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“A Tale of Two States—And One Million Jobs!!”

**An Analysis of the Economic Benefits of
Achieving the Future Goals of the
“Closing the Gaps” Initiative of the
Texas Higher Education Coordinating Board**





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INTRODUCTION AND HIGHLIGHTS



Introduction and Purpose of Study

- Research has consistently shown that higher education is beneficial not only to individuals, but also to society. These benefits are many and varied, ranging from
 - improved health and financial prospects for individuals to
 - a more productive workforce and
 - less demand for social services by society.

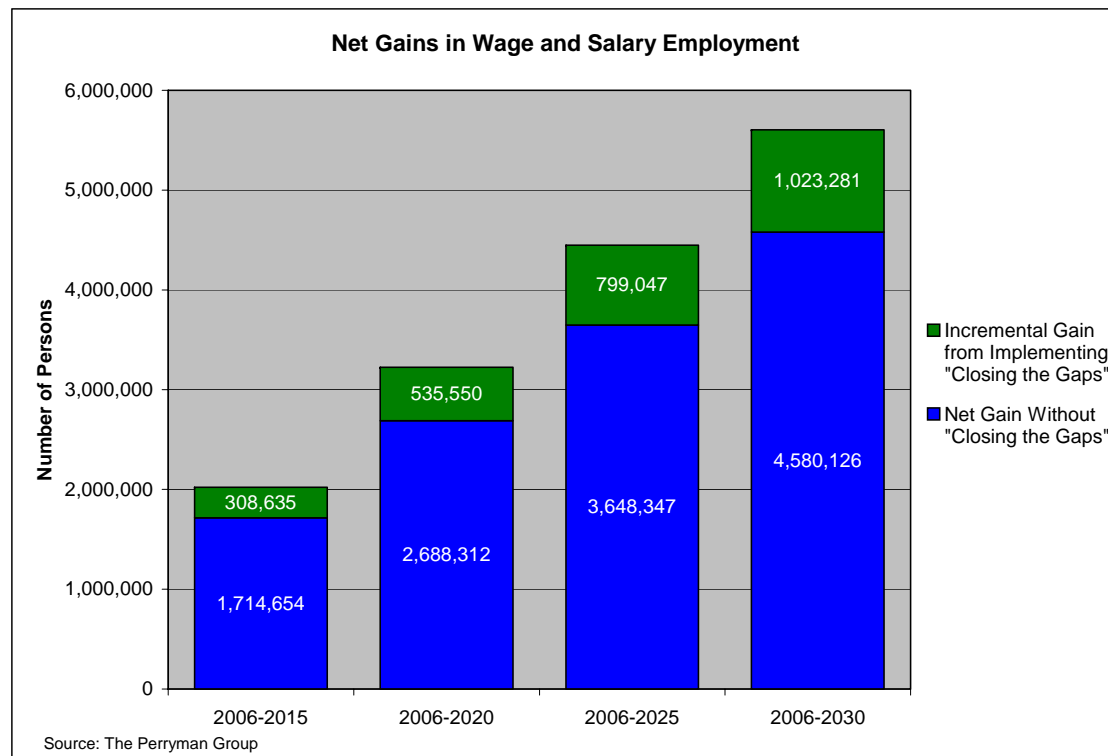
- The gains from a more educated populace promote long-term economic development, and enhanced research activity spawns new and innovative advances in multiple arenas.

- This study seeks to measure the overall gains associated with improving higher education attainment from the perspective of the Texas economy. Specifically, the benefits of achieving the goals of the “Closing the Gaps” initiative set forth by the Texas Higher Education Coordinating Board (THECB) are analyzed (this initiative is explained on slide 41). The incremental gains over and above those that would occur under normal or “baseline” conditions are illustrated with respect to participation, completion, and research. The analysis examines these net effects over time, accounting for gains in income, output, and productivity; reductions in social costs; returns on enhanced research; and economic development emerging from a more educated workforce.



Highlights of Study Findings: Statewide Results

- The results from this investigation reveal a dramatic **"Tale of Two States."** While Texas is projected to experience healthy economic growth if current trends continue, the payoff to achieving the objectives of "Closing the Gaps" is enormous. By 2030, it includes **annual gains (in 2006 dollars)** of \$489.6 billion in total spending, \$194.5 billion in gross state product, and \$121.9 billion in personal income, as well as 1,023,281 permanent jobs.





Highlights of Study Findings: Benefits to the Economy

- The **cumulative addition to output** if the goals embodied in “Closing the Gaps” are achieved is more than **\$1.897 trillion** in gross product (in constant dollars) over the 2006-2030 period.
- The fiscal impacts of “Closing the Gaps” are also impressive. The program will generate sufficient State revenues to approximately cover outlays through full implementation in 2015 and, by 2030, will have provided more than \$85.3 billion (in constant dollars) as well as \$73.5 billion in receipts to local governments. Moreover, **the State receives approximately \$8.08 in receipts for every \$1 in funding** over this period.
- The benefits to the economy as a whole are even more impressive. By full implementation in 2015, the **annual** gains per dollar of cumulative State outlays include \$11.92 in total spending, \$4.77 in gross state product, and \$3.02 in personal income. By 2030, the stimulus per dollar reaches \$46.36 in expenditures, \$18.41 in output, and \$11.54 in income.
- When all public (state and local) and private costs are considered, the **annual** economic returns per \$1 of expenditures by 2030 are estimated to be \$24.15 in total spending, \$9.60 in gross state product, and \$6.01 in personal income.



