AN ECONOMIC REPORT TO THE GOVERNOR OF THE STATE OF TENNESSEE

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PREFACE

This 2014 volume of An Economic Report to the Governor of the State of Tennessee is the thirty-eighth 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 2016 and annual forecast through 2023 represent the collective judgment of the staff of the University of Tennessee's Center for Business and Economic Research in conjunction with the Quarterly and Annual Tennessee Econometric Models. The national forecasts were prepared by IHS Global Insight, Inc. Tennessee forecasts, current as of January 2014, are based on an array of assumptions, particularly at the national level, which are described in Chapter One. Chapter Two details evaluations for major sectors of the Tennessee economy, with an agriculture section provided by the University of Tennessee Agricultural Policy Analysis Center. Chapter Three discusses Tennessee's role in the international economy and presents the long-run outlook and forecast for the state. Chapter Four presents manufacturing trends and advanced manufacturing in Tennessee.

The primary purpose of this annual volume—published, distributed, and financed through the Tennessee Department of Finance and Administration, Tennessee Department of Economic and Community Development, the Tennessee Department of Revenue, the Tennessee Department of Labor and Workforce Development, and the Appalachian Regional Commission—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

The U.S. Economy

After five years of sluggish recovery, the U.S. economy is poised for strong growth in 2014 and 2015. According to early estimates, inflation-adjusted gross domestic product (GDP) grew 1.9 percent in 2013, compared to 2.8 percent in 2012 and 1.8 percent in 2011. Despite the slow pace of the recovery, many indicators now point to stronger fundamentals in the economy and brighter growth prospects in the quarters ahead.

Consumer confidence rose and remained high for most of 2013, amid persistent fiscal uncertainties from Washington, DC. Rallying stock markets and rising home prices were the main factors that boosted confidence. Inflation-adjusted household net worth grew by almost 10 percent in 2013, surpassing for the first time its pre-crisis level. As a result, consumers spent more and firms were more eager to hire. Inflation-adjusted consumer spending grew by 2.0 percent and the economy added approximately 2.2 million jobs in 2013. That is an average of 182 thousand jobs added monthly. The unemployment rate fell by more than a full percentage point over the course of the year, down to 6.7 percent in December 2013. That is the lowest it has been since late 2008.

For the third consecutive year, both construction and manufacturing sectors recorded net payroll employment growth, adding 164 thousand and 60 thousand jobs. The rebound of the housing sector, which started in 2012, was sustained in 2013. Household spending on new housing grew by 14.6 percent. That is the second consecutive year of double-digit growth. The number of housing starts increased by 19.0 percent to reach 931 thousand units in 2013, compared to 783 units in 2012. Home prices also kept their upward trend dating back to 2012. Despite its solid performance, the housing sector still has a long way to go to recover fully. Sales of new houses are still less than one-half their pre-crisis figures.

The Federal Reserve maintained its accommodating monetary policies throughout 2013. However, citing improving labor market conditions, it announced in December that it would start reducing long-term asset purchases beginning in January 2014. This move by the Fed – commonly referred to as the "taper" – has been widely anticipated by observers since mid-2013. The reaction of the markets to the announcement was mostly favorable as the move was perceived as a confirmation by the Fed that the economy is indeed strengthening. The Fed also insisted that, provided inflation is not an issue, it would maintain its targeted interest rate at low levels until the unemployment rate falls well below 6.5 percent and other indicators confirm strong labor market conditions.

The federal government deficit was cut down to $680 billion in 2013 after four consecutive years of deficits higher than a trillion dollars. The persistent political divide forced a two-week government shutdown in October. Eventually a rare compromise was reached in December 2013 as the two parties agreed on the main lines of the federal budget for 2014 and 2015. State and local government purchases have bottomed out in 2013, and they are expected to increase timidly in the next few years.

The slow global recovery, especially in Europe, continues to hold back U.S. exports. However, for the third straight year, exports have grown slightly faster than imports. The trade deficit amounted to $500 billion in 2013, down from $550 billion in 2012. The trade deficit is now slightly less than 3 percent of GDP, the lowest it has been since 2009.

Inflation remains subdued in part because of falling energy prices. As measured by the consumer price index (CPI), overall prices rose by 1.5 percent in 2013 compared to 2.1 percent in 2012 and 3.1 percent in 2011. Core-CPI, which excludes prices of energy and food, increased 1.8 percent compared to 2.1 percent in 2012.

The economy is expected to carry self-sustained growth momentum into 2014. The passage of the bipartisan budget deal in December 2013 removes some of the fiscal uncertainties that have clouded the outlook of the economy in the past three years. In addition, it appears markets received favorably the decision by the Fed to start tapering its latest round of quantitative easing. The positive outlook for the global economy in the coming quarters will also help boost U.S. exports, and hence growth.

Inflation-adjusted GDP is projected to grow by a solid 2.7 percent in 2014, followed by 3.2 and 3.4 percent growth in 2015 and 2016 respectively. This year is expected to start on a relatively healthy note with 2.0 percent growth in the first quarter, followed by 2.5 percent growth in the second quarter. The economy is then projected to switch gears and accelerate to 2.7 percent and 3.3 percent annual growth in the second half of the year. Despite stronger growth, inflation will likely remain quiet as energy prices continue to fall and market competition restrains sellers.

Although many remain cautious regarding the sustainability of the recovery, most observers agree the U.S. economy is now in much better shape than it was a few years ago and faces brighter prospects in the coming quarters.

The Tennessee Economy

The Short-Term Economic Outlook

Tennessee's economy showed signs of improvement in 2013 over 2012. Inflation-adjusted gross domestic product (GDP) grew by 2.6 percent for the year and nonfarm employment increased by 1.5 percent, representing an addition of over 40,000 jobs to the state economy. Despite this job growth the annual unemployment rate increased slightly, from 8.0 percent in 2012 to 8.2 percent in 2013.

Nominal personal income was up 2.7 percent for the year, slightly behind the pace of income growth for the nation. Nominal taxable sales increased at a rate of 2.8 percent in 2013. This followed a 4.8 percent gain in taxable sales in 2012.

Tennessee is expected to see slightly faster growth in 2014 and 2015. Nonfarm employment is expected to increase by 1.5 percent in 2014 followed by stronger 1.8 percent growth in 2015. Leisure and hospitality, professional and business services, and transportation equipment will experience the largest rates of job growth in 2014 and 2015. Manufacturing employment will continue to grow, but at a slow rate of 1.0 percent in 2014 and 0.5 percent in 2015. Growth in the manufacturing sector will be carried by gains in durable goods manufacturing which will offset job losses in nondurable goods manufacturing.

Tennessee's unemployment rate will fall to 7.5 percent in 2014, and 7.0 percent in 2015. This will mark the first time since 2008 that unemployment drops below 8.0 percent, however, it is still well above pre-recession levels. The number of unemployed people is projected to decline by 8.3 percent this year and 6.2 percent in 2015. However, Tennessee's unemployment rate will remain above the nation's rate through the short-term forecast horizon.

Nominal personal income is projected to rise by 4.2 this year, followed by 4.5 percent in 2015. On a fiscal year basis, nominal personal income will increase by 3.3 percent in FY 2014 and 4.5 percent in FY 2015. Nominal taxable sales will show improved growth over 2013, increasing by 3.4 percent this year and 3.8 percent next year. On a fiscal year basis, nominal taxable sales are expected to rise by 3.1 percent in FY 2014 and 3.9 percent in FY 2015.

Long-Term Economic Outlook

Tennessee's long-term outlook continues to be colored by the Great Recession which ended in the second quarter of 2009. Among the components of the economy that have been slow to heal are the housing market and the labor market. Fortunately, a full recovery to prerecession levels of annualized employment should occur in 2015. However, unemployment rates remain elevated and the labor force participation rate has moved to unprecedented lows. The labor market is likely to continue to struggle for the remainder of the decade.

The early 2000s were years of weak-to-modest growth, including the "jobless recovery" from the recession of 2001. The economy finally gained momentum and by mid-decade the economy was performing well by virtually all measures. Then the housing bubble broke, financial markets tumbled and ripple effects led to the longest and deepest recession since the Great Depression. State gross domestic product fell 3.7 percent in 2009 and U.S. gross domestic product slipped 2.8 percent. Most measures of economic activity then began to improve. Jobs, however, fell again in 2010, and the unemployment rate continued to rise. The following year finally produced broader improvements, though the housing market continued to struggle.

As discussed in Chapters 1 and 2, the near-term outlook for the national and state economies is as bright as it has been since the end of the recession. This will help the economy move toward a full post-recession recovery in the next two to three years. Manufacturing is expected to see employment gains sustained until 2017, at which point jobs will revert to trend and begin contracting again. Professional and business services and education and health services will enjoy especially strong growth in the coming decade.

The state unemployment rate will continue to drift down and should reach 6.0 percent in 2020. This is well above the 4.8 percent low that was registered in 2007 on the eve of the recession. Modest employment growth, large numbers of unemployed people and significant numbers of new entrants to the labor market will together keep the unemployment rate from falling faster. This will likely mean continued downward pressure on the state's labor force participation rate.

Promoting Advanced Manufacturing Clusters in Tennessee

Advanced manufacturing has emerged as a catch phrase intended to encompass manufacturing activities on the frontier in terms of end products and/or industrial processes. There is considerable interest in advanced manufacturing in Tennessee because of the significant role played by manufacturing in general and the recent renaissance in manufacturing employment across the country. By attracting and retaining firms engaged in advanced manufacturing, and by nurturing firms to adopt advanced manufacturing practices, it is hoped that the state can capture more jobs and build a stronger tax base.

This special chapter of the *Economic Report to the Governor* discusses manufacturing trends and advanced manufacturing in some detail to help inform policymakers and stakeholders. A definition of advanced manufacturing is used to help guide the analysis: "the application and integration of innovative technologies, materials and processes to the production of manufactured products." It is important to note that this definition applies not only to sophisticated products, but also to production processes. Even simple, basic products like bricks, lumber, or sausage may be produced using advanced processes. The Tennessee economy may be able to create competitive advantages by promoting the adoption of advanced processes and the production of advanced products.

While advanced manufacturing can be reasonably well defined conceptually, it is difficult in practice to identify advanced manufacturing activities based on available data. Cluster analysis is used here to explore alternative sets of industries, some of which may fall under the heading of advanced manufacturing. The most promising set of industries is referred to as the *high-wage* cluster. Since it is impossible to directly observe production practices, high wages are used as a proxy since earnings will be correlated with worker skill levels as well as capital investment. In general, one would expect more sophisticated processes where capital investment is deeper and human capital skills are stronger.

Advanced manufacturing can be defined as it is above, but it can also be viewed as a continuum of products and processes. In practice, virtually all manufacturing firms may benefit from the integration of more advanced production processes and the development of more advanced products that meet the needs of industry and final consumers. These considerations lead to the identification of three additional clusters that may be used as targets for recruitment, retention, and industrial assistance. This includes the *well-established* cluster of existing industries that pay good wages and have a large employment base; the *high-potential* cluster of firms that pay good wages but have a small share of the national workforce; and the *aspirational* cluster of firms that pay low wages but have a long-standing presence in the state. Each of these three clusters offer differential opportunities for growing the state's manufacturing base.