# The 32nd Annual
# Perryman Economic Outlook Conference
## US AND TEXAS FORECAST HIGHLIGHTS
## 2015-2020

To download an Appendix with further forecast detail, methodology, and explanation of terms, see http://www.perrymangroup.com/STForecast/2015TYL.pdf. Follow us on twitter: @PerrymanGroup.

The latest US Bureau of Labor Statistics data indicate that total nonfarm payroll employment increased by 211,000 in November after a gain of 271,000 in October. The unemployment rate now stands at 5.0%. Job gains occurred in construction, professional and technical services, and health care, while mining and information lost jobs.

Despite these notable gains, the number of long-term unemployed (defined as persons jobless for 27 weeks or more) was little changed at 2.1 million. The problem of long-term unemployment has been stubbornly persistent since the Great Recession, and the workforce participation rate remains low by historical standards. The number of persons employed part time for economic reasons (sometimes referred to as involuntary part-time workers) has increased by 319,000 to 6.1 million in November, following declines in September and October. Over time, continued improvement in the US job market is expected, setting the stage for better conditions.

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## Federal Reserve Actions

The Federal Reserve has now begun the process of normalization of monetary policy over the next few years, which is necessary in order to avoid undesirable outcomes such as excessive inflation. The decision was not unexpected; in fact, many analysts had anticipated the Federal Reserve to take action to begin to raise target interest rates at an earlier meeting. However, because inflation rates were below target levels and there was still room for improvement in the labor market, the Open Market Committee decided to leave target rates unchanged until December. The recent instability in China also played a role in this outcome. The economy should be able to maintain forward momentum even with modestly increasing interest rates.

## Infrastructure Issues

One challenge to future US economic performance is aging physical infrastructure. The American Society of Civil Engineers (ASCE) publishes "The Report Card for America's Infrastructure" every four years. The ASCE looks at 15 national infrastructure categories and assigns a grade on a scale from A (excellent) through F (failing). Grades are based on capacity, condition, funding, future need, operation and maintenance, public safety, resilience, and innovation. The most recent (2013) report indicates an overall grade for US infrastructure of D+, with a range of B- for solid waste to D- for inland waterways and levees. There were a few improvements and no categories declined since the prior survey, but the overall results are clearly troubling. Moreover, the ASCE estimates that to address these problems would require an investment of $3.6 trillion by 2020.

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The essential issue is that much of America's infrastructure dates to spending decades ago, during the Great Depression or the 1950s and 1960s (when most of the interstate highway system was originally constructed). Since that time, population and economic growth have greatly enhanced the need for infrastructure, but investments have not kept pace. In fact, public infrastructure spending as a share of GDP is far lower in the United States than in many other nations, and is about half the European level. Roadway congestion costs billions in lost time and fuel each year, and nearly one fourth of US bridges are considered structurally deficient or functionally obsolete.

Another area of infrastructure (not covered by the survey) which is often overlooked but has the potential to dampen US economic performance over time is the nation's courts system. Delays in filling vacancies in the Federal courts and the failure to expand the number of judgeships to keep pace with increases in the population and the level and sophistication of production processes are compromising the essential framework for social progress and prosperity. Investing in judicial infrastructure can not only improve quality of life, but also enhance future prosperity by reducing uncertainties and time required to resolve business disputes. Without additional judges, the current difficulties in a number of districts around the country will only become worse in the future, with caseloads rising, judges increasingly overworked, criminal and civil cases delayed, and people and businesses unable to resolve disputes in a predictable manner and in a reasonable amount of time.

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## International and Terrorism Issues

Even before the recent tragic events in Paris, tensions were high in several areas. In the wake of the Paris terrorist attack, uncertainty has increased. The attack in California heightens these concerns. A major escalation of military conflicts could affect global economies and US economic performance. In addition, the current refugee crisis could strain social service networks across much of Europe. Even the major Volkswagen emissions scandal could affect performance of the German economy, with fallout across the European Union and beyond. Greece remains severely challenged by debt levels, and several other nations have the potential for crisis in the next few years. Any of these situations could adversely affect growth in the US economy.

The slowing of the Chinese economy is also affecting global conditions. Not only is China one of the world's largest economies, it is also a major trading partner for the United States. As it has become clear (despite data deficiencies) that

**Outlook for US Economic Indicators 2015 - 2020**

| Key Indicator | 2015 Level | Projected 2020 Level | Projected Growth Rate* | Projected Increase |
|---|---|---|---|---|
| Real Gross Product* | $16.355 trillion | $19.113 trillion | 3.17% | $2.757 trillion |
| Population | 321.354 million | 333.216 million | 0.73% | 11.862 million |
| Employment* | 141.882 million | 154.194 million | 1.68% | 12.312 million |
| Real Personal Income* | $13.933 trillion | $16.127 trillion | 2.97% | $2.194 trillion |
| Industrial Production Index* | 119.921 | 139.662 | 3.09% | 19.741 |
| Consumer Price Index* | 112.15 | 124.51 | 2.11% | 12.36 |
| Interest Rates* | 2.69% | 3.95% | N/A | N/A |