Highlights of Study Findings: Regional Results

- The benefits from achieving the objectives of “Closing the Gaps” are spread over every region of the state, including border and rural areas.

**Net Annual Gains in Employment
Associated with “Closing the Gaps”—2030**





Highlights of Study Findings: Regional Results (continued)

- Reaching the “Closing the Gaps” goals is particularly beneficial for some of the state’s most vulnerable regional economies.

- Specifically, the **Texas-Mexico border segment** sees annual gains by 2030 of
 - \$23.5 billion in total expenditures,
 - \$8.8 billion in gross state product,
 - \$6.5 billion in personal income, and
 - 81,751 permanent jobs.

- **Rural Texas** is expected to enjoy an annual stimulus of
 - \$28.7 billion in total expenditures,
 - \$10.6 billion in production,
 - \$8.0 billion in personal income, and
 - 79,202 permanent jobs.

- Every **urban area** in the state is also projected to receive ongoing and substantial increases in economic activity from this initiative.



Highlights of Study Findings: Key Conclusions

- Texas is truly faced with “A Tale of Two States.”
- While growth is likely to occur in any case, the benefits of generating a more educated workforce are enormous. Even under conservative assumptions, the enhanced productivity, greater ongoing capacity, reduced social costs, research stimulus, and economic development potential translate into
 - almost **\$200 billion per year in incremental gross product** by 2030 (about \$1.9 trillion cumulative) and
 - more than **1,000,000 jobs**.
- In addition, “Closing the Gaps” assures that the state will rank among the global leaders in providing the human resources needed to compete in the highly technological economy of the future. It will also
 - increase the capacity of Texas to create and attract emerging industries,
 - generate synergies with other strategic advantages enjoyed by the state, and
 - provide enormous returns on public resource investments.
- Most important of all, it will **improve the lives and opportunities for millions of Texans** from all socioeconomic backgrounds and promote a better quality of life in thousands of communities.



The Perryman Perspective

- The Perryman Group (TPG) is a Texas-based economic research and analysis firm with more than 25 years of experience in assessing the economic impact of corporate expansions, regulatory changes, real estate developments, public policy initiatives, and myriad other types of events affecting business activity.
- TPG has conducted hundreds of impact analyses for the US and Texas economies as well as all Texas metro areas and regions.
- TPG has maintained an extensive set of economic models for more than two decades, including econometric, impact assessment, demographic, occupational, and real estate absorption models developed to specifically reflect the underlying structure of the Texas economy and its various regions.
- Impact studies have been performed for hundreds of clients including many of the largest corporations in the world, governmental entities at all levels, educational institutions, major health care systems, utilities, and economic development organizations. TPG has extensively analyzed the higher education sector, workforce issues, productivity, research endeavors, economic development, and other areas relevant to the current analysis.



OVERVIEW OF ECONOMIC BENEFITS



Overview of the Benefits of Higher Education

- The Institute for Higher Education Policy has summarized the economic and social benefits of higher education both on a public and a private basis. Many of these items are explored in more detail within this analysis.

The Array of Higher Educational Benefits		
	Public	Private
Economic	Increased Tax Revenues Greater Productivity Increased Consumption Increased Workforce Flexibility Decreased Reliance on Government Financial Support	Higher Salaries and Benefits Employment Higher Savings Levels Improved Working Conditions Personal/Professional Mobility
Social	Reduced Crime Rates Increased Charitable Giving/Community Service Increased Quality of Civic Life Social Cohesion/Appreciation of Diversity Improved Ability to Adapt to and Use Technology	Improved Health/Life Expectancy Improved Quality of Life for Offspring Better Consumer Decision Making Increased Personal Status More Hobbies, Leisure Activities

Source: "Reaping the Benefits: Defining the Public and Private Value of Going to College," Institute for Higher Education Policy, 1998 as seen in *The Investment Payoff: A 50-State Analysis of the Public and Private Benefits of Higher Education*, February 2005.



INDIVIDUAL BENEFITS OF HIGHER EDUCATION



Individual Benefits of Higher Education

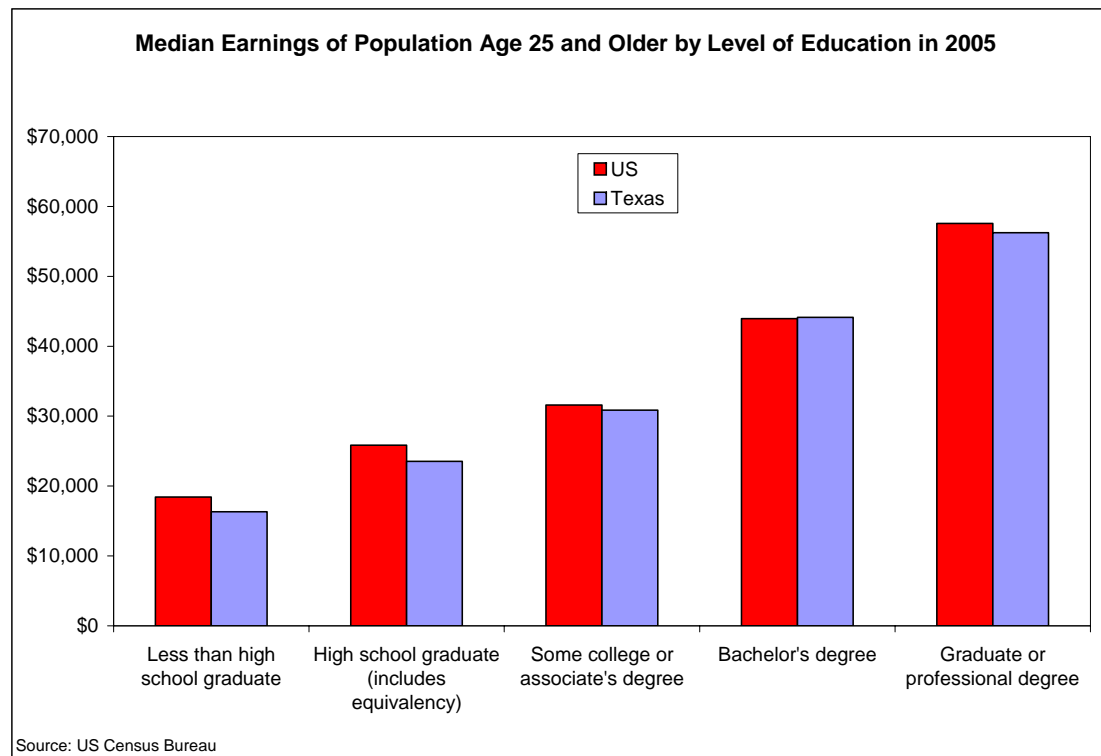
- From the individual's perspective, education can lead to notable enhancement in quality of life through such avenues as a broader world view, better health, greater civic involvement, and other difficult-to-measure improvements.

- In addition to these benefits, the economic gains to individuals are substantial.
 - There is a clear correlation between education level and income level, with many of the most financially rewarding occupations requiring college degrees.
 - There is also a negative relationship between education level and the likelihood of being unemployed.



Education and Earnings

- As education increases, individual earning potential rises. The average income for Texans with bachelor's degrees was \$49,167 in 2003, slightly higher than the national average. The difference in average earnings between persons with a bachelor's degree and those with a high school diploma was \$25,455.





Earnings Gap Likely to Grow

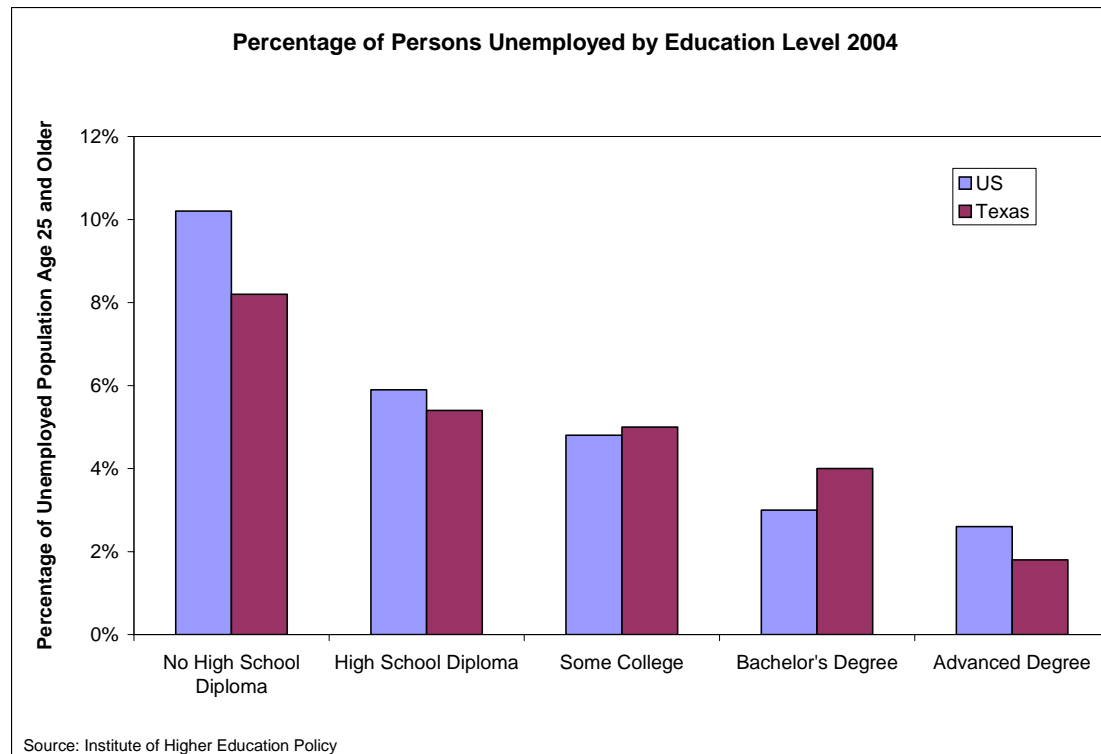
- Several trends are contributing to increasing differences in the average earnings of those with various levels of education.
- The shift to a knowledge-based economy emphasizing technology has increased the educational requirements of many industries.
- A decrease in the relative importance of labor unions and high-paying manufacturing jobs for those with low levels of education (partly a consequence of global competition) has further widened the gap between earnings for those with a high school diploma and those with some form of higher education.
- In the early 1980s, the average earnings of a full-time male worker between the ages of 35 and 44 with a bachelor's degree were 38% higher than one with a high school diploma. In the early 2000s, the difference had climbed to 94%. [\[1\]](#)

[\[1\]](#) "The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings," US Census Bureau, US Department of Commerce, issued July 2002. Also see "The Value of Higher Education: Individual and Societal Benefits (With Special Consideration for the State of Arizona)," Arizona State University, School of Business Productive and Prosperity Project (P3), October 2005.



Education and Unemployment Relationship

- Education is also correlated with greater opportunity and the ability to maintain employment. Nationally, 6% of adults age 25 and older with only a high school diploma were unemployed in 2004 compared to only 3% of those with a bachelor's degree. In Texas, the difference was slightly less.^[1]



^[1] *The Investment Payoff: A 50-State Analysis of the Public and Private Benefits of Higher Education*, Institute for Higher Education Policy, February 2005.



SOCIETAL BENEFITS OF HIGHER EDUCATION



Societal Benefits of Higher Education

- The benefits to society of higher education are undeniable and span a broad spectrum.
- They include economic improvements that translate into greater opportunities for all Texans. With higher education, the Texas workforce is more productive, and the state is more competitive for future desirable corporate locations and other growth.
- In addition, a more educated populace tends to require less social assistance. Lower unemployment and higher earnings contribute to reducing the need for unemployment benefits and various social services programs. Higher education levels also translate into lower rates of incarceration.
- Finally, there are other gains from increasing education levels, including
 - enhanced volunteerism,
 - more active participation in and support of public and philanthropic initiatives,
 - better levels of community health, and
 - a greater pace of discovery and innovation to sustain social and economic progress.



Economic Benefits to Society



Economic Benefits

- Key sources of economic benefits from higher education include
 - institutional operations and development of new facilities,
 - increased productivity and capacity of the workforce,
 - decreased need for social services,
 - enhanced pace of discovery and innovation, and
 - increased competitiveness for new activity.

- Higher educational institutions themselves contribute to the local economy through direct expenditures, employment, and student outlays. Colleges and universities often bring in non-local revenues through grants and spending by out-of-state students, thus creating a substantial impact on business activity. Because the present study is focused largely on the net long-term effects of bringing more students from within the state into higher education programs, these effects are not included in the reported benefits.

- In addition, there are spillover effects of a more educated workforce and higher wages in a region. Recent research indicates that increases in the proportion of college graduates in the labor force produce higher wages for workers at all levels of education.^[1]

^[1] *The Value of Higher Education: Individual and Societal Benefits (With Special Consideration for the State of Arizona)*, Arizona State University, School of Business Productivity and Prosperity Project (P3), October 2005.



Increased Productivity and Capacity

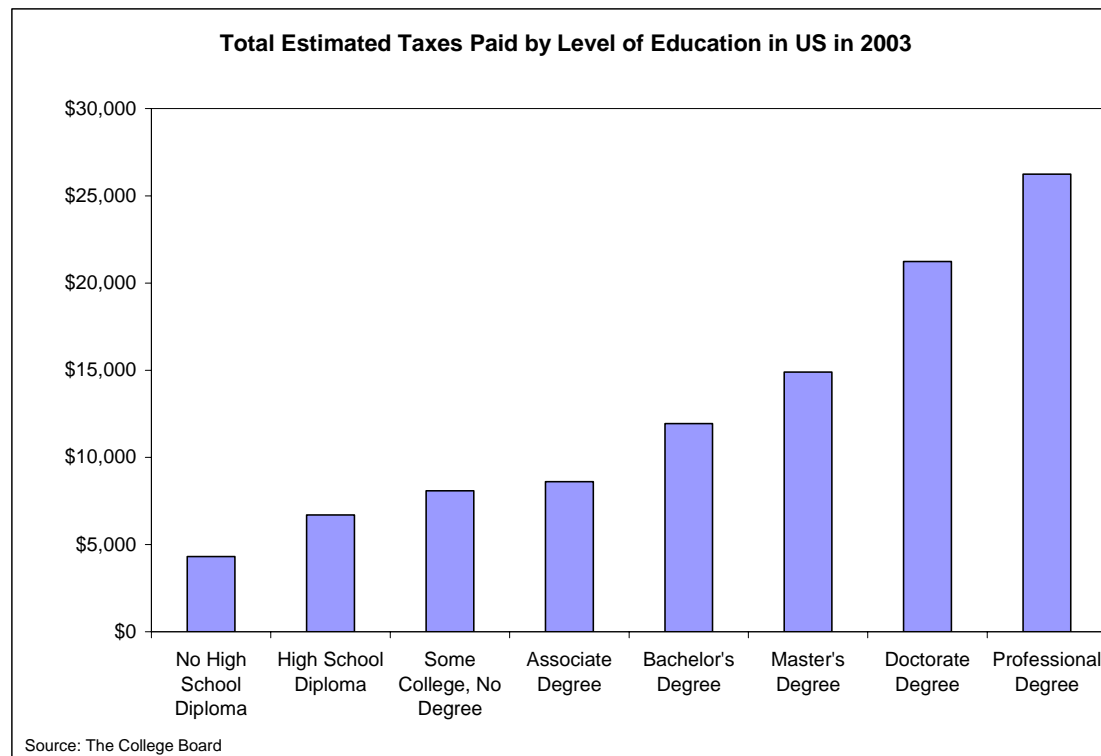
- As noted earlier, increased lifetime earnings of graduates are an indication of their enhanced contribution to the economy. The additional compensation can only occur as a result of the greater value-added created by educated workers.
- The improvement in the productivity and capacity of the individuals attending the institutions has far-reaching economic benefits. The National Bureau of Economic Research estimated that a 10% increase in the average educational level of workers resulted in a 4.9% to 8.5% rise in productivity in manufacturing and 5.9% to 12.7% productivity improvement in non-manufacturing industries.^[1]
- Enhanced levels of academic research funding lead to important discoveries which are often commercialized into products and services that expand output and productivity in fundamental ways. This process ultimately increases the overall capacity of the economy to meet human needs.

^[1] Lynch, Lisa M. and Sandra E. Black, *Beyond the Incidence of Training: Evidence from a National Employers Survey*, Working Paper No. 5231, National Bureau of Economic Research (Cambridge, Massachusetts), 1995, Appendix D.



Higher Tax Receipts

- With higher earnings, the amount of taxes paid rises. In addition to the effect on income taxes, higher incomes translate into more spending for various goods and services subject to sales taxes and other charges. Property tax collections are also enhanced as earnings are spent on housing and other real estate assets.





Social Services Benefits to Society



Reduced Social Services Costs

- Not only does higher education lead to individual improvement in quality of life, it can also translate into social and economic gains through the reduction of social services costs and dependency on government-provided assistance programs. In every state, a larger percentage of those with just high school diplomas report receiving public aid than those with bachelor's degrees.^[1]
- Research by the Institute for Higher Education Policy suggests that a one percentage point increase in high school or higher education in the population leads to an approximately 4 percentage point decrease in welfare dependence and almost 2 percentage point decrease in poverty. The same study suggests that increased education also reduces unemployment.^[2] These findings are consistent with other academic research as well.
- Statistics show that a large proportion of welfare recipients have low education levels, reducing their ability to find employment and decreasing their earning potential.^[3]

^[1] *The Investment Payoff: A 50-State Analysis of the Public and Private Benefits of Higher Education*, Institute for Higher Education Policy, February 2005.

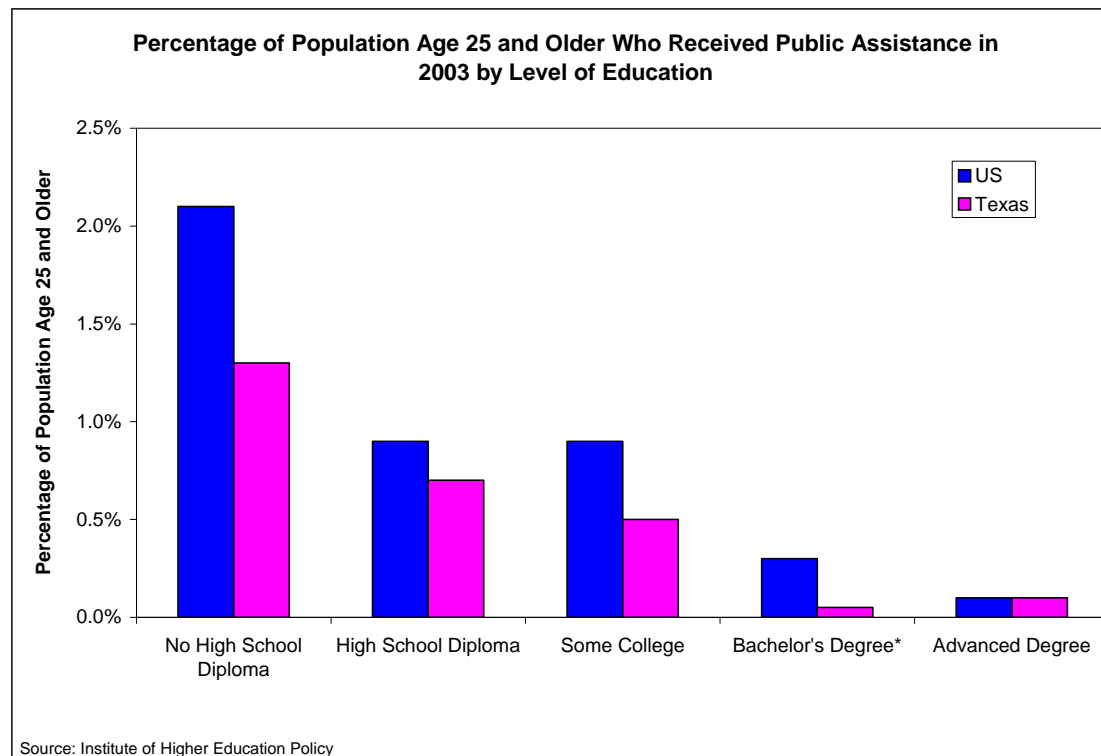
^[2] Niskanen, William A., "Welfare and the Culture of Poverty," *The CATO Journal* 16(1).

^[3] "Testimony of NOW Legal Defense and Education Fund on "Welfare Reform: Success in Moving Toward Work," submitted to the US House 21st Century Competitiveness Subcommittee of the Education and the Workforce Committee, October 16, 2001.



Public Assistance and Education Level

- As education level rises, the percentage of persons receiving public assistance falls.





Incarceration Cost and Education Level

- In general, locations with more-educated populations have lower crime rates.
- The chances of being incarcerated are much higher for persons with lower levels of education. According to one study, 2% of adults who had not finished high school were incarcerated, as were 1.2% of those with a high school diploma. By contrast, only 0.1% of those with college degrees were incarcerated.^[1]

^[1] Baum, Sandy and Kathleen Payea, "Education Pays 2004: The Benefits of Higher Education for Individuals and Society," *Trends in Higher Education Series*, College Board, Revised Edition 2005.



Other Benefits to Society



Better Health

- Health care costs are based on an individual's attitude about exercise and food as well as their ability to obtain health insurance and cover medical expenses.
- More education and the corresponding likelihood of a better paying job translates into a greater ability to finance health care expenses. A larger proportion of people with bachelor's degrees (93%) report being in excellent, very good, or good health compared to those with just a high school diploma (82%).^[1]

^[1] *The Investment Payoff: A 50-State Analysis of the Public and Private Benefits of Higher Education*, Institute for Higher Education Policy, February 2005. Also, see "Mississippi's Mandate: Why the Investment in Education Pays off in Mississippi," Institute for Higher Education Policy, May 2006.



Volunteerism and Citizenship

- On the most basic level, education can help instill civic values and acceptable norms for our society contributing to more activism and social cohesion.^[1]
- Some 38% of Texans with a bachelor's degree reported volunteering in 2004, compared to 22% of those with high school diplomas.^[2]
- Texans with a bachelor's degree were also more likely to have voted in the 2000 presidential election (78% compared to 51% of those with a high school diploma).

^[1] *Mississippi's Mandate: Why the Investment in Education Pays off in Mississippi*, Institute for Higher Education Policy, May 2006.

^[2] *The Investment Payoff: A 50-State Analysis of the Public and Private Benefits of Higher Education*, Institute for Higher Education Policy, February 2005.



TEXAS TODAY



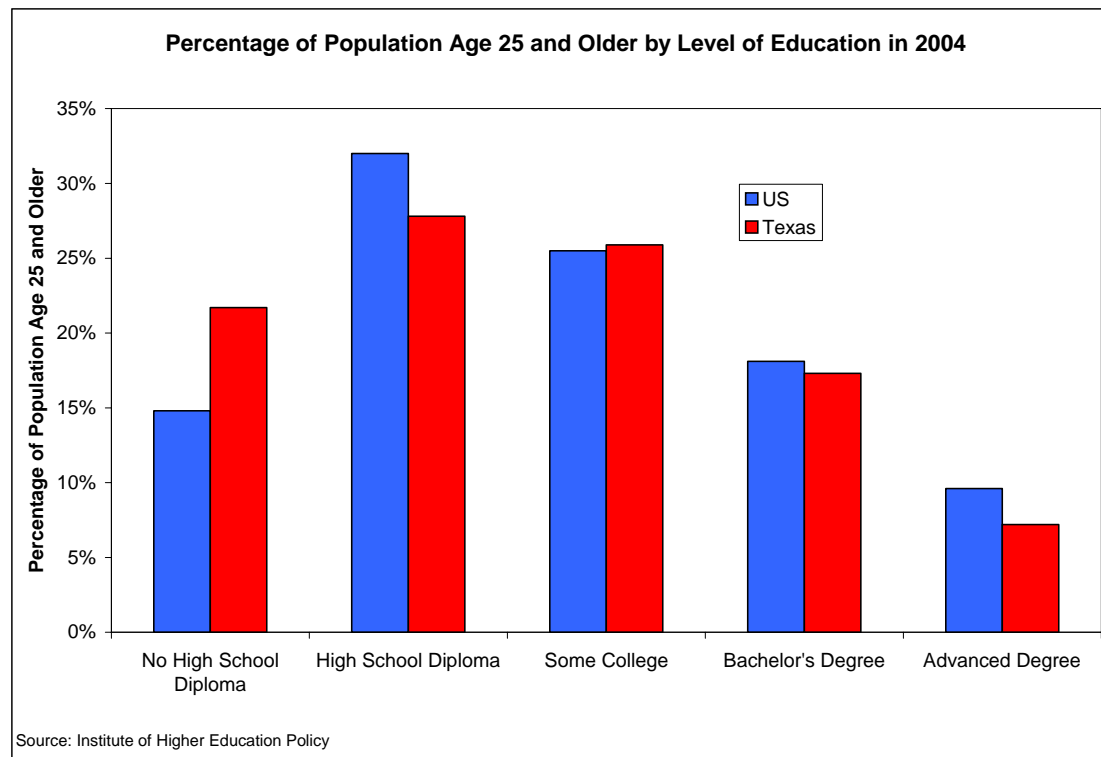
Texas' Current Position

- The preceding sections clearly illustrate the enormous benefits of a more educated populace. Higher education levels contribute to economic prosperity and well-being both for individuals and for society as a whole.
- Another facet of the issue, however, is that Texas currently lags most other areas of the US in key education-related statistics. Moreover, underlying demographic trends and patterns within the state suggest that, in the absence of a substantial proactive effort such as "Closing the Gaps," the situation will deteriorate dramatically over time.



Texas Lags the Nation in Educational Attainment

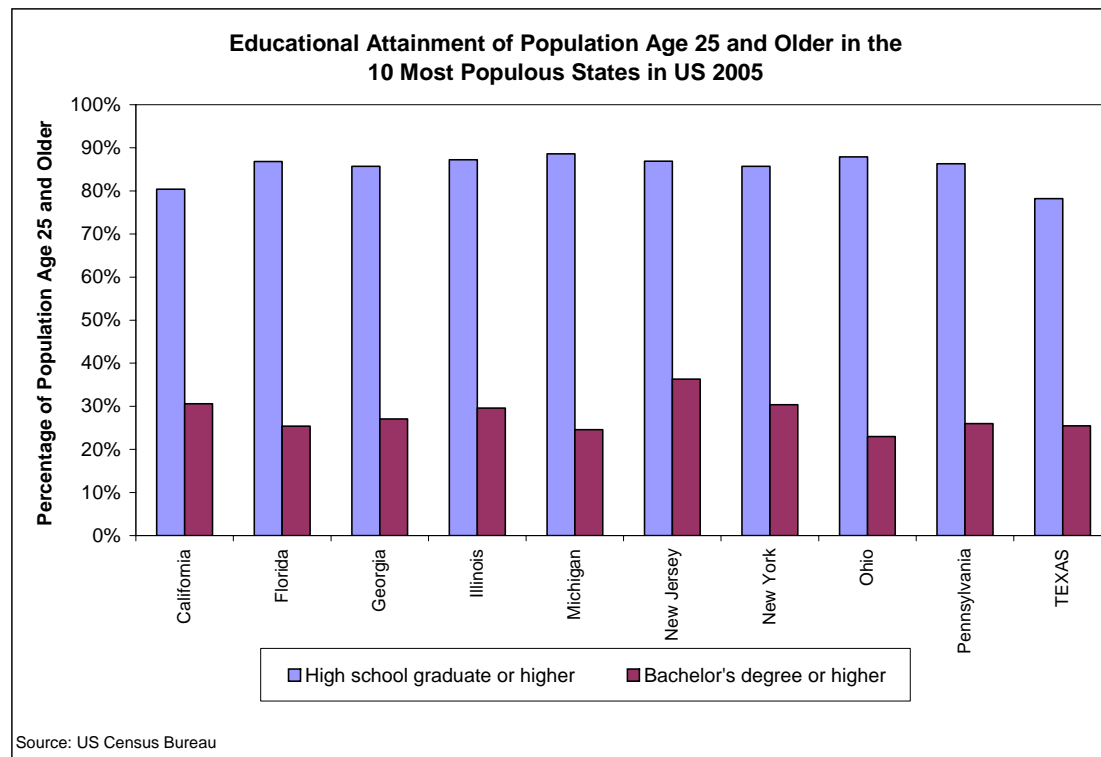
- The percentage of the Texas population with less than a high school education is substantially higher than for the US as a whole. Texas also lags in the number of persons with bachelor's and advanced degrees.





Texas Lags Other Large States

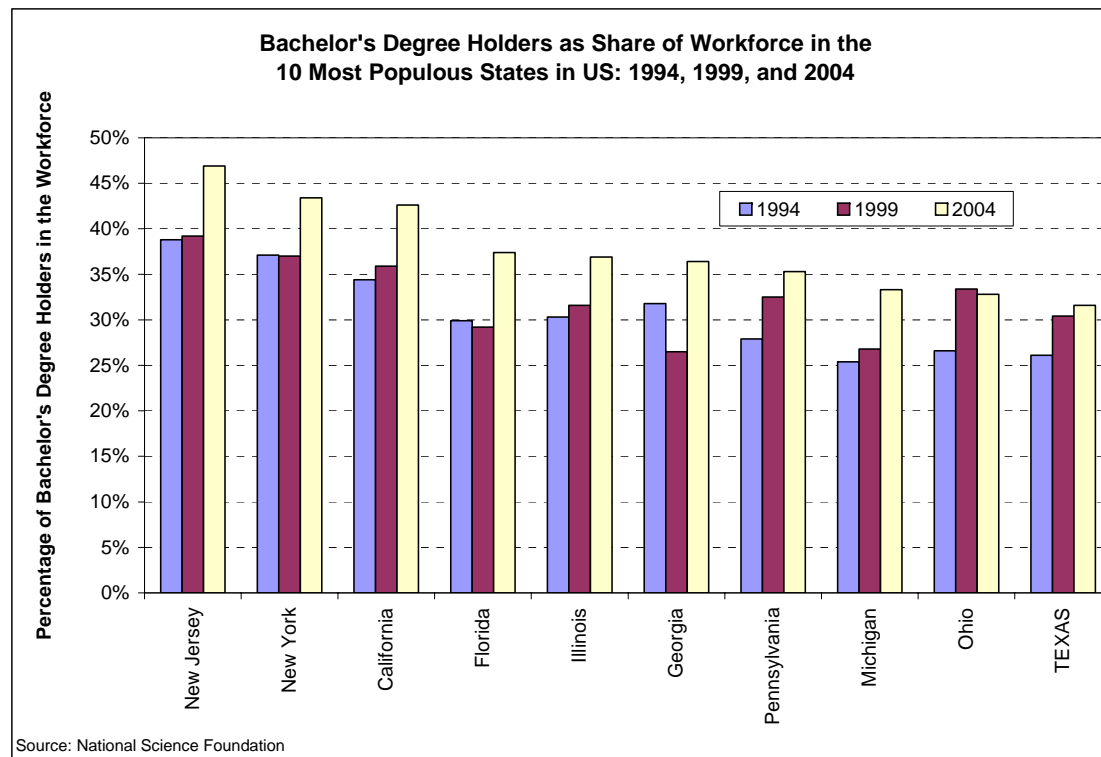
- Compared to other large states, Texas ranks near the bottom in terms of the percentage of the population with a high school diploma and lags many other areas in the proportion with college degrees.





Growth in Bachelor's Degree Holders in Workforce

- While the proportion of the Texas workforce with bachelor's degrees is growing, the pace is lagging most other large states that are competitive for major new activity.





Relevant Demographic Patterns

- Texas does not stack up well against other states in terms of the proportion of those 25 years of age who have completed high school. Texas' 78.8% ranks behind every state except Mississippi.
- Another important aspect is the variation in educational attainment among racial/ethnic groups in Texas. Only 55.0% of Texas Hispanics age 25 and older have completed high school, compared to 81.0% of whites and 83.3% of Blacks.
- In the area of higher education, the disparity among groups is even more pronounced. As of 2005, 27.1% of whites in Texas had completed a bachelor's degree (or higher). About 18.3% of Blacks and 53.0% of Asians had received a bachelor's degree (or higher). However, only 10.4% of Hispanics age 25 and older attained this level of education.
- The demographic trends observable in Texas shed an ominous light on these variations. In 2005, Texas joined Hawaii, New Mexico, and California as majority-minority states. The fastest growing key segment of the population is Hispanics which grew from 4.3 million in 1990 to 6.7 million in 2000 to 7.9 million in 2005. (Even though some of this increase may be due to changes in the Census, the expansion is nonetheless much greater than other segments of the population.) The white population rose from 12.8 million in 1990 to 14.8 million in 2000 to 16.0 million in 2005. The number of Black persons increased from 2.0 million in 1990 and has remained at about 2.4 million since 2000. The population of Asian/Pacific Islanders grew as well but accounted for only 4.4% of the Texas population in 2005.



Relevant Demographic Patterns (continued)

- The variation in the rates at which numerous demographic groups seek higher education produces an alarming result if the current pattern continues. A smaller proportion of the relatively faster-growing Hispanic demographic segment has historically attended college. If the tendency to attain less education among this demographic group continues, the overall education level of the Texas workforce will drop.
- Among the statistics are a few offering hope that a positive direction has emerged. One of the most promising is that educational attainment levels are slowly rising. In 1991, 47.9% of Hispanics 25 years old and older had completed four years of high school, notably less than 2005's 55.0%. Similarly, 6.5% of Hispanics age 25 and older had completed four years of college in 1991, almost four percentage points less than the 2005 proportion. While the methods of gathering data have changed to some degree over the period, there nonetheless appear to be signs that efforts to reduce dropout rates may be working. Nonetheless, aggressive measures are needed if Texas is to achieve its full potential in the highly competitive global and technological economy of the future.



Fallout from Lower Education Levels

- Too few college graduates harms the economy by
 - decreasing tax revenues, productivity, consumption, and workforce flexibility, as well as
 - increasing the reliance on government financial support, and^[1]
 - shrinking commitment to public initiatives and community endeavors.

- Without enough new professionals, the flow of human capital into the economy would diminish. Discoveries and patents decrease, as does the pace of creation of new firms or even industries.^[2]

- In addition, unless key patterns are changed, the state's competitive position erodes over time as insufficient education levels become an ever greater problem.

- Many of these problems are exacerbated if Texas is not on a par with other major states with regard to research funding and achievement. Recent empirical evidence shows an aggregate rate of return to enhanced university research of about 28% per annum.

^[1] Porter, Kathleen, "The Value of College Degree, *ERIC Digest*, 2000.

^[2] Ibid.



A ROADMAP TO CHANGE



A Roadmap to Change

- The Texas Higher Education Coordinating Board, which has the responsibility for overseeing many aspects of college and university policy within the state, has been focused on the educational challenges of the economic and demographic realities confronting Texas for many years.
- In an effort to develop a strategy for dealing with these issues, the THECB undertook a comprehensive program to address the underlying patterns in college attendance and other relevant issues. As an outgrowth of this “Closing the Gaps” endeavor, specific goals related to the number of Texans attending college and completing various programs by 2015 were developed. Similar objectives were established for federal research funding. These targets have subsequently been revised to reflect more recent patterns.
- The “Closing the Gaps” initiative represents both (1) a well-grounded and realistic assessment of the importance of improving Texas’ higher education attendance, graduation rates, and research participation and (2) measurable milestones to achieve the needed outcomes.



Measuring the Payoff

- In assessing the benefits of “Closing the Gaps,” TPG focused only on the net gains that would occur as a result of this effort. In particular, it is assumed that the trend toward higher attendance and outcomes among various demographic groups will continue, with only the increment above that level being attributed to “Closing the Gaps.”
- In defining the baseline scenario, TPG performed a comprehensive simulation of the Texas Econometric Model. This system, which is described in detail in Appendix B, has been used to project business activity within the state for more than 25 years. It has an embedded demographic model and fully reflects specific ongