07	3.39	3.50	4.00
% CHG SAME QTR LAST YR....	1.19	1.92	3.10	3.57	3.02	4.29	3.75	3.75	4.13	4.36	3.66	3.39	3.50	4.00
SERVICES.....	26031	26224	27724	28162	27097	27556	28946	29372	28299	28782	30183	26445	27635	28850
% CHG PREV QTR SAAR.....	-11.95	2.99	24.92	6.47	-14.29	6.95	21.76	6.01	-13.83	7.02	20.93	5.09	4.50	4.40
% CHG SAME QTR LAST YR....	3.09	2.07	4.02	4.80	4.09	5.08	4.41	4.29	4.43	4.45	4.27	5.09	4.50	4.40
FIN, INS, REAL EST.....	34352	34579	36214	37273	36241	35943	37512	38533	37953	37439	38922	35082	36418	37859
% CHG PREV QTR SAAR.....	-18.79	2.66	20.29	12.22	-10.62	-3.25	18.64	11.34	-5.89	-5.31	16.82	2.49	3.81	3.96
% CHG SAME QTR LAST YR....	-1.29	-3.51	2.85	3.00	5.50	3.95	3.59	3.38	4.72	4.16	3.76	2.49	3.81	3.96
TRANS, COMM, PUB UTIL.....	35232	35436	37449	38333	37012	37111	38912	39870	38539	38703	40650	35825	37476	39006
% CHG PREV QTR SAAR.....	-14.34	2.33	24.74	9.78	-13.09	1.07	20.87	10.22	-12.70	1.71	21.69	6.55	4.61	4.08
% CHG SAME QTR LAST YR....	2.20	3.47	4.00	4.67	5.05	4.73	3.91	4.01	4.13	4.29	4.47	6.55	4.61	4.08
GOVERNMENT.....	27389	27499	28145	28317	28388	28318	28851	29417	29147	29119	29596	27401	28292	29134
% CHG PREV QTR SAAR.....	-1.09	1.61	9.73	2.47	1.00	-0.98	7.75	8.08	-3.62	-0.38	6.72	4.82	3.25	2.98
% CHG SAME QTR LAST YR....	3.41	3.18	3.27	3.11	3.65	2.98	2.51	3.88	2.67	2.83	2.58	4.82	3.25	2.98
FEDERAL, CIVILIAN.....	43992	44910	47351	47921	45979	46316	48983	49635	47661	48030	50184	45396	46892	48577
% CHG PREV QTR SAAR.....	-20.45	8.60	23.58	4.91	-15.25	2.96	25.10	5.43	-14.98	3.13	19.18	4.92	3.29	3.59
% CHG SAME QTR LAST YR....	1.24	2.84	2.71	2.87	4.52	3.13	3.45	3.58	3.66	3.70	2.45	4.92	3.29	3.59
STATE AND LOCAL.....	24594	24717	25087	25222	25628	25518	25679	26280	26301	26217	26413	24500	25364	26119
% CHG PREV QTR SAAR.....	2.07	2.01	6.13	2.17	6.59	-1.70	2.55	9.69	0.33	-1.27	3.01	5.03	3.52	2.98
% CHG SAME QTR LAST YR....	4.42	3.26	3.57	3.08	4.20	3.24	2.36	4.19	2.63	2.74	2.86	5.03	3.52	2.98

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 TABLE 15: TENNESSEE CIVILIAN LABOR FORCE AND UNEMPLOYMENT RATE

	HISTORY					FORECAST - DATA						ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
CIVILIAN LABOR FORCE (THOUS)....	2795	2801	2755	2781	2830	2834	2793	2818	2868	2872	2831	2766	2800	2838
% CHG SAME QTR LAST YR.....	0.38	0.51	1.27	1.22	1.23	1.17	1.41	1.36	1.36	1.35	1.33	0.55	1.22	1.37
EMPLOYED PERSONS (THOUS).....	2643	2671	2602	2637	2672	2699	2635	2670	2706	2733	2669	2624	2652	2686
% CHG SAME QTR LAST YR.....	0.05	0.54	1.15	1.10	1.09	1.05	1.29	1.27	1.28	1.28	1.29	0.56	1.10	1.28
UNEMPLOYED PERSONS (THOUS)....	152	131	153	144	158	135	158	148	162	139	161	142	147	152
% CHG SAME QTR LAST YR.....	6.58	-0.04	3.37	3.52	3.66	3.59	3.46	3.05	2.87	2.70	2.00	0.48	3.54	3.03
PARTICIPATION RATE (PERCENT)....	66.4	66.3	65.1	65.5	66.4	66.3	65.2	65.6	66.5	66.4	65.3	65.8	65.8	65.9
% CHG SAME QTR LAST YR.....	-0.81	-0.68	0.07	0.04	0.03	-0.03	0.20	0.15	0.16	0.17	0.06	-0.69	0.03	0.17
UNEMPLOYMENT RATE (PERCENT).....	5.4	4.7	5.5	5.2	5.6	4.8	5.7	5.3	5.7	4.8	5.7	5.1	5.3	5.4

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 TABLE 16: TENNESSEE CIVILIAN LABOR FORCE AND UNEMPLOYMENT RATE
 SEASONALLY ADJUSTED

	HISTORY		FORECAST - DATA									ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
CIVILIAN LABOR FORCE (THOUS)....	2765	2783	2793	2792	2798	2816	2832	2830	2837	2855	2869	2766	2800	2838
% CHG PREV QTR SAAR.....	0.99	2.74	1.32	-0.13	0.99	2.58	2.19	-0.27	0.98	2.55	2.07	0.56	1.22	1.37
% CHG SAME QTR LAST YR.....	0.38	0.51	1.26	1.22	1.22	1.18	1.40	1.36	1.36	1.36	1.33	0.56	1.22	1.37
EMPLOYED PERSONS (THOUS).....	2617	2642	2648	2647	2645	2669	2682	2680	2679	2704	2717	2624	2652	2686
% CHG PREV QTR SAAR.....	-0.11	3.80	1.03	-0.26	-0.17	3.67	1.96	-0.33	-0.15	3.69	1.99	0.56	1.10	1.28
% CHG SAME QTR LAST YR.....	0.06	0.54	1.15	1.10	1.09	1.05	1.29	1.27	1.28	1.28	1.29	0.56	1.10	1.28
UNEMPLOYED PERSONS (THOUS)....	148	142	144	145	153	147	149	149	157	151	152	142	147	152
% CHG PREV QTR SAAR.....	23.19	-14.77	6.89	2.33	23.86	-15.00	6.36	0.70	23.02	-15.56	3.46	0.43	3.54	3.02
% CHG SAME QTR LAST YR.....	6.44	-0.04	3.37	3.52	3.66	3.59	3.46	3.05	2.87	2.70	2.00	0.43	3.54	3.02
PARTICIPATION RATE (PERCENT)....	65.6	65.9	66.0	65.8	65.7	65.9	66.1	65.9	65.8	66.0	66.1	65.8	65.8	66.0
% CHG PREV QTR SAAR.....	-0.79	1.70	0.32	-1.05	-0.85	1.53	1.17	-1.22	-0.83	1.61	0.70	-0.69	0.03	0.17
% CHG SAME QTR LAST YR.....	-0.81	-0.68	0.06	0.04	0.02	-0.02	0.20	0.15	0.16	0.18	0.06	-0.69	0.03	0.17
UNEMPLOYMENT RATE (PERCENT).....	5.3	5.1	5.2	5.2	5.5	5.2	5.3	5.3	5.6	5.3	5.3	5.1	5.3	5.3

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 TABLE 17: TENNESSEE TAXABLE SALES
 MILLIONS OF 1992 DOLLARS

	HISTORY		FORECAST - DATA									ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
TOTAL.....	15832	15228	13294	15296	15583	15775	13559	15618	15659	16192	13910	58520	59948	61028
% CHG SAME QTR LAST YR.....	12.97	3.60	4.15	4.08	-1.57	3.59	2.00	2.10	0.49	2.64	2.58	6.57	2.44	1.80
AUTO DEALERS.....	1605	1363	1458	1573	1586	1366	1395	1582	1583	1417	1460	5885	5983	5977
% CHG SAME QTR LAST YR.....	3.32	1.29	4.29	3.54	-1.17	0.24	-4.36	0.57	-0.17	3.76	4.72	-1.61	1.67	-0.10
PURCHASES FROM MANUFACTURERS..	1072	1059	901	1102	1131	1108	928	1132	1164	1141	976	3926	4242	4366
% CHG SAME QTR LAST YR.....	7.27	0.81	7.74	14.87	5.50	4.64	3.04	2.74	2.94	3.03	5.13	4.42	8.03	2.93
MISC DURABLE GOODS.....	3294	2738	2445	3008	2985	2833	2510	3094	2981	2858	2545	10795	11271	11442
% CHG SAME QTR LAST YR.....	34.74	12.49	11.28	17.24	-9.40	3.47	2.68	2.84	-0.13	0.88	1.37	14.92	4.41	1.53
EATING AND DRINKING PLACES....	1206	1127	1079	1227	1254	1173	1104	1254	1282	1202	1134	4598	4732	4842
% CHG SAME QTR LAST YR.....	2.76	0.62	0.63	2.80	3.97	4.09	2.37	2.19	2.26	2.47	2.73	2.76	2.92	2.32
FOOD STORES.....	1658	1708	1574	1670	1683	1740	1573	1666	1679	1737	1564	6591	6667	6654
% CHG SAME QTR LAST YR.....	1.06	-2.42	0.93	0.25	1.51	1.86	-0.10	-0.25	-0.26	-0.15	-0.56	-0.34	1.15	-0.19
LIQUOR STORES.....	67	86	67	68	68	86	66	67	66	85	66	292	289	284
% CHG SAME QTR LAST YR.....	-1.68	-2.80	-1.80	-3.65	0.40	0.30	-1.58	-1.74	-1.75	-1.66	-0.33	0.49	-1.12	-1.68
HOTELS AND MOTELS.....	420	335	271	388	434	351	279	398	442	354	280	1424	1443	1474
% CHG SAME QTR LAST YR.....	3.42	-0.66	-1.56	-1.62	3.39	4.73	3.16	2.56	1.86	1.07	0.31	5.57	1.36	2.10
OTHER RETAIL AND SERVICE.....	4049	4554	3581	4020	4041	4669	3619	4064	4057	4809	3685	16084	16312	16548
% CHG SAME QTR LAST YR.....	5.19	0.74	1.53	1.68	-0.20	2.53	1.04	1.08	0.39	3.00	1.82	3.18	1.41	1.45
MISC NONDURABLE GOODS.....	1320	1340	1042	1173	1232	1367	1063	1193	1260	1403	1084	4791	4814	4918
% CHG SAME QTR LAST YR.....	20.04	3.77	2.98	4.80	-6.63	1.99	2.01	1.75	2.23	2.61	1.96	7.60	0.48	2.17
TRANSPORTATION, COMMUNICATION..	1142	919	876	1067	1170	1083	1022	1169	1145	1185	1116	4134	4196	4522
% CHG SAME QTR LAST YR.....	46.47	20.71	7.06	-14.99	2.50	17.86	16.77	9.57	-2.10	9.45	9.17	37.37	1.50	7.78
PER CAPITA (\$).....	2933	2813	2449	2811	2852	2880	2469	2836	2832	2921	2501	10859	10993	11059
% CHG SAME QTR LAST YR.....	11.64	2.37	2.92	2.86	-2.74	2.37	0.79	0.89	-0.71	1.44	1.32	5.30	1.23	0.60

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 18: TENNESSEE TAXABLE SALES
 MILLIONS OF SEASONALLY ADJUSTED 1992 DOLLARS

	HISTORY					FORECAST - DATA						ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
TOTAL.....	15437	14423	14838	14975	15196	14947	15138	15284	15268	15341	15524	58510	59955	61031
% CHG PREV QTR SAAR.....	31.85	-23.79	12.01	3.74	6.03	-6.39	5.21	3.93	-0.43	1.94	4.86	6.57	2.47	1.79
% CHG SAME QTR LAST YR.....	12.96	3.74	4.17	3.95	-1.56	3.63	2.02	2.07	0.47	2.64	2.55	6.57	2.47	1.79
AUTO DEALERS.....	1510	1474	1517	1496	1491	1478	1451	1504	1489	1533	1519	5884	5982	5977
% CHG PREV QTR SAAR.....	19.58	-9.10	12.10	-5.43	-1.27	-3.52	-7.11	15.61	-4.15	12.59	-3.63	-1.65	1.68	-0.08
% CHG SAME QTR LAST YR.....	3.17	1.37	4.24	3.61	-1.24	0.24	-4.36	0.57	-0.17	3.76	4.72	-1.65	1.68	-0.08
PURCHASES FROM MANUFACTURERS..	1011	1031	1039	1055	1066	1078	1070	1083	1098	1111	1125	3923	4238	4363
% CHG PREV QTR SAAR.....	47.49	7.86	3.20	6.20	4.58	4.58	-2.96	4.96	5.41	4.97	5.17	4.69	8.02	2.94
% CHG SAME QTR LAST YR.....	7.16	0.79	7.80	14.91	5.45	4.64	3.04	2.74	2.94	3.03	5.13	4.69	8.02	2.94
MISC DURABLE GOODS.....	3128	2730	2803	2808	2832	2825	2878	2887	2828	2850	2918	10770	11267	11443
% CHG PREV QTR SAAR.....	192.26	-41.96	11.11	0.67	3.51	-0.99	7.74	1.30	-7.95	3.09	9.87	14.68	4.61	1.56
% CHG SAME QTR LAST YR.....	34.55	12.50	11.21	17.36	-9.46	3.47	2.68	2.84	-0.13	0.88	1.37	14.68	4.61	1.56
EATING AND DRINKING PLACES....	1141	1142	1171	1185	1187	1189	1199	1211	1213	1218	1232	4600	4732	4841
% CHG PREV QTR SAAR.....	-3.97	0.38	10.69	4.67	0.62	0.68	3.57	3.95	0.87	1.53	4.61	2.83	2.86	2.32
% CHG SAME QTR LAST YR.....	2.83	0.63	0.60	2.80	4.01	4.09	2.37	2.19	2.26	2.47	2.73	2.83	2.86	2.32
FOOD STORES.....	1629	1665	1658	1659	1659	1696	1656	1655	1654	1694	1647	6594	6672	6660
% CHG PREV QTR SAAR.....	-6.18	9.18	-1.71	0.19	-0.07	9.39	-9.08	-0.41	-0.08	9.86	-10.56	-0.32	1.19	-0.19
% CHG SAME QTR LAST YR.....	1.65	-2.64	0.86	0.22	1.81	1.86	-0.10	-0.25	-0.26	-0.15	-0.56	-0.32	1.19	-0.19
LIQUOR STORES.....	72	71	73	72	72	71	72	71	71	70	71	292	289	284
% CHG PREV QTR SAAR.....	-16.61	-3.43	9.16	-1.84	-2.13	-3.49	1.19	-2.46	-2.16	-3.16	6.80	0.71	-1.24	-1.68
% CHG SAME QTR LAST YR.....	-1.84	-2.72	-1.83	-3.62	0.32	0.30	-1.58	-1.74	-1.75	-1.66	-0.33	0.71	-1.24	-1.68
HOTELS AND MOTELS.....	351	348	356	359	363	365	367	368	369	369	368	1426	1442	1473
% CHG PREV QTR SAAR.....	-14.75	-2.66	9.27	3.19	4.17	2.40	2.88	0.83	1.34	-0.75	-0.15	5.94	1.14	2.16
% CHG SAME QTR LAST YR.....	3.45	-0.52	-1.68	-1.65	3.41	4.73	3.16	2.56	1.86	1.07	0.32	5.94	1.14	2.16
OTHER RETAIL AND SERVICE.....	4126	3894	4097	4124	4119	3992	4140	4168	4135	4112	4215	16114	16332	16555
% CHG PREV QTR SAAR.....	6.95	-20.69	22.58	2.64	-0.50	-11.73	15.60	2.80	-3.18	-2.17	10.38	3.32	1.35	1.36
% CHG SAME QTR LAST YR.....	5.24	0.82	1.50	1.64	-0.18	2.53	1.04	1.08	0.39	3.00	1.82	3.32	1.35	1.36
MISC NONDURABLE GOODS.....	1330	1163	1189	1198	1241	1187	1212	1219	1269	1218	1236	4790	4814	4918
% CHG PREV QTR SAAR.....	82.95	-41.40	8.93	3.20	15.15	-16.41	9.00	2.15	17.35	-15.14	6.25	7.65	0.51	2.15
% CHG SAME QTR LAST YR.....	19.93	3.77	3.08	4.78	-6.67	1.99	2.01	1.75	2.23	2.61	1.96	7.65	0.51	2.15
TRANSPORTATION, COMMUNICATION..	1139	904	935	1020	1166	1066	1092	1117	1142	1166	1192	4117	4187	4517
% CHG PREV QTR SAAR.....	-19.64	-60.31	14.41	41.27	71.25	-30.29	10.24	9.52	9.13	8.92	9.12	36.72	1.69	7.89
% CHG SAME QTR LAST YR.....	46.12	20.94	7.45	-15.27	2.38	17.86	16.77	9.57	-2.10	9.45	9.17	36.72	1.69	7.89
PER CAPITA (\$).....	2859	2665	2734	2752	2781	2729	2756	2776	2761	2768	2792	10859	10996	11061
% CHG PREV QTR SAAR.....	29.69	-24.59	10.84	2.72	4.26	-7.37	4.12	2.89	-2.09	0.94	3.50	5.30	1.26	0.59
% CHG SAME QTR LAST YR.....	11.62	2.51	2.93	2.73	-2.73	2.40	0.81	0.85	-0.72	1.44	1.29	5.30	1.26	0.59

TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 19: TENNESSEE TAXABLE SALES
 MILLIONS OF CURRENT DOLLARS

	HISTORY		FORECAST - DATA									ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
TOTAL.....	17873	17265	15155	17526	17972	18327	15860	18401	18578	19349	16735	65992	68980	72188
% CHG SAME QTR LAST YR.....	15.11	5.24	5.82	6.01	0.55	6.15	4.66	4.99	3.37	5.58	5.51	8.74	4.53	4.65
AUTO DEALERS.....	1812	1545	1662	1802	1829	1587	1631	1864	1878	1694	1757	6635	6881	7067
% CHG SAME QTR LAST YR.....	5.26	2.89	5.95	5.47	0.96	2.72	-1.87	3.41	2.69	6.72	7.71	0.44	3.71	2.71
PURCHASES FROM MANUFACTURERS..	1210	1200	1027	1263	1304	1287	1086	1334	1381	1364	1174	4428	4881	5165
% CHG SAME QTR LAST YR.....	9.29	2.41	9.46	17.00	7.78	7.22	5.72	5.64	5.89	5.98	8.13	6.51	10.23	5.81
MISC DURABLE GOODS.....	3719	3104	2787	3447	3442	3292	2936	3645	3536	3415	3061	12175	12967	13533
% CHG SAME QTR LAST YR.....	37.28	14.27	13.05	19.42	-7.44	6.03	5.36	5.75	2.73	3.76	4.27	17.27	6.51	4.36
EATING AND DRINKING PLACES....	1361	1278	1230	1406	1446	1363	1292	1477	1521	1436	1365	5184	5444	5726
% CHG SAME QTR LAST YR.....	4.70	2.22	2.24	4.71	6.22	6.66	5.04	5.08	5.19	5.40	5.66	4.86	5.01	5.18
FOOD STORES.....	1872	1936	1795	1914	1941	2021	1839	1963	1992	2076	1881	7432	7670	7870
% CHG SAME QTR LAST YR.....	2.96	-0.88	2.54	2.12	3.71	4.38	2.50	2.57	2.61	2.70	2.28	1.69	3.21	2.60
LIQUOR STORES.....	76	97	77	78	78	100	77	78	79	101	79	329	332	336
% CHG SAME QTR LAST YR.....	0.18	-1.26	-0.23	-1.86	2.57	2.78	0.98	1.04	1.07	1.15	2.52	2.51	0.91	1.07
HOTELS AND MOTELS.....	474	380	308	444	501	407	326	469	525	424	337	1606	1661	1743
% CHG SAME QTR LAST YR.....	5.37	0.92	0.01	0.21	5.63	7.31	5.85	5.46	4.78	3.96	3.18	7.67	3.45	4.96
OTHER RETAIL AND SERVICE.....	4571	5163	4083	4607	4660	5425	4233	4788	4813	5747	4433	18140	18774	19580
% CHG SAME QTR LAST YR.....	7.18	2.33	3.15	3.57	1.96	5.06	3.67	3.93	3.27	5.95	4.73	5.26	3.50	4.29
MISC NONDURABLE GOODS.....	1490	1520	1188	1343	1421	1588	1243	1406	1495	1676	1304	5404	5541	5820
% CHG SAME QTR LAST YR.....	22.30	5.42	4.63	6.74	-4.61	4.51	4.66	4.62	5.16	5.55	4.87	9.77	2.54	5.03
TRANSPORTATION, COMMUNICATION..	1289	1042	998	1223	1349	1258	1196	1378	1359	1416	1343	4660	4828	5349
% CHG SAME QTR LAST YR.....	49.23	22.62	8.77	-13.41	4.71	20.77	19.81	12.67	0.70	12.58	12.29	40.18	3.61	10.78
PER CAPITA (\$).....	3311	3190	2792	3221	3290	3346	2888	3342	3360	3491	3009	12246	12649	13081
% CHG SAME QTR LAST YR.....	13.74	3.99	4.56	4.77	-0.64	4.89	3.41	3.74	2.14	4.34	4.21	7.45	3.29	3.41

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 20: TENNESSEE TAXABLE SALES
 MILLIONS OF SEASONALLY ADJUSTED CURRENT DOLLARS

	HISTORY					FORECAST - DATA						ANNUAL		
	199703	199704	199801	199802	199803	199804	199901	199902	199903	199904	200001	1997	1998	1999
TOTAL.....	17427	16353	16915	17158	17525	17365	17707	18008	18114	18333	18677	65968	68964	72161
% CHG PREV QTR SAAR.....	33.73	-22.45	14.48	5.86	8.84	-3.60	8.10	6.98	2.37	4.93	7.74	8.76	4.54	4.64
% CHG SAME QTR LAST YR.....	15.09	5.38	5.83	5.88	0.56	6.19	4.68	4.95	3.36	5.57	5.48	8.76	4.54	4.64
AUTO DEALERS.....	1705	1672	1729	1714	1720	1717	1697	1773	1766	1832	1828	6633	6880	7068
% CHG PREV QTR SAAR.....	21.29	-7.51	14.57	-3.50	1.34	-0.65	-4.56	19.01	-1.45	15.89	-0.99	0.40	3.72	2.73
% CHG SAME QTR LAST YR.....	5.12	2.98	5.90	5.53	0.90	2.72	-1.87	3.41	2.69	6.72	7.71	0.40	3.72	2.73
PURCHASES FROM MANUFACTURERS..	1142	1169	1184	1208	1230	1253	1252	1276	1302	1328	1354	4424	4875	5159
% CHG PREV QTR SAAR.....	49.60	9.74	5.48	8.37	7.35	7.70	-0.30	8.05	8.38	8.05	8.05	6.81	10.20	5.81
% CHG SAME QTR LAST YR.....	9.18	2.39	9.52	17.04	7.73	7.22	5.72	5.64	5.89	5.98	8.13	6.81	10.20	5.81
MISC DURABLE GOODS.....	3531	3095	3195	3217	3266	3282	3366	3402	3355	3405	3510	12145	12960	13529
% CHG PREV QTR SAAR.....	196.44	-40.95	13.56	2.74	6.25	1.96	10.70	4.27	-5.36	6.11	12.88	17.05	6.71	4.39
% CHG SAME QTR LAST YR.....	37.09	14.28	12.99	19.54	-7.50	6.03	5.36	5.75	2.73	3.76	4.27	17.05	6.71	4.39
EATING AND DRINKING PLACES....	1288	1295	1335	1358	1369	1381	1403	1427	1440	1456	1482	5186	5443	5724
% CHG PREV QTR SAAR.....	-2.60	2.13	13.13	6.81	3.29	3.68	6.42	7.00	3.71	4.50	7.47	4.93	4.95	5.18
% CHG SAME QTR LAST YR.....	4.77	2.22	2.21	4.71	6.26	6.66	5.04	5.08	5.19	5.40	5.66	4.93	4.95	5.18
FOOD STORES.....	1839	1888	1890	1901	1913	1971	1938	1950	1963	2024	1982	7434	7675	7874
% CHG PREV QTR SAAR.....	-4.84	11.09	0.46	2.24	2.57	12.65	-6.58	2.52	2.73	13.08	-8.11	1.73	3.24	2.60
% CHG SAME QTR LAST YR.....	3.57	-1.10	2.47	2.08	4.01	4.38	2.50	2.57	2.61	2.70	2.28	1.73	3.24	2.60
LIQUOR STORES.....	81	81	83	83	83	83	84	84	84	84	86	330	332	336
% CHG PREV QTR SAAR.....	-15.42	-1.74	11.57	0.18	0.45	-0.61	3.97	0.41	0.59	-0.32	9.73	2.77	0.76	1.06
% CHG SAME QTR LAST YR.....	0.01	-1.18	-0.26	-1.83	2.49	2.78	0.98	1.04	1.07	1.15	2.52	2.77	0.76	1.06
HOTELS AND MOTELS.....	396	395	406	411	418	424	430	434	438	440	443	1607	1659	1742
% CHG PREV QTR SAAR.....	-13.53	-0.96	11.68	5.31	6.93	5.45	5.71	3.80	4.19	2.16	2.58	8.09	3.20	5.00
% CHG SAME QTR LAST YR.....	5.40	1.06	-0.12	0.18	5.64	7.31	5.85	5.46	4.78	3.96	3.18	8.09	3.20	5.00
OTHER RETAIL AND SERVICE.....	4658	4415	4671	4725	4750	4638	4842	4911	4906	4914	5071	18167	18784	19573
% CHG PREV QTR SAAR.....	8.48	-19.31	25.28	4.75	2.13	-9.10	18.78	5.82	-0.45	0.70	13.41	5.44	3.40	4.20
% CHG SAME QTR LAST YR.....	7.22	2.42	3.12	3.53	1.98	5.06	3.67	3.93	3.27	5.95	4.73	5.44	3.40	4.20
MISC NONDURABLE GOODS.....	1501	1319	1355	1373	1431	1379	1418	1436	1505	1455	1487	5400	5537	5814
% CHG PREV QTR SAAR.....	85.57	-40.37	11.33	5.31	18.20	-13.92	11.99	5.15	20.65	-12.66	9.16	9.87	2.54	5.00
% CHG SAME QTR LAST YR.....	22.19	5.42	4.72	6.72	-4.66	4.51	4.66	4.62	5.16	5.55	4.87	9.87	2.54	5.00
TRANSPORTATION, COMMUNICATION..	1286	1025	1066	1168	1345	1238	1277	1316	1355	1394	1434	4641	4817	5342
% CHG PREV QTR SAAR.....	-18.49	-59.62	16.93	44.17	75.78	-28.22	13.27	12.74	12.20	12.11	12.11	39.53	3.79	10.88
% CHG SAME QTR LAST YR.....	48.88	22.85	9.16	-13.69	4.59	20.77	19.81	12.67	0.70	12.58	12.29	39.53	3.79	10.88
PER CAPITA (\$).....	3228	3021	3117	3154	3208	3170	3224	3271	3276	3308	3359	12243	12648	13078
% CHG PREV QTR SAAR.....	31.55	-23.27	13.29	4.82	7.02	-4.61	6.98	5.91	0.67	3.90	6.33	7.47	3.31	3.40
% CHG SAME QTR LAST YR.....	13.73	4.13	4.58	4.64	-0.63	4.93	3.44	3.70	2.13	4.34	4.18	7.47	3.31	3.40

Appendix A: Forecast Data-Annual

Tennessee Econometric Model November 1997 Update

Table

1. Selected U.S. and Tennessee Economic Indicators
2. Selected Per Capita U.S. and Tennessee Economic Indicators
3. Personal Income by Components (Mil 92 \$)
4. Personal Income by Components (Mil Current \$)
5. Wage and Salary Employment by Sector (Thou Jobs)
6. Durable Goods Manufacturing Employment (Thou Jobs)
7. Nondurable Goods Manufacturing Employment (Thou Jobs)
8. Average Annual Wage and Salary Rate by Sector (92 \$)
9. Average Annual Wage and Salary Rate by Sector (Current \$)
10. Civilian Labor Force and Unemployment Rate
11. Taxable Sales (Mil 92 \$)
12. Taxable Sales (Mil Current \$)
13. Gross State Product by Sector (Mil 92 \$)
14. Durable Goods Manufacturing Gross Product (Mil 92 \$)
15. Nondurable Goods Manufacturing Gross Product (Mil 92 \$)
16. Gross State Product by Sector (Mil Current \$)
17. Durable Goods Manufacturing Gross Product (Mil Current \$)
18. Nondurable Goods Manufacturing Gross Product (Mil Current \$)
19. Energy Consumption - Selected Categories

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
TABLE 1: SELECTED U.S. AND TENNESSEE ECONOMIC INDICATORS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
US GDP (BIL92\$).....	7190.9	7368.4	7539.0	7710.7	7889.0	8070.2	8246.4	8176.3	8347.7	8519.8
PERCENTAGE CHANGE.....	3.78	2.47	2.31	2.28	2.31	2.30	2.18	-0.85	2.10	2.06
TN GSP (MIL92\$).....	133060.3	136322.0	139866.5	144426.1	148964.7	154151.9	159868.2	165972.3	172504.8	179199.6
PERCENTAGE CHANGE.....	2.10	2.45	2.60	3.26	3.14	3.48	3.71	3.82	3.94	3.88
US GDP (BIL\$).....	8082.6	8457.9	8868.7	9299.4	9752.6	10227.8	10737.9	11099.1	11645.0	12210.1
PERCENTAGE CHANGE.....	5.85	4.64	4.86	4.86	4.87	4.87	4.99	3.36	4.92	4.85
TN GSP (MIL\$).....	149591.5	157018.5	165084.7	174676.7	184672.3	195894.0	208452.5	222475.7	237132.2	252625.0
PERCENTAGE CHANGE.....	4.62	4.96	5.14	5.81	5.72	6.08	6.41	6.73	6.59	6.53
IMPLICIT DEFLATOR,GDP.....	112.4	114.8	117.6	120.6	123.6	126.7	130.2	135.7	139.5	143.3
PERCENTAGE CHANGE.....	1.99	2.12	2.49	2.52	2.50	2.52	2.74	4.25	2.76	2.73
IMPLICIT DEFLATOR,GSP.....	112.4	115.2	118.0	120.9	124.0	127.1	130.4	134.0	137.5	141.0
PERCENTAGE CHANGE.....	2.48	2.45	2.47	2.47	2.50	2.51	2.61	2.80	2.55	2.55
US PERS CONS DEFL (1992=100).....	112.7	115.0	118.2	121.6	124.9	128.5	132.2	136.9	140.8	144.8
PERCENTAGE CHANGE.....	2.06	2.02	2.79	2.83	2.74	2.86	2.88	3.58	2.84	2.82
TN PERSONAL INCOME (MIL\$).....	122529	128784	135835	144025	152849	163032	173327	184476	196282	208646
PERCENTAGE CHANGE.....	4.94	5.10	5.48	6.03	6.13	6.66	6.31	6.43	6.40	6.30
US PERSONAL INCOME (BIL\$).....	6868.8	7221.5	7617.2	8026.3	8452.3	8907.7	9378.6	9547.2	10056.0	10583.0
PERCENTAGE CHANGE.....	5.75	5.13	5.48	5.37	5.31	5.39	5.29	1.80	5.33	5.24
TN PERSONAL INCOME (MIL92\$).....	108680	111964	114888	118464	122368	126895	131132	134745	139415	144127
PERCENTAGE CHANGE.....	2.83	3.02	2.61	3.11	3.30	3.70	3.34	2.76	3.47	3.38
US PERSONAL INCOME (BIL92\$).....	6092.5	6278.3	6442.5	6601.8	6766.7	6933.3	7095.5	6973.5	7142.5	7310.5
PERCENTAGE CHANGE.....	3.62	3.05	2.62	2.47	2.50	2.46	2.34	-1.72	2.42	2.35
TN NONAGRIC JOBS (THOUS).....	2557.8	2589.3	2624.7	2683.3	2742.2	2817.7	2903.9	2991.6	3084.4	3183.5
PERCENTAGE CHANGE.....	0.93	1.23	1.37	2.23	2.19	2.75	3.06	3.02	3.10	3.21
US NONAGRIC JOBS (MIL).....	122.2	124.5	126.2	127.6	129.3	130.8	132.3	132.9	134.5	136.1
PERCENTAGE CHANGE.....	2.24	1.91	1.30	1.18	1.30	1.18	1.12	0.47	1.19	1.19
TN UNEMPLOYMENT RATE (%).....	5.1	5.3	5.4	5.4	5.4	5.5	5.5	5.6	5.6	5.6
US UNEMPLOYMENT RATE (%).....	4.9	4.6	5.0	5.2	5.3	5.5	5.5	5.7	5.7	5.7
BANK PRIME INTEREST RATE (%).....	8.4	8.8	9.0	8.9	8.5	8.5	8.3	7.6	7.7	7.8
TN MFG JOBS (THOUS).....	515.3	514.9	516.6	519.5	522.0	525.5	528.8	531.2	536.4	540.9
PERCENTAGE CHANGE.....	-1.31	-0.08	0.34	0.57	0.47	0.69	0.61	0.47	0.97	0.85
TN TAXABLE SALES (MIL\$).....	65992	68980	72188	76116	80326	85145	89994	95251	100739	106497
PERCENTAGE CHANGE.....	8.74	4.53	4.65	5.44	5.53	6.00	5.70	5.84	5.76	5.72
TN TAXABLE SALES (MIL92\$).....	58534	59971	61056	62607	64307	66272	68086	69573	71553	73565
PERCENTAGE CHANGE.....	6.55	2.46	1.81	2.54	2.72	3.06	2.74	2.18	2.85	2.81

(Continued on next page)

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 1: SELECTED U.S. AND TENNESSEE ECONOMIC INDICATORS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TN MFG OUTPUT/EMPLOYEE (THOUS92\$)...	61.2	62.9	64.4	66.0	67.6	69.3	71.1	72.9	74.8	76.8
PERCENTAGE CHANGE.....	3.53	2.73	2.43	2.47	2.46	2.46	2.60	2.59	2.60	2.59
TN AVERAGE ANNUAL WAGE, NONAG (\$)...	27557	28641	29765	30794	31960	33301	34669	36257	37509	38860
PERCENTAGE CHANGE.....	4.35	3.93	3.92	3.46	3.78	4.20	4.11	4.58	3.45	3.60
TN AVERAGE ANNUAL WAGE, NONAG (92\$)..	24443	24901	25175	25329	25586	25919	26229	26483	26642	26843
PERCENTAGE CHANGE.....	2.25	1.87	1.10	0.61	1.02	1.30	1.19	0.97	0.60	0.76
TN TOTAL POPULATION (THOUS).....	5388	5452	5518	5585	5654	5723	5791	5861	5931	6005
PERCENTAGE CHANGE.....	1.20	1.19	1.20	1.23	1.24	1.21	1.20	1.20	1.20	1.25

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 2: SELECTED PER CAPITA U.S. AND TENNESSEE ECONOMIC INDICATORS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TN GSP (92 \$).....	24697	25004	25349	25858	26345	26937	27605	28319	29085	29842
PERCENTAGE CHANGE.....	0.88	1.24	1.38	2.01	1.88	2.25	2.48	2.59	2.71	2.60
TN GSP (\$).....	27766	28800	29920	31274	32660	34232	35994	37960	39982	42070
PERCENTAGE CHANGE.....	3.38	3.73	3.89	4.53	4.43	4.81	5.15	5.46	5.33	5.22
US GDP (92 \$).....	26842	27267	27662	28055	28469	28886	29280	28759	29125	29485
PERCENTAGE CHANGE.....	2.84	1.59	1.45	1.42	1.48	1.47	1.36	-1.78	1.27	1.24
US GDP (\$).....	30170	31299	32541	33836	35194	36609	38126	39040	40629	42257
PERCENTAGE CHANGE.....	4.89	3.74	3.97	3.98	4.01	4.02	4.14	2.40	4.07	4.01
TN PERSONAL INCOME (92 \$).....	20172	20536	20822	21210	21641	22174	22643	22991	23506	24002
PERCENTAGE CHANGE.....	1.61	1.81	1.39	1.86	2.03	2.46	2.11	1.54	2.24	2.11
TN PERSONAL INCOME (\$).....	22743	23621	24619	25786	27032	28489	29929	31477	33094	34746
PERCENTAGE CHANGE.....	3.70	3.86	4.22	4.74	4.83	5.39	5.05	5.17	5.14	4.99
US PERSONAL INCOME (92 \$).....	22742	23233	23639	24021	24419	24817	25193	24529	24920	25300
PERCENTAGE CHANGE.....	2.68	2.16	1.75	1.62	1.66	1.63	1.52	-2.64	1.60	1.53
US PERSONAL INCOME (\$).....	25640	26724	27949	29204	30502	31884	33300	33582	35085	36626
PERCENTAGE CHANGE.....	4.80	4.23	4.59	4.49	4.44	4.53	4.44	0.85	4.48	4.39
TN TAXABLE SALES (92 \$).....	10864	11000	11066	11209	11373	11581	11756	11871	12064	12251
PERCENTAGE CHANGE.....	5.28	1.25	0.60	1.29	1.46	1.83	1.52	0.97	1.63	1.55
TN TAXABLE SALES (\$).....	12249	12652	13083	13628	14206	14879	15539	16252	16985	17735
PERCENTAGE CHANGE.....	7.45	3.29	3.41	4.16	4.24	4.74	4.44	4.59	4.51	4.41

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 3: TENNESSEE PERSONAL INCOME BY COMPONENTS
 MILLIONS OF 1992 DOLLARS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TOTAL PERSONAL INCOME.....	108680	111964	114888	118464	122368	126895	131132	134745	139415	144127
PERCENTAGE CHANGE.....	2.83	3.02	2.61	3.11	3.30	3.70	3.34	2.76	3.47	3.38
WAGES AND SALARIES.....	63133	65111	66738	68652	70876	73778	76943	80031	83019	86343
PERCENTAGE CHANGE.....	3.01	3.13	2.50	2.87	3.24	4.09	4.29	4.01	3.73	4.00
OTHER LABOR INCOME.....	7233	7411	7692	8078	8504	9012	9160	9246	9634	9972
PERCENTAGE CHANGE.....	-0.64	2.46	3.79	5.03	5.26	5.98	1.64	0.93	4.20	3.50
PROPRIETORS INCOME.....	9434	9638	9763	9982	10199	10425	10547	10638	10806	10989
PERCENTAGE CHANGE.....	2.43	2.16	1.30	2.24	2.17	2.21	1.17	0.86	1.58	1.69
RENT INTEREST DIVIDENDS.....	15557	16094	16402	16866	17360	17665	17823	17896	18272	18451
PERCENTAGE CHANGE.....	4.02	3.45	1.91	2.83	2.93	1.76	0.89	0.41	2.10	0.98
TRANSFER PAYMENTS.....	19497	20054	20817	21631	22407	23259	24165	24742	25729	26734
PERCENTAGE CHANGE.....	2.87	2.86	3.80	3.91	3.58	3.80	3.90	2.39	3.99	3.90
LESS:PERS CONT FOR SOC INS.....	5160	5311	5473	5668	5873	6108	6344	6593	6802	7085
PERCENTAGE CHANGE.....	2.43	2.93	3.05	3.56	3.61	4.01	3.86	3.93	3.16	4.17
RESIDENCE ADJUSTMENT.....	-1013	-1034	-1052	-1078	-1105	-1136	-1164	-1215	-1245	-1276
PERCENTAGE CHANGE.....	5.33	1.98	1.79	2.51	2.48	2.79	2.44	4.41	2.44	2.49
PER CAPITA PERSONAL INCOME (\$)	20172	20536	20822	21210	21641	22174	22643	22991	23506	24002
PERCENTAGE CHANGE.....	1.61	1.81	1.39	1.86	2.03	2.46	2.11	1.54	2.24	2.11

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 4: TENNESSEE PERSONAL INCOME BY COMPONENTS
 MILLIONS OF CURRENT DOLLARS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TOTAL PERSONAL INCOME	122529	128784	135835	144025	152849	163032	173327	184476	196282	208646
PERCENTAGE CHANGE.....	4.94	5.10	5.48	6.03	6.13	6.66	6.31	6.43	6.40	6.30
WAGES AND SALARIES.....	71178	74893	78906	83465	88531	94788	101702	109569	116882	124995
PERCENTAGE CHANGE.....	5.13	5.22	5.36	5.78	6.07	7.07	7.29	7.74	6.67	6.94
OTHER LABOR INCOME.....	8154	8524	9094	9821	10622	11579	12108	12658	13564	14435
PERCENTAGE CHANGE.....	1.41	4.53	6.68	8.00	8.15	9.01	4.57	4.54	7.16	6.42
PROPRIETORS INCOME.....	10636	11085	11544	12136	12740	13394	13941	14565	15214	15908
PERCENTAGE CHANGE.....	4.54	4.22	4.13	5.14	4.97	5.13	4.09	4.47	4.46	4.56
RENT INTEREST DIVIDENDS.....	17539	18512	19393	20506	21684	22696	23558	24501	25726	26711
PERCENTAGE CHANGE.....	6.15	5.55	4.76	5.74	5.75	4.67	3.80	4.00	5.00	3.83
TRANSFER PAYMENTS.....	21981	23067	24613	26299	27988	29883	31941	33873	36224	38701
PERCENTAGE CHANGE.....	4.98	4.94	6.70	6.85	6.42	6.77	6.89	6.05	6.94	6.84
LESS:PERS CONT FOR SOC INS.....	5818	6109	6471	6891	7336	7848	8385	9026	9576	10257
PERCENTAGE CHANGE.....	4.54	5.01	5.92	6.49	6.45	6.98	6.85	7.65	6.09	7.11
RESIDENCE ADJUSTMENT.....	-1143	-1189	-1244	-1311	-1381	-1460	-1538	-1664	-1753	-1847
PERCENTAGE CHANGE.....	7.49	4.04	4.63	5.41	5.29	5.73	5.39	8.14	5.35	5.38
PER CAPITA PERSONAL INCOME (\$).....	22743	23621	24619	25786	27032	28489	29929	31477	33094	34746
PERCENTAGE CHANGE.....	3.70	3.86	4.22	4.74	4.83	5.39	5.05	5.17	5.14	4.99

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 5: TENNESSEE WAGE AND SALARY EMPLOYMENT BY SECTOR
 THOUSANDS OF JOBS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TOTAL NONAGRICULTURAL.....	2557.8	2589.3	2624.7	2683.3	2742.2	2817.7	2903.9	2991.6	3084.4	3183.5
PERCENTAGE CHANGE.....	0.93	1.23	1.37	2.23	2.19	2.75	3.06	3.02	3.10	3.21
MINING.....	4.6	4.6	4.6	4.6	4.5	4.5	4.5	4.4	4.4	4.4
PERCENTAGE CHANGE.....	0.09	0.52	-0.45	-0.56	-0.81	-0.94	-0.94	-0.82	-0.52	-0.27
CONSTRUCTION.....	117.7	122.6	127.4	133.0	138.2	144.0	149.5	155.2	161.1	167.4
PERCENTAGE CHANGE.....	4.39	4.18	3.93	4.37	3.91	4.16	3.85	3.81	3.80	3.91
MANUFACTURING.....	515.3	514.9	516.6	519.5	522.0	525.5	528.8	531.2	536.4	540.9
PERCENTAGE CHANGE.....	-1.31	-0.08	0.34	0.57	0.47	0.69	0.61	0.47	0.97	0.85
DURABLE GOODS.....	285.7	288.1	292.8	297.5	301.5	305.9	310.4	315.9	322.2	327.5
PERCENTAGE CHANGE.....	-0.22	0.86	1.63	1.59	1.34	1.44	1.49	1.79	1.98	1.65
NONDURABLE GOODS.....	229.6	226.7	223.8	222.0	220.5	219.7	218.4	215.3	214.2	213.4
PERCENTAGE CHANGE.....	-2.63	-1.26	-1.31	-0.78	-0.71	-0.35	-0.60	-1.41	-0.51	-0.36
TRADE.....	604.9	614.3	623.2	639.5	652.6	669.6	684.3	700.0	715.6	730.9
PERCENTAGE CHANGE.....	1.44	1.56	1.45	2.61	2.06	2.60	2.21	2.29	2.23	2.14
SERVICES.....	669.0	681.1	694.0	717.0	742.5	776.6	818.1	862.5	909.6	959.5
PERCENTAGE CHANGE.....	2.05	1.81	1.89	3.31	3.56	4.60	5.35	5.42	5.46	5.49
FIN, INS, REAL EST.....	120.0	122.4	125.2	127.9	130.7	133.5	136.2	139.0	141.9	144.7
PERCENTAGE CHANGE.....	2.34	2.03	2.30	2.18	2.15	2.12	2.08	2.05	2.02	1.99
TRANS, COMM, PUB UTIL.....	142.2	143.3	144.7	147.2	150.3	154.0	158.1	162.7	167.5	174.7
PERCENTAGE CHANGE.....	-0.45	0.78	1.03	1.73	2.10	2.43	2.68	2.88	2.99	4.29
GOVERNMENT.....	384.3	386.1	388.9	394.6	401.4	410.1	424.4	436.5	447.9	460.9
PERCENTAGE CHANGE.....	0.31	0.47	0.74	1.46	1.72	2.18	3.48	2.85	2.61	2.90
FEDERAL, CIVILIAN.....	53.0	52.5	52.2	52.3	52.2	52.2	52.2	52.5	52.9	53.3
PERCENTAGE CHANGE.....	-2.02	-0.95	-0.60	0.16	-0.07	0.00	0.00	0.57	0.73	0.71
STATE AND LOCAL.....	331.3	333.6	336.7	342.3	349.1	357.9	372.2	384.0	395.0	407.6
PERCENTAGE CHANGE.....	0.70	0.70	0.95	1.66	1.99	2.50	3.99	3.17	2.87	3.20
FARM.....	11.8	11.3	10.8	10.4	10.0	9.6	9.3	9.7	9.4	9.1
PERCENTAGE CHANGE.....	-4.37	-4.23	-3.95	-3.60	-3.80	-3.98	-3.56	4.15	-3.26	-2.81

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 6: TENNESSEE DURABLE GOODS MANUFACTURING EMPLOYMENT
 THOUSANDS OF JOBS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TOTAL DURABLE GOODS.....	285.7	288.1	292.8	297.5	301.5	305.9	310.4	315.9	322.2	327.5
PERCENTAGE CHANGE.....	-0.22	0.86	1.63	1.59	1.34	1.44	1.49	1.79	1.98	1.65
LUMBER AND WOOD.....	21.7	21.8	21.9	21.9	21.8	21.9	22.0	21.8	21.7	21.5
PERCENTAGE CHANGE.....	-0.90	0.72	0.35	0.09	-0.41	0.34	0.34	-0.88	-0.23	-1.09
FURNITURE AND FIXTURES.....	27.5	27.3	27.3	27.4	27.2	27.2	27.3	27.4	27.6	27.7
PERCENTAGE CHANGE.....	-4.14	-0.49	0.05	0.27	-0.65	0.06	0.19	0.46	0.53	0.30
STONE, CLAY AND GLASS.....	16.4	16.6	16.7	16.9	17.0	17.1	17.3	17.5	17.8	18.1
PERCENTAGE CHANGE.....	-0.19	0.90	0.90	1.05	0.57	0.93	1.00	0.90	1.66	1.75
PRIMARY METALS.....	16.5	16.6	16.8	17.0	17.2	17.3	17.4	17.6	17.8	17.8
PERCENTAGE CHANGE.....	0.07	0.74	1.22	1.38	0.83	0.83	0.69	0.98	0.91	0.48
FABRICATED METALS.....	43.3	43.2	43.9	44.8	45.7	46.6	47.2	47.7	48.5	49.6
PERCENTAGE CHANGE.....	-1.15	-0.27	1.74	2.03	1.97	1.86	1.34	1.04	1.73	2.19
NONELECTRICAL MACHINERY.....	44.3	45.3	46.3	46.6	47.0	47.8	48.5	49.3	50.0	50.6
PERCENTAGE CHANGE.....	1.03	2.25	2.17	0.83	0.81	1.59	1.46	1.83	1.25	1.32
ELECTRICAL MACHINERY.....	40.3	40.4	41.5	41.9	42.4	42.8	43.4	44.1	44.6	45.1
PERCENTAGE CHANGE.....	-0.89	0.20	2.65	1.06	1.09	1.16	1.28	1.62	1.08	1.22
TRANSPORTATION EQUIPMENT.....	53.5	54.5	55.4	57.2	58.9	60.1	61.8	63.6	64.9	66.5
PERCENTAGE CHANGE.....	2.19	1.91	1.76	3.11	2.99	2.15	2.82	2.93	2.04	2.47
INSTRUMENTS.....	11.1	11.5	11.8	12.0	12.3	12.7	13.0	13.3	13.6	13.9
PERCENTAGE CHANGE.....	4.58	3.98	2.19	2.18	2.16	3.02	2.72	2.00	2.21	2.30
MISCELLANEOUS.....	11.3	11.0	11.2	11.7	12.1	12.3	12.5	13.6	15.8	16.7
PERCENTAGE CHANGE.....	-3.70	-2.31	2.21	4.12	2.92	1.93	1.72	9.12	16.04	5.75

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 7: TENNESSEE NONDURABLE GOODS MANUFACTURING EMPLOYMENT
 THOUSANDS OF JOBS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TOTAL NONDURABLE GOODS.....	229.6	226.7	223.8	222.0	220.5	219.7	218.4	215.3	214.2	213.4
PERCENTAGE CHANGE.....	-2.63	-1.26	-1.31	-0.78	-0.71	-0.35	-0.60	-1.41	-0.51	-0.36
FOOD.....	35.4	35.4	35.1	35.1	35.0	35.1	35.3	35.5	35.6	35.8
PERCENTAGE CHANGE.....	-0.40	-0.03	-0.82	0.15	-0.49	0.45	0.52	0.49	0.46	0.44
TOBACCO.....	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
PERCENTAGE CHANGE.....	0.70	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TEXTILES.....	18.7	18.3	17.9	17.6	17.1	16.6	16.3	15.8	15.3	14.8
PERCENTAGE CHANGE.....	-3.03	-2.29	-2.17	-1.78	-3.01	-2.57	-2.02	-2.83	-3.10	-3.52
APPAREL.....	39.6	37.4	35.5	34.1	33.1	32.3	31.2	30.5	29.5	28.5
PERCENTAGE CHANGE.....	-7.85	-5.45	-5.10	-3.95	-2.98	-2.46	-3.28	-2.26	-3.40	-3.46
PAPER.....	21.3	20.9	20.6	20.7	20.9	21.2	21.1	21.2	21.2	21.1
PERCENTAGE CHANGE.....	-1.01	-1.80	-1.31	0.60	0.82	1.19	-0.40	0.68	-0.32	-0.23
PRINTING AND PUBLISHING.....	39.1	39.1	39.0	39.2	39.2	39.4	40.0	40.6	41.4	42.3
PERCENTAGE CHANGE.....	0.27	-0.13	-0.24	0.39	0.08	0.57	1.45	1.62	1.79	2.32
CHEMICALS.....	36.6	36.4	36.0	35.8	35.6	35.3	34.7	34.9	34.6	34.3
PERCENTAGE CHANGE.....	-2.46	-0.59	-1.08	-0.51	-0.67	-0.82	-1.57	0.53	-0.91	-0.81
PETROLEUM REFINING.....	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9
PERCENTAGE CHANGE.....	8.25	-5.39	-4.71	-3.59	-2.90	-2.31	-1.69	-1.08	-1.15	-0.89
RUBBER AND PLASTICS.....	32.5	33.1	33.8	33.8	34.2	34.5	34.6	31.7	31.8	31.9
PERCENTAGE CHANGE.....	-2.39	2.10	1.94	0.09	1.02	0.99	0.24	-8.37	0.28	0.52
LEATHER.....	4.1	3.8	3.6	3.5	3.3	3.2	3.0	2.9	2.7	2.6
PERCENTAGE CHANGE.....	-8.45	-6.57	-5.29	-4.29	-4.00	-4.96	-3.49	-5.10	-5.01	-5.46

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 8: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
 1992 DOLLARS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TOTAL NONAGRICULTURAL.....	24443	24901	25175	25329	25586	25919	26229	26483	26642	26843
PERCENTAGE CHANGE.....	2.25	1.87	1.10	0.61	1.02	1.30	1.19	0.97	0.60	0.76
MINING.....	34690	34964	35338	35317	35421	35937	36423	36749	37270	37776
PERCENTAGE CHANGE.....	0.02	0.79	1.07	-0.06	0.29	1.46	1.35	0.89	1.42	1.36
CONSTRUCTION.....	26877	27266	27345	27557	27816	28193	28573	28901	29196	29286
PERCENTAGE CHANGE.....	2.81	1.44	0.29	0.78	0.94	1.35	1.35	1.15	1.02	0.31
MANUFACTURING.....	28696	29317	29719	30194	30723	31210	31695	32134	32536	32857
PERCENTAGE CHANGE.....	2.31	2.16	1.37	1.60	1.75	1.58	1.55	1.38	1.25	0.99
DURABLE GOODS.....	29606	30005	30147	30423	30795	31147	31494	31939	32004	32081
PERCENTAGE CHANGE.....	3.50	1.35	0.48	0.91	1.22	1.14	1.11	1.41	0.20	0.24
NONDURABLE GOODS.....	27565	28444	29159	29888	30625	31297	31980	32420	33335	34048
PERCENTAGE CHANGE.....	0.70	3.19	2.51	2.50	2.47	2.19	2.18	1.38	2.82	2.14
TRADE.....	18417	18682	18903	18938	19090	19321	19501	19694	19848	19955
PERCENTAGE CHANGE.....	1.35	1.44	1.18	0.19	0.80	1.21	0.93	0.99	0.78	0.54
SERVICES.....	23451	24020	24395	24516	24806	25256	25627	25941	26075	26342
PERCENTAGE CHANGE.....	2.85	2.43	1.56	0.50	1.18	1.81	1.47	1.23	0.52	1.03
FIN, INS, REAL EST.....	31102	31647	32007	32154	32753	33423	33997	34324	34462	34900
PERCENTAGE CHANGE.....	0.32	1.75	1.14	0.46	1.86	2.04	1.72	0.96	0.40	1.27
TRANS, COMM, PUB UTIL.....	31775	32580	32990	33202	33440	34035	34652	34911	35133	35585
PERCENTAGE CHANGE.....	4.28	2.53	1.26	0.64	0.72	1.78	1.81	0.75	0.64	1.28
GOVERNMENT.....	24290	24597	24642	24738	24757	24773	24863	24963	24915	24918
PERCENTAGE CHANGE.....	2.64	1.26	0.18	0.39	0.08	0.07	0.36	0.40	-0.20	0.01
FEDERAL, CIVILIAN.....	40273	40772	41091	41288	41489	41679	41918	42277	41908	40818
PERCENTAGE CHANGE.....	2.81	1.24	0.78	0.48	0.49	0.46	0.58	0.86	-0.87	-2.60
STATE AND LOCAL.....	21733	22051	22093	22211	22254	22306	22470	22595	22639	22840
PERCENTAGE CHANGE.....	2.93	1.46	0.19	0.54	0.19	0.23	0.73	0.56	0.19	0.89
AGRICULTURE.....	9242	9470	9669	9832	10022	10238	10405	9681	9805	9877
PERCENTAGE CHANGE.....	2.63	2.46	2.11	1.68	1.93	2.15	1.63	-6.96	1.28	0.74

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 9: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
 CURRENT DOLLARS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TOTAL NONAGRICULTURAL.....	27557	28641	29765	30794	31960	33301	34669	36257	37509	38860
PERCENTAGE CHANGE.....	4.35	3.93	3.92	3.46	3.78	4.20	4.11	4.58	3.45	3.60
MINING.....	39111	40217	41781	42937	44244	46170	48143	50312	52473	54687
PERCENTAGE CHANGE.....	2.08	2.83	3.89	2.77	3.04	4.35	4.27	4.50	4.30	4.22
CONSTRUCTION.....	30302	31361	32330	33503	34745	36222	37767	39568	41105	42397
PERCENTAGE CHANGE.....	4.92	3.50	3.09	3.63	3.71	4.25	4.27	4.77	3.88	3.14
MANUFACTURING.....	32353	33721	35138	36710	38376	40097	41893	43993	45807	47565
PERCENTAGE CHANGE.....	4.41	4.23	4.20	4.47	4.54	4.49	4.48	5.01	4.12	3.84
DURABLE GOODS.....	33378	34512	35644	36987	38465	40017	41628	43726	45059	46442
PERCENTAGE CHANGE.....	5.63	3.40	3.28	3.77	4.00	4.03	4.03	5.04	3.05	3.07
NONDURABLE GOODS.....	31077	32717	34476	36337	38254	40209	42270	44385	46933	49289
PERCENTAGE CHANGE.....	2.77	5.28	5.38	5.40	5.27	5.11	5.12	5.00	5.74	5.02
TRADE.....	20763	21489	22349	23025	23846	24823	25776	26962	27944	28888
PERCENTAGE CHANGE.....	3.43	3.49	4.00	3.02	3.57	4.10	3.84	4.60	3.64	3.38
SERVICES.....	26439	27629	28843	29806	30985	32448	33873	35515	36711	38135
PERCENTAGE CHANGE.....	4.97	4.50	4.40	3.34	3.95	4.72	4.39	4.85	3.37	3.88
FIN, INS, REAL EST.....	35066	36401	37842	39092	40912	42941	44937	46992	48520	50523
PERCENTAGE CHANGE.....	2.38	3.81	3.96	3.30	4.66	4.96	4.65	4.57	3.25	4.13
TRANS, COMM, PUB UTIL.....	35824	37474	39005	40367	41770	43727	45802	47796	49464	51515
PERCENTAGE CHANGE.....	6.43	4.60	4.09	3.49	3.48	4.68	4.74	4.35	3.49	4.14
GOVERNMENT.....	27385	28292	29135	30076	30924	31828	32863	34177	35077	36073
PERCENTAGE CHANGE.....	4.76	3.31	2.98	3.23	2.82	2.92	3.25	4.00	2.63	2.84
FEDERAL, CIVILIAN.....	45405	46897	48583	50197	51824	53548	55407	57880	59002	59090
PERCENTAGE CHANGE.....	4.93	3.29	3.60	3.32	3.24	3.33	3.47	4.46	1.94	0.15
STATE AND LOCAL.....	24503	25364	26121	27004	27797	28658	29700	30935	31873	33064
PERCENTAGE CHANGE.....	5.05	3.51	2.99	3.38	2.94	3.10	3.64	4.16	3.03	3.74
AGRICULTURE.....	10420	10892	11432	11954	12519	13153	13753	13254	13804	14298
PERCENTAGE CHANGE.....	4.74	4.53	4.96	4.56	4.73	5.07	4.56	-3.63	4.15	3.58

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 10: TENNESSEE CIVILIAN LABOR FORCE AND UNEMPLOYMENT RATE

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CIVILIAN LABOR FORCE (THOUS).....	2766	2800	2838	2874	2911	2952	2992	3033	3074	3116
PERCENTAGE CHANGE.....	0.55	1.22	1.37	1.25	1.29	1.41	1.37	1.37	1.36	1.37
EMPLOYED PERSONS (THOUS).....	2624	2652	2686	2719	2752	2790	2827	2865	2902	2941
PERCENTAGE CHANGE.....	0.56	1.10	1.28	1.20	1.24	1.36	1.33	1.33	1.31	1.33
UNEMPLOYED PERSONS (THOUS).....	142	147	152	155	158	162	165	169	172	176
PERCENTAGE CHANGE.....	0.48	3.54	3.03	2.04	2.11	2.34	1.99	2.06	2.14	1.97
PARTICIPATION RATE (PERCENT).....	65.8	65.8	65.9	66.0	66.0	66.1	66.2	66.3	66.4	66.5
PERCENTAGE CHANGE.....	-0.64	0.03	0.16	0.01	0.04	0.20	0.16	0.17	0.16	0.11
UNEMPLOYMENT RATE (PERCENT).....	5.1	5.3	5.4	5.4	5.4	5.5	5.5	5.6	5.6	5.6

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 11: TENNESSEE TAXABLE SALES
 MILLIONS OF 1992 DOLLARS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TOTAL.....	58534	59971	61056	62607	64307	66272	68086	69573	71553	73565
PERCENTAGE CHANGE.....	6.55	2.46	1.81	2.54	2.72	3.06	2.74	2.18	2.85	2.81
AUTO DEALERS.....	5885	5982	5977	6079	6260	6347	6428	6631	6764	6902
PERCENTAGE CHANGE.....	-1.59	1.66	-0.08	1.70	2.98	1.40	1.26	3.17	2.01	2.03
PURCHASES FROM MANUFACTURERS.....	3928	4244	4369	4526	4718	4912	5068	5234	5482	5721
PERCENTAGE CHANGE.....	4.36	8.05	2.94	3.61	4.25	4.10	3.18	3.26	4.74	4.36
MISC DURABLE GOODS.....	10799	11274	11446	11630	11888	12183	12458	12691	12978	13230
PERCENTAGE CHANGE.....	14.91	4.40	1.53	1.61	2.22	2.48	2.25	1.87	2.27	1.94
EATING AND DRINKING PLACES.....	4598	4733	4843	4984	5145	5334	5503	5632	5845	6056
PERCENTAGE CHANGE.....	2.74	2.93	2.33	2.91	3.22	3.68	3.17	2.35	3.78	3.61
FOOD STORES.....	6592	6669	6656	6659	6632	6626	6627	6589	6596	6590
PERCENTAGE CHANGE.....	-0.36	1.16	-0.19	0.04	-0.40	-0.09	0.02	-0.57	0.11	-0.10
LIQUOR STORES.....	292	289	284	284	277	272	267	261	256	251
PERCENTAGE CHANGE.....	0.44	-1.09	-1.68	-0.13	-2.18	-1.91	-1.82	-2.41	-1.75	-1.91
HOTELS AND MOTELS.....	1424	1444	1475	1485	1503	1533	1566	1615	1673	1705
PERCENTAGE CHANGE.....	5.50	1.40	2.11	0.71	1.22	1.96	2.19	3.15	3.58	1.92
OTHER RETAIL AND SERVICE.....	16090	16322	16561	17052	17457	18094	18722	19058	19630	20215
PERCENTAGE CHANGE.....	3.14	1.44	1.46	2.97	2.37	3.65	3.47	1.79	3.00	2.98
MISC NONDURABLE GOODS.....	4793	4817	4922	4975	5061	5179	5297	5387	5507	5630
PERCENTAGE CHANGE.....	7.56	0.51	2.18	1.08	1.72	2.33	2.28	1.69	2.23	2.23
TRANSPORTATION, COMMUNICATION.....	4134	4198	4524	4933	5366	5793	6150	6475	6821	7265
PERCENTAGE CHANGE.....	37.35	1.55	7.77	9.04	8.77	7.96	6.16	5.29	5.34	6.51
PER CAPITA TOTAL TAXABLE SALES (\$)..	10864	11000	11066	11209	11373	11581	11756	11871	12064	12251
PERCENTAGE CHANGE.....	5.28	1.25	0.60	1.29	1.46	1.83	1.52	0.97	1.63	1.55

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 12: TENNESSEE TAXABLE SALES
 MILLIONS OF CURRENT DOLLARS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TOTAL.....	65992	68980	72188	76116	80326	85145	89994	95251	100739	106497
PERCENTAGE CHANGE.....	8.74	4.53	4.65	5.44	5.53	6.00	5.70	5.84	5.76	5.72
AUTO DEALERS.....	6635	6881	7067	7391	7820	8155	8496	9079	9524	9991
PERCENTAGE CHANGE.....	0.44	3.71	2.71	4.58	5.80	4.29	4.18	6.86	4.90	4.91
PURCHASES FROM MANUFACTURERS.....	4428	4881	5165	5503	5894	6311	6699	7165	7717	8282
PERCENTAGE CHANGE.....	6.51	10.23	5.81	6.54	7.11	7.08	6.15	6.96	7.71	7.31
MISC DURABLE GOODS.....	12175	12967	13533	14140	14850	15653	16466	17374	18272	19153
PERCENTAGE CHANGE.....	17.27	6.51	4.36	4.49	5.02	5.41	5.20	5.51	5.17	4.82
EATING AND DRINKING PLACES.....	5184	5444	5726	6059	6426	6853	7273	7711	8229	8767
PERCENTAGE CHANGE.....	4.86	5.01	5.18	5.82	6.05	6.64	6.14	6.01	6.73	6.54
FOOD STORES.....	7432	7670	7870	8095	8284	8512	8760	9021	9287	9540
PERCENTAGE CHANGE.....	1.69	3.21	2.60	2.87	2.33	2.76	2.91	2.99	2.95	2.72
LIQUOR STORES.....	329	332	336	345	347	350	353	357	361	364
PERCENTAGE CHANGE.....	2.51	0.91	1.07	2.69	0.50	0.89	1.01	1.08	1.04	0.86
HOTELS AND MOTELS.....	1606	1661	1743	1805	1877	1969	2070	2212	2356	2469
PERCENTAGE CHANGE.....	7.67	3.45	4.96	3.56	4.00	4.87	5.13	6.84	6.52	4.79
OTHER RETAIL AND SERVICE.....	18140	18774	19580	20732	21806	23247	24747	26092	27637	29264
PERCENTAGE CHANGE.....	5.26	3.50	4.29	5.88	5.18	6.61	6.45	5.44	5.92	5.89
MISC NONDURABLE GOODS.....	5404	5541	5820	6049	6322	6654	7002	7375	7753	8150
PERCENTAGE CHANGE.....	9.77	2.54	5.03	3.94	4.51	5.26	5.23	5.33	5.13	5.12
TRANSPORTATION, COMMUNICATION.....	4660	4828	5349	5997	6702	7442	8129	8865	9603	10517
PERCENTAGE CHANGE.....	40.18	3.61	10.78	12.12	11.76	11.05	9.22	9.05	8.33	9.52
PER CAPITA TOTAL TAXABLE SALES (\$)..	12249	12652	13083	13628	14206	14879	15539	16252	16985	17735
PERCENTAGE CHANGE.....	7.45	3.29	3.41	4.16	4.24	4.74	4.44	4.59	4.51	4.41

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 13: TENNESSEE GROSS STATE PRODUCT BY SECTOR
 MILLIONS OF 1992 DOLLARS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
GROSS STATE PRODUCT.....	133060.3	136322.0	139866.5	144426.1	148964.7	154151.9	159868.2	165972.3	172504.8	179199.6
PERCENTAGE CHANGE.....	2.10	2.45	2.60	3.26	3.14	3.48	3.71	3.82	3.94	3.88
MINING.....	445.4	481.2	516.2	551.6	582.9	611.1	637.2	664.2	692.7	722.3
PERCENTAGE CHANGE.....	7.30	8.03	7.28	6.86	5.67	4.84	4.26	4.24	4.29	4.27
CONSTRUCTION.....	5235.3	5508.4	5781.4	6095.0	6398.4	6732.8	7061.9	7402.5	7761.8	8144.4
PERCENTAGE CHANGE.....	5.44	5.22	4.96	5.42	4.98	5.23	4.89	4.82	4.85	4.93
MANUFACTURING.....	31550.1	32384.5	33283.1	34297.2	35306.2	36422.8	37598.9	38751.3	40143.2	41531.5
PERCENTAGE CHANGE.....	2.18	2.64	2.77	3.05	2.94	3.16	3.23	3.06	3.59	3.46
DURABLE GOODS.....	17582.3	18220.2	18930.6	19664.1	20375.8	21134.3	21984.7	22932.6	23970.4	24977.4
PERCENTAGE CHANGE.....	3.76	3.63	3.90	3.87	3.62	3.72	4.02	4.31	4.53	4.20
NONDURABLE GOODS.....	13967.8	14164.4	14352.5	14633.1	14930.4	15288.4	15614.2	15818.7	16172.8	16554.1
PERCENTAGE CHANGE.....	0.25	1.41	1.33	1.96	2.03	2.40	2.13	1.31	2.24	2.36
TRADE.....	26446.9	27263.9	28071.2	29019.9	29838.0	30843.8	31762.7	32736.1	33718.4	34693.9
PERCENTAGE CHANGE.....	2.91	3.09	2.96	3.38	2.82	3.37	2.98	3.06	3.00	2.89
SERVICES.....	24360.0	24874.6	25409.7	26328.8	27373.7	28637.6	30236.9	32015.9	33972.7	36009.4
PERCENTAGE CHANGE.....	2.31	2.11	2.15	3.62	3.97	4.62	5.58	5.88	6.11	6.00
FINANCE, INSURANCE AND REAL ESTATE..	17196.4	17648.4	18171.7	18682.1	19198.7	19730.1	20256.0	20794.6	21369.8	21922.9
PERCENTAGE CHANGE.....	3.01	2.63	2.97	2.81	2.77	2.77	2.67	2.66	2.77	2.59
TRANS., COMM., AND PUBLIC UTIL.....	11462.7	11782.1	12139.5	12715.4	13243.1	13785.3	14367.2	15062.2	15772.4	16508.3
PERCENTAGE CHANGE.....	1.57	2.79	3.03	4.74	4.15	4.09	4.22	4.84	4.72	4.67
GOVERNMENT.....	14584.4	14600.8	14673.5	14850.3	15061.5	15339.1	15791.4	16186.5	16573.6	17003.2
PERCENTAGE CHANGE.....	-1.31	0.11	0.50	1.20	1.42	1.84	2.95	2.50	2.39	2.59
FEDERAL CIVILIAN.....	3932.3	3906.6	3900.1	3917.2	3927.2	3941.0	3959.1	3994.5	4043.2	4084.4
PERCENTAGE CHANGE.....	-1.15	-0.66	-0.16	0.44	0.26	0.35	0.46	0.89	1.22	1.02
FEDERAL MILITARY.....	414.9	414.5	417.4	420.9	424.7	428.9	431.5	434.3	439.0	443.6
PERCENTAGE CHANGE.....	-30.24	-0.08	0.68	0.84	0.91	0.98	0.62	0.66	1.07	1.05
STATE AND LOCAL.....	10237.2	10279.7	10356.0	10512.2	10709.6	10969.2	11400.7	11757.7	12091.5	12475.2
PERCENTAGE CHANGE.....	0.32	0.41	0.74	1.51	1.88	2.42	3.93	3.13	2.84	3.17
AGRICULTURE.....	1779.1	1778.0	1820.2	1885.8	1962.2	2049.3	2156.0	2359.0	2500.2	2663.9
PERCENTAGE CHANGE.....	-1.49	-0.06	2.37	3.61	4.05	4.44	5.21	9.41	5.99	6.54
FARM.....	1218.5	1167.0	1153.7	1157.6	1165.0	1174.8	1194.2	1293.9	1317.4	1346.1
PERCENTAGE CHANGE.....	-5.71	-4.23	-1.13	0.34	0.64	0.84	1.65	8.35	1.82	2.18
AG SERVICES, FORESTRY, FISHERIES..	560.6	611.0	666.4	728.2	797.2	874.5	961.9	1065.1	1182.9	1317.8
PERCENTAGE CHANGE.....	9.13	9.00	9.08	9.26	9.47	9.70	9.99	10.73	11.05	11.41
PER CAPITA GROSS STATE PRODUCT (\$)..	24697.3	25004.1	25349.3	25857.8	26344.8	26937.4	27604.7	28319.4	29085.4	29842.4
PERCENTAGE CHANGE.....	0.88	1.24	1.38	2.01	1.88	2.25	2.48	2.59	2.71	2.60

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 14: TENNESSEE DURABLE GOODS MANUFACTURING GROSS PRODUCT
 MILLIONS OF 1992 DOLLARS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TOTAL DURABLE GOODS.....	17582.3	18220.2	18930.6	19664.1	20375.8	21134.3	21984.7	22932.6	23970.4	24977.4
PERCENTAGE CHANGE.....	3.76	3.63	3.90	3.87	3.62	3.72	4.02	4.31	4.53	4.20
LUMBER AND WOOD PRODUCTS.....	796.6	825.6	845.7	861.9	876.9	896.6	917.7	922.9	938.6	949.1
PERCENTAGE CHANGE.....	2.54	3.64	2.43	1.92	1.74	2.25	2.34	0.57	1.70	1.12
FURNITURE AND FIXTURES.....	964.6	991.1	1027.3	1055.2	1088.7	1131.9	1182.2	1243.0	1295.5	1317.4
PERCENTAGE CHANGE.....	0.94	2.74	3.66	2.71	3.17	3.97	4.45	5.14	4.22	1.69
STONE, CLAY AND GLASS.....	773.3	795.6	813.1	824.7	840.3	861.8	884.6	901.9	931.3	960.8
PERCENTAGE CHANGE.....	2.69	2.89	2.20	1.43	1.89	2.56	2.65	1.96	3.26	3.17
PRIMARY METALS.....	1091.0	1121.4	1158.5	1182.0	1206.6	1235.7	1263.5	1290.0	1320.4	1333.1
PERCENTAGE CHANGE.....	3.20	2.78	3.31	2.03	2.08	2.41	2.24	2.10	2.36	0.97
FABRICATED METAL PRODUCTS.....	2784.6	2870.9	2989.8	3091.8	3190.8	3290.0	3380.0	3438.3	3538.3	3653.4
PERCENTAGE CHANGE.....	2.87	3.10	4.14	3.41	3.20	3.11	2.74	1.73	2.91	3.25
NONELECTRICAL MACHINERY.....	3211.7	3437.9	3671.2	3863.4	4061.4	4303.6	4556.0	4850.2	5135.9	5426.1
PERCENTAGE CHANGE.....	5.89	7.04	6.79	5.24	5.12	5.96	5.86	6.46	5.89	5.65
ELECTRICAL MACHINERY.....	2356.3	2392.1	2454.9	2486.1	2543.5	2617.8	2708.3	2815.2	2920.9	3040.8
PERCENTAGE CHANGE.....	2.16	1.52	2.63	1.27	2.31	2.92	3.46	3.95	3.76	4.10
TRANSPORTATION EQUIPMENT.....	4301.1	4453.5	4585.0	4858.2	5065.7	5230.0	5450.7	5686.1	5898.3	6188.2
PERCENTAGE CHANGE.....	5.45	3.54	2.95	5.96	4.27	3.24	4.22	4.32	3.73	4.91
INSTRUMENTS.....	590.6	626.4	660.0	682.8	713.1	754.0	808.7	881.5	947.4	1004.5
PERCENTAGE CHANGE.....	5.48	6.07	5.35	3.46	4.43	5.75	7.25	9.00	7.48	6.02
MISCELLANEOUS DURABLE GOODS.....	712.4	705.6	725.2	757.9	788.9	813.0	833.2	903.6	1043.7	1103.8
PERCENTAGE CHANGE.....	-0.67	-0.95	2.77	4.52	4.09	3.05	2.49	8.44	15.51	5.76

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 15: TENNESSEE NONDURABLE GOODS MANUFACTURING GROSS PRODUCT
 MILLIONS OF 1992 DOLLARS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TOTAL NONDURABLE GOODS.....	13967.8	14164.4	14352.5	14633.1	14930.4	15288.4	15614.2	15818.7	16172.8	16554.1
PERCENTAGE CHANGE.....	0.25	1.41	1.33	1.96	2.03	2.40	2.13	1.31	2.24	2.36
FOOD.....	2893.0	2934.8	2954.7	3011.4	3058.7	3142.9	3236.1	3330.6	3444.1	3576.4
PERCENTAGE CHANGE.....	1.02	1.44	0.68	1.92	1.57	2.75	2.97	2.92	3.41	3.84
TOBACCO.....	289.7	294.6	298.6	302.8	306.5	310.8	316.1	322.1	328.6	335.5
PERCENTAGE CHANGE.....	1.71	1.70	1.35	1.40	1.24	1.41	1.68	1.89	2.02	2.12
TEXTILES.....	652.9	666.3	686.8	725.6	738.5	762.7	781.7	790.5	791.2	784.3
PERCENTAGE CHANGE.....	1.29	2.04	3.08	5.65	1.78	3.27	2.50	1.13	0.08	-0.86
APPAREL.....	1057.6	1022.1	991.1	975.8	973.3	975.5	972.0	984.2	989.8	993.5
PERCENTAGE CHANGE.....	-5.42	-3.36	-3.03	-1.54	-0.25	0.22	-0.35	1.25	0.57	0.37
PAPER.....	1412.6	1414.4	1430.9	1474.7	1526.6	1587.1	1622.9	1650.9	1677.3	1692.4
PERCENTAGE CHANGE.....	0.81	0.13	1.17	3.07	3.52	3.96	2.26	1.72	1.60	0.90
PRINTING AND PUBLISHING.....	1491.2	1516.7	1553.0	1598.1	1646.0	1698.2	1771.3	1853.8	1944.5	2048.7
PERCENTAGE CHANGE.....	1.62	1.71	2.39	2.90	3.00	3.17	4.31	4.66	4.89	5.36
CHEMICALS.....	4021.5	4107.5	4168.7	4238.5	4311.5	4377.3	4425.8	4546.6	4605.6	4671.7
PERCENTAGE CHANGE.....	0.03	2.14	1.49	1.68	1.72	1.53	1.11	2.73	1.30	1.43
PETROLEUM REFINING.....	180.0	178.1	172.1	167.6	162.6	159.2	158.6	157.4	156.8	156.7
PERCENTAGE CHANGE.....	15.07	-1.06	-3.38	-2.61	-3.01	-2.08	-0.40	-0.73	-0.40	-0.03
RUBBER AND PLASTICS.....	1862.1	1928.1	1998.3	2042.4	2113.9	2186.1	2242.8	2099.1	2154.0	2216.8
PERCENTAGE CHANGE.....	-0.10	3.54	3.64	2.21	3.50	3.42	2.59	-6.41	2.62	2.92
LEATHER.....	107.3	101.9	98.4	96.2	92.7	88.7	87.0	83.5	81.0	78.1
PERCENTAGE CHANGE.....	-5.09	-5.06	-3.41	-2.29	-3.61	-4.28	-1.96	-3.96	-3.09	-3.58

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 16: TENNESSEE GROSS STATE PRODUCT BY SECTOR
 MILLIONS OF CURRENT DOLLARS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
GROSS STATE PRODUCT.....	149592	157018	165085	174677	184672	195894	208453	222476	237132	252625
PERCENTAGE CHANGE.....	4.62	4.96	5.14	5.81	5.72	6.08	6.41	6.73	6.59	6.53
MINING.....	468	511	551	592	627	659	689	719	751	784
PERCENTAGE CHANGE.....	8.79	9.01	7.95	7.33	6.01	5.11	4.47	4.41	4.43	4.39
CONSTRUCTION.....	6010	6459	6925	7453	7971	8550	9145	9784	10487	11256
PERCENTAGE CHANGE.....	7.78	7.48	7.21	7.62	6.95	7.26	6.95	7.00	7.18	7.33
MANUFACTURING.....	33673	35064	36613	38378	40171	42131	44223	46352	48821	51350
PERCENTAGE CHANGE.....	3.47	4.13	4.42	4.82	4.67	4.88	4.97	4.81	5.33	5.18
DURABLE GOODS.....	18907	19885	21011	22233	23456	24763	26227	27876	29676	31495
PERCENTAGE CHANGE.....	5.23	5.17	5.66	5.82	5.50	5.57	5.91	6.28	6.46	6.13
NONDURABLE GOODS.....	14766	15180	15603	16145	16714	17368	17996	18477	19145	19855
PERCENTAGE CHANGE.....	1.29	2.80	2.79	3.48	3.53	3.91	3.62	2.67	3.62	3.71
TRADE.....	28220	29661	31202	32906	34567	36510	38487	41124	43363	45663
PERCENTAGE CHANGE.....	4.83	5.11	5.19	5.46	5.05	5.62	5.42	6.85	5.45	5.30
SERVICES.....	29413	31252	33183	35706	38514	41764	45674	50059	54954	60226
PERCENTAGE CHANGE.....	6.43	6.25	6.18	7.60	7.86	8.44	9.36	9.60	9.78	9.59
FINANCE, INSURANCE AND REAL ESTATE..	19472	20431	21502	22576	23715	24934	26203	27456	28813	30199
PERCENTAGE CHANGE.....	5.24	4.93	5.24	4.99	5.05	5.14	5.09	4.78	4.94	4.81
TRANS., COMM., AND PUBLIC UTIL.....	12652	13267	13944	14910	15863	16888	18041	19320	20659	22080
PERCENTAGE CHANGE.....	3.86	4.86	5.10	6.92	6.39	6.46	6.83	7.09	6.93	6.88
GOVERNMENT.....	17363	18026	18718	19559	20495	21551	22908	24261	25658	27181
PERCENTAGE CHANGE.....	2.48	3.82	3.84	4.49	4.79	5.15	6.30	5.91	5.75	5.94
FEDERAL CIVILIAN.....	4939	5080	5203	5375	5556	5732	5923	6158	6421	6680
PERCENTAGE CHANGE.....	2.51	2.85	2.44	3.29	3.38	3.17	3.33	3.97	4.27	4.04
FEDERAL MILITARY.....	470	487	508	530	553	577	600	623	649	675
PERCENTAGE CHANGE.....	-27.57	3.66	4.28	4.36	4.35	4.34	3.89	3.85	4.20	4.11
STATE AND LOCAL.....	11954	12459	13007	13654	14386	15241	16385	17481	18588	19825
PERCENTAGE CHANGE.....	4.16	4.22	4.39	4.98	5.36	5.95	7.51	6.69	6.33	6.66
AGRICULTURE.....	2320	2346	2445	2598	2749	2907	3083	3400	3626	3887
PERCENTAGE CHANGE.....	3.42	1.11	4.23	6.25	5.82	5.73	6.07	10.26	6.66	7.19
FARM.....	1567	1524	1545	1609	1662	1710	1762	1932	1991	2059
PERCENTAGE CHANGE.....	0.59	-2.79	1.43	4.12	3.30	2.85	3.07	9.66	3.03	3.40
AG SERVICES, FORESTRY, FISHERIES..	753	822	900	989	1087	1197	1321	1468	1635	1828
PERCENTAGE CHANGE.....	9.87	9.23	9.41	9.90	9.93	10.14	10.35	11.07	11.43	11.81
PER CAPITA GROSS STATE PRODUCT (\$)..	27766	28800	29920	31274	32660	34232	35994	37960	39982	42070
PERCENTAGE CHANGE.....	3.38	3.73	3.89	4.53	4.43	4.81	5.15	5.46	5.33	5.22

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 17: TENNESSEE DURABLE GOODS MANUFACTURING GROSS PRODUCT
 MILLIONS OF CURRENT DOLLARS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TOTAL DURABLE GOODS.....	18907	19885	21011	22233	23456	24763	26227	27876	29676	31495
PERCENTAGE CHANGE.....	5.23	5.17	5.66	5.82	5.50	5.57	5.91	6.28	6.46	6.13
LUMBER AND WOOD PRODUCTS.....	1238	1363	1485	1611	1745	1901	2075	2227	2419	2614
PERCENTAGE CHANGE.....	8.87	10.12	8.92	8.45	8.34	8.96	9.14	7.33	8.62	8.08
FURNITURE AND FIXTURES.....	999	1027	1065	1094	1128	1171	1221	1282	1335	1357
PERCENTAGE CHANGE.....	1.08	2.84	3.71	2.70	3.08	3.81	4.30	5.01	4.12	1.60
STONE, CLAY AND GLASS.....	853	883	909	927	951	981	1013	1039	1079	1119
PERCENTAGE CHANGE.....	3.45	3.59	2.87	2.08	2.53	3.18	3.26	2.54	3.83	3.72
PRIMARY METALS.....	1212	1275	1347	1404	1463	1529	1594	1659	1729	1778
PERCENTAGE CHANGE.....	5.67	5.16	5.63	4.25	4.23	4.50	4.26	4.05	4.26	2.78
FABRICATED METAL PRODUCTS.....	2861	2968	3139	3299	3456	3622	3784	3947	4128	4331
PERCENTAGE CHANGE.....	3.57	3.75	5.78	5.09	4.76	4.81	4.46	4.31	4.58	4.92
NONELECTRICAL MACHINERY.....	2997	3222	3451	3641	3834	4068	4310	4592	4865	5142
PERCENTAGE CHANGE.....	6.52	7.51	7.13	5.49	5.31	6.10	5.96	6.53	5.95	5.69
ELECTRICAL MACHINERY.....	2339	2404	2490	2539	2613	2701	2805	2925	3043	3176
PERCENTAGE CHANGE.....	3.88	2.77	3.58	1.99	2.88	3.39	3.85	4.28	4.04	4.36
TRANSPORTATION EQUIPMENT.....	4929	5204	5500	5999	6442	6848	7348	7893	8434	9116
PERCENTAGE CHANGE.....	6.52	5.57	5.68	9.08	7.38	6.31	7.30	7.42	6.85	8.09
INSTRUMENTS.....	656	704	752	790	838	901	984	1093	1197	1294
PERCENTAGE CHANGE.....	6.69	7.35	6.82	5.05	6.13	7.55	9.14	11.12	9.55	8.04
MISCELLANEOUS DURABLE GOODS.....	824	835	873	929	987	1041	1094	1219	1447	1570
PERCENTAGE CHANGE.....	2.80	1.33	4.60	6.41	6.22	5.45	5.04	11.49	18.70	8.48

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 18: TENNESSEE NONDURABLE GOODS MANUFACTURING GROSS PRODUCT
 MILLIONS OF CURRENT DOLLARS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TOTAL NONDURABLE GOODS.....	14766	15180	15603	16145	16714	17368	17996	18477	19145	19855
PERCENTAGE CHANGE.....	1.29	2.80	2.79	3.48	3.53	3.91	3.62	2.67	3.62	3.71
FOOD.....	3011	3082	3133	3225	3309	3437	3577	3719	3883	4071
PERCENTAGE CHANGE.....	1.65	2.37	1.65	2.95	2.59	3.89	4.06	3.96	4.42	4.83
TOBACCO.....	257	269	278	286	292	299	308	318	328	340
PERCENTAGE CHANGE.....	5.39	4.73	3.35	2.89	2.12	2.46	2.82	3.14	3.39	3.63
TEXTILES.....	612	628	650	689	704	730	751	762	765	760
PERCENTAGE CHANGE.....	1.75	2.51	3.54	6.09	2.18	3.64	2.84	1.45	0.38	-0.59
APPAREL.....	1022	991	969	965	972	984	991	1014	1032	1047
PERCENTAGE CHANGE.....	-6.01	-3.04	-2.21	-0.41	0.76	1.19	0.70	2.39	1.72	1.50
PAPER.....	1494	1522	1564	1636	1718	1811	1877	1934	1990	2033
PERCENTAGE CHANGE.....	2.72	1.92	2.72	4.60	5.01	5.42	3.64	3.06	2.90	2.15
PRINTING AND PUBLISHING.....	1931	2019	2109	2212	2320	2434	2577	2734	2902	3089
PERCENTAGE CHANGE.....	4.75	4.54	4.43	4.92	4.86	4.91	5.90	6.09	6.14	6.43
CHEMICALS.....	4142	4270	4398	4540	4688	4836	4965	5175	5315	5465
PERCENTAGE CHANGE.....	-0.22	3.08	3.01	3.23	3.25	3.15	2.67	4.23	2.71	2.82
PETROLEUM REFINING.....	196	195	190	187	183	183	185	187	190	193
PERCENTAGE CHANGE.....	14.95	-0.55	-2.59	-1.57	-1.74	-0.44	1.43	1.04	1.31	1.66
RUBBER AND PLASTICS.....	1977	2083	2194	2286	2412	2541	2652	2523	2631	2750
PERCENTAGE CHANGE.....	2.11	5.38	5.29	4.19	5.51	5.36	4.38	-4.85	4.27	4.53
LEATHER.....	125	121	119	119	116	113	113	110	109	106
PERCENTAGE CHANGE.....	-2.53	-2.98	-1.61	-0.52	-1.92	-2.63	-0.30	-2.37	-1.52	-2.05

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 19: TENNESSEE ENERGY CONSUMPTION - SELECTED CATEGORIES

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
ELECTRICITY (MIL. KWH).....	84834	86715	88640	90654	92752	94932	97205	99428	101752	104149
PERCENTAGE CHANGE.....	2.22	2.22	2.22	2.27	2.32	2.35	2.39	2.29	2.34	2.36
RESIDENTIAL.....	33697	34205	34719	35235	35763	36298	36856	37409	37972	38541
PERCENTAGE CHANGE.....	1.49	1.51	1.50	1.49	1.50	1.50	1.54	1.50	1.50	1.50
COMMERCIAL & INDUSTRIAL (<=50 KWH)	5188	5307	5413	5544	5689	5867	6069	6221	6384	6557
PERCENTAGE CHANGE.....	1.57	2.28	2.01	2.40	2.62	3.13	3.44	2.51	2.62	2.71
COMMERCIAL & INDUSTRIAL (> 50 KWH)	38500	39655	40859	42125	43459	44833	46243	47655	49132	50667
PERCENTAGE CHANGE.....	3.10	3.00	3.03	3.10	3.17	3.16	3.15	3.05	3.10	3.12
DIRECTLY SERVED COMM AND IND.....	7449	7548	7649	7750	7841	7934	8036	8142	8264	8384
PERCENTAGE CHANGE.....	1.51	1.33	1.34	1.32	1.18	1.18	1.30	1.32	1.50	1.45
GASOLINE (MIL. GAL.).....	2773	2793	2776	2789	2793	2803	2788	2767	2798	2793
PERCENTAGE CHANGE.....	0.84	0.73	-0.61	0.48	0.12	0.38	-0.53	-0.76	1.11	-0.16
MOTOR VEHICLE REGISTRATIONS.....	5597	5730	5925	6125	6333	6544	6766	6994	7228	7469
PERCENTAGE CHANGE.....	2.00	2.37	3.40	3.38	3.40	3.34	3.38	3.37	3.35	3.34

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Appendix B: Historical Data-Quarterly

Tennessee Econometric Model November 1997 Update

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*Key: SA=Seasonally Adjusted; NSA=Not Seasonally Adjusted
SAAR=Seasonally Adjusted at Annual Rates

TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 1: SELECTED U.S. AND TENNESSEE ECONOMIC INDICATORS
 SEASONALLY ADJUSTED

	HISTORICAL - DATA										ANNUAL			
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
US GDP (BIL92\$) SAAR.....	6688.6	6703.7	6708.8	6759.2	6796.5	6826.4	6926.0	6943.8	7017.4	7101.6	7159.6	6610.7	6742.0	6928.4
% CHG PREV QTR SAAR.....	3.61	0.91	0.30	3.04	2.23	1.77	5.97	1.03	4.31	4.89	3.31	3.46	1.99	2.76
% CHG SAME QTR LAST YR.....	3.27	2.75	1.64	1.96	1.61	1.83	3.24	2.73	3.25	4.03	3.37	3.46	1.99	2.76
US GDP (BIL\$) SAAR.....	7095.7	7168.9	7209.5	7301.3	7381.9	7467.5	7607.7	7676.0	7792.9	7933.6	8034.3	6947.0	7265.4	7636.0
% CHG PREV QTR SAAR.....	6.40	4.19	2.28	5.19	4.49	4.72	7.72	3.64	6.23	7.42	5.17	5.93	4.58	5.10
% CHG SAME QTR LAST YR.....	5.84	5.51	4.31	4.51	4.03	4.17	5.52	5.13	5.57	6.24	5.61	5.93	4.58	5.10
IMPLICIT DEFLATOR,GDP.....	106.1	106.9	107.5	108.0	108.6	109.4	109.8	110.5	111.1	111.7	112.2	105.1	107.8	110.2
% CHG PREV QTR SAAR.....	2.68	3.24	1.96	2.10	2.20	2.90	1.66	2.57	1.86	2.40	1.84	2.38	2.55	2.27
% CHG SAME QTR LAST YR.....	2.49	2.70	2.63	2.50	2.38	2.29	2.21	2.33	2.25	2.12	2.17	2.38	2.55	2.27
US PERS CONS DEFL (1992=100)....	106.3	107.1	107.7	108.2	108.6	109.3	110.1	110.8	111.6	112.2	112.5	105.2	107.9	110.5
% CHG PREV QTR SAAR.....	2.68	2.81	2.41	1.87	1.64	2.64	2.92	2.46	2.96	2.17	1.00	2.42	2.61	2.39
% CHG SAME QTR LAST YR.....	2.65	2.93	2.88	2.44	2.18	2.14	2.27	2.41	2.74	2.62	2.14	2.42	2.61	2.39
TN PERSONAL INCOME (MIL92\$) SAAR	100991	102415	103093	103726	104775	104667	105484	106161	106447	108189	109308	98883	103502	105690
% CHG PREV QTR SAAR.....	6.83	5.76	2.68	2.48	4.11	-0.41	3.16	2.59	1.08	6.71	4.20	3.91	4.67	2.11
% CHG SAME QTR LAST YR.....	4.38	5.85	4.72	4.42	3.75	2.20	2.32	2.35	1.60	3.36	3.63	3.91	4.67	2.11
US PERSONAL INCOME (BIL92\$) SAAR	5593.2	5654.5	5678.1	5711.3	5759.2	5816.2	5867.0	5904.2	5929.9	6012.1	6070.8	5507.6	5700.8	5879.3
% CHG PREV QTR SAAR.....	4.80	4.46	1.69	2.36	3.39	4.02	3.54	2.57	1.75	5.66	3.97	2.46	3.51	3.13
% CHG SAME QTR LAST YR.....	2.36	4.71	3.07	3.32	2.97	2.86	3.33	3.38	2.96	3.37	3.47	2.46	3.51	3.13
TN PERSONAL INCOME (MIL\$) SAAR..	107364	109635	111021	112221	113817	114443	116170	117626	118805	121399	122961	103989	111674	116761
% CHG PREV QTR SAAR.....	9.69	8.73	5.15	4.39	5.81	2.22	6.17	5.11	4.07	9.02	5.25	6.43	7.39	4.56
% CHG SAME QTR LAST YR.....	7.14	8.95	7.73	6.97	6.01	4.39	4.64	4.82	4.38	6.08	5.85	6.43	7.39	4.56
US PERSONAL INCOME (BIL\$) SAAR..	5946.1	6053.1	6114.8	6179.1	6256.2	6359.4	6461.3	6541.9	6618.4	6746.2	6829.1	5791.8	6150.8	6495.2
% CHG PREV QTR SAAR.....	7.61	7.39	4.14	4.27	5.09	6.76	6.57	5.08	4.76	7.95	5.01	4.94	6.20	5.60
% CHG SAME QTR LAST YR.....	5.07	7.78	6.04	5.84	5.22	5.06	5.67	5.87	5.79	6.08	5.69	4.94	6.20	5.60
TN NONAGRIC JOBS (THOUS).....	2461.1	2479.4	2489.5	2505.3	2521.2	2529.3	2528.6	2533.5	2549.9	2555.6	2552.5	2422.9	2498.8	2535.3
% CHG PREV QTR SAAR.....	4.75	3.01	1.63	2.56	2.57	1.29	-0.10	0.78	2.61	0.90	-0.48	4.06	3.14	1.46
% CHG SAME QTR LAST YR.....	4.36	4.04	3.10	2.98	2.44	2.01	1.57	1.13	1.14	1.04	0.95	4.06	3.14	1.46
US NONAGRIC JOBS (MIL).....	115.6	116.5	116.9	117.4	117.9	118.5	119.3	119.9	120.4	121.1	121.8	114.1	117.2	119.5
% CHG PREV QTR SAAR.....	3.32	3.04	1.59	1.62	1.85	1.78	2.66	2.20	1.85	2.31	2.37	3.10	2.67	1.98
% CHG SAME QTR LAST YR.....	3.41	3.43	2.87	2.39	2.02	1.71	1.98	2.12	2.12	2.25	2.18	3.10	2.67	1.98
TN UNEMPLOYMENT RATE (%).....	4.6	4.7	5.2	5.5	5.3	5.4	5.1	5.0	5.1	5.1	5.1	4.8	5.2	5.2
US UNEMPLOYMENT RATE (%).....	5.6	5.5	5.6	5.7	5.6	5.6	5.4	5.3	5.3	5.3	4.9	6.1	5.6	5.4
BANK PRIME INTEREST RATE (%)....	8.1	8.8	9.0	8.8	8.7	8.3	8.3	8.3	8.3	8.3	8.5	7.1	8.8	8.3
TN MFG JOBS (THOUS).....	543.2	547.0	541.4	535.7	531.7	526.2	522.0	520.5	520.9	519.3	515.9	539.0	538.9	522.4
% CHG PREV QTR SAAR.....	1.81	2.83	-4.08	-4.15	-2.93	-4.07	-3.18	-1.09	0.26	-1.22	-2.54	1.99	-0.01	-3.07
% CHG SAME QTR LAST YR.....	1.97	2.36	0.73	-0.95	-2.12	-3.81	-3.58	-2.83	-2.04	-1.32	-1.16	1.99	-0.01	-3.07

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 1: SELECTED U.S. AND TENNESSEE ECONOMIC INDICATORS
 SEASONALLY ADJUSTED

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TN TAXABLE SALES (MIL92\$).....	13162	13349	13420	13486	13415	13648	13686	13666	13903	14244	14406	51047	53670	54902
% CHG PREV QTR SAAR.....	8.10	5.81	2.14	1.98	-2.08	7.12	1.13	-0.60	7.15	10.16	4.62	6.94	5.14	2.30
% CHG SAME QTR LAST YR.....	7.68	7.93	6.44	4.48	1.92	2.24	1.98	1.33	3.64	4.37	5.26	6.94	5.14	2.30
TN TAXABLE SALES (MIL\$).....	13992	14290	14452	14590	14573	14922	15072	15141	15518	15983	16205	53686	57905	60654
% CHG PREV QTR SAAR.....	11.00	8.79	4.60	3.88	-0.48	9.95	4.08	1.85	10.32	12.55	5.67	9.53	7.86	4.75
% CHG SAME QTR LAST YR.....	10.52	11.09	9.50	7.03	4.15	4.42	4.29	3.78	6.48	7.11	7.52	9.53	7.86	4.75
TN AVG ANNUAL WAGE, NONAG (92\$)..	23610	23671	23666	23670	23803	23540	23874	24085	24075	24463	24746	23462	23702	23894
% CHG PREV QTR SAAR.....	1.60	1.05	-0.09	0.06	2.27	-4.34	5.79	3.58	-0.16	6.59	4.71	0.68	1.02	0.81
% CHG SAME QTR LAST YR.....	-0.05	1.73	0.90	0.65	0.82	-0.55	0.88	1.75	1.14	3.92	3.65	0.68	1.02	0.81
TN AVG ANNUAL WAGE, NONAG (\$)....	25099	25340	25486	25608	25857	25739	26292	26686	26870	27450	27837	24672	25573	26397
% CHG PREV QTR SAAR.....	4.32	3.89	2.32	1.93	3.95	-1.81	8.88	6.12	2.79	8.90	5.76	3.12	3.65	3.22
% CHG SAME QTR LAST YR.....	2.59	4.71	3.80	3.11	3.02	1.57	3.17	4.21	3.92	6.65	5.87	3.12	3.65	3.22

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 2: SELECTED PER CAPITA U.S. AND TENNESSEE ECONOMIC INDICATORS
 SEASONALLY ADJUSTED

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
US GDP (92\$) SAAR.....	25565	25556	25517	25655	25745	25817	26142	26156	26376	26628	26785	25359	25618	26123
% CHG PREV QTR SAAR.....	2.62	-0.14	-0.61	2.17	1.42	1.11	5.14	0.21	3.42	3.87	2.38	2.45	1.02	1.97
% CHG SAME QTR LAST YR.....	2.28	1.74	0.66	1.00	0.70	1.02	2.45	1.95	2.45	3.14	2.46	2.45	1.02	1.97
US GDP (\$) SAAR.....	27121	27330	27422	27712	27963	28241	28715	28914	29291	29747	30057	26648	27607	28790
% CHG PREV QTR SAAR.....	5.38	3.11	1.35	4.30	3.67	4.04	6.88	2.80	5.33	6.38	4.23	4.89	3.60	4.29
% CHG SAME QTR LAST YR.....	4.82	4.48	3.30	3.53	3.10	3.33	4.71	4.34	4.75	5.33	4.68	4.89	3.60	4.29
TN PERSONAL INCOME (92\$) SAAR...	19415	19621	19649	19676	19824	19752	19855	19900	19901	20174	20331	19112	19692	19852
% CHG PREV QTR SAAR.....	5.37	4.31	0.57	0.55	3.03	-1.44	2.10	0.91	0.03	5.60	3.14	2.32	3.04	0.81
% CHG SAME QTR LAST YR.....	2.82	4.32	3.08	2.68	2.11	0.67	1.05	1.14	0.39	2.14	2.40	2.32	3.04	0.81
TN PERSONAL INCOME (\$) SAAR.....	20640	21004	21160	21287	21534	21597	21866	22049	22212	22638	22870	20098	21246	21931
% CHG PREV QTR SAAR.....	8.19	7.25	3.00	2.43	4.72	1.17	5.08	3.39	2.98	7.89	4.17	4.80	5.72	3.22
% CHG SAME QTR LAST YR.....	5.54	7.38	6.05	5.19	4.33	2.82	3.34	3.58	3.15	4.82	4.59	4.80	5.72	3.22
US PERSONAL INCOME (92\$) SAAR...	21378	21556	21597	21677	21816	21996	22145	22240	22289	22543	22712	21127	21662	22167
% CHG PREV QTR SAAR.....	3.80	3.38	0.76	1.49	2.58	3.34	2.73	1.73	0.88	4.63	3.04	1.45	2.53	2.33
% CHG SAME QTR LAST YR.....	1.38	3.68	2.07	2.35	2.05	2.04	2.53	2.59	2.17	2.49	2.56	1.45	2.53	2.33
US PERSONAL INCOME (\$) SAAR.....	22727	23076	23258	23453	23699	24050	24388	24642	24877	25295	25548	22217	23371	24489
% CHG PREV QTR SAAR.....	6.57	6.29	3.19	3.39	4.26	6.07	5.73	4.23	3.87	6.90	4.07	3.91	5.20	4.78
% CHG SAME QTR LAST YR.....	4.06	6.72	5.01	4.85	4.27	4.22	4.86	5.07	4.97	5.18	4.76	3.91	5.20	4.78
TN TAXABLE SALES (92\$).....	2530	2557	2558	2558	2538	2575	2576	2562	2599	2656	2679	9866	10211	10312
% CHG PREV QTR SAAR.....	6.62	4.37	0.05	0.06	-3.09	6.01	0.09	-2.22	6.03	9.02	3.55	5.30	3.50	0.99
% CHG SAME QTR LAST YR.....	6.07	6.37	4.77	2.74	0.31	0.70	0.72	0.14	2.41	3.13	4.01	5.30	3.50	0.99
TN TAXABLE SALES (\$).....	2690	2738	2754	2768	2757	2816	2837	2838	2901	2980	3014	10375	11017	11392
% CHG PREV QTR SAAR.....	9.48	7.30	2.46	1.93	-1.51	8.81	3.01	0.18	9.16	11.38	4.59	7.85	6.18	3.41
% CHG SAME QTR LAST YR.....	8.88	9.49	7.79	5.25	2.50	2.86	3.00	2.55	5.22	5.84	6.24	7.85	6.18	3.41

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 TABLE 3: TENNESSEE PERSONAL INCOME BY COMPONENTS
 SEASONALLY ADJUSTED ANNUAL RATES
 MILLIONS OF 1992 DOLLARS

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TOTAL PERSONAL INCOME.....	100991	102415	103093	103726	104775	104667	105484	106161	106447	108189	109308	98883	103502	105690
% CHG PREV QTR SAAR.....	6.83	5.76	2.68	2.48	4.11	-0.41	3.16	2.59	1.08	6.71	4.20	3.91	4.67	2.11
% CHG SAME QTR LAST YR.....	4.38	5.85	4.72	4.42	3.75	2.20	2.32	2.35	1.60	3.36	3.63	3.91	4.67	2.11
WAGES AND SALARIES.....	58823	59411	59636	60017	60739	60273	61093	61739	62054	63125	63782	57576	59951	61290
% CHG PREV QTR SAAR.....	6.34	4.06	1.52	2.58	4.90	-3.03	5.55	4.30	2.06	7.08	4.22	4.73	4.13	2.23
% CHG SAME QTR LAST YR.....	4.25	5.74	3.95	3.61	3.26	1.45	2.44	2.87	2.17	4.73	4.40	4.73	4.13	2.23
OTHER LABOR INCOME.....	7603	7528	7468	7424	7447	7278	7294	7299	7247	7282	7325	7543	7467	7279
% CHG PREV QTR SAAR.....	1.80	-3.89	-3.18	-2.32	1.26	-8.78	0.88	0.25	-2.82	1.96	2.39	4.60	-1.01	-2.51
% CHG SAME QTR LAST YR.....	3.67	0.54	-0.61	-1.92	-2.05	-3.32	-2.32	-1.69	-2.69	0.05	0.42	4.60	-1.01	-2.51
PROPRIETORS INCOME.....	8994	8967	9019	9133	9195	9207	9251	9195	9189	9313	9467	8927	9078	9211
% CHG PREV QTR SAAR.....	5.35	-1.18	2.37	5.13	2.72	0.55	1.92	-2.40	-0.25	5.50	6.77	2.78	1.70	1.45
% CHG SAME QTR LAST YR.....	1.79	1.16	0.52	2.88	2.23	2.68	2.57	0.68	-0.06	1.15	2.33	2.78	1.70	1.45
RENT INTEREST DIVIDENDS.....	13804	14316	14479	14464	14664	14870	14849	15032	15073	15319	15488	13109	14481	14956
% CHG PREV QTR SAAR.....	16.71	15.67	4.63	-0.39	5.62	5.76	-0.57	5.02	1.11	6.70	4.49	4.73	10.46	3.28
% CHG SAME QTR LAST YR.....	11.06	14.72	12.48	8.91	6.23	3.87	2.56	3.92	2.79	3.02	4.31	4.73	10.46	3.28
TRANSFER PAYMENTS.....	17495	18064	18375	18606	18728	18966	18980	18936	18932	19322	19477	17344	18443	18953
% CHG PREV QTR SAAR.....	4.03	13.67	7.05	5.13	2.64	5.18	0.31	-0.93	-0.08	8.49	3.26	1.87	6.34	2.77
% CHG SAME QTR LAST YR.....	2.34	4.65	6.25	7.41	7.05	4.99	3.29	1.77	1.09	1.88	2.62	1.87	6.34	2.77
LESS:PERS CONT FOR SOC INS.....	4844	4936	4950	4974	5026	4981	5028	5067	5075	5170	5206	4773	4972	5038
% CHG PREV QTR SAAR.....	5.17	7.79	1.16	1.90	4.30	-3.57	3.82	3.15	0.64	7.70	2.82	6.37	4.16	1.33
% CHG SAME QTR LAST YR.....	6.57	4.64	4.31	3.97	3.76	0.91	1.56	1.87	0.97	3.79	3.54	6.37	4.16	1.33
RESIDENCE ADJUSTMENT.....	-883	-936	-933	-945	-971	-947	-955	-973	-974	-1003	-1025	-842	-946	-962
% CHG PREV QTR SAAR.....	13.37	26.11	-1.18	4.98	11.73	-9.75	3.70	7.62	0.41	12.30	9.24	9.78	12.34	1.68
% CHG SAME QTR LAST YR.....	8.00	16.86	12.55	10.36	9.95	1.13	2.36	2.99	0.28	5.92	7.30	9.78	12.34	1.68
PER CAPITA PERSONAL INCOME (\$)...	19415	19621	19649	19676	19824	19752	19855	19900	19901	20174	20331	19112	19692	19852
% CHG PREV QTR SAAR.....	5.37	4.31	0.57	0.55	3.03	-1.44	2.10	0.91	0.03	5.60	3.14	2.32	3.04	0.81
% CHG SAME QTR LAST YR.....	2.82	4.32	3.08	2.68	2.11	0.67	1.05	1.14	0.39	2.14	2.40	2.32	3.04	0.81

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 4: TENNESSEE PERSONAL INCOME BY COMPONENTS
 SEASONALLY ADJUSTED ANNUAL RATES
 MILLIONS OF CURRENT DOLLARS

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TOTAL PERSONAL INCOME.....	107364	109635	111021	112221	113817	114443	116170	117626	118805	121399	122961	103989	111674	116761
% CHG PREV QTR SAAR.....	9.69	8.73	5.15	4.39	5.81	2.22	6.17	5.11	4.07	9.02	5.25	6.43	7.39	4.56
% CHG SAME QTR LAST YR.....	7.14	8.95	7.73	6.97	6.01	4.39	4.64	4.82	4.38	6.08	5.85	6.43	7.39	4.56
WAGES AND SALARIES.....	62535	63600	64222	64932	65981	65903	67282	68407	69259	70833	71748	60549	64684	67713
% CHG PREV QTR SAAR.....	9.19	6.99	3.97	4.50	6.62	-0.47	8.64	6.86	5.08	9.41	5.27	7.27	6.83	4.68
% CHG SAME QTR LAST YR.....	7.01	8.84	6.94	6.14	5.51	3.62	4.76	5.35	4.97	7.48	6.64	7.27	6.83	4.68
OTHER LABOR INCOME.....	8083	8059	8042	8032	8090	7958	8033	8087	8088	8171	8240	7932	8056	8042
% CHG PREV QTR SAAR.....	4.53	-1.18	-0.84	-0.50	2.92	-6.37	3.82	2.72	0.05	4.17	3.42	7.13	1.56	-0.18
% CHG SAME QTR LAST YR.....	6.41	3.49	2.25	0.48	0.09	-1.25	-0.11	0.68	-0.02	2.68	2.58	7.13	1.56	-0.18
PROPRIETORS INCOME.....	9561	9599	9713	9881	9988	10067	10188	10188	10256	10450	10649	9387	9795	10175
% CHG PREV QTR SAAR.....	8.18	1.60	4.84	7.10	4.40	3.20	4.90	0.00	2.70	7.78	7.84	5.26	4.35	3.87
% CHG SAME QTR LAST YR.....	4.48	4.12	3.41	5.40	4.47	4.88	4.89	3.11	2.68	3.80	4.52	5.26	4.35	3.87
RENT INTEREST DIVIDENDS.....	14675	15325	15592	15649	15929	16259	16353	16655	16823	17190	17423	13788	15624	16523
% CHG PREV QTR SAAR.....	19.83	18.93	7.15	1.47	7.35	8.55	2.33	7.59	4.10	9.02	5.53	7.30	13.31	5.75
% CHG SAME QTR LAST YR.....	14.00	18.08	15.72	11.57	8.55	6.09	4.88	6.43	5.61	5.73	6.54	7.30	13.31	5.75
TRANSFER PAYMENTS.....	18599	19338	19788	20130	20344	20737	20903	20981	21130	21681	21910	18238	19900	20938
% CHG PREV QTR SAAR.....	6.81	16.87	9.64	7.09	4.32	7.95	3.24	1.50	2.87	10.85	4.29	4.33	9.12	5.21
% CHG SAME QTR LAST YR.....	5.04	7.72	9.30	10.03	9.38	7.23	5.63	4.23	3.86	4.55	4.82	4.33	9.12	5.21
LESS:PERS CONT FOR SOC INS.....	5150	5284	5331	5381	5460	5446	5537	5614	5664	5801	5856	5019	5364	5565
% CHG PREV QTR SAAR.....	7.99	10.82	3.61	3.80	6.00	-1.02	6.85	5.68	3.61	10.03	3.85	8.94	6.87	3.75
% CHG SAME QTR LAST YR.....	9.39	7.70	7.31	6.51	6.02	3.07	3.86	4.33	3.74	6.52	5.76	8.94	6.87	3.75
RESIDENCE ADJUSTMENT.....	-939	-1002	-1005	-1022	-1055	-1035	-1052	-1078	-1087	-1125	-1153	-886	-1021	-1063
% CHG PREV QTR SAAR.....	16.41	29.66	1.20	6.94	13.55	-7.37	6.73	10.26	3.38	14.73	10.33	12.44	15.24	4.11
% CHG SAME QTR LAST YR.....	10.86	20.29	15.78	13.05	12.35	3.29	4.68	5.48	3.03	8.70	9.60	12.44	15.24	4.11
PER CAPITA PERSONAL INCOME (\$)...	20640	21004	21160	21287	21534	21597	21866	22049	22212	22638	22870	20098	21246	21931
% CHG PREV QTR SAAR.....	8.19	7.25	3.00	2.43	4.72	1.17	5.08	3.39	2.98	7.89	4.17	4.80	5.72	3.22
% CHG SAME QTR LAST YR.....	5.54	7.38	6.05	5.19	4.33	2.82	3.34	3.58	3.15	4.82	4.59	4.80	5.72	3.22

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 5: TENNESSEE NONAGRICULTURAL EMPLOYMENT BY SECTOR
 THOUSANDS OF JOBS

	HISTORICAL - DATA										ANNUAL			
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TOTAL NONAGRICULTURAL.....	2485.4	2446.7	2494.1	2508.4	2546.7	2496.8	2532.8	2536.7	2571.3	2527.2	2557.3	2423.0	2499.0	2534.4
% CHG SAME QTR LAST YR....	4.37	4.09	3.07	2.96	2.46	2.04	1.55	1.13	0.97	1.22	0.97	4.06	3.14	1.42
MINING.....	4.6	4.5	4.6	4.6	4.6	4.5	4.7	4.7	4.5	4.5	4.6	4.6	4.6	4.6
% CHG SAME QTR LAST YR....	-0.72	0.75	-1.43	-1.42	0.72	0.75	1.45	1.44	-2.16	-0.74	-0.71	-1.78	-0.36	0.36
CONSTRUCTION.....	104.9	98.8	109.1	115.2	112.3	103.8	114.7	116.8	115.7	108.9	118.3	101.0	108.8	112.7
% CHG SAME QTR LAST YR....	6.93	7.08	6.89	9.82	7.06	5.06	5.10	1.39	3.03	4.88	3.17	7.15	7.74	3.58
MANUFACTURING.....	543.7	544.3	542.9	536.3	532.0	523.8	523.5	519.8	521.5	518.3	517.1	538.9	538.9	522.2
% CHG SAME QTR LAST YR....	1.92	2.45	0.72	-0.97	-2.15	-3.77	-3.58	-3.09	-1.97	-1.06	-1.22	1.98	0.00	-3.11
DURABLE GOODS.....	286.4	289.5	289.7	285.1	287.6	286.0	286.7	284.8	287.9	287.5	286.3	281.7	288.0	286.3
% CHG SAME QTR LAST YR....	4.34	4.93	2.94	0.73	0.43	-1.22	-1.06	-0.11	0.08	0.55	-0.12	4.48	2.23	-0.58
NONDURABLE GOODS.....	257.3	254.8	253.2	251.3	244.4	237.9	236.8	235.0	233.7	230.8	230.8	257.2	250.9	235.8
% CHG SAME QTR LAST YR....	-0.64	-0.23	-1.70	-2.84	-5.01	-6.66	-6.46	-6.47	-4.39	-2.98	-2.55	-0.61	-2.45	-6.01
TRADE.....	580.5	566.9	582.1	590.6	602.2	580.4	591.3	600.0	613.4	592.8	602.2	562.1	585.5	596.3
% CHG SAME QTR LAST YR....	4.48	4.77	4.21	3.93	3.74	2.39	1.57	1.60	1.87	2.13	1.84	4.89	4.15	1.85
SERVICES.....	618.9	613.5	635.2	648.8	654.4	637.4	656.3	664.9	663.4	654.5	668.1	603.8	638.0	655.5
% CHG SAME QTR LAST YR....	6.42	6.42	5.00	5.54	5.73	3.90	3.32	2.49	1.39	2.69	1.79	5.48	5.66	2.75
FIN,INS,REAL EST.....	108.9	108.4	110.5	113.0	114.4	115.0	116.8	118.6	118.6	118.6	119.9	108.3	111.6	117.2
% CHG SAME QTR LAST YR....	2.58	1.66	1.97	3.17	5.05	6.09	5.70	4.96	3.67	3.19	2.63	4.04	2.97	5.09
TRANS,COMM,PUB UTIL.....	137.8	135.7	137.1	139.4	141.9	141.5	142.5	143.4	143.8	141.5	142.0	133.6	138.6	142.8
% CHG SAME QTR LAST YR....	5.46	5.33	4.18	2.55	3.00	4.30	3.89	2.84	1.34	0.00	-0.33	5.36	3.74	3.07
GOVERNMENT.....	386.2	374.7	372.5	360.5	384.9	390.3	383.1	368.5	390.3	388.1	385.1	370.7	373.1	383.1
% CHG SAME QTR LAST YR....	4.01	1.39	0.54	1.10	-0.35	4.17	2.84	2.24	1.41	-0.57	0.53	2.42	0.66	2.66
FEDERAL,CIVILIAN.....	53.9	54.7	55.1	54.3	53.4	54.5	55.0	53.9	53.0	53.6	53.5	55.3	54.4	54.1
% CHG SAME QTR LAST YR....	-1.94	-1.85	-2.01	-1.51	-0.87	-0.37	-0.30	-0.86	-0.69	-1.71	-2.67	-0.76	-1.57	-0.55
STATE AND LOCAL.....	332.3	320.0	317.4	306.1	331.5	335.8	328.1	314.7	337.3	334.5	331.6	315.5	318.8	329.0
% CHG SAME QTR LAST YR....	5.05	1.96	1.00	1.58	-0.26	4.95	3.38	2.79	1.75	-0.39	1.07	3.00	1.05	3.21

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 TABLE 6: TENNESSEE DURABLE GOODS MANUFACTURING EMPLOYMENT
 THOUSANDS OF JOBS

	HISTORICAL - DATA										ANNUAL			
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TOTAL DURABLE GOODS.....	286.4	289.5	289.7	285.1	287.6	286.0	286.7	284.8	287.9	287.5	286.3	281.7	288.0	286.3
% CHG SAME QTR LAST YR.....	4.34	4.93	2.94	0.73	0.43	-1.22	-1.06	-0.11	0.08	0.55	-0.12	4.48	2.23	-0.58
LUMBER AND WOOD.....	20.9	21.3	21.8	21.8	21.8	21.5	21.9	22.1	21.9	21.3	21.7	20.5	21.7	21.9
% CHG SAME QTR LAST YR.....	4.51	7.21	6.16	5.14	4.63	1.10	0.46	1.22	0.31	-0.93	-1.06	4.59	5.77	0.77
FURNITURE AND FIXTURES.....	30.2	30.4	29.9	28.5	29.1	28.9	29.0	28.1	28.5	28.0	27.7	29.8	29.5	28.6
% CHG SAME QTR LAST YR.....	2.60	3.05	-0.67	-3.06	-3.75	-4.82	-2.79	-1.52	-1.95	-3.11	-4.48	2.97	-1.12	-2.80
STONE, CLAY AND GLASS.....	16.3	16.0	16.1	16.3	16.6	16.4	16.6	16.4	16.4	16.3	16.4	16.1	16.2	16.5
% CHG SAME QTR LAST YR.....	4.93	3.23	-2.03	-0.81	1.43	2.71	3.11	1.02	-1.01	-0.81	-0.80	6.37	0.41	1.44
PRIMARY METALS.....	16.5	16.3	16.2	16.1	16.4	16.5	16.6	16.1	16.6	16.5	16.4	16.2	16.2	16.5
% CHG SAME QTR LAST YR.....	4.64	2.31	0.21	0.00	-1.01	1.23	2.47	0.21	1.63	0.40	-1.21	3.97	0.36	1.39
FABRICATED METALS.....	46.4	46.5	45.9	45.1	45.1	43.9	43.6	43.5	44.3	43.7	43.3	45.6	45.7	43.8
% CHG SAME QTR LAST YR.....	3.65	3.56	1.32	-1.67	-2.94	-5.66	-5.08	-3.55	-1.70	-0.30	-0.69	3.15	0.04	-4.02
NONELECTRICAL MACHINERY.....	41.6	43.8	44.4	42.4	43.1	44.5	44.4	42.9	43.6	45.5	44.7	41.1	43.4	43.8
% CHG SAME QTR LAST YR.....	5.77	8.68	7.33	2.66	3.77	1.52	-0.15	1.18	1.00	2.40	0.68	5.99	5.59	0.88
ELECTRICAL MACHINERY.....	40.4	40.4	39.9	40.3	40.7	39.9	40.1	41.0	41.7	40.7	40.3	39.3	40.3	40.7
% CHG SAME QTR LAST YR.....	4.84	5.21	3.28	0.92	0.66	-1.24	0.42	1.74	2.46	2.09	0.42	5.14	2.48	0.85
TRANSPORTATION EQUIPMENT.....	51.8	52.5	53.1	52.0	52.4	52.0	52.1	52.4	52.7	53.0	53.5	51.0	52.5	52.3
% CHG SAME QTR LAST YR.....	5.50	5.21	3.98	1.56	1.16	-0.89	-2.01	0.77	0.57	1.92	2.69	6.21	2.96	-0.40
INSTRUMENTS.....	10.4	10.4	10.5	10.7	10.6	10.6	10.6	10.6	10.7	11.0	11.1	10.1	10.5	10.6
% CHG SAME QTR LAST YR.....	4.00	4.70	5.70	5.94	1.60	1.60	0.63	-1.25	1.26	4.42	5.05	1.76	4.46	0.55
MISCELLANEOUS.....	11.8	12.0	11.9	11.8	11.9	11.9	11.9	11.6	11.4	11.4	11.3	11.8	11.9	11.7
% CHG SAME QTR LAST YR.....	-1.12	1.98	0.00	-0.56	0.85	-1.39	0.00	-1.69	-3.92	-4.21	-4.78	-0.56	0.56	-1.75

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 7: TENNESSEE NONDURABLE GOODS MANUFACTURING EMPLOYMENT
 THOUSANDS OF JOBS

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TOTAL NONDURABLE GOODS.....	257.3	254.8	253.2	251.3	244.4	237.9	236.8	235.0	233.7	230.8	230.8	257.2	250.9	235.8
% CHG SAME QTR LAST YR.....	-0.64	-0.23	-1.70	-2.84	-5.01	-6.66	-6.46	-6.47	-4.39	-2.98	-2.55	-0.61	-2.45	-6.01
FOOD.....	37.5	36.7	37.1	37.1	36.4	35.9	35.5	35.5	35.2	34.9	35.6	37.3	36.8	35.5
% CHG SAME QTR LAST YR.....	-0.44	0.27	-0.80	-1.59	-3.11	-2.18	-4.14	-4.40	-3.21	-2.88	0.19	-0.25	-1.32	-3.49
TOBACCO.....	1.3	1.3	1.1	1.1	1.2	1.3	1.1	1.1	1.2	1.3	1.1	1.2	1.2	1.2
% CHG SAME QTR LAST YR.....	5.56	-4.76	-5.56	3.12	-7.89	-2.50	0.00	0.00	0.00	0.00	0.00	0.68	-4.05	-0.70
TEXTILES.....	22.2	22.2	21.3	20.3	19.5	19.3	19.7	19.2	19.1	19.1	18.9	22.2	20.8	19.3
% CHG SAME QTR LAST YR.....	-0.30	0.91	-4.19	-8.83	-12.18	-13.34	-7.66	-5.25	-1.88	-0.87	-3.89	1.29	-6.09	-7.24
APPAREL.....	56.8	55.2	53.4	51.6	48.5	44.3	43.8	42.0	41.8	40.6	40.4	56.8	52.2	43.0
% CHG SAME QTR LAST YR.....	-2.57	-3.04	-6.04	-8.67	-14.50	-19.69	-18.03	-18.72	-13.94	-8.42	-7.76	-4.91	-8.06	-17.69
PAPER.....	22.4	21.8	22.2	22.8	21.7	21.1	21.4	21.9	21.6	21.2	21.3	22.5	22.1	21.5
% CHG SAME QTR LAST YR.....	-2.18	-0.61	-0.74	-1.58	-3.12	-3.22	-3.90	-3.95	-0.31	0.47	-0.31	-0.88	-1.52	-2.86
PRINTING AND PUBLISHING.....	39.3	39.1	39.1	40.1	39.9	38.9	38.8	39.2	39.2	38.8	39.0	38.5	39.5	39.0
% CHG SAME QTR LAST YR.....	5.17	3.99	2.80	2.74	1.53	-0.34	-0.77	-2.16	-1.75	-0.34	0.52	3.82	2.75	-1.26
CHEMICALS.....	37.2	37.5	37.7	37.7	37.7	37.9	37.6	37.3	37.3	36.9	36.6	38.0	37.6	37.5
% CHG SAME QTR LAST YR.....	-4.13	-2.17	-1.82	-0.96	1.35	1.16	-0.18	-0.97	-1.06	-2.64	-2.66	-2.25	-0.92	-0.27
PETROLEUM REFINING.....	0.9	0.9	0.9	0.9	0.9	1.0	1.1	1.1	1.1	1.1	1.2	0.8	0.9	1.1
% CHG SAME QTR LAST YR.....	12.50	17.39	12.00	3.70	3.70	7.41	14.29	17.86	17.86	13.79	12.50	9.68	8.82	14.41
RUBBER AND PLASTICS.....	33.3	34.0	34.2	33.7	33.2	33.6	33.2	33.2	33.0	32.7	32.4	32.9	33.8	33.3
% CHG SAME QTR LAST YR.....	5.60	5.37	3.22	2.33	-0.40	-1.27	-2.73	-1.68	-0.50	-2.68	-2.41	6.67	2.61	-1.55
LEATHER.....	6.5	6.1	6.1	5.9	5.5	4.5	4.6	4.5	4.2	4.2	4.2	7.0	5.9	4.5
% CHG SAME QTR LAST YR.....	-20.73	-19.82	-14.08	-14.90	-15.38	-25.27	-25.14	-23.16	-23.03	-8.09	-8.76	-15.95	-16.13	-24.19

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 8: TENNESSEE NONAGRICULTURAL EMPLOYMENT BY SECTOR
 THOUSANDS OF SEASONALLY ADJUSTED JOBS

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TOTAL NONAGRICULTURAL.....	2461.1	2479.4	2489.5	2505.3	2521.2	2529.3	2528.6	2533.5	2549.9	2555.6	2552.5	2422.9	2498.8	2535.3
% CHG PREV QTR SAAR.....	4.75	3.01	1.63	2.56	2.57	1.29	-0.10	0.78	2.61	0.90	-0.48	4.06	3.14	1.46
% CHG SAME QTR LAST YR....	4.36	4.04	3.10	2.98	2.44	2.01	1.57	1.13	1.14	1.04	0.95	4.06	3.14	1.46
MINING.....	4.6	4.6	4.6	4.5	4.6	4.6	4.6	4.7	4.6	4.6	4.5	4.6	4.6	4.6
% CHG PREV QTR SAAR.....	0.00	0.00	-2.87	-2.89	9.12	0.00	0.00	2.91	-8.30	0.00	-2.89	-1.60	-0.36	0.91
% CHG SAME QTR LAST YR....	-0.72	0.73	-1.44	-1.45	0.72	0.72	1.46	2.94	-1.44	-1.44	-2.16	-1.60	-0.36	0.91
CONSTRUCTION.....	103.4	105.7	107.9	111.0	110.8	110.7	113.4	113.2	114.6	115.1	116.8	101.0	108.8	113.0
% CHG PREV QTR SAAR.....	11.31	8.92	8.73	11.86	-0.48	-0.36	9.99	-0.82	5.16	1.87	5.80	7.14	7.74	3.80
% CHG SAME QTR LAST YR....	7.11	6.66	6.94	10.20	7.15	4.79	5.10	1.98	3.40	3.97	2.97	7.14	7.74	3.80
MANUFACTURING.....	543.2	547.0	541.4	535.7	531.7	526.2	522.0	520.5	520.9	519.3	515.9	539.0	538.9	522.4
% CHG PREV QTR SAAR.....	1.81	2.83	-4.08	-4.15	-2.93	-4.07	-3.18	-1.09	0.26	-1.22	-2.54	1.99	-0.01	-3.07
% CHG SAME QTR LAST YR....	1.97	2.36	0.73	-0.95	-2.12	-3.81	-3.58	-2.83	-2.04	-1.32	-1.16	1.99	-0.01	-3.07
DURABLE GOODS.....	286.3	289.9	288.3	286.2	287.5	286.3	285.3	286.1	288.0	287.4	285.0	281.7	288.0	286.4
% CHG PREV QTR SAAR.....	3.13	5.13	-2.10	-2.93	1.88	-1.75	-1.30	1.13	2.64	-0.88	-3.30	4.48	2.22	-0.54
% CHG SAME QTR LAST YR....	4.38	4.83	2.95	0.75	0.44	-1.24	-1.04	-0.02	0.16	0.38	-0.13	4.48	2.22	-0.54
NONDURABLE GOODS.....	257.0	257.2	253.0	249.5	244.2	239.9	236.6	234.4	232.9	231.9	231.0	257.3	251.0	236.0
% CHG PREV QTR SAAR.....	0.36	0.31	-6.28	-5.52	-8.23	-6.76	-5.39	-3.72	-2.59	-1.65	-1.60	-0.61	-2.45	-5.98
% CHG SAME QTR LAST YR....	-0.58	-0.28	-1.70	-2.83	-4.98	-6.70	-6.48	-6.04	-4.63	-3.35	-2.39	-0.61	-2.45	-5.98
TRADE.....	570.0	578.8	583.4	588.0	591.3	592.5	592.6	596.3	602.5	605.2	604.5	562.0	585.4	596.0
% CHG PREV QTR SAAR.....	3.03	6.34	3.19	3.22	2.29	0.79	0.05	2.52	4.25	1.78	-0.46	4.89	4.15	1.81
% CHG SAME QTR LAST YR....	4.50	4.72	4.21	3.94	3.75	2.37	1.58	1.41	1.89	2.14	2.01	4.89	4.15	1.81
SERVICES.....	615.9	625.4	632.7	642.5	650.8	649.5	654.2	658.3	662.3	665.7	664.1	603.6	637.8	656.1
% CHG PREV QTR SAAR.....	4.95	6.27	4.80	6.32	5.27	-0.82	2.93	2.55	2.45	2.09	-0.96	5.49	5.67	2.85
% CHG SAME QTR LAST YR....	6.32	6.35	5.09	5.58	5.66	3.85	3.39	2.46	1.77	2.50	1.52	5.49	5.67	2.85
FIN, INS, REAL EST.....	108.8	109.3	110.4	112.2	114.3	115.9	116.7	117.9	118.6	119.4	119.6	108.3	111.6	117.3
% CHG PREV QTR SAAR.....	0.00	1.98	3.96	6.81	7.45	5.72	3.03	3.94	2.40	2.84	0.67	4.04	2.98	5.11
% CHG SAME QTR LAST YR....	2.54	1.64	2.06	3.16	5.02	5.98	5.74	5.02	3.76	3.05	2.46	4.04	2.98	5.11
TRANS, COMM, PUB UTIL.....	136.1	137.2	138.1	138.7	140.2	142.9	143.5	142.6	142.9	143.0	142.2	133.5	138.5	143.0
% CHG PREV QTR SAAR.....	2.29	3.17	2.65	1.95	4.40	7.83	1.60	-2.39	0.84	0.19	-2.04	5.36	3.76	3.19
% CHG SAME QTR LAST YR....	5.50	5.27	4.28	2.51	3.04	4.18	3.91	2.79	1.90	0.05	-0.86	5.36	3.76	3.19
GOVERNMENT.....	379.0	371.4	371.1	372.6	377.4	387.0	381.7	380.1	383.6	383.4	384.9	370.7	373.1	383.1
% CHG PREV QTR SAAR.....	12.26	-7.75	-0.39	1.70	5.22	10.53	-5.33	-1.63	3.70	-0.24	1.57	2.42	0.66	2.67
% CHG SAME QTR LAST YR....	3.97	1.36	0.52	1.20	-0.42	4.18	2.87	2.01	1.64	-0.93	0.83	2.42	0.66	2.67
FEDERAL, CIVILIAN.....	54.5	54.6	54.5	54.3	54.2	54.4	54.3	53.9	53.8	53.4	52.8	55.3	54.4	54.1
% CHG PREV QTR SAAR.....	-4.20	0.76	-0.95	-1.31	-1.24	1.58	-0.55	-2.93	-0.44	-3.16	-4.22	-0.76	-1.57	-0.57
% CHG SAME QTR LAST YR....	-1.74	-1.96	-2.16	-1.44	-0.69	-0.49	-0.39	-0.80	-0.60	-1.78	-2.70	-0.76	-1.57	-0.57
STATE AND LOCAL.....	324.4	315.6	317.2	318.9	323.3	331.1	327.9	328.0	328.9	329.7	331.4	315.4	318.7	329.0
% CHG PREV QTR SAAR.....	14.70	-10.40	2.05	2.10	5.70	10.02	-3.86	0.21	1.02	0.99	2.11	2.98	1.06	3.21
% CHG SAME QTR LAST YR....	4.94	1.91	0.99	1.72	-0.33	4.92	3.36	2.88	1.72	-0.43	1.08	2.98	1.06	3.21
STATISTICAL DISCREPANCY.....	0.1	1.2	-0.6	-0.5	-0.1	1.5	-0.5	-1.8	0.9	0.3	0.6	0.0	0.0	0.0

TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 9: TENNESSEE DURABLE GOODS MANUFACTURING EMPLOYMENT
 THOUSANDS OF SEASONALLY ADJUSTED JOBS

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TOTAL DURABLE GOODS.....	286.3	289.9	288.3	286.2	287.5	286.3	285.3	286.1	288.0	287.4	285.0	281.7	288.0	286.4
% CHG PREV QTR SAAR.....	3.13	5.13	-2.10	-2.93	1.88	-1.75	-1.30	1.13	2.64	-0.88	-3.30	4.48	2.22	-0.54
% CHG SAME QTR LAST YR.....	4.38	4.83	2.95	0.75	0.44	-1.24	-1.04	-0.02	0.16	0.38	-0.13	4.48	2.22	-0.54
LUMBER AND WOOD.....	21.0	21.6	21.7	21.6	21.9	21.8	21.8	21.9	21.9	21.6	21.6	20.5	21.7	21.9
% CHG PREV QTR SAAR.....	8.30	12.47	1.52	-0.52	4.77	-1.51	-0.42	2.45	0.35	-5.94	-0.84	4.59	5.78	0.77
% CHG SAME QTR LAST YR.....	4.25	7.12	6.27	5.32	4.45	1.04	0.55	1.29	0.21	-0.94	-1.04	4.59	5.78	0.77
FURNITURE AND FIXTURES.....	30.0	30.3	29.6	29.0	28.9	28.8	28.7	28.6	28.4	27.9	27.4	29.8	29.5	28.6
% CHG PREV QTR SAAR.....	1.84	4.22	-9.71	-7.06	-1.73	-1.01	-1.51	-1.19	-4.09	-5.83	-6.75	2.97	-1.13	-2.81
% CHG SAME QTR LAST YR.....	2.65	2.87	-0.77	-2.86	-3.72	-4.95	-2.86	-1.36	-1.96	-3.17	-4.49	2.97	-1.13	-2.81
STONE, CLAY AND GLASS.....	16.3	16.2	16.0	16.2	16.5	16.6	16.5	16.4	16.3	16.4	16.4	16.2	16.2	16.5
% CHG PREV QTR SAAR.....	-0.61	-2.44	-5.58	6.50	7.51	2.16	-2.85	-2.03	-1.45	2.67	-1.81	6.36	0.42	1.44
% CHG SAME QTR LAST YR.....	4.85	2.98	-1.93	-0.63	1.34	2.52	3.25	1.12	-1.06	-0.94	-0.67	6.36	0.42	1.44
PRIMARY METALS.....	16.4	16.2	16.2	16.2	16.2	16.4	16.6	16.3	16.5	16.5	16.4	16.2	16.2	16.4
% CHG PREV QTR SAAR.....	4.98	-4.00	-1.98	1.73	0.28	4.72	3.28	-6.87	5.84	-0.19	-3.23	3.96	0.35	1.38
% CHG SAME QTR LAST YR.....	4.73	2.20	0.14	0.13	-1.01	1.16	2.49	0.25	1.61	0.40	-1.22	3.96	0.35	1.38
FABRICATED METALS.....	46.2	46.6	46.0	45.3	44.8	43.9	43.7	43.7	44.0	43.8	43.4	45.6	45.7	43.8
% CHG PREV QTR SAAR.....	1.64	3.54	-4.59	-6.39	-4.26	-7.64	-1.97	0.31	2.59	-2.14	-3.46	3.14	0.04	-4.02
% CHG SAME QTR LAST YR.....	3.61	3.44	1.33	-1.53	-3.00	-5.73	-5.09	-3.44	-1.75	-0.32	-0.70	3.14	0.04	-4.02
NONELECTRICAL MACHINERY.....	42.1	42.9	43.5	43.6	43.7	43.6	43.6	44.0	44.2	44.6	43.9	41.2	43.4	43.8
% CHG PREV QTR SAAR.....	-3.58	7.44	6.04	0.32	1.42	-1.61	0.00	4.33	1.48	3.83	-6.29	6.02	5.53	0.89
% CHG SAME QTR LAST YR.....	5.74	8.66	7.55	2.46	3.76	1.51	0.03	1.01	1.03	2.39	0.74	6.02	5.53	0.89
ELECTRICAL MACHINERY.....	40.0	40.6	40.3	40.2	40.2	40.1	40.5	40.9	41.2	40.9	40.7	39.3	40.3	40.7
% CHG PREV QTR SAAR.....	2.21	6.39	-2.85	-1.64	0.71	-1.20	3.96	3.85	3.03	-2.33	-2.68	5.14	2.49	0.84
% CHG SAME QTR LAST YR.....	4.76	5.19	3.33	0.96	0.59	-1.25	0.43	1.81	2.39	2.09	0.42	5.14	2.49	0.84
TRANSPORTATION EQUIPMENT.....	51.9	52.7	52.9	52.0	52.5	52.1	51.9	52.4	52.8	53.1	53.3	51.0	52.5	52.3
% CHG PREV QTR SAAR.....	5.04	6.19	1.75	-6.21	3.54	-2.73	-2.19	4.69	2.82	2.22	1.26	6.21	2.95	-0.40
% CHG SAME QTR LAST YR.....	5.64	5.05	4.02	1.58	1.21	-0.99	-1.96	0.77	0.60	1.85	2.74	6.21	2.95	-0.40
INSTRUMENTS.....	10.4	10.4	10.5	10.7	10.6	10.6	10.6	10.6	10.7	11.0	11.1	10.1	10.5	10.6
% CHG PREV QTR SAAR.....	14.42	0.11	3.19	6.97	-3.55	-0.44	0.04	-0.68	6.18	12.42	2.88	1.77	4.45	0.54
% CHG SAME QTR LAST YR.....	4.02	4.52	5.76	6.04	1.61	1.47	0.68	-1.17	1.23	4.35	5.09	1.77	4.45	0.54
MISCELLANEOUS.....	11.8	12.1	11.8	11.8	11.9	11.9	11.8	11.6	11.5	11.4	11.3	11.8	11.9	11.7
% CHG PREV QTR SAAR.....	-2.32	8.78	-7.33	-0.30	3.31	-1.55	-1.39	-6.59	-5.94	-3.00	-3.67	-0.58	0.55	-1.77
% CHG SAME QTR LAST YR.....	-0.97	1.73	-0.01	-0.46	0.94	-1.54	0.00	-1.62	-3.90	-4.25	-4.81	-0.58	0.55	-1.77
STATISTICAL DISCREPANCY.....	0.2	0.3	-0.1	-0.5	0.2	0.4	-0.2	-0.3	0.5	0.1	-0.3	0.0	0.0	0.1

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 10: TENNESSEE NONDURABLE GOODS MANUFACTURING EMPLOYMENT
 THOUSANDS OF SEASONALLY ADJUSTED JOBS

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TOTAL NONDURABLE GOODS.....	257.0	257.2	253.0	249.5	244.2	239.9	236.6	234.4	232.9	231.9	231.0	257.3	251.0	236.0
% CHG PREV QTR SAAR.....	0.36	0.31	-6.28	-5.52	-8.23	-6.76	-5.39	-3.72	-2.59	-1.65	-1.60	-0.61	-2.45	-5.98
% CHG SAME QTR LAST YR.....	-0.58	-0.28	-1.70	-2.83	-4.98	-6.70	-6.48	-6.04	-4.63	-3.35	-2.39	-0.61	-2.45	-5.98
FOOD.....	37.4	37.3	37.1	36.7	36.3	36.5	35.5	35.1	35.1	35.4	35.6	37.3	36.8	35.5
% CHG PREV QTR SAAR.....	1.46	-0.97	-2.58	-3.89	-4.70	2.24	-9.95	-4.57	0.06	3.23	2.18	-0.22	-1.31	-3.49
% CHG SAME QTR LAST YR.....	-0.37	0.18	-0.85	-1.52	-3.05	-2.27	-4.17	-4.34	-3.17	-2.94	0.18	-0.22	-1.31	-3.49
TOBACCO.....	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
% CHG PREV QTR SAAR.....	26.75	-19.44	1.10	5.91	-15.75	2.88	7.94	3.88	-12.52	3.33	6.20	1.05	-3.90	-0.65
% CHG SAME QTR LAST YR.....	5.68	-3.84	-5.95	2.25	-7.67	-1.85	-0.23	-0.71	0.23	0.34	-0.07	1.05	-3.90	-0.65
TEXTILES.....	22.3	22.3	21.2	20.3	19.6	19.3	19.5	19.3	19.2	19.1	18.8	22.2	20.8	19.3
% CHG PREV QTR SAAR.....	0.30	1.09	-19.19	-15.09	-13.87	-5.23	4.74	-5.40	-1.14	-1.67	-7.27	1.29	-6.10	-7.26
% CHG SAME QTR LAST YR.....	-0.14	0.72	-4.32	-8.67	-12.08	-13.49	-7.69	-5.17	-1.84	-0.93	-3.90	1.29	-6.10	-7.26
APPAREL.....	56.4	55.7	53.2	51.7	48.2	44.7	43.6	42.1	41.5	40.9	40.2	56.8	52.2	43.0
% CHG PREV QTR SAAR.....	-0.88	-5.37	-16.34	-10.99	-24.21	-26.26	-9.49	-13.42	-5.20	-5.26	-7.07	-4.92	-8.04	-17.70
% CHG SAME QTR LAST YR.....	-2.51	-3.02	-6.15	-8.58	-14.51	-19.68	-18.09	-18.65	-13.97	-8.41	-7.80	-4.92	-8.04	-17.70
PAPER.....	22.4	22.4	22.3	22.1	21.7	21.6	21.4	21.3	21.6	21.7	21.4	22.5	22.1	21.5
% CHG PREV QTR SAAR.....	-0.67	-0.47	-1.75	-2.57	-7.66	-1.39	-3.85	-2.24	6.53	1.38	-6.41	-0.85	-1.52	-2.87
% CHG SAME QTR LAST YR.....	-2.22	-0.80	-0.76	-1.37	-3.15	-3.38	-3.90	-3.82	-0.32	0.38	-0.30	-0.85	-1.52	-2.87
PRINTING AND PUBLISHING.....	39.1	39.3	39.3	39.8	39.7	39.2	39.0	38.9	39.0	39.1	39.3	38.5	39.5	39.0
% CHG PREV QTR SAAR.....	3.60	2.47	-0.01	4.62	-1.04	-4.51	-1.78	-1.41	0.61	1.35	1.61	3.82	2.76	-1.25
% CHG SAME QTR LAST YR.....	5.13	4.07	2.87	2.66	1.49	-0.29	-0.73	-2.19	-1.79	-0.31	0.53	3.82	2.76	-1.25
CHEMICALS.....	37.4	37.5	37.6	37.6	37.8	37.9	37.5	37.3	37.4	36.9	36.5	38.0	37.6	37.5
% CHG PREV QTR SAAR.....	-6.22	1.43	1.12	0.29	2.40	0.60	-3.85	-2.60	1.62	-5.74	-3.78	-2.26	-0.91	-0.26
% CHG SAME QTR LAST YR.....	-4.18	-2.22	-1.79	-0.90	1.31	1.10	-0.17	-0.89	-1.08	-2.68	-2.66	-2.26	-0.91	-0.26
PETROLEUM REFINING.....	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.1	1.1	1.1	1.2	0.9	0.9	1.1
% CHG PREV QTR SAAR.....	16.97	16.55	-12.19	-0.56	13.11	30.82	16.20	14.57	10.94	11.31	13.85	9.63	8.84	14.30
% CHG SAME QTR LAST YR.....	12.55	15.73	12.52	4.46	3.58	6.62	14.35	18.47	17.90	13.23	12.66	9.63	8.84	14.30
RUBBER AND PLASTICS.....	33.4	34.0	34.0	33.8	33.3	33.6	33.1	33.2	33.1	32.6	32.3	32.9	33.8	33.3
% CHG PREV QTR SAAR.....	4.20	8.32	-0.23	-2.60	-5.91	3.25	-5.28	1.53	-0.99	-6.13	-3.73	6.67	2.59	-1.57
% CHG SAME QTR LAST YR.....	5.85	5.13	3.22	2.34	-0.24	-1.43	-2.70	-1.69	-0.42	-2.77	-2.37	6.67	2.59	-1.57
LEATHER.....	6.5	6.2	6.1	5.8	5.5	4.7	4.6	4.4	4.2	4.3	4.2	7.0	5.9	4.5
% CHG PREV QTR SAAR.....	-16.79	-13.10	-7.15	-21.75	-18.23	-47.45	-7.59	-11.84	-17.79	6.69	-10.78	-15.87	-16.16	-24.21
% CHG SAME QTR LAST YR.....	-20.60	-19.73	-14.35	-14.86	-15.23	-25.25	-25.34	-23.08	-22.98	-8.06	-8.86	-15.87	-16.16	-24.21
STATISTICAL DISCREPANCY.....	0.0	0.3	0.1	-0.5	0.0	0.3	0.1	0.6	-0.6	-0.5	0.4	0.0	0.0	0.1

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 11: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
 1992 DOLLARS

	HISTORICAL - DATA										ANNUAL			
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TOTAL NONAGRICULTURAL.....	23378	23987	23622	23640	23565	23847	23835	24055	23875	24738	24699	23464	23703	23903
% CHG SAME QTR LAST YR....	-0.06	1.68	0.93	0.67	0.80	-0.59	0.90	1.75	1.32	3.74	3.63	0.69	1.02	0.84
MINING.....	33127	34926	32097	32317	32385	33535	34245	33989	36959	36113	34919	32301	32931	34682
% CHG SAME QTR LAST YR....	4.58	8.07	1.16	0.89	-2.24	-3.98	6.69	5.17	14.12	7.69	1.97	3.00	1.95	5.32
CONSTRUCTION.....	25367	27523	25262	24808	25747	27305	25372	25554	26438	28479	26556	25479	25835	26167
% CHG SAME QTR LAST YR....	3.81	0.99	1.16	1.98	1.50	-0.79	0.44	3.00	2.68	4.30	4.67	1.53	1.40	1.28
MANUFACTURING.....	27527	27228	27103	27222	27738	27940	27905	28336	28013	28082	28699	27172	27323	28049
% CHG SAME QTR LAST YR....	-0.42	1.86	-0.15	-0.24	0.76	2.62	2.96	4.09	0.99	0.51	2.85	0.70	0.55	2.66
DURABLE GOODS.....	28508	28037	27957	28322	28564	28246	28542	29234	28392	28945	29631	28322	28220	28604
% CHG SAME QTR LAST YR....	-1.71	0.26	-1.48	-0.40	0.20	0.75	2.09	3.22	-0.60	2.47	3.81	0.75	-0.36	1.36
NONDURABLE GOODS.....	26435	26309	26127	25974	26765	27572	27133	27249	27547	27006	27543	25915	26294	27375
% CHG SAME QTR LAST YR....	0.89	3.59	1.28	-0.21	1.25	4.80	3.85	4.91	2.92	-2.05	1.51	0.42	1.46	4.11
TRADE.....	17949	18279	18103	17952	17766	18372	18263	18198	17862	18964	18732	17851	18025	18174
% CHG SAME QTR LAST YR....	2.67	2.18	1.31	1.45	-1.02	0.51	0.88	1.37	0.54	3.22	2.56	0.87	0.98	0.83
SERVICES.....	22052	23333	22542	22453	22518	22969	22686	22562	22980	24159	23748	22106	22712	22799
% CHG SAME QTR LAST YR....	-2.44	3.01	3.32	2.50	2.12	-1.56	0.64	0.49	2.05	5.18	4.68	-0.50	2.74	0.39
FIN,INS,REAL EST.....	29248	29964	29303	29905	29814	29720	30887	31224	32109	31581	32098	29352	29747	30985
% CHG SAME QTR LAST YR....	-1.26	2.46	-1.07	2.08	1.94	-0.81	5.40	4.41	7.70	6.26	3.92	-0.18	1.35	4.16
TRANS,COMM,PUB UTIL.....	30390	30854	30472	30076	30892	29802	30631	30940	30486	32415	32610	30700	30573	30465
% CHG SAME QTR LAST YR....	1.17	-0.15	-1.60	-1.53	1.65	-3.41	0.52	2.87	-1.31	8.77	6.46	1.13	-0.41	-0.35
GOVERNMENT.....	23010	23709	24218	24826	23347	23007	23576	24656	23468	23992	24398	23839	24025	23677
% CHG SAME QTR LAST YR....	0.63	0.08	1.53	0.09	1.47	-2.96	-2.65	-0.69	0.52	4.28	3.48	2.88	0.78	-1.45
FEDERAL,CIVILIAN.....	38959	38732	37896	38344	38736	39033	38722	39240	39719	40960	40893	38776	38427	39178
% CHG SAME QTR LAST YR....	2.24	-0.09	-2.83	-0.09	-0.57	0.78	2.18	2.34	2.54	4.94	5.61	4.00	-0.90	1.96
STATE AND LOCAL.....	20424	21141	21843	22427	20868	20406	21039	22160	20913	21274	21737	21225	21570	21129
% CHG SAME QTR LAST YR....	1.02	0.61	3.32	0.48	2.17	-3.48	-3.68	-1.19	0.21	4.26	3.32	2.99	1.63	-2.04

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 12: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
 SEASONALLY ADJUSTED 1992 DOLLARS

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TOTAL NONAGRICULTURAL.....	23610	23671	23666	23670	23803	23540	23874	24085	24075	24463	24746	23462	23702	23894
% CHG PREV QTR SAAR.....	1.60	1.05	-0.09	0.06	2.27	-4.34	5.79	3.58	-0.16	6.59	4.71	0.68	1.02	0.81
% CHG SAME QTR LAST YR....	-0.05	1.73	0.90	0.65	0.82	-0.55	0.88	1.75	1.14	3.92	3.65	0.68	1.02	0.81
MINING.....	33127	33913	32331	33030	32385	32570	34492	34232	36689	35322	35689	32297	32915	34495
% CHG PREV QTR SAAR.....	4.95	9.84	-17.40	8.93	-7.59	2.30	25.78	-2.98	31.96	-14.09	4.22	2.75	1.91	4.80
% CHG SAME QTR LAST YR....	4.58	8.10	1.17	0.92	-2.24	-3.96	6.68	3.64	13.29	8.45	3.47	2.75	1.91	4.80
CONSTRUCTION.....	25718	25743	25543	25755	26080	25604	25655	26374	26684	26937	26905	25428	25780	26079
% CHG PREV QTR SAAR.....	6.09	0.39	-3.08	3.36	5.15	-7.11	0.80	11.69	4.78	3.85	-0.47	1.57	1.39	1.16
% CHG SAME QTR LAST YR....	3.63	1.39	1.12	1.63	1.41	-0.54	0.44	2.40	2.31	5.21	4.87	1.57	1.39	1.16
MANUFACTURING.....	27551	27094	27182	27256	27755	27815	27987	28295	28049	28030	28766	27170	27322	28036
% CHG PREV QTR SAAR.....	3.31	-6.48	1.31	1.10	7.53	0.86	2.50	4.47	-3.43	-0.28	10.93	0.70	0.56	2.62
% CHG SAME QTR LAST YR....	-0.48	1.94	-0.15	-0.26	0.74	2.66	2.96	3.81	1.06	0.77	2.78	0.70	0.56	2.62
DURABLE GOODS.....	28522	28002	28093	28210	28574	28217	28676	29095	28379	28962	29773	28319	28220	28591
% CHG PREV QTR SAAR.....	2.74	-7.09	1.31	1.68	5.26	-4.91	6.67	5.97	-9.48	8.48	11.68	0.75	-0.35	1.32
% CHG SAME QTR LAST YR....	-1.75	0.35	-1.49	-0.42	0.18	0.77	2.07	3.13	-0.68	2.64	3.83	0.75	-0.35	1.32
NONDURABLE GOODS.....	26470	26070	26144	26162	26791	27334	27156	27318	27641	26874	27523	25914	26292	27363
% CHG PREV QTR SAAR.....	3.87	-5.90	1.14	0.27	9.97	8.36	-2.58	2.41	4.81	-10.65	10.02	0.42	1.46	4.07
% CHG SAME QTR LAST YR....	0.82	3.64	1.29	-0.22	1.21	4.85	3.87	4.42	3.17	-1.68	1.35	0.42	1.46	4.07
TRADE.....	18281	17902	18065	18032	18093	17997	18224	18313	18186	18576	18661	17850	18023	18180
% CHG PREV QTR SAAR.....	11.88	-8.04	3.70	-0.74	1.36	-2.10	5.15	1.97	-2.76	8.86	1.85	0.88	0.97	0.87
% CHG SAME QTR LAST YR....	2.65	2.23	1.30	1.44	-1.03	0.53	0.88	1.56	0.52	3.22	2.40	0.88	0.97	0.87
SERVICES.....	22158	22889	22630	22672	22642	22541	22760	22789	23020	23752	23889	22103	22708	22777
% CHG PREV QTR SAAR.....	0.54	13.86	-4.44	0.75	-0.54	-1.77	3.94	0.51	4.12	13.34	2.33	-0.53	2.74	0.30
% CHG SAME QTR LAST YR....	-2.34	3.08	3.23	2.46	2.18	-1.52	0.57	0.51	1.67	5.37	4.96	-0.53	2.74	0.30
FIN, INS, REAL EST.....	29265	29699	29330	30101	29840	29490	30904	31410	32109	31378	32169	29351	29742	30978
% CHG PREV QTR SAAR.....	-2.95	6.06	-4.88	10.94	-3.42	-4.62	20.61	6.71	9.20	-8.79	10.47	-0.18	1.33	4.15
% CHG SAME QTR LAST YR....	-1.23	2.48	-1.16	2.09	1.96	-0.70	5.37	4.35	7.60	6.40	4.09	-0.18	1.33	4.15
TRANS, COMM, PUB UTIL.....	30770	30524	30266	30227	31267	29517	30418	31114	30685	32090	32557	30699	30571	30434
% CHG PREV QTR SAAR.....	1.08	-3.16	-3.34	-0.50	14.48	-20.57	12.77	9.47	-5.40	19.61	5.94	1.14	-0.42	-0.45
% CHG SAME QTR LAST YR....	1.13	-0.09	-1.69	-1.50	1.61	-3.30	0.50	2.93	-1.86	8.72	7.03	1.14	-0.42	-0.45
GOVERNMENT.....	23447	23917	24314	24016	23809	23207	23663	23904	23878	24288	24415	23825	24014	23663
% CHG PREV QTR SAAR.....	-9.20	8.28	6.80	-4.82	-3.40	-9.74	8.09	4.14	-0.43	7.04	2.11	2.84	0.79	-1.46
% CHG SAME QTR LAST YR....	0.67	0.11	1.55	-0.01	1.55	-2.97	-2.68	-0.47	0.29	4.66	3.18	2.84	0.79	-1.46
FEDERAL, CIVILIAN.....	38482	38776	38331	38348	38193	39126	39199	39220	39128	41085	41410	38762	38412	39168
% CHG PREV QTR SAAR.....	0.75	3.09	-4.51	0.18	-1.60	10.13	0.75	0.21	-0.94	21.56	3.21	4.00	-0.90	1.97
% CHG SAME QTR LAST YR....	2.03	0.02	-2.68	-0.16	-0.75	0.90	2.27	2.27	2.45	5.01	5.64	4.00	-0.90	1.97
STATE AND LOCAL.....	20925	21436	21856	21532	21395	20697	21056	21256	21446	21587	21751	21208	21555	21114
% CHG PREV QTR SAAR.....	-9.61	10.13	8.09	-5.80	-2.53	-12.43	7.13	3.86	3.62	2.66	3.07	2.96	1.64	-2.05
% CHG SAME QTR LAST YR....	1.12	0.67	3.32	0.34	2.25	-3.45	-3.66	-1.28	0.24	4.30	3.30	2.96	1.64	-2.05

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 13: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
 CURRENT DOLLARS

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TOTAL NONAGRICULTURAL.....	24853	25678	25438	25576	25599	26074	26249	26653	26647	27758	27784	24671	25573	26406
% CHG SAME QTR LAST YR....	2.58	4.67	3.83	3.13	3.00	1.54	3.19	4.21	4.10	6.46	5.85	3.13	3.65	3.26
MINING.....	35217	37388	34565	34964	35180	36667	37714	37660	41250	40522	39281	33968	35524	38323
% CHG SAME QTR LAST YR....	7.35	11.24	4.07	3.35	-0.11	-1.93	9.11	7.71	17.25	10.52	4.15	5.50	4.58	7.88
CONSTRUCTION.....	26968	29464	27204	26840	27969	29856	27942	28313	29507	31956	29873	26785	27869	28904
% CHG SAME QTR LAST YR....	6.55	3.96	4.07	4.47	3.71	1.33	2.71	5.49	5.50	7.04	6.91	3.98	4.05	3.71
MANUFACTURING.....	29264	29148	29188	29452	30132	30550	30732	31397	31266	31511	32284	28574	29480	30986
% CHG SAME QTR LAST YR....	2.21	4.85	2.72	2.20	2.96	4.81	5.29	6.60	3.76	3.15	5.05	3.14	3.17	5.11
DURABLE GOODS.....	30307	30014	30107	30642	31029	30885	31434	32391	31688	32480	33332	29782	30448	31600
% CHG SAME QTR LAST YR....	0.89	3.20	1.35	2.03	2.38	2.90	4.41	5.71	2.12	5.16	6.04	3.18	2.24	3.78
NONDURABLE GOODS.....	28103	28164	28136	28102	29075	30147	29882	30191	30745	30303	30984	27253	28369	30241
% CHG SAME QTR LAST YR....	3.55	6.62	4.20	2.22	3.46	7.04	6.21	7.44	5.74	0.52	3.69	2.85	4.10	6.60
TRADE.....	19082	19567	19496	19423	19299	20088	20113	20164	19935	21280	21071	18770	19446	20075
% CHG SAME QTR LAST YR....	5.39	5.18	4.22	3.93	1.14	2.66	3.17	3.82	3.30	5.93	4.76	3.31	3.60	3.23
SERVICES.....	23443	24978	24276	24292	24462	25114	24984	24999	25648	27109	26714	23243	24502	25186
% CHG SAME QTR LAST YR....	0.15	6.03	6.29	5.01	4.35	0.55	2.92	2.91	4.85	7.94	6.93	1.90	5.42	2.79
FIN,INS,REAL EST.....	31093	32076	31557	32355	32387	32496	34015	34597	35836	35437	36107	30863	32094	34236
% CHG SAME QTR LAST YR....	1.35	5.47	1.78	4.57	4.16	1.31	7.79	6.93	10.65	9.05	6.15	2.23	3.99	6.68
TRANS,COMM,PUB UTIL.....	32308	33029	32815	32539	33558	32586	33734	34282	34025	36373	36683	32279	32985	33657
% CHG SAME QTR LAST YR....	3.85	2.78	1.23	0.87	3.87	-1.34	2.80	5.36	1.39	11.62	8.74	3.58	2.19	2.04
GOVERNMENT.....	24461	25380	26081	26860	25362	25155	25965	27319	26193	26921	27445	25066	25921	26158
% CHG SAME QTR LAST YR....	3.29	3.02	4.45	2.53	3.68	-0.89	-0.45	1.71	3.28	7.02	5.70	5.36	3.41	0.92
FEDERAL,CIVILIAN.....	41417	41463	40810	41485	42079	42679	42644	43478	44331	45961	46000	40772	41459	43283
% CHG SAME QTR LAST YR....	4.94	2.84	-0.03	2.35	1.60	2.93	4.49	4.80	5.35	7.69	7.87	6.51	1.68	4.40
STATE AND LOCAL.....	21713	22631	23522	24264	22669	22312	23170	24553	23341	23872	24452	22317	23272	23344
% CHG SAME QTR LAST YR....	3.69	3.56	6.29	2.93	4.40	-1.41	-1.50	1.19	2.96	6.99	5.53	5.48	4.28	0.31

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 14: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
 SEASONALLY ADJUSTED CURRENT DOLLARS

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TOTAL NONAGRICULTURAL.....	25099	25340	25486	25608	25857	25739	26292	26686	26870	27450	27837	24672	25573	26397
% CHG PREV QTR SAAR.....	4.32	3.89	2.32	1.93	3.95	-1.81	8.88	6.12	2.79	8.90	5.76	3.12	3.65	3.22
% CHG SAME QTR LAST YR....	2.59	4.71	3.80	3.11	3.02	1.57	3.17	4.21	3.92	6.65	5.87	3.12	3.65	3.22
MINING.....	35217	36304	34818	35735	35180	35612	37986	37929	40949	39635	40147	33966	35509	38119
% CHG PREV QTR SAAR.....	7.76	12.93	-15.40	10.97	-6.07	5.00	29.45	-0.60	35.86	-12.23	5.27	5.24	4.54	7.35
% CHG SAME QTR LAST YR....	7.35	11.27	4.08	3.39	-0.11	-1.91	9.10	6.14	16.40	11.30	5.69	5.24	4.54	7.35
CONSTRUCTION.....	27341	27558	27507	27864	28331	27995	28254	29222	29782	30226	30265	26738	27815	28813
% CHG PREV QTR SAAR.....	8.93	3.21	-0.74	5.30	6.87	-4.66	3.75	14.43	7.88	6.10	0.53	4.04	4.03	3.59
% CHG SAME QTR LAST YR....	6.38	4.36	4.03	4.12	3.62	1.59	2.72	4.87	5.12	7.97	7.12	4.04	4.03	3.59
MANUFACTURING.....	29289	29004	29272	29488	30150	30412	30822	31351	31306	31452	32359	28572	29479	30973
% CHG PREV QTR SAAR.....	6.07	-3.85	3.75	2.99	9.29	3.52	5.50	7.04	-0.57	1.89	12.04	3.14	3.17	5.07
% CHG SAME QTR LAST YR....	2.16	4.93	2.72	2.17	2.94	4.86	5.29	6.31	3.83	3.42	4.99	3.14	3.17	5.07
DURABLE GOODS.....	30321	29976	30253	30521	31040	30852	31581	32237	31674	32499	33492	29778	30447	31586
% CHG PREV QTR SAAR.....	5.49	-4.48	3.75	3.58	6.98	-2.39	9.78	8.57	-6.81	10.83	12.79	3.18	2.25	3.74
% CHG SAME QTR LAST YR....	0.85	3.29	1.34	2.01	2.37	2.92	4.39	5.62	2.04	5.34	6.05	3.18	2.25	3.74
NONDURABLE GOODS.....	28140	27908	28154	28304	29103	29887	29907	30269	30850	30155	30961	27253	28367	30228
% CHG PREV QTR SAAR.....	6.65	-3.26	3.58	2.15	11.77	11.22	0.26	4.93	7.91	-8.71	11.13	2.86	4.09	6.56
% CHG SAME QTR LAST YR....	3.49	6.68	4.20	2.22	3.42	7.09	6.23	6.94	6.00	0.90	3.52	2.86	4.09	6.56
TRADE.....	19434	19164	19454	19509	19654	19678	20070	20291	20297	20844	20992	18772	19445	20084
% CHG PREV QTR SAAR.....	14.88	-5.46	6.20	1.12	3.01	0.48	8.22	4.48	0.12	11.22	2.87	3.33	3.59	3.29
% CHG SAME QTR LAST YR....	5.36	5.22	4.22	3.92	1.13	2.68	3.17	4.01	3.27	5.93	4.59	3.33	3.59	3.29
SERVICES.....	23556	24502	24370	24529	24596	24646	25065	25250	25692	26652	26873	23241	24499	25164
% CHG PREV QTR SAAR.....	3.24	17.06	-2.14	2.63	1.09	0.82	6.98	2.98	7.19	15.80	3.36	1.87	5.41	2.71
% CHG SAME QTR LAST YR....	0.24	6.11	6.20	4.96	4.41	0.59	2.85	2.94	4.46	8.14	7.21	1.87	5.41	2.71
FIN, INS, REAL EST.....	31112	31793	31585	32566	32415	32244	34035	34802	35836	35209	36187	30864	32090	34229
% CHG PREV QTR SAAR.....	-0.35	9.04	-2.59	13.01	-1.84	-2.10	24.14	9.33	12.43	-6.82	11.58	2.23	3.97	6.67
% CHG SAME QTR LAST YR....	1.38	5.49	1.68	4.58	4.19	1.42	7.76	6.87	10.55	9.20	6.32	2.23	3.97	6.67
TRANS, COMM, PUB UTIL.....	32711	32676	32593	32703	33965	32274	33499	34474	34248	36008	36623	32280	32984	33624
% CHG PREV QTR SAAR.....	3.78	-0.44	-1.01	1.36	16.35	-18.47	16.07	12.16	-2.60	22.20	7.00	3.59	2.18	1.94
% CHG SAME QTR LAST YR....	3.81	2.84	1.13	0.91	3.83	-1.23	2.78	5.42	0.83	11.57	9.33	3.59	2.18	1.94
GOVERNMENT.....	24926	25604	26184	25983	25864	25374	26060	26485	26650	27253	27464	25051	25908	26142
% CHG PREV QTR SAAR.....	-6.77	11.32	9.38	-3.04	-1.82	-7.36	11.25	6.70	2.51	9.36	3.13	5.32	3.42	0.90
% CHG SAME QTR LAST YR....	3.34	3.04	4.47	2.43	3.76	-0.90	-0.47	1.94	3.04	7.41	5.39	5.32	3.42	0.90
FEDERAL, CIVILIAN.....	40910	41510	41278	41488	41489	42780	43170	43456	43671	46101	46582	40756	41441	43269
% CHG PREV QTR SAAR.....	3.45	5.99	-2.21	2.05	0.01	13.04	3.70	2.67	1.99	24.19	4.24	6.51	1.68	4.41
% CHG SAME QTR LAST YR....	4.72	2.96	0.12	2.28	1.41	3.06	4.58	4.74	5.26	7.76	7.90	6.51	1.68	4.41
STATE AND LOCAL.....	22245	22947	23537	23296	23242	22630	23189	23552	23936	24223	24468	22299	23255	23327
% CHG PREV QTR SAAR.....	-7.19	13.23	10.69	-4.04	-0.93	-10.12	10.26	6.41	6.69	4.88	4.10	5.44	4.29	0.31
% CHG SAME QTR LAST YR....	3.79	3.62	6.29	2.79	4.48	-1.38	-1.48	1.10	2.99	7.04	5.52	5.44	4.29	0.31

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 15: TENNESSEE CIVILIAN LABOR FORCE AND UNEMPLOYMENT RATE

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
CIVILIAN LABOR FORCE (THOUS)....	2716	2657	2690	2744	2739	2700	2731	2785	2787	2720	2747	2665	2707	2751
% CHG SAME QTR LAST YR.....	5.86	3.26	1.50	0.93	0.83	1.62	1.52	1.49	1.76	0.75	0.57	6.56	1.61	1.60
EMPLOYED PERSONS (THOUS).....	2604	2521	2551	2591	2605	2545	2593	2642	2656	2572	2608	2537	2567	2609
% CHG SAME QTR LAST YR.....	6.71	3.68	1.00	0.11	0.07	0.97	1.66	1.95	1.96	1.08	0.58	7.65	1.18	1.64
UNEMPLOYED PERSONS (THOUS)....	113	136	140	152	133	155	138	143	131	148	139	127	140	142
% CHG SAME QTR LAST YR.....	-10.54	-3.92	11.42	17.26	18.53	13.56	-0.98	-6.25	-2.05	-4.65	0.41	-11.34	10.21	0.87
PARTICIPATION RATE (PERCENT)....	67.1	65.4	66.0	67.0	66.6	65.4	65.9	66.9	66.8	65.0	65.5	66.2	66.3	66.3
% CHG SAME QTR LAST YR.....	4.24	1.73	0.04	-0.52	-0.66	0.07	-0.07	-0.19	0.23	-0.62	-0.64	4.91	0.13	0.01
UNEMPLOYMENT RATE (PERCENT).....	4.1	5.1	5.2	5.6	4.9	5.7	5.1	5.1	4.7	5.4	5.1	4.8	5.2	5.2

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 16: TENNESSEE CIVILIAN LABOR FORCE AND UNEMPLOYMENT RATE
 SEASONALLY ADJUSTED

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
CIVILIAN LABOR FORCE (THOUS)....	2700	2694	2700	2714	2722	2737	2742	2754	2769	2758	2758	2664	2707	2751
% CHG PREV QTR SAAR.....	1.65	-0.88	0.93	2.00	1.18	2.34	0.66	1.81	2.21	-1.64	0.01	6.45	1.61	1.60
% CHG SAME QTR LAST YR.....	5.82	3.24	1.52	0.92	0.81	1.61	1.54	1.49	1.75	0.75	0.58	6.45	1.61	1.60
EMPLOYED PERSONS (THOUS).....	2576	2566	2559	2565	2577	2591	2602	2615	2627	2618	2618	2537	2567	2609
% CHG PREV QTR SAAR.....	2.25	-1.57	-1.02	0.86	1.89	2.15	1.81	2.03	1.83	-1.37	-0.08	7.55	1.18	1.64
% CHG SAME QTR LAST YR.....	6.67	3.62	1.02	0.12	0.03	0.96	1.68	1.97	1.95	1.07	0.59	7.55	1.18	1.64
UNEMPLOYED PERSONS (THOUS)....	124	128	141	149	145	147	140	139	142	140	140	127	140	142
% CHG PREV QTR SAAR.....	-9.91	14.42	46.60	24.65	-10.50	5.74	-18.08	-2.27	9.55	-6.51	1.73	-11.44	10.21	0.87
% CHG SAME QTR LAST YR.....	-9.25	-3.91	11.52	17.15	16.96	14.68	-0.85	-6.70	-1.87	-4.84	0.45	-11.44	10.21	0.87
PARTICIPATION RATE (PERCENT)....	66.7	66.3	66.2	66.3	66.2	66.3	66.2	66.2	66.4	65.9	65.8	66.2	66.3	66.3
% CHG PREV QTR SAAR.....	0.21	-2.27	-0.49	0.47	-0.43	0.71	-0.94	-0.07	1.18	-2.62	-0.97	4.80	0.13	0.01
% CHG SAME QTR LAST YR.....	4.19	1.71	0.06	-0.53	-0.69	0.06	-0.05	-0.18	0.22	-0.62	-0.63	4.80	0.13	0.01
UNEMPLOYMENT RATE (PERCENT).....	4.6	4.7	5.2	5.5	5.3	5.4	5.1	5.0	5.1	5.1	5.1	4.8	5.2	5.2

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 17: TENNESSEE TAXABLE SALES
 MILLIONS OF 1992 DOLLARS

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TOTAL.....	13908	11977	13679	13833	14199	12247	13952	14014	14699	12763	14696	51112	53689	54912
% CHG SAME QTR LAST YR.....	7.54	7.80	6.40	4.51	2.09	2.25	2.00	1.31	3.52	4.22	5.33	6.89	5.04	2.28
AUTO DEALERS.....	1394	1435	1622	1673	1360	1492	1590	1553	1345	1398	1519	5787	6088	5981
% CHG SAME QTR LAST YR.....	9.48	6.66	5.34	10.89	-2.49	4.04	-1.95	-7.13	-1.05	-6.31	-4.47	9.23	5.20	-1.76
PURCHASES FROM MANUFACTURERS..	905	798	932	926	885	748	962	999	1050	836	960	3338	3541	3760
% CHG SAME QTR LAST YR.....	16.50	17.31	9.85	2.33	-2.17	-6.23	3.27	7.92	18.66	11.73	-0.30	10.46	6.08	6.19
MISC DURABLE GOODS.....	2275	2037	2441	2429	2287	2015	2500	2445	2434	2197	2566	8568	9194	9393
% CHG SAME QTR LAST YR.....	18.93	17.53	6.14	7.48	0.52	-1.11	2.41	0.67	6.43	9.04	2.64	15.97	7.31	2.17
EATING AND DRINKING PLACES....	1066	989	1118	1161	1078	1012	1169	1173	1120	1072	1193	4165	4346	4474
% CHG SAME QTR LAST YR.....	11.22	7.66	5.33	3.70	1.20	2.30	4.62	1.08	3.86	5.96	2.05	8.90	4.35	2.96
FOOD STORES.....	1613	1516	1642	1656	1747	1581	1642	1641	1750	1560	1666	6513	6561	6614
% CHG SAME QTR LAST YR.....	7.85	-1.93	2.80	-5.76	8.28	4.31	-0.01	-0.93	0.22	-1.36	1.47	6.53	0.72	0.81
LIQUOR STORES.....	84	63	65	67	84	67	67	69	88	69	70	274	279	291
% CHG SAME QTR LAST YR.....	6.03	-0.05	2.66	5.25	-0.48	6.04	3.50	2.05	5.13	2.80	4.72	5.32	1.68	4.21
HOTELS AND MOTELS.....	322	260	353	398	294	243	362	406	337	275	394	1290	1305	1349
% CHG SAME QTR LAST YR.....	-7.34	8.20	1.81	4.55	-8.84	-6.50	2.67	2.12	14.69	13.00	8.77	-8.24	1.15	3.38
OTHER RETAIL AND SERVICE.....	4278	3221	3662	3706	4458	3387	3831	3849	4521	3527	3954	14204	15047	15588
% CHG SAME QTR LAST YR.....	4.88	6.34	7.54	6.10	4.22	5.16	4.62	3.86	1.40	4.15	3.20	6.16	5.93	3.60
MISC NONDURABLE GOODS.....	1277	975	1086	1106	1281	971	1091	1100	1292	1012	1119	4310	4447	4453
% CHG SAME QTR LAST YR.....	9.87	5.57	4.40	3.38	0.29	-0.44	0.46	-0.60	0.86	4.23	2.58	6.19	3.18	0.12
TRANSPORTATION, COMMUNICATION..	694	684	759	712	726	731	737	779	761	818	1255	2661	2881	3009
% CHG SAME QTR LAST YR.....	-18.10	8.15	15.90	4.74	4.59	6.92	-2.87	9.47	4.83	11.86	70.25	-13.13	8.26	4.45
PER CAPITA (\$).....	2674	2295	2607	2624	2687	2311	2626	2627	2748	2380	2733	9876	10212	10312
% CHG SAME QTR LAST YR.....	5.94	6.24	4.74	2.77	0.48	0.72	0.73	0.11	2.29	2.98	4.08	5.26	3.40	0.98

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 18: TENNESSEE TAXABLE SALES
 MILLIONS OF SEASONALLY ADJUSTED 1992 DOLLARS

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TOTAL.....	13162	13349	13420	13486	13415	13648	13686	13666	13903	14244	14406	51047	53670	54902
% CHG PREV QTR SAAR.....	8.10	5.81	2.14	1.98	-2.08	7.12	1.13	-0.60	7.15	10.16	4.62	6.94	5.14	2.30
% CHG SAME QTR LAST YR.....	7.68	7.93	6.44	4.48	1.92	2.24	1.98	1.33	3.64	4.37	5.26	6.94	5.14	2.30
AUTO DEALERS.....	1504	1496	1536	1580	1467	1555	1510	1463	1454	1455	1444	5792	6080	5982
% CHG PREV QTR SAAR.....	23.55	-2.15	11.22	12.07	-25.74	26.14	-11.15	-11.66	-2.47	0.27	-3.11	9.36	4.97	-1.60
% CHG SAME QTR LAST YR.....	9.63	6.40	5.54	10.80	-2.45	3.95	-1.73	-7.40	-0.87	-6.40	-4.35	9.36	4.97	-1.60
PURCHASES FROM MANUFACTURERS..	883	915	890	876	862	862	920	944	1023	964	918	3327	3543	3748
% CHG PREV QTR SAAR.....	12.12	15.20	-10.67	-5.82	-6.43	-0.22	29.93	10.81	37.81	-21.11	-17.75	10.28	6.50	5.76
% CHG SAME QTR LAST YR.....	16.15	17.88	9.97	2.10	-2.42	-5.86	3.38	7.67	18.62	11.85	-0.23	10.28	6.50	5.76
MISC DURABLE GOODS.....	2272	2340	2265	2314	2280	2314	2326	2325	2427	2520	2392	8549	9199	9391
% CHG PREV QTR SAAR.....	23.73	12.64	-12.27	9.02	-5.81	6.11	2.06	-0.20	18.76	16.32	-18.82	15.95	7.61	2.09
% CHG SAME QTR LAST YR.....	18.99	17.40	6.33	7.45	0.36	-1.12	2.69	0.45	6.44	8.91	2.85	15.95	7.61	2.09
EATING AND DRINKING PLACES....	1080	1076	1079	1097	1093	1100	1129	1110	1135	1164	1153	4162	4345	4473
% CHG PREV QTR SAAR.....	8.72	-1.37	1.30	6.74	-1.62	2.55	11.34	-6.88	9.47	10.81	-4.00	8.90	4.40	2.96
% CHG SAME QTR LAST YR.....	11.32	7.55	5.35	3.77	1.20	2.20	4.64	1.13	3.87	5.90	2.05	8.90	4.40	2.96
FOOD STORES.....	1597	1602	1633	1606	1715	1669	1633	1603	1711	1644	1655	6511	6556	6615
% CHG PREV QTR SAAR.....	-20.19	1.42	7.96	-6.47	29.90	-10.22	-8.44	-7.11	29.74	-14.67	2.79	6.61	0.70	0.90
% CHG SAME QTR LAST YR.....	6.95	-2.24	2.98	-4.92	7.39	4.17	-0.03	-0.20	-0.24	-1.50	1.40	6.61	0.70	0.90
LIQUOR STORES.....	70	68	69	72	70	72	72	73	73	74	75	274	279	290
% CHG PREV QTR SAAR.....	7.46	-9.36	7.66	15.45	-12.35	16.14	-2.38	8.28	0.13	5.25	5.65	5.29	1.78	4.15
% CHG SAME QTR LAST YR.....	6.40	-0.33	2.92	4.90	-0.31	6.06	3.49	1.85	5.29	2.73	4.79	5.29	1.78	4.15
HOTELS AND MOTELS.....	333	345	328	331	304	321	336	339	350	362	365	1292	1308	1346
% CHG PREV QTR SAAR.....	23.53	14.65	-18.02	4.20	-28.75	24.18	19.06	3.96	13.82	14.54	3.04	-7.97	1.27	2.89
% CHG SAME QTR LAST YR.....	-6.97	7.82	1.44	4.88	-8.60	-6.76	2.36	2.30	15.01	12.71	8.71	-7.97	1.27	2.89
OTHER RETAIL AND SERVICE.....	3637	3693	3764	3778	3803	3878	3935	3921	3862	4037	4058	14185	15037	15596
% CHG PREV QTR SAAR.....	7.79	6.27	7.92	1.46	2.66	8.22	5.96	-1.42	-5.85	19.33	2.09	6.30	6.01	3.72
% CHG SAME QTR LAST YR.....	5.26	6.13	7.60	5.83	4.55	5.02	4.54	3.79	1.57	4.08	3.12	6.30	6.01	3.72
MISC NONDURABLE GOODS.....	1109	1105	1110	1118	1112	1104	1115	1109	1121	1153	1143	4299	4445	4449
% CHG PREV QTR SAAR.....	9.84	-1.47	1.87	2.79	-2.24	-2.63	3.98	-2.22	4.54	11.88	-3.33	6.02	3.38	0.10
% CHG SAME QTR LAST YR.....	9.79	6.02	4.32	3.18	0.22	-0.08	0.44	-0.81	0.86	4.43	2.54	6.02	3.38	0.10
TRANSPORTATION, COMMUNICATION..	678	709	745	713	711	772	711	780	748	870	1203	2656	2877	3011
% CHG PREV QTR SAAR.....	-4.41	19.97	21.93	-16.37	-1.12	39.72	-28.11	44.30	-15.41	83.62	265.25	-13.09	8.31	4.65
% CHG SAME QTR LAST YR.....	-18.39	10.16	14.61	3.99	4.88	8.95	-4.53	9.41	5.22	12.66	69.15	-13.09	8.31	4.65
PER CAPITA (\$).....	2530	2557	2558	2558	2538	2575	2576	2562	2599	2656	2679	9866	10211	10312
% CHG PREV QTR SAAR.....	6.62	4.37	0.05	0.06	-3.09	6.01	0.09	-2.22	6.03	9.02	3.55	5.30	3.50	0.99
% CHG SAME QTR LAST YR.....	6.07	6.37	4.77	2.74	0.31	0.70	0.72	0.14	2.41	3.13	4.01	5.30	3.50	0.99

TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 19: TENNESSEE TAXABLE SALES
 MILLIONS OF CURRENT DOLLARS

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TOTAL.....	14786	12821	14731	14966	15425	13391	15366	15528	16405	14322	16532	53778	57943	60689
% CHG SAME QTR LAST YR.....	10.39	10.96	9.46	7.06	4.32	4.44	4.31	3.75	6.36	6.95	7.59	9.50	7.75	4.74
AUTO DEALERS.....	1482	1536	1746	1810	1477	1632	1751	1721	1502	1569	1709	6086	6569	6606
% CHG SAME QTR LAST YR.....	12.38	9.78	8.37	13.60	-0.37	6.27	0.27	-4.89	1.67	-3.85	-2.42	11.87	7.93	0.56
PURCHASES FROM MANUFACTURERS..	962	854	1004	1002	961	818	1060	1107	1172	938	1079	3513	3821	4158
% CHG SAME QTR LAST YR.....	19.58	20.75	13.01	4.83	-0.03	-4.22	5.61	10.52	21.92	14.66	1.84	13.18	8.77	8.80
MISC DURABLE GOODS.....	2419	2181	2629	2628	2485	2203	2753	2709	2717	2465	2886	9015	9922	10381
% CHG SAME QTR LAST YR.....	22.08	20.98	9.20	10.11	2.71	1.01	4.73	3.09	9.35	11.90	4.84	18.81	10.05	4.63
EATING AND DRINKING PLACES....	1133	1059	1204	1256	1171	1106	1288	1300	1250	1203	1342	4381	4689	4944
% CHG SAME QTR LAST YR.....	14.17	10.82	8.36	6.23	3.41	4.49	6.99	3.52	6.71	8.75	4.24	11.56	7.04	5.42
FOOD STORES.....	1715	1623	1768	1792	1897	1729	1808	1818	1954	1750	1874	6850	7080	7308
% CHG SAME QTR LAST YR.....	10.70	0.94	5.75	-3.46	10.65	6.54	2.25	1.46	2.96	1.23	3.64	9.12	3.35	3.22
LIQUOR STORES.....	90	67	70	73	91	73	74	76	98	77	79	289	301	321
% CHG SAME QTR LAST YR.....	8.83	2.88	5.61	7.82	1.69	8.31	5.85	4.51	8.01	5.50	6.96	7.90	4.29	6.73
HOTELS AND MOTELS.....	343	278	380	430	319	266	399	450	376	308	443	1357	1408	1491
% CHG SAME QTR LAST YR.....	-4.89	11.37	4.74	7.11	-6.86	-4.50	5.00	4.58	17.84	15.96	11.10	-6.00	3.73	5.91
OTHER RETAIL AND SERVICE.....	4548	3448	3944	4009	4843	3703	4219	4265	5046	3958	4448	14951	16244	17233
% CHG SAME QTR LAST YR.....	7.66	9.45	10.63	8.70	6.50	7.41	6.99	6.37	4.18	6.88	5.41	8.75	8.65	6.09
MISC NONDURABLE GOODS.....	1357	1044	1169	1197	1391	1061	1201	1218	1442	1135	1259	4537	4801	4922
% CHG SAME QTR LAST YR.....	12.78	8.67	7.40	5.91	2.48	1.69	2.74	1.80	3.63	6.97	4.78	8.80	5.82	2.53
TRANSPORTATION, COMMUNICATION..	738	732	818	770	789	799	812	864	849	918	1412	2799	3109	3325
% CHG SAME QTR LAST YR.....	-15.93	11.32	19.23	7.30	6.87	9.21	-0.67	12.11	7.70	14.80	73.90	-11.01	11.05	6.95
PER CAPITA (\$).....	2843	2456	2808	2839	2918	2527	2892	2911	3067	2671	3075	10391	11021	11397
% CHG SAME QTR LAST YR.....	8.74	9.36	7.75	5.28	2.67	2.88	3.01	2.53	5.10	5.68	6.31	7.82	6.07	3.41

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TENNESSEE ECONOMETRIC MODEL November 1997 UPDATE
 TABLE 20: TENNESSEE TAXABLE SALES
 MILLIONS OF SEASONALLY ADJUSTED CURRENT DOLLARS

	HISTORICAL - DATA											ANNUAL		
	199404	199501	199502	199503	199504	199601	199602	199603	199604	199701	199702	1994	1995	1996
TOTAL.....	13992	14290	14452	14590	14573	14922	15072	15141	15518	15983	16205	53686	57905	60654
% CHG PREV QTR SAAR.....	11.00	8.79	4.60	3.88	-0.48	9.95	4.08	1.85	10.32	12.55	5.67	9.53	7.86	4.75
% CHG SAME QTR LAST YR.....	10.52	11.09	9.50	7.03	4.15	4.42	4.29	3.78	6.48	7.11	7.52	9.53	7.86	4.75
AUTO DEALERS.....	1599	1601	1654	1710	1594	1700	1662	1622	1623	1633	1624	6091	6559	6607
% CHG PREV QTR SAAR.....	26.86	0.61	13.90	14.16	-24.53	29.48	-8.56	-9.49	0.42	2.45	-2.14	12.00	7.68	0.73
% CHG SAME QTR LAST YR.....	12.53	9.52	8.57	13.50	-0.32	6.17	0.50	-5.17	1.85	-3.94	-2.30	12.00	7.68	0.73
PURCHASES FROM MANUFACTURERS..	939	980	958	948	936	942	1013	1046	1141	1081	1032	3500	3823	4142
% CHG PREV QTR SAAR.....	15.12	18.44	-8.51	-4.06	-4.90	2.41	33.72	13.53	41.88	-19.40	-16.93	12.99	9.21	8.36
% CHG SAME QTR LAST YR.....	19.22	21.34	13.13	4.59	-0.29	-3.85	5.73	10.27	21.87	14.79	1.91	12.99	9.21	8.36
MISC DURABLE GOODS.....	2415	2505	2439	2504	2477	2530	2561	2576	2709	2828	2691	8993	9925	10376
% CHG PREV QTR SAAR.....	27.04	15.81	-10.15	11.06	-4.27	8.91	5.04	2.26	22.27	18.84	-18.01	18.78	10.37	4.54
% CHG SAME QTR LAST YR.....	22.14	20.85	9.39	10.07	2.56	0.99	5.02	2.87	9.36	11.77	5.06	18.78	10.37	4.54
EATING AND DRINKING PLACES....	1148	1152	1162	1187	1187	1202	1244	1229	1267	1307	1297	4377	4688	4942
% CHG PREV QTR SAAR.....	11.63	1.40	3.74	8.73	-0.01	5.26	14.59	-4.59	12.71	13.21	-3.04	11.55	7.10	5.42
% CHG SAME QTR LAST YR.....	14.26	10.70	8.38	6.30	3.41	4.38	7.01	3.57	6.72	8.68	4.23	11.55	7.10	5.42
FOOD STORES.....	1697	1715	1759	1738	1863	1825	1798	1776	1909	1845	1862	6846	7074	7308
% CHG PREV QTR SAAR.....	-18.05	4.27	10.56	-4.72	32.03	-7.85	-5.76	-4.83	33.58	-12.83	3.82	9.19	3.33	3.31
% CHG SAME QTR LAST YR.....	9.78	0.63	5.94	-2.60	9.74	6.40	2.23	2.20	2.50	1.09	3.57	9.19	3.33	3.31
LIQUOR STORES.....	74	73	75	78	76	79	79	81	82	83	85	288	301	321
% CHG PREV QTR SAAR.....	10.34	-6.81	10.25	17.61	-10.91	19.20	0.47	10.94	3.09	7.53	6.71	7.85	4.43	6.63
% CHG SAME QTR LAST YR.....	9.22	2.60	5.88	7.46	1.86	8.33	5.84	4.31	8.18	5.43	7.03	7.85	4.43	6.63
HOTELS AND MOTELS.....	354	369	353	358	331	351	370	375	391	406	410	1358	1411	1487
% CHG PREV QTR SAAR.....	26.84	17.88	-16.04	6.15	-27.58	27.46	22.54	6.51	17.18	17.03	4.07	-5.75	3.88	5.39
% CHG SAME QTR LAST YR.....	-4.51	10.98	4.35	7.44	-6.61	-4.76	4.68	4.77	18.16	15.67	11.04	-5.75	3.88	5.39
OTHER RETAIL AND SERVICE.....	3867	3953	4054	4087	4131	4241	4334	4344	4311	4529	4564	14918	16225	17229
% CHG PREV QTR SAAR.....	10.67	9.26	10.53	3.35	4.34	11.08	9.05	1.00	-3.06	21.91	3.11	8.87	8.76	6.19
% CHG SAME QTR LAST YR.....	8.04	9.24	10.70	8.41	6.83	7.27	6.91	6.29	4.35	6.81	5.33	8.87	8.76	6.19
MISC NONDURABLE GOODS.....	1179	1183	1196	1209	1208	1207	1228	1229	1251	1294	1286	4522	4796	4915
% CHG PREV QTR SAAR.....	12.78	1.30	4.33	4.72	-0.64	-0.06	7.02	0.18	7.63	14.31	-2.36	8.60	6.06	2.50
% CHG SAME QTR LAST YR.....	12.70	9.13	7.31	5.70	2.40	2.06	2.71	1.58	3.63	7.17	4.74	8.60	6.06	2.50
TRANSPORTATION, COMMUNICATION..	720	759	802	771	772	845	783	864	834	977	1353	2794	3104	3326
% CHG PREV QTR SAAR.....	-1.85	23.35	24.87	-14.80	0.50	43.41	-26.01	47.85	-12.91	87.60	268.90	-10.98	11.11	7.16
% CHG SAME QTR LAST YR.....	-16.23	13.40	17.90	6.53	7.16	11.28	-2.37	12.05	8.11	15.62	72.77	-10.98	11.11	7.16
PER CAPITA (\$).....	2690	2738	2754	2768	2757	2816	2837	2838	2901	2980	3014	10375	11017	11392
% CHG PREV QTR SAAR.....	9.48	7.30	2.46	1.93	-1.51	8.81	3.01	0.18	9.16	11.38	4.59	7.85	6.18	3.41
% CHG SAME QTR LAST YR.....	8.88	9.49	7.79	5.25	2.50	2.86	3.00	2.55	5.22	5.84	6.24	7.85	6.18	3.41

Appendix B: Historical Data-Annual

Tennessee Econometric Model November 1997 Update

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18. Nondurable Goods Manufacturing Gross Product (Mil Current \$)
19. Energy Consumption - Selected Categories

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
TABLE 1: SELECTED U.S. AND TENNESSEE ECONOMIC INDICATORS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US GDP (BIL92\$).....	5650.2	5866.0	6062.3	6136.1	6079.6	6244.9	6389.9	6611.1	6742.4	6928.9
PERCENTAGE CHANGE.....	2.96	3.82	3.35	1.22	-0.92	2.72	2.32	3.46	1.99	2.77
TN GSP (MIL92\$).....	96641.0	100171.0	101584.0	100348.0	102911.0	109113.0	112338.0	120686.0	126691.4	130329.1
PERCENTAGE CHANGE.....	5.60	3.65	1.41	-1.22	2.55	6.03	2.96	7.43	4.98	2.87
US GDP (BIL\$).....	4692.3	5049.6	5438.7	5743.8	5916.7	6244.4	6558.1	6947.0	7265.4	7636.0
PERCENTAGE CHANGE.....	6.11	7.61	7.71	5.61	3.01	5.54	5.02	5.93	4.58	5.10
TN GSP (MIL\$).....	81122.0	87044.0	91724.0	94218.0	100313.0	109113.0	115341.0	126539.0	135894.6	142978.9
PERCENTAGE CHANGE.....	9.58	7.30	5.38	2.72	6.47	8.77	5.71	9.71	7.39	5.21
IMPLICIT DEFLATOR,GDP.....	83.0	86.1	89.7	93.6	97.3	100.0	102.6	105.1	107.8	110.2
PERCENTAGE CHANGE.....	3.06	3.65	4.22	4.34	3.97	2.75	2.64	2.38	2.55	2.27
IMPLICIT DEFLATOR,GSP.....	83.9	86.9	90.3	93.9	97.5	100.0	102.7	104.8	107.3	109.7
PERCENTAGE CHANGE.....	3.76	3.52	3.91	3.98	3.82	2.59	2.67	2.12	2.30	2.28
US PERS CONS DEFL (1992=100).....	81.0	84.3	88.4	92.9	96.8	100.0	102.7	105.2	107.9	110.5
PERCENTAGE CHANGE.....	3.79	4.15	4.89	5.06	4.20	3.29	2.67	2.42	2.61	2.39
TN PERSONAL INCOME (MIL\$).....	64609	69907	74996	79850	84137	91754	97703	103989	111674	116756
PERCENTAGE CHANGE.....	7.64	8.20	7.28	6.47	5.37	9.05	6.48	6.43	7.39	4.55
US PERSONAL INCOME (BIL\$).....	3888.7	4184.6	4501.0	4804.2	4981.6	5277.2	5519.2	5791.8	6150.8	6495.2
PERCENTAGE CHANGE.....	6.30	7.61	7.56	6.74	3.69	5.93	4.59	4.94	6.20	5.60
TN PERSONAL INCOME (MIL92\$).....	79803	82909	84796	85939	86902	91754	95167	98896	103507	105690
PERCENTAGE CHANGE.....	3.70	3.89	2.28	1.35	1.12	5.58	3.72	3.92	4.66	2.11
US PERSONAL INCOME (BIL92\$).....	4803.2	4963.0	5089.2	5170.6	5145.4	5277.2	5375.9	5508.1	5701.0	5879.6
PERCENTAGE CHANGE.....	2.41	3.33	2.54	1.60	-0.49	2.56	1.87	2.46	3.50	3.13
TN NONAGRIC JOBS (THOUS).....	2011.6	2092.0	2167.2	2193.2	2183.6	2245.0	2328.5	2423.0	2499.0	2534.4
PERCENTAGE CHANGE.....	4.24	4.00	3.59	1.20	-0.44	2.81	3.72	4.06	3.14	1.42
US NONAGRIC JOBS (MIL).....	102.0	105.2	107.9	109.4	108.3	108.6	110.7	114.1	117.2	119.5
PERCENTAGE CHANGE.....	2.63	3.19	2.55	1.41	-1.05	0.31	1.95	3.10	2.67	1.98
TN UNEMPLOYMENT RATE (%).....	6.6	5.8	5.1	5.3	6.7	6.4	5.7	4.8	5.2	5.2
US UNEMPLOYMENT RATE (%).....	6.2	5.5	5.3	5.6	6.8	7.5	6.9	6.1	5.6	5.4
BANK PRIME INTEREST RATE (%).....	8.2	9.3	10.9	10.0	8.5	6.3	6.0	7.1	8.8	8.3
TN MFG JOBS (THOUS).....	497.4	511.9	524.5	520.3	502.7	514.5	528.4	538.9	538.9	522.2
PERCENTAGE CHANGE.....	1.42	2.90	2.47	-0.81	-3.39	2.35	2.71	1.98	0.00	-3.11
TN TAXABLE SALES (MIL\$).....	36728	38903	40438	41991	42650	45473	49112	53778	57943	60689
PERCENTAGE CHANGE.....	5.96	5.92	3.95	3.84	1.57	6.62	8.00	9.50	7.75	4.74

(Continued on next page)

TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 1: SELECTED U.S. AND TENNESSEE ECONOMIC INDICATORS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TN TAXABLE SALES (MIL92\$).....	45366	46138	45722	45192	44052	45473	47837	51144	53706	54937
PERCENTAGE CHANGE.....	2.09	1.70	-0.90	-1.16	-2.52	3.23	5.20	6.91	5.01	2.29
TN MFG OUTPUT/EMPLOYEE (THOUS92\$)...	47.2	47.6	47.6	46.3	49.4	51.9	53.1	55.1	56.9	59.1
PERCENTAGE CHANGE.....	9.30	1.01	-0.08	-2.71	6.63	5.15	2.27	3.71	3.26	3.99
TN AVERAGE ANNUAL WAGE, NONAG (\$)....	19245	19919	20363	21241	22192	23414	23926	24674	25572	26408
PERCENTAGE CHANGE.....	4.73	3.50	2.23	4.31	4.48	5.51	2.19	3.12	3.64	3.27
TN AVERAGE ANNUAL WAGE, NONAG (92\$)..	23771	23623	23024	22861	22921	23414	23305	23465	23702	23905
PERCENTAGE CHANGE.....	0.90	-0.62	-2.54	-0.71	0.26	2.15	-0.47	0.69	1.01	0.86
TN TOTAL POPULATION (THOUS).....	4783	4822	4854	4891	4950	5020	5094	5174	5259	5324
PERCENTAGE CHANGE.....	0.90	0.82	0.67	0.76	1.21	1.41	1.47	1.57	1.64	1.23

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 2: SELECTED PER CAPITA U.S. AND TENNESSEE ECONOMIC INDICATORS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TN GSP (92 \$).....	20206	20775	20927	20517	20790	21735	22052	23324	24089	24481
PERCENTAGE CHANGE.....	4.66	2.81	0.73	-1.96	1.33	4.55	1.46	5.77	3.28	1.62
TN GSP (\$).....	16961	18052	18896	19264	20265	21735	22642	24455	25839	26857
PERCENTAGE CHANGE.....	8.60	6.43	4.67	1.95	5.20	7.26	4.17	8.01	5.66	3.94
US GDP (92 \$).....	23245	23914	24480	24522	24034	24419	24722	25330	25591	26100
PERCENTAGE CHANGE.....	2.05	2.88	2.37	0.17	-1.99	1.60	1.24	2.46	1.03	1.99
US GDP (\$).....	19304	20585	21962	22954	23390	24417	25373	26617	27576	28763
PERCENTAGE CHANGE.....	5.17	6.64	6.69	4.52	1.90	4.39	3.91	4.90	3.60	4.31
TN PERSONAL INCOME (92 \$).....	16686	17195	17468	17571	17556	18277	18682	19113	19681	19853
PERCENTAGE CHANGE.....	2.78	3.05	1.59	0.59	-0.09	4.11	2.21	2.31	2.97	0.87
TN PERSONAL INCOME (\$).....	13509	14498	15450	16326	16997	18277	19180	20097	21234	21931
PERCENTAGE CHANGE.....	6.68	7.32	6.56	5.67	4.11	7.53	4.94	4.78	5.66	3.28
US PERSONAL INCOME (92 \$).....	19761	20232	20551	20663	20341	20635	20799	21104	21638	22147
PERCENTAGE CHANGE.....	1.50	2.39	1.57	0.55	-1.56	1.45	0.79	1.47	2.53	2.35
US PERSONAL INCOME (\$).....	15998	17059	18175	19199	19693	20635	21353	22191	23345	24466
PERCENTAGE CHANGE.....	5.35	6.63	6.54	5.63	2.57	4.78	3.48	3.92	5.20	4.80
TN TAXABLE SALES (92 \$).....	9485	9569	9419	9240	8899	9058	9391	9884	10212	10319
PERCENTAGE CHANGE.....	1.18	0.88	-1.57	-1.90	-3.69	1.79	3.67	5.26	3.31	1.05
TN TAXABLE SALES (\$).....	7679	8068	8330	8585	8616	9058	9641	10393	11017	11400
PERCENTAGE CHANGE.....	5.02	5.06	3.25	3.06	0.36	5.13	6.43	7.80	6.01	3.47

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 3: TENNESSEE PERSONAL INCOME BY COMPONENTS
 MILLIONS OF 1992 DOLLARS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TOTAL PERSONAL INCOME.....	79803	82909	84796	85939	86902	91754	95167	98896	103507	105690
PERCENTAGE CHANGE.....	3.70	3.89	2.28	1.35	1.12	5.58	3.72	3.92	4.66	2.11
WAGES AND SALARIES.....	48553	50162	50644	50910	50804	53291	54981	57583	59953	61291
PERCENTAGE CHANGE.....	5.14	3.31	0.96	0.53	-0.21	4.90	3.17	4.73	4.12	2.23
OTHER LABOR INCOME.....	5131	5296	5509	5795	6062	6613	7212	7544	7467	7279
PERCENTAGE CHANGE.....	7.15	3.22	4.02	5.19	4.60	9.10	9.06	4.60	-1.02	-2.51
PROPRIETORS INCOME.....	6758	7157	7225	7049	7062	8053	8686	8927	9079	9210
PERCENTAGE CHANGE.....	2.40	5.91	0.94	-2.44	0.18	14.03	7.87	2.77	1.70	1.45
RENT INTEREST DIVIDENDS.....	11753	12490	13341	13323	12947	12506	12516	13113	14481	14957
PERCENTAGE CHANGE.....	-0.76	6.27	6.81	-0.13	-2.82	-3.41	0.09	4.77	10.43	3.28
TRANSFER PAYMENTS.....	12016	12466	12889	13707	14916	16223	17026	17344	18445	18953
PERCENTAGE CHANGE.....	2.08	3.75	3.39	6.34	8.82	8.76	4.95	1.87	6.34	2.76
LESS:PERS CONT FOR SOC INS.....	3630	3877	4024	4058	4142	4289	4487	4773	4972	5038
PERCENTAGE CHANGE.....	4.64	6.80	3.81	0.84	2.08	3.53	4.63	6.37	4.16	1.33
RESIDENCE ADJUSTMENT.....	-778	-787	-788	-787	-747	-643	-768	-843	-946	-962
PERCENTAGE CHANGE.....	2.70	1.09	0.15	-0.10	-5.15	-13.87	19.37	9.78	12.31	1.68
PER CAPITA PERSONAL INCOME (\$)	16686	17195	17468	17571	17556	18277	18682	19113	19681	19853
PERCENTAGE CHANGE.....	2.78	3.05	1.59	0.59	-0.09	4.11	2.21	2.31	2.97	0.87

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 4: TENNESSEE PERSONAL INCOME BY COMPONENTS
 MILLIONS OF CURRENT DOLLARS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TOTAL PERSONAL INCOME	64609	69907	74996	79850	84137	91754	97703	103989	111674	116756
PERCENTAGE CHANGE.....	7.64	8.20	7.28	6.47	5.37	9.05	6.48	6.43	7.39	4.55
WAGES AND SALARIES.....	39309	42296	44791	47303	49187	53291	56446	60549	64684	67708
PERCENTAGE CHANGE.....	9.13	7.60	5.90	5.61	3.98	8.34	5.92	7.27	6.83	4.67
OTHER LABOR INCOME.....	4154	4466	4872	5384	5869	6613	7405	7932	8056	8042
PERCENTAGE CHANGE.....	11.21	7.51	9.11	10.51	9.00	12.68	11.97	7.13	1.56	-0.18
PROPRIETORS INCOME.....	5472	6035	6390	6550	6837	8053	8918	9387	9795	10175
PERCENTAGE CHANGE.....	6.29	10.30	5.88	2.50	4.39	17.78	10.75	5.26	4.35	3.87
RENT INTEREST DIVIDENDS.....	9516	10531	11799	12380	12535	12506	12850	13788	15624	16523
PERCENTAGE CHANGE.....	3.01	10.67	12.04	4.92	1.26	-0.24	2.75	7.30	13.31	5.75
TRANSFER PAYMENTS.....	9728	10511	11400	12736	14442	16223	17480	18238	19900	20938
PERCENTAGE CHANGE.....	5.96	8.05	8.45	11.72	13.40	12.34	7.75	4.33	9.12	5.21
LESS:PERS CONT FOR SOC INS.....	2939	3269	3559	3771	4011	4289	4607	5019	5364	5565
PERCENTAGE CHANGE.....	8.61	11.23	8.89	5.94	6.37	6.94	7.42	8.94	6.87	3.75
RESIDENCE ADJUSTMENT.....	-630	-663	-697	-731	-723	-643	-788	-886	-1021	-1063
PERCENTAGE CHANGE.....	6.60	5.28	5.05	4.95	-1.16	-11.03	22.55	12.44	15.24	4.11
PER CAPITA PERSONAL INCOME (\$).....	13509	14498	15450	16326	16997	18277	19180	20097	21234	21931
PERCENTAGE CHANGE.....	6.68	7.32	6.56	5.67	4.11	7.53	4.94	4.78	5.66	3.28

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 5: TENNESSEE WAGE AND SALARY EMPLOYMENT BY SECTOR
 THOUSANDS OF JOBS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TOTAL NONAGRICULTURAL.....	2011.6	2092.0	2167.2	2193.2	2183.6	2245.0	2328.5	2423.0	2499.0	2534.4
PERCENTAGE CHANGE.....	4.24	4.00	3.59	1.20	-0.44	2.81	3.72	4.06	3.14	1.42
MINING.....	6.8	6.6	6.3	6.2	5.5	5.0	4.7	4.6	4.6	4.6
PERCENTAGE CHANGE.....	-5.13	-2.33	-4.40	-2.89	-10.30	-10.12	-5.55	-1.78	-0.36	0.36
CONSTRUCTION.....	95.2	96.7	97.2	92.4	86.5	88.3	94.3	101.0	108.8	112.7
PERCENTAGE CHANGE.....	5.80	1.57	0.56	-5.02	-6.33	2.13	6.74	7.15	7.74	3.58
MANUFACTURING.....	497.4	511.9	524.5	520.3	502.7	514.5	528.4	538.9	538.9	522.2
PERCENTAGE CHANGE.....	1.42	2.90	2.47	-0.81	-3.39	2.35	2.71	1.98	0.00	-3.11
DURABLE GOODS.....	244.4	254.1	261.7	258.4	248.6	257.3	269.6	281.7	288.0	286.3
PERCENTAGE CHANGE.....	2.13	3.96	2.99	-1.25	-3.80	3.51	4.78	4.48	2.23	-0.58
NONDURABLE GOODS.....	253.0	257.8	262.8	261.9	254.1	257.2	258.8	257.2	250.9	235.8
PERCENTAGE CHANGE.....	0.73	1.87	1.96	-0.36	-2.98	1.21	0.64	-0.61	-2.45	-6.01
TRADE.....	477.2	495.6	508.4	517.2	511.6	517.7	535.9	562.1	585.5	596.3
PERCENTAGE CHANGE.....	5.57	3.86	2.58	1.73	-1.09	1.19	3.53	4.89	4.15	1.85
SERVICES.....	408.9	440.3	467.2	486.3	505.2	541.1	572.4	603.8	638.0	655.5
PERCENTAGE CHANGE.....	6.30	7.68	6.11	4.09	3.88	7.10	5.78	5.48	5.66	2.75
FIN, INS, REAL EST.....	101.4	103.2	103.4	103.1	101.6	101.0	104.1	108.3	111.6	117.2
PERCENTAGE CHANGE.....	6.32	1.78	0.19	-0.35	-1.44	-0.56	3.08	4.04	2.97	5.09
TRANS, COMM, PUB UTIL.....	103.4	109.2	115.8	116.4	117.4	120.6	126.8	133.6	138.6	142.8
PERCENTAGE CHANGE.....	5.98	5.61	6.00	0.55	0.81	2.77	5.10	5.36	3.74	3.07
GOVERNMENT.....	321.2	328.4	344.3	351.4	353.2	356.9	362.0	370.7	373.1	383.1
PERCENTAGE CHANGE.....	2.81	2.24	4.83	2.08	0.49	1.05	1.43	2.42	0.66	2.66
FEDERAL, CIVILIAN.....	63.4	64.5	61.8	63.6	61.7	58.4	55.7	55.3	54.4	54.1
PERCENTAGE CHANGE.....	2.94	1.80	-4.29	3.00	-3.03	-5.38	-4.58	-0.76	-1.57	-0.55
STATE AND LOCAL.....	257.8	263.9	282.5	287.8	291.5	298.5	306.3	315.5	318.8	329.0
PERCENTAGE CHANGE.....	2.78	2.35	7.06	1.88	1.27	2.41	2.60	3.00	1.05	3.21
FARM.....	13.0	13.2	15.4	15.7	13.2	14.6	12.7	10.1	12.0	12.3
PERCENTAGE CHANGE.....	-18.74	0.87	16.99	1.96	-15.86	10.83	-13.23	-20.40	18.94	2.28

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 6: TENNESSEE DURABLE GOODS MANUFACTURING EMPLOYMENT
 THOUSANDS OF JOBS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TOTAL DURABLE GOODS.....	244.4	254.1	261.7	258.4	248.6	257.3	269.6	281.7	288.0	286.3
PERCENTAGE CHANGE.....	2.13	3.96	2.99	-1.25	-3.80	3.51	4.78	4.48	2.23	-0.58
LUMBER AND WOOD.....	21.3	21.6	21.0	20.2	18.3	18.5	19.6	20.5	21.7	21.9
PERCENTAGE CHANGE.....	14.45	1.72	-2.77	-3.88	-9.40	0.91	6.13	4.59	5.77	0.77
FURNITURE AND FIXTURES.....	24.7	26.0	27.2	27.1	26.1	27.4	28.9	29.8	29.5	28.6
PERCENTAGE CHANGE.....	1.09	4.92	4.65	-0.21	-3.57	4.88	5.56	2.97	-1.12	-2.80
STONE, CLAY AND GLASS.....	15.3	14.8	14.8	14.3	13.5	14.1	15.2	16.1	16.2	16.5
PERCENTAGE CHANGE.....	1.33	-2.95	-0.23	-2.93	-6.05	4.76	7.62	6.37	0.41	1.44
PRIMARY METALS.....	15.7	15.7	15.8	15.6	15.1	15.2	15.6	16.2	16.2	16.5
PERCENTAGE CHANGE.....	-2.89	-0.11	0.53	-1.32	-2.68	0.33	2.30	3.97	0.36	1.39
FABRICATED METALS.....	39.9	42.2	42.9	43.2	41.7	42.0	44.2	45.6	45.7	43.8
PERCENTAGE CHANGE.....	2.05	5.62	1.72	0.64	-3.44	0.86	5.25	3.15	0.04	-4.02
NONELECTRICAL MACHINERY.....	36.4	37.1	40.1	38.1	35.4	37.3	38.8	41.1	43.4	43.8
PERCENTAGE CHANGE.....	-2.44	2.13	8.10	-5.04	-7.26	5.40	4.18	5.99	5.59	0.88
ELECTRICAL MACHINERY.....	35.7	38.4	40.0	37.3	35.5	35.8	37.4	39.3	40.3	40.7
PERCENTAGE CHANGE.....	1.56	7.41	4.15	-6.59	-4.91	0.70	4.64	5.14	2.48	0.85
TRANSPORTATION EQUIPMENT.....	34.7	36.0	36.9	39.4	41.3	45.3	48.0	51.0	52.5	52.3
PERCENTAGE CHANGE.....	5.36	3.53	2.64	6.66	4.87	9.67	6.09	6.21	2.96	-0.40
INSTRUMENTS.....	9.3	9.9	10.7	11.0	10.8	10.3	9.9	10.1	10.5	10.6
PERCENTAGE CHANGE.....	-2.86	6.08	8.00	2.81	-1.97	-4.80	-3.25	1.76	4.46	0.55
MISCELLANEOUS.....	11.4	12.5	12.4	12.2	10.9	11.5	11.9	11.8	11.9	11.7
PERCENTAGE CHANGE.....	4.52	9.74	-1.00	-1.15	-10.57	5.57	3.25	-0.56	0.56	-1.75

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 7: TENNESSEE NONDURABLE GOODS MANUFACTURING EMPLOYMENT
 THOUSANDS OF JOBS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TOTAL NONDURABLE GOODS.....	253.0	257.8	262.8	261.9	254.1	257.2	258.8	257.2	250.9	235.8
PERCENTAGE CHANGE.....	0.73	1.87	1.96	-0.36	-2.98	1.21	0.64	-0.61	-2.45	-6.01
FOOD.....	38.7	39.2	38.8	38.8	37.3	36.5	37.4	37.3	36.8	35.5
PERCENTAGE CHANGE.....	0.65	1.49	-1.15	-0.09	-3.87	-1.92	2.35	-0.25	-1.32	-3.49
TOBACCO.....	1.4	1.0	1.2	1.4	1.3	1.2	1.2	1.2	1.2	1.2
PERCENTAGE CHANGE.....	-11.46	-26.47	12.80	18.44	-6.59	-5.13	-0.68	0.68	-4.05	-0.70
TEXTILES.....	24.0	23.1	22.2	20.8	20.2	20.7	21.9	22.2	20.8	19.3
PERCENTAGE CHANGE.....	3.79	-3.61	-3.93	-6.41	-2.85	2.64	5.63	1.29	-6.09	-7.24
APPAREL.....	64.7	65.1	65.7	64.2	60.6	60.9	59.7	56.8	52.2	43.0
PERCENTAGE CHANGE.....	1.41	0.58	1.06	-2.29	-5.59	0.37	-1.90	-4.91	-8.06	-17.69
PAPER.....	18.9	19.7	20.8	21.4	21.6	22.2	22.7	22.5	22.1	21.5
PERCENTAGE CHANGE.....	2.86	4.33	5.42	2.89	1.13	2.78	2.14	-0.88	-1.52	-2.86
PRINTING AND PUBLISHING.....	33.9	35.4	36.8	37.6	37.0	36.5	37.1	38.5	39.5	39.0
PERCENTAGE CHANGE.....	3.19	4.42	3.95	2.06	-1.62	-1.26	1.51	3.82	2.75	-1.26
CHEMICALS.....	37.4	38.5	39.3	39.7	39.2	39.6	38.9	38.0	37.6	37.5
PERCENTAGE CHANGE.....	-1.25	2.85	2.01	1.13	-1.30	0.98	-1.77	-2.25	-0.92	-0.27
PETROLEUM REFINING.....	0.9	1.0	1.0	1.0	0.9	0.7	0.8	0.8	0.9	1.1
PERCENTAGE CHANGE.....	3.77	4.55	0.00	0.00	-8.70	-15.24	4.49	9.68	8.82	14.41
RUBBER AND PLASTICS.....	23.9	25.5	27.6	28.1	27.7	30.2	30.9	32.9	33.8	33.3
PERCENTAGE CHANGE.....	-1.17	6.76	8.03	2.06	-1.54	9.00	2.21	6.67	2.61	-1.55
LEATHER.....	9.3	9.3	9.6	9.0	8.4	8.6	8.4	7.0	5.9	4.5
PERCENTAGE CHANGE.....	-8.48	-0.09	3.24	-5.93	-6.86	2.79	-2.90	-15.95	-16.13	-24.19

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 8: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
 1992 DOLLARS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TOTAL NONAGRICULTURAL.....	23771	23623	23024	22861	22921	23414	23305	23465	23702	23905
PERCENTAGE CHANGE.....	0.90	-0.62	-2.54	-0.71	0.26	2.15	-0.47	0.69	1.01	0.86
MINING.....	31046	32089	32224	31194	29301	30151	31353	32304	32912	34684
PERCENTAGE CHANGE.....	5.42	3.36	0.42	-3.20	-6.07	2.90	3.99	3.03	1.88	5.38
CONSTRUCTION.....	25437	25620	25356	24963	24944	25166	25035	25431	25784	26143
PERCENTAGE CHANGE.....	0.57	0.72	-1.03	-1.55	-0.08	0.89	-0.52	1.58	1.39	1.39
MANUFACTURING.....	26561	26435	26001	25799	26298	27155	26991	27179	27321	28048
PERCENTAGE CHANGE.....	-0.38	-0.47	-1.64	-0.78	1.93	3.26	-0.60	0.69	0.52	2.66
DURABLE GOODS.....	28066	27691	27110	26789	27376	28146	28125	28329	28220	28604
PERCENTAGE CHANGE.....	-1.20	-1.33	-2.10	-1.18	2.19	2.81	-0.08	0.73	-0.39	1.36
NONDURABLE GOODS.....	25107	25196	24897	24823	25244	26164	25811	25919	26289	27374
PERCENTAGE CHANGE.....	0.42	0.35	-1.18	-0.30	1.70	3.65	-1.35	0.42	1.43	4.13
TRADE.....	18046	17925	17424	17029	17191	17879	17696	17855	18022	18172
PERCENTAGE CHANGE.....	0.45	-0.67	-2.80	-2.26	0.95	4.00	-1.02	0.90	0.94	0.83
SERVICES.....	22460	22229	22138	22320	22138	22551	22220	22102	22705	22800
PERCENTAGE CHANGE.....	2.94	-1.03	-0.41	0.82	-0.81	1.86	-1.47	-0.53	2.73	0.42
FIN, INS, REAL EST.....	28568	27843	27102	26557	27283	28970	29411	29354	29750	31004
PERCENTAGE CHANGE.....	0.68	-2.54	-2.66	-2.01	2.73	6.19	1.52	-0.19	1.35	4.21
TRANS, COMM, PUB UTIL.....	32744	32105	30944	31100	30969	31090	30353	30699	30576	30470
PERCENTAGE CHANGE.....	1.01	-1.95	-3.62	0.50	-0.42	0.39	-2.37	1.14	-0.40	-0.34
GOVERNMENT.....	24575	24805	23244	23331	23012	22665	23166	23822	24013	23665
PERCENTAGE CHANGE.....	2.17	0.93	-6.29	0.38	-1.37	-1.51	2.21	2.83	0.80	-1.45
FEDERAL, CIVILIAN.....	35340	36237	33797	34445	34545	35081	37281	38771	38422	39172
PERCENTAGE CHANGE.....	2.10	2.54	-6.73	1.92	0.29	1.55	6.27	4.00	-0.90	1.95
STATE AND LOCAL.....	21929	22010	20938	20876	20572	20238	20600	21204	21554	21115
PERCENTAGE CHANGE.....	2.18	0.37	-4.87	-0.30	-1.45	-1.62	1.79	2.93	1.65	-2.04
AGRICULTURE.....	8829	9328	7858	8399	9071	7462	9297	11028	9480	9006
PERCENTAGE CHANGE.....	16.68	5.65	-15.75	6.88	8.00	-17.73	24.59	18.62	-14.04	-5.00

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 9: TENNESSEE AVERAGE ANNUAL WAGE AND SALARY RATE BY SECTOR
 CURRENT DOLLARS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TOTAL NONAGRICULTURAL.....	19245	19919	20363	21241	22192	23414	23926	24674	25572	26408
PERCENTAGE CHANGE.....	4.73	3.50	2.23	4.31	4.48	5.51	2.19	3.12	3.64	3.27
MINING.....	25135	27057	28500	28984	28369	30151	32189	33967	35509	38315
PERCENTAGE CHANGE.....	9.42	7.64	5.33	1.70	-2.12	6.28	6.76	5.53	4.54	7.90
CONSTRUCTION.....	20593	21602	22425	23194	24150	25166	25702	26741	27818	28880
PERCENTAGE CHANGE.....	4.38	4.90	3.81	3.43	4.12	4.21	2.13	4.04	4.03	3.82
MANUFACTURING.....	21504	22289	22996	23971	25461	27155	27711	28579	29476	30985
PERCENTAGE CHANGE.....	3.40	3.65	3.17	4.24	6.22	6.65	2.04	3.13	3.14	5.12
DURABLE GOODS.....	22722	23349	23977	24891	26505	28146	28874	29788	30446	31599
PERCENTAGE CHANGE.....	2.55	2.76	2.69	3.81	6.49	6.19	2.59	3.16	2.21	3.79
NONDURABLE GOODS.....	20327	21245	22020	23064	24440	26164	26498	27254	28363	30240
PERCENTAGE CHANGE.....	4.24	4.52	3.65	4.74	5.97	7.05	1.28	2.85	4.07	6.62
TRADE.....	14610	15114	15410	15823	16644	17879	18167	18774	19444	20074
PERCENTAGE CHANGE.....	4.26	3.45	1.96	2.68	5.19	7.42	1.61	3.34	3.57	3.24
SERVICES.....	18183	18743	19579	20738	21434	22551	22812	23240	24496	25188
PERCENTAGE CHANGE.....	6.85	3.08	4.46	5.92	3.35	5.21	1.16	1.88	5.41	2.82
FIN, INS, REAL EST.....	23128	23476	23970	24676	26414	28970	30194	30865	32098	34250
PERCENTAGE CHANGE.....	4.50	1.50	2.10	2.95	7.05	9.68	4.23	2.22	3.99	6.71
TRANS, COMM, PUB UTIL.....	26510	27070	27368	28896	29983	31090	31162	32280	32988	33661
PERCENTAGE CHANGE.....	4.85	2.12	1.10	5.58	3.76	3.69	0.23	3.59	2.19	2.04
GOVERNMENT.....	19896	20915	20558	21678	22280	22665	23784	25049	25908	26142
PERCENTAGE CHANGE.....	6.05	5.12	-1.71	5.45	2.77	1.73	4.93	5.32	3.43	0.91
FEDERAL, CIVILIAN.....	28611	30554	29891	32005	33445	35081	38274	40768	41454	43274
PERCENTAGE CHANGE.....	5.97	6.79	-2.17	7.07	4.50	4.89	9.10	6.51	1.68	4.39
STATE AND LOCAL.....	17754	18558	18518	19397	19917	20238	21149	22296	23255	23325
PERCENTAGE CHANGE.....	6.06	4.53	-0.22	4.75	2.68	1.61	4.50	5.42	4.30	0.30
AGRICULTURE.....	7148	7865	6950	7804	8782	7462	9545	11596	10228	9949
PERCENTAGE CHANGE.....	21.11	10.03	-11.63	12.28	12.54	-15.02	27.91	21.49	-11.80	-2.73

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 10: TENNESSEE CIVILIAN LABOR FORCE AND UNEMPLOYMENT RATE

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
CIVILIAN LABOR FORCE (THOUS).....	2334	2338	2368	2387	2421	2455	2500	2665	2707	2751
PERCENTAGE CHANGE.....	1.92	0.17	1.28	0.82	1.41	1.43	1.83	6.56	1.61	1.60
EMPLOYED PERSONS (THOUS).....	2180	2203	2247	2261	2258	2298	2357	2537	2567	2609
PERCENTAGE CHANGE.....	3.51	1.06	2.00	0.64	-0.15	1.76	2.57	7.65	1.18	1.64
UNEMPLOYED PERSONS (THOUS).....	154	135	121	126	163	158	144	127	140	142
PERCENTAGE CHANGE.....	-16.30	-12.35	-10.36	4.01	29.44	-3.19	-8.84	-11.34	10.21	0.87
PARTICIPATION RATE (PERCENT).....	63.1	62.6	62.9	62.7	62.7	62.9	63.2	66.2	66.0	66.2
PERCENTAGE CHANGE.....	0.69	-0.76	0.44	-0.30	0.12	0.19	0.47	4.82	-0.31	0.36
UNEMPLOYMENT RATE (PERCENT).....	6.6	5.8	5.1	5.3	6.7	6.4	5.7	4.8	5.2	5.2

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 11: TENNESSEE TAXABLE SALES
 MILLIONS OF 1992 DOLLARS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TOTAL.....	45366	46138	45722	45192	44052	45473	47837	51144	53706	54937
PERCENTAGE CHANGE.....	2.09	1.70	-0.90	-1.16	-2.52	3.23	5.20	6.91	5.01	2.29
AUTO DEALERS.....	5409	5430	5127	4562	4207	4616	5299	5788	6088	5980
PERCENTAGE CHANGE.....	3.86	0.40	-5.58	-11.03	-7.77	9.71	14.80	9.22	5.19	-1.78
PURCHASES FROM MANUFACTURERS.....	3028	3301	3379	3208	3001	2991	3023	3341	3542	3764
PERCENTAGE CHANGE.....	1.31	9.01	2.36	-5.07	-6.46	-0.32	1.07	10.51	6.01	6.26
MISC DURABLE GOODS.....	7706	7584	7273	7034	6511	6886	7391	8574	9196	9398
PERCENTAGE CHANGE.....	1.00	-1.59	-4.09	-3.29	-7.43	5.76	7.34	16.00	7.26	2.19
EATING AND DRINKING PLACES.....	3436	3522	3600	3637	3639	3769	3825	4166	4347	4475
PERCENTAGE CHANGE.....	4.37	2.50	2.23	1.03	0.05	3.58	1.48	8.93	4.32	2.96
FOOD STORES.....	6898	6817	6668	6596	6449	6395	6115	6515	6562	6616
PERCENTAGE CHANGE.....	2.21	-1.16	-2.19	-1.08	-2.23	-0.83	-4.39	6.54	0.73	0.81
LIQUOR STORES.....	316	301	288	284	284	281	261	274	279	291
PERCENTAGE CHANGE.....	-13.03	-4.78	-4.46	-1.20	-0.08	-1.17	-7.19	5.35	1.64	4.24
HOTELS AND MOTELS.....	1005	1057	1092	1105	1112	1216	1406	1291	1305	1350
PERCENTAGE CHANGE.....	1.69	5.18	3.26	1.23	0.60	9.40	15.63	-8.22	1.10	3.43
OTHER RETAIL AND SERVICE.....	11798	12087	12080	12115	12174	12653	13391	14219	15056	15600
PERCENTAGE CHANGE.....	3.32	2.45	-0.06	0.29	0.49	3.93	5.84	6.18	5.89	3.61
MISC NONDURABLE GOODS.....	3942	4045	4085	4109	4029	4137	4062	4314	4450	4456
PERCENTAGE CHANGE.....	-2.44	2.60	1.01	0.58	-1.95	2.69	-1.83	6.23	3.14	0.14
TRANSPORTATION, COMMUNICATION.....	1828	1994	2129	2542	2646	2528	3064	2662	2881	3009
PERCENTAGE CHANGE.....	3.88	9.11	6.77	19.42	4.09	-4.46	21.20	-13.12	8.23	4.45
PER CAPITA TOTAL TAXABLE SALES (\$)..	9485	9569	9419	9240	8899	9058	9391	9884	10212	10319
PERCENTAGE CHANGE.....	1.18	0.88	-1.57	-1.90	-3.69	1.79	3.67	5.26	3.31	1.05

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 12: TENNESSEE TAXABLE SALES
 MILLIONS OF CURRENT DOLLARS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TOTAL.....	36728	38903	40438	41991	42650	45473	49112	53778	57943	60689
PERCENTAGE CHANGE.....	5.96	5.92	3.95	3.84	1.57	6.62	8.00	9.50	7.75	4.74
AUTO DEALERS.....	4379	4579	4535	4239	4073	4616	5440	6086	6569	6606
PERCENTAGE CHANGE.....	7.80	4.57	-0.96	-6.53	-3.90	13.32	17.86	11.87	7.93	0.56
PURCHASES FROM MANUFACTURERS.....	2452	2783	2989	2981	2905	2991	3104	3513	3821	4158
PERCENTAGE CHANGE.....	5.15	13.53	7.37	-0.27	-2.53	2.96	3.76	13.18	8.77	8.80
MISC DURABLE GOODS.....	6239	6394	6433	6535	6304	6886	7588	9015	9922	10381
PERCENTAGE CHANGE.....	4.83	2.49	0.60	1.60	-3.54	9.24	10.20	18.81	10.05	4.63
EATING AND DRINKING PLACES.....	2782	2970	3184	3380	3523	3769	3927	4381	4689	4944
PERCENTAGE CHANGE.....	8.33	6.75	7.23	6.14	4.25	6.98	4.18	11.56	7.04	5.42
FOOD STORES.....	5584	5748	5898	6129	6244	6395	6278	6850	7080	7308
PERCENTAGE CHANGE.....	6.09	2.94	2.60	3.92	1.87	2.43	-1.84	9.12	3.35	3.22
LIQUOR STORES.....	256	254	254	264	275	281	267	289	301	321
PERCENTAGE CHANGE.....	-9.73	-0.83	0.21	3.80	4.12	2.08	-4.72	7.90	4.29	6.73
HOTELS AND MOTELS.....	814	892	966	1027	1076	1216	1444	1357	1408	1491
PERCENTAGE CHANGE.....	5.55	9.54	8.31	6.35	4.82	13.00	18.71	-6.00	3.73	5.91
OTHER RETAIL AND SERVICE.....	9551	10191	10684	11256	11787	12653	13748	14951	16244	17233
PERCENTAGE CHANGE.....	7.24	6.70	4.83	5.36	4.71	7.35	8.66	8.75	8.65	6.09
MISC NONDURABLE GOODS.....	3191	3410	3613	3818	3901	4137	4170	4537	4801	4922
PERCENTAGE CHANGE.....	1.26	6.86	5.95	5.66	2.17	6.06	0.79	8.80	5.82	2.53
TRANSPORTATION, COMMUNICATION.....	1480	1681	1883	2362	2562	2528	3146	2799	3109	3325
PERCENTAGE CHANGE.....	7.83	13.63	11.99	25.45	8.46	-1.32	24.43	-11.01	11.05	6.95
PER CAPITA TOTAL TAXABLE SALES (\$)..	7679	8068	8330	8585	8616	9058	9641	10393	11017	11400
PERCENTAGE CHANGE.....	5.02	5.06	3.25	3.06	0.36	5.13	6.43	7.80	6.01	3.47

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 13: TENNESSEE GROSS STATE PRODUCT BY SECTOR
 MILLIONS OF 1992 DOLLARS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
GROSS STATE PRODUCT.....	96641.0	100171.0	101584.0	100348.0	102911.0	109113.0	112338.0	120686.0	126691.4	130329.1
PERCENTAGE CHANGE.....	5.60	3.65	1.41	-1.22	2.55	6.03	2.96	7.43	4.98	2.87
MINING.....	373.0	406.0	395.0	404.0	395.0	404.0	366.0	354.0	389.6	415.1
PERCENTAGE CHANGE.....	0.27	8.85	-2.71	2.28	-2.23	2.28	-9.41	-3.28	10.06	6.55
CONSTRUCTION.....	3890.0	3928.0	3912.0	3683.0	3504.0	3791.0	4040.0	4390.0	4723.3	4965.0
PERCENTAGE CHANGE.....	1.65	0.98	-0.41	-5.85	-4.86	8.19	6.57	8.66	7.59	5.12
MANUFACTURING.....	23462.0	24386.0	24970.0	24098.0	24825.0	26716.0	28062.0	29680.0	30645.8	30878.3
PERCENTAGE CHANGE.....	10.84	3.94	2.39	-3.49	3.02	7.62	5.04	5.77	3.25	0.76
DURABLE GOODS.....	11196.0	11909.0	12107.0	11229.0	11737.0	13158.0	14295.0	15492.0	16393.3	16944.9
PERCENTAGE CHANGE.....	11.53	6.37	1.66	-7.25	4.52	12.11	8.64	8.37	5.82	3.37
NONDURABLE GOODS.....	12266.0	12477.0	12863.0	12869.0	13088.0	13559.0	13766.0	14188.0	14252.5	13933.4
PERCENTAGE CHANGE.....	10.23	1.72	3.09	0.05	1.70	3.60	1.53	3.07	0.45	-2.24
TRADE.....	16660.0	17385.0	17872.0	17650.0	18135.0	19630.0	20718.0	22567.0	24678.7	25699.1
PERCENTAGE CHANGE.....	-1.09	4.35	2.80	-1.24	2.75	8.24	5.54	8.92	9.36	4.13
SERVICES.....	16752.0	17767.0	18642.0	19073.0	19373.0	20675.0	21153.0	21961.0	23198.7	23809.6
PERCENTAGE CHANGE.....	5.06	6.06	4.92	2.31	1.57	6.72	2.31	3.82	5.64	2.63
FINANCE, INSURANCE AND REAL ESTATE..	13369.0	13710.0	13618.0	13054.0	13281.0	14116.0	14473.0	15223.0	15909.7	16693.1
PERCENTAGE CHANGE.....	4.23	2.55	-0.67	-4.14	1.74	6.29	2.53	5.18	4.51	4.92
TRANS., COMM., AND PUBLIC UTIL.....	7185.0	7478.0	7140.0	7240.0	8027.0	8770.0	9005.0	10273.0	10786.5	11285.7
PERCENTAGE CHANGE.....	11.02	4.08	-4.52	1.40	10.87	9.26	2.68	14.08	5.00	4.63
GOVERNMENT.....	13669.0	13944.0	13885.0	13815.0	13920.0	13385.0	13059.0	14553.0	14545.0	14777.3
PERCENTAGE CHANGE.....	6.54	2.01	-0.42	-0.50	0.76	-3.84	-2.44	11.44	-0.06	1.60
FEDERAL CIVILIAN.....	4590.0	4582.0	4386.0	4148.0	4280.0	3646.0	3052.0	4033.0	3964.2	3978.2
PERCENTAGE CHANGE.....	5.86	-0.17	-4.28	-5.43	3.18	-14.81	-16.29	32.14	-1.71	0.36
FEDERAL MILITARY.....	787.0	796.0	807.0	800.0	787.0	724.0	687.0	689.0	650.2	594.7
PERCENTAGE CHANGE.....	1.55	1.14	1.38	-0.87	-1.63	-8.01	-5.11	0.29	-5.63	-8.54
STATE AND LOCAL.....	8293.0	8565.0	8692.0	8868.0	8854.0	9015.0	9320.0	9831.0	9930.6	10204.4
PERCENTAGE CHANGE.....	7.42	3.28	1.48	2.02	-0.16	1.82	3.38	5.48	1.01	2.76
AGRICULTURE.....	1282.0	1167.0	1150.0	1329.0	1451.0	1627.0	1463.0	1686.0	1814.2	1805.9
PERCENTAGE CHANGE.....	4.23	-8.97	-1.46	15.57	9.18	12.13	-10.08	15.24	7.60	-0.45
FARM.....	968.0	875.0	877.0	991.0	1091.0	1224.0	1055.0	1256.0	1344.5	1292.3
PERCENTAGE CHANGE.....	-2.42	-9.61	0.23	13.00	10.09	12.19	-13.81	19.05	7.05	-3.88
AG SERVICES, FORESTRY, FISHERIES..	314.0	292.0	273.0	338.0	360.0	402.0	408.0	429.0	469.6	513.7
PERCENTAGE CHANGE.....	31.38	-7.01	-6.51	23.81	6.51	11.67	1.49	5.15	9.48	9.37
PER CAPITA GROSS STATE PRODUCT (\$)..	20206.2	20774.8	20926.8	20517.2	20789.8	21735.3	22052.4	23323.9	24089.3	24480.6
PERCENTAGE CHANGE.....	4.66	2.81	0.73	-1.96	1.33	4.55	1.46	5.77	3.28	1.62

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 14: TENNESSEE DURABLE GOODS MANUFACTURING GROSS PRODUCT
 MILLIONS OF 1992 DOLLARS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TOTAL DURABLE GOODS.....	11196.0	11909.0	12107.0	11229.0	11737.0	13158.0	14295.0	15492.0	16393.3	16944.9
PERCENTAGE CHANGE.....	11.53	6.37	1.66	-7.25	4.52	12.11	8.64	8.37	5.82	3.37
LUMBER AND WOOD PRODUCTS.....	880.0	822.0	690.0	687.0	628.0	596.0	542.0	707.0	758.7	776.9
PERCENTAGE CHANGE.....	23.60	-6.59	-16.06	-0.43	-8.59	-5.10	-9.06	30.44	7.31	2.40
FURNITURE AND FIXTURES.....	746.0	755.0	792.0	719.0	774.0	836.0	892.0	947.0	957.5	955.7
PERCENTAGE CHANGE.....	-0.67	1.21	4.90	-9.22	7.65	8.01	6.70	6.17	1.11	-0.19
STONE, CLAY AND GLASS.....	629.0	624.0	695.0	640.0	549.0	615.0	671.0	707.0	727.3	753.1
PERCENTAGE CHANGE.....	-0.16	-0.79	11.38	-7.91	-14.22	12.02	9.11	5.37	2.87	3.54
PRIMARY METALS.....	712.0	818.0	788.0	817.0	1031.0	887.0	1064.0	981.0	1024.6	1057.1
PERCENTAGE CHANGE.....	28.06	14.89	-3.67	3.68	26.19	-13.97	19.95	-7.80	4.44	3.18
FABRICATED METAL PRODUCTS.....	2072.0	2056.0	2208.0	2159.0	2150.0	2320.0	2494.0	2596.0	2672.2	2706.7
PERCENTAGE CHANGE.....	1.32	-0.77	7.39	-2.22	-0.42	7.91	7.50	4.09	2.94	1.29
NONELECTRICAL MACHINERY.....	1592.0	1838.0	2007.0	1838.0	1638.0	2269.0	2402.0	2423.0	2760.3	3033.1
PERCENTAGE CHANGE.....	10.25	15.45	9.19	-8.42	-10.88	38.52	5.86	0.87	13.92	9.88
ELECTRICAL MACHINERY.....	1400.0	1477.0	1633.0	1503.0	1608.0	1650.0	1697.0	2160.0	2244.3	2306.6
PERCENTAGE CHANGE.....	46.66	5.50	10.56	-7.96	6.99	2.61	2.85	27.28	3.90	2.77
TRANSPORTATION EQUIPMENT.....	2149.0	2318.0	2109.0	1636.0	2094.0	2669.0	3298.0	3820.0	3997.0	4078.6
PERCENTAGE CHANGE.....	14.92	7.86	-9.02	-22.43	28.00	27.46	23.57	15.83	4.63	2.04
INSTRUMENTS.....	401.0	533.0	509.0	651.0	692.0	644.0	548.0	506.0	548.5	559.9
PERCENTAGE CHANGE.....	23.77	32.92	-4.50	27.90	6.30	-6.94	-14.91	-7.66	8.40	2.07
MISCELLANEOUS DURABLE GOODS.....	556.0	621.0	632.0	559.0	560.0	670.0	697.0	677.0	702.7	717.2
PERCENTAGE CHANGE.....	16.08	11.69	1.77	-11.55	0.18	19.64	4.03	-2.87	3.80	2.06

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 15: TENNESSEE NONDURABLE GOODS MANUFACTURING GROSS PRODUCT
 MILLIONS OF 1992 DOLLARS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TOTAL NONDURABLE GOODS.....	12266.0	12477.0	12863.0	12869.0	13088.0	13559.0	13766.0	14188.0	14252.5	13933.4
PERCENTAGE CHANGE.....	10.23	1.72	3.09	0.05	1.70	3.60	1.53	3.07	0.45	-2.24
FOOD.....	2512.0	2817.0	2648.0	2724.0	2809.0	2735.0	2672.0	2937.0	2936.7	2863.6
PERCENTAGE CHANGE.....	8.84	12.14	-6.00	2.87	3.12	-2.63	-2.30	9.92	-0.01	-2.49
TOBACCO.....	361.0	346.0	347.0	364.0	254.0	245.0	262.0	289.0	283.2	284.8
PERCENTAGE CHANGE.....	-16.44	-4.16	0.29	4.90	-30.22	-3.54	6.94	10.31	-2.01	0.57
TEXTILES.....	650.0	585.0	560.0	616.0	588.0	730.0	729.0	723.0	689.6	644.6
PERCENTAGE CHANGE.....	6.38	-10.00	-4.27	10.00	-4.55	24.15	-0.14	-0.82	-4.62	-6.52
APPAREL.....	1256.0	1339.0	1528.0	1494.0	1462.0	1501.0	1450.0	1434.0	1338.4	1118.1
PERCENTAGE CHANGE.....	10.86	6.61	14.12	-2.23	-2.14	2.67	-3.40	-1.10	-6.67	-16.46
PAPER.....	1347.0	1422.0	1354.0	1217.0	1355.0	1398.0	1518.0	1401.0	1431.4	1401.2
PERCENTAGE CHANGE.....	13.96	5.57	-4.78	-10.12	11.34	3.17	8.58	-7.71	2.17	-2.11
PRINTING AND PUBLISHING.....	1476.0	1553.0	1510.0	1534.0	1529.0	1502.0	1429.0	1403.0	1467.5	1467.4
PERCENTAGE CHANGE.....	3.51	5.22	-2.77	1.59	-0.33	-1.77	-4.86	-1.82	4.59	0.00
CHEMICALS.....	3111.0	2820.0	3222.0	3326.0	3423.0	3607.0	3753.0	3899.0	3931.3	4020.2
PERCENTAGE CHANGE.....	13.62	-9.35	14.26	3.23	2.92	5.38	4.05	3.89	0.83	2.26
PETROLEUM REFINING.....	136.0	108.0	122.0	121.0	133.0	148.0	131.0	122.0	134.1	156.4
PERCENTAGE CHANGE.....	52.81	-20.59	12.96	-0.82	9.92	11.28	-11.49	-6.87	9.90	16.68
RUBBER AND PLASTICS.....	1107.0	1169.0	1256.0	1173.0	1281.0	1412.0	1573.0	1806.0	1892.1	1863.9
PERCENTAGE CHANGE.....	18.27	5.60	7.44	-6.61	9.21	10.23	11.40	14.81	4.77	-1.49
LEATHER.....	310.0	318.0	315.0	300.0	254.0	280.0	249.0	175.0	148.2	113.1
PERCENTAGE CHANGE.....	13.97	2.58	-0.94	-4.76	-15.33	10.24	-11.07	-29.72	-15.32	-23.70

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 16: TENNESSEE GROSS STATE PRODUCT BY SECTOR
 MILLIONS OF CURRENT DOLLARS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
GROSS STATE PRODUCT.....	81122	87044	91724	94218	100313	109113	115341	126539	135895	142979
PERCENTAGE CHANGE.....	9.58	7.30	5.38	2.72	6.47	8.77	5.71	9.71	7.39	5.21
MINING.....	398	428	430	444	404	404	351	347	395	431
PERCENTAGE CHANGE.....	0.76	7.54	0.47	3.26	-9.01	0.00	-13.12	-1.14	13.95	8.88
CONSTRUCTION.....	3554	3704	3776	3658	3501	3791	4173	4677	5204	5576
PERCENTAGE CHANGE.....	5.87	4.22	1.94	-3.13	-4.29	8.28	10.08	12.08	11.26	7.15
MANUFACTURING.....	20216	21637	23237	22846	24320	26716	28618	30611	31915	32545
PERCENTAGE CHANGE.....	10.58	7.03	7.39	-1.68	6.45	9.85	7.12	6.96	4.26	1.98
DURABLE GOODS.....	10081	10817	11437	10744	11501	13158	14628	16049	17173	17967
PERCENTAGE CHANGE.....	9.67	7.30	5.73	-6.06	7.05	14.41	11.17	9.71	7.00	4.63
NONDURABLE GOODS.....	10135	10820	11800	12102	12820	13559	13990	14562	14742	14578
PERCENTAGE CHANGE.....	11.50	6.76	9.06	2.56	5.93	5.76	3.18	4.09	1.24	-1.11
TRADE.....	14672	15621	16416	16938	17933	19630	20969	23113	25561	26921
PERCENTAGE CHANGE.....	6.11	6.47	5.09	3.18	5.87	9.46	6.82	10.22	10.59	5.32
SERVICES.....	12614	14165	15663	17079	18274	20675	21963	23663	25950	27635
PERCENTAGE CHANGE.....	10.81	12.30	10.58	9.04	7.00	13.14	6.23	7.74	9.66	6.50
FINANCE, INSURANCE AND REAL ESTATE..	10862	11302	11721	12014	12972	14116	15116	16217	17273	18502
PERCENTAGE CHANGE.....	8.90	4.05	3.71	2.50	7.97	8.82	7.08	7.28	6.51	7.12
TRANS., COMM., AND PUBLIC UTIL.....	6669	7301	7104	7247	8031	8770	9194	10646	11409	12182
PERCENTAGE CHANGE.....	12.31	9.48	-2.70	2.01	10.82	9.20	4.83	15.79	7.17	6.78
GOVERNMENT.....	10847	11588	12041	12578	13392	13385	13465	15547	16104	16944
PERCENTAGE CHANGE.....	11.64	6.83	3.91	4.46	6.47	-0.05	0.60	15.46	3.58	5.21
FEDERAL CIVILIAN.....	3519	3739	3739	3664	4114	3646	3173	4450	4601	4818
PERCENTAGE CHANGE.....	10.45	6.25	0.00	-2.01	12.28	-11.38	-12.97	40.25	3.39	4.71
FEDERAL MILITARY.....	654	670	702	713	730	724	684	694	681	649
PERCENTAGE CHANGE.....	5.14	2.45	4.78	1.57	2.38	-0.82	-5.52	1.46	-1.89	-4.73
STATE AND LOCAL.....	6673	7179	7600	8201	8548	9015	9608	10403	10822	11477
PERCENTAGE CHANGE.....	12.95	7.58	5.86	7.91	4.23	5.46	6.58	8.27	4.03	6.05
AGRICULTURE.....	1290	1297	1335	1414	1486	1627	1493	1719	2085	2244
PERCENTAGE CHANGE.....	11.02	0.54	2.93	5.92	5.09	9.49	-8.24	15.14	21.29	7.61
FARM.....	979	989	1029	1068	1123	1224	1074	1242	1468	1558
PERCENTAGE CHANGE.....	3.38	1.02	4.04	3.79	5.15	8.99	-12.25	15.64	18.22	6.14
AG SERVICES, FORESTRY, FISHERIES..	312	307	306	346	363	402	419	476	617	685
PERCENTAGE CHANGE.....	45.12	-1.60	-0.33	13.07	4.91	10.74	4.23	13.60	29.57	11.12
PER CAPITA GROSS STATE PRODUCT (\$)..	16961	18052	18896	19264	20265	21735	22642	24455	25839	26857
PERCENTAGE CHANGE.....	8.60	6.43	4.67	1.95	5.20	7.26	4.17	8.01	5.66	3.94

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 17: TENNESSEE DURABLE GOODS MANUFACTURING GROSS PRODUCT
 MILLIONS OF CURRENT DOLLARS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TOTAL DURABLE GOODS.....	10081	10817	11437	10744	11501	13158	14628	16049	17173	17967
PERCENTAGE CHANGE.....	9.67	7.30	5.73	-6.06	7.05	14.41	11.17	9.71	7.00	4.63
LUMBER AND WOOD PRODUCTS.....	700	673	600	593	553	596	671	920	1047	1137
PERCENTAGE CHANGE.....	28.21	-3.86	-10.85	-1.17	-6.75	7.78	12.58	37.11	13.78	8.65
FURNITURE AND FIXTURES.....	646	676	739	702	781	836	886	977	988	988
PERCENTAGE CHANGE.....	-0.15	4.64	9.32	-5.01	11.25	7.04	5.98	10.27	1.18	-0.04
STONE, CLAY AND GLASS.....	646	612	676	624	549	615	689	755	789	824
PERCENTAGE CHANGE.....	-2.27	-5.26	10.46	-7.69	-12.02	12.02	12.03	9.58	4.47	4.50
PRIMARY METALS.....	639	885	922	900	1057	887	1038	1013	1085	1147
PERCENTAGE CHANGE.....	31.75	38.50	4.18	-2.39	17.44	-16.08	17.02	-2.41	7.11	5.73
FABRICATED METAL PRODUCTS.....	1771	1788	2029	2069	2131	2320	2503	2586	2698	2762
PERCENTAGE CHANGE.....	-0.67	0.96	13.48	1.97	3.00	8.87	7.89	3.32	4.32	2.39
NONELECTRICAL MACHINERY.....	1628	1825	2017	1845	1665	2269	2311	2216	2541	2813
PERCENTAGE CHANGE.....	3.04	12.10	10.52	-8.53	-9.76	36.28	1.85	-4.11	14.65	10.73
ELECTRICAL MACHINERY.....	1438	1481	1658	1518	1639	1650	1665	1994	2140	2252
PERCENTAGE CHANGE.....	17.10	2.99	11.95	-8.44	7.97	0.67	0.91	19.76	7.33	5.21
TRANSPORTATION EQUIPMENT.....	1810	1904	1796	1390	1929	2669	3572	4341	4537	4627
PERCENTAGE CHANGE.....	13.41	5.19	-5.67	-22.61	38.78	38.36	33.83	21.53	4.51	2.00
INSTRUMENTS.....	328	441	437	588	655	644	573	545	596	614
PERCENTAGE CHANGE.....	27.63	34.45	-0.91	34.55	11.39	-1.68	-11.02	-4.89	9.30	3.15
MISCELLANEOUS DURABLE GOODS.....	474	533	563	515	540	670	719	701	753	802
PERCENTAGE CHANGE.....	15.61	12.45	5.63	-8.53	4.85	24.07	7.31	-2.50	7.43	6.45

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 18: TENNESSEE NONDURABLE GOODS MANUFACTURING GROSS PRODUCT
 MILLIONS OF CURRENT DOLLARS

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TOTAL NONDURABLE GOODS.....	10135	10820	11800	12102	12820	13559	13990	14562	14742	14578
PERCENTAGE CHANGE.....	11.50	6.76	9.06	2.56	5.93	5.76	3.18	4.09	1.24	-1.11
FOOD.....	2055	2249	2286	2510	2741	2735	2721	3076	3040	2962
PERCENTAGE CHANGE.....	8.10	9.44	1.65	9.80	9.20	-0.22	-0.51	13.05	-1.18	-2.56
TOBACCO.....	169	177	204	248	213	245	250	217	227	244
PERCENTAGE CHANGE.....	-5.59	4.73	15.25	21.57	-14.11	15.02	2.04	-13.20	4.73	7.30
TEXTILES.....	607	565	541	597	570	730	719	677	642	602
PERCENTAGE CHANGE.....	7.43	-6.92	-4.25	10.35	-4.52	28.07	-1.51	-5.84	-5.20	-6.26
APPAREL.....	1122	1210	1422	1421	1435	1501	1468	1436	1318	1087
PERCENTAGE CHANGE.....	8.62	7.84	17.52	-0.07	0.99	4.60	-2.20	-2.18	-8.19	-17.56
PAPER.....	1204	1402	1434	1258	1363	1398	1454	1386	1455	1454
PERCENTAGE CHANGE.....	19.80	16.45	2.28	-12.27	8.35	2.57	4.01	-4.68	4.97	-0.05
PRINTING AND PUBLISHING.....	1083	1201	1250	1346	1437	1502	1510	1536	1720	1844
PERCENTAGE CHANGE.....	7.65	10.90	4.08	7.68	6.76	4.52	0.53	1.72	11.99	7.20
CHEMICALS.....	2449	2495	3048	3142	3378	3607	3888	4132	4112	4151
PERCENTAGE CHANGE.....	14.98	1.88	22.16	3.08	7.51	6.78	7.79	6.28	-0.47	0.93
PETROLEUM REFINING.....	84	91	101	133	140	148	146	137	147	170
PERCENTAGE CHANGE.....	12.00	8.33	10.99	31.68	5.26	5.71	-1.35	-6.16	7.16	15.98
RUBBER AND PLASTICS.....	1109	1146	1220	1159	1294	1412	1581	1779	1917	1936
PERCENTAGE CHANGE.....	13.63	3.34	6.46	-5.00	11.65	9.12	11.97	12.52	7.77	0.99
LEATHER.....	254	284	292	288	248	280	253	186	163	128
PERCENTAGE CHANGE.....	15.98	11.81	2.82	-1.37	-13.89	12.90	-9.64	-26.48	-12.24	-21.42

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TENNESSEE ECONOMETRIC MODEL NOVEMBER 1997 UPDATE
 TABLE 19: TENNESSEE ENERGY CONSUMPTION - SELECTED CATEGORIES

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
ELECTRICITY (MIL. KWH).....	65878	68955	69734	71641	73116	72939	77298	77105	80825	82991
PERCENTAGE CHANGE.....	2.01	4.67	1.13	2.73	2.06	-0.24	5.98	-0.25	4.82	2.68
RESIDENTIAL.....	27202	28324	27638	28069	29090	28486	31284	30783	32481	33202
PERCENTAGE CHANGE.....	2.84	4.12	-2.42	1.56	3.64	-2.07	9.82	-1.60	5.52	2.22
COMMERCIAL & INDUSTRIAL (<=50 KWH)	6068	5649	5735	5976	6211	5053	4788	4754	5057	5108
PERCENTAGE CHANGE.....	11.81	-6.91	1.52	4.20	3.94	-18.64	-5.26	-0.71	6.38	1.00
COMMERCIAL & INDUSTRIAL (> 50 KWH)	25137	26803	27780	28646	29155	31196	33413	34892	36155	37343
PERCENTAGE CHANGE.....	3.22	6.63	3.65	3.12	1.78	7.00	7.11	4.43	3.62	3.29
DIRECTLY SERVED COMM AND IND.....	7471	8179	8581	8950	8660	8204	7814	6676	7130	7338
PERCENTAGE CHANGE.....	-10.52	9.48	4.92	4.30	-3.23	-5.28	-4.75	-14.56	6.81	2.91
GASOLINE (MIL. GAL.).....	2693	2510	2600	2460	2370	2508	2590	2669	2719	2750
PERCENTAGE CHANGE.....	3.83	-6.82	3.59	-5.35	-3.69	5.82	3.29	3.04	1.89	1.12
MOTOR VEHICLE REGISTRATIONS.....	4027	4226	4316	4444	4542	4645	4964	5059	5400	5487
PERCENTAGE CHANGE.....	2.40	4.94	2.13	2.98	2.20	2.28	6.86	1.91	6.75	1.61

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