**Compound Annual Growth Rate, meaning that it reflects changes in the base from which growth is calculated. Real Gross Product is computed in 2009 dollars, and Real Personal Income by place of residence, in 2009 dollars. Employment is civilian non-agricultural employment. Industrial Production and Consumer Price Indices are given such that 2009 = 100. Interest rates for long-term, 20-year bonds. See the Appendices for further information.*

growth is slowing, concerns have arisen. Add to that a sharp drop in the Chinese stock market, and those qualms have escalated. Chinese policymakers have been attempting to deal with situations that must be corrected (such as debt, a bubble in the stock market earlier this year, real estate imbalances, troubled loan portfolios in major banks, and currency exchange issues), and policies have caused some disruptions. Nonetheless, the most likely outcome at this point appears to be slower growth in the Chinese economy than in the past, but still overall expansion at a healthy, sustainable rate.

## Forecast for the US Economy

The Perryman Group's latest projections call for compound annual growth in real gross product (RGP) of 3.17% through 2020, a gain of almost $2.8 trillion. Employment growth of 1.68% per year over the period is forecast, for a total increase in employment of more than 12.3 million.

## Outlook for Texas

Many of the major indicators signal that Texas is continuing to outpace the rest of the nation in spite of retrenching in the energy sector. In November, 16,300 net new jobs were added, following gains of 20,000 jobs in October and 29,200 in September. Even with the end of the oil surge, the state added jobs in nine of the 11 months of 2015 for which data is currently available. The Texas unemployment rate has been at or below the national rate for years, and it looks like that pattern will be maintained, despite slower hiring in the Lone Star State.

## Oil Price Turnaround

There are some signals that things are changing in the crude oil market. Although conditions are not yet right for a sustained increase in prices, recent developments are enhancing the prospects for upward movement in the next 6-12 months.

First, US crude oil production has leveled off after years of strong growth and is down slightly from its peak level several months ago. Lower production will decrease the oversupply over time, removing some of the downward pressure on crude prices. The recent decision to allow crude oil exports will also lessen the domestic oversupply, but near-term effects will be minimal. Moreover, there is no doubt that OPEC members and other major producing nations are feeling the economic pinch of lower prices. For some countries, oil is essentially the only resource, with few other sources of business activity to pick up the slack when crude prices fall. Many nations are running high deficits and rapidly burning through accumulated assets as they fund government operations with drastically lower revenues.

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Currency problems are also escalating. Many nations rely on exports of oil to obtain foreign currency, and several currencies are down sharply. Pressure is mounting, and at some point restricting production to boost prices is the most likely outcome.

On the other hand, as long as supply exceeds demand, there will be downward pressure on prices. The prospect of Iranian supplies coming on to the market is a short-term issue, although markets are well aware of these situations. Another negative sign is that data coming out of China continues to indicate that the world's second-largest economy is definitely slowing. In addition to decreasing demand for oil among the Chinese, slower growth in China will tend to pull down economic performance in other countries.

## Higher Education Progress

The Texas Higher Education Coordinating Board (THECB) has announced that many of the goals in the "Closing the Gaps by 2015" initiative have been met. To build on and expand upon this progress, the THECB has developed a new strategic plan with the overarching goal that at least 60% of Texans ages 25-34 will have a certificate or degree by 2030, hence the name: 60x30TX ("60 by 30 Tex"). The plan is focused on getting more students through school with marketable skills and manageable debt. One reason for the choice of goals is recognition that Texas is slipping. While decades ago, Texas' young adult population was ranked reasonably well, that is no longer the case.

The 60x30TX plan sets forth specific strategies to encourage higher education, including aggressively promoting college attainment to students and parents prior to high school. Education and curriculum delivery systems (such as competency-based programs) can also make higher education available to a broader and changing population. In addition, high-quality education programs for educationally underserved adults can play a role.

For prosperity in Texas to be maintained or enhanced, it is crucial that workforce quality keeps pace with the evolving needs of business and industry. From an individual perspective, it is critical to have marketable skills to be able to find quality jobs.

## Texas Key Economic Indicators

The Perryman Group's most recent short-term forecast indicates the Texas economy is likely to continue to outpace the US rate of growth. Real gross product is forecast to expand at a 4.15% rate of growth through 2020, representing total expansion of $347.1 billion. More than 1.3 million net new jobs are forecast to be added over the next five years, a 2.12% compound annual rate of growth.

**Outlook for Texas**
**Economic Indicators 2015 - 2020**

| Key Indicator | 2015 Level | Projected 2020 Level | Projected Growth Rate* | Projected Increase |
|---|---|---|---|---|
| Real Gross Product* | $1.539 trillion | $1.886 trillion | 4.15% | $347.101 billion |
| Population | 27.006 million | 29.187 million | 1.57% | 2.181 million |
| Wage & Salary Employment | 12.361 million | 13.729 million | 2.12% | 1.368 million |
| Real Personal Income* | $1.173 trillion | $1.484 trillion | 4.81% | $310.818 billion |
| Real Retail Sales* | $425.356 billion | $538.630 billion | 4.84% | $113.274 billion |
| Housing Permits | 167,916 | 185,147 | 1.97% | 17,231 |

**Compound Annual Growth Rate, meaning that it reflects changes in the base from which growth is calculated. Real Gross Product and Real Retail Sales are computed in 2009 dollars. Real Personal Income by place of residence, in 2009 dollars. See the Appendices for further information.*

*For more than 30 years, The Perryman Group has met the challenges of thousands of clients through a systematic approach and a level of performance that assures a consistent standard of excellence. The firm has been involved in scores of major events shaping the economic landscape, from crucial corporate locations to landmark legislation to important regulatory policies to notable judicial decisions. TPG's practice areas include economic modeling and forecasting, litigation and regulatory support, business valuation, economic development and strategic planning, and impact assessment. The firm also provides market and industry analysis, statistical modeling and analysis, economic forecasts, survey and demographic studies, economic statistics, research and information, and feasibility studies and business plans, as well as speeches, presentations, conferences, and other appearances.*

# The Economic Outlook for the Tyler Metropolitan Statistical Area

*The Perryman Group's most recent projections indicate expansion in the Tyler Metropolitan Statistical Area (MSA) at a rate exceeding most areas. The area has recently experienced overall gains in employment, though growth has been uneven. The large education and health care industries provide a strong and stable base, with an emerging technology segment generating expansion opportunities. On balance, the area is expected to continue to see sustained growth through 2020.*

## Forecast for the Tyler MSA Economy

The Tyler MSA is forecast to see real gross product expansion at a 4.40% annual pace through 2020, resulting in a total gain of more than $2.6 billion over the period.

Job gains are projected to be approximately 12,000 through 2020, representing a 2.20% rate of expansion.

**Outlook for Tyler MSA**
**Economic Indicators 2015 - 2020**

| Key Indicator | 2015 Level | Projected 2020 Level | Projected Growth Rate* | Projected Increase |
|---|---|---|---|---|
| Real Gross Product* | $10.859 billion | $13.466 billion | 4.40% | $2.607 billion |
| Population | 218,946 | 232,026 | 1.17% | 13,080 |
| Wage & Salary Employment | 104,416 | 116,415 | 2.20% | 11,999 |
| Real Personal Income* | $9.294 billion | $11.718 billion | 4.74% | $2.424 billion |
| Real Retail Sales* | $3.675 billion | $4.595 billion | 4.57% | $919.379 million |
| Housing Permits | 332 | 447 | 6.12% | 115 |

*Compound Annual Growth Rate, meaning that it reflects changes in the base from which growth is calculated. Real Gross Product and Real Retail Sales are computed in 2009 dollars. Real Personal Income by place of residence, in 2009 dollars. See the Appendices for further information.

## Forecast Growth by Industry

The largest gains in employment through 2020 are expected to be in the services, wholesale and retail trade, and government sectors.

Growth in output (real gross product or RGP) will be concentrated in services and wholesale and retail trade.

**Projected 2015 - 2020 Tyler MSA**
**Employment and Output (RGP) Growth by Sector**

| Sector | Projected Employment Change | Projected Growth Rate* | Projected Output Change | Projected Growth Rate* |
|---|---|---|---|---|
| Agriculture | 4 | 0.15% | $0.004 billion | 1.94% |
| Mining | 260 | 2.05% | $0.682 billion | 5.37% |
| Construction | 282 | 1.25% | $0.056 billion | 2.64% |
| Total Manufacturing | 242 | 0.89% | $0.237 billion | 4.63% |
| Durable Manufacturing | 204 | 1.04% | $0.197 billion | 5.26% |
| Nondurable Manufacturing | 38 | 0.50% | $0.040 billion | 2.94% |
| Trade | 1,791 | 2.03% | $0.335 billion | 4.20% |
| TWU* | 340 | 1.51% | $0.121 billion | 3.93% |
| Information | 246 | 1.91% | $0.131 billion | 4.99% |
| FIRE* | 291 | 1.19% | $0.168 billion | 3.33% |
| Services | 7,877 | 3.01% | $0.771 billion | 4.89% |
| Government | 665 | 0.94% | $0.102 billion | 2.19% |
| **TOTAL** | **11,999** | **2.20%** | **$2.607 billion** | **4.40%** |

*Compound Annual Growth Rate, meaning that it reflects changes in the base from which growth is calculated. TWU is Transportation, Warehousing, & Utilities; FIRE is Finance, Insurance, & Real Estate. See Appendices for more information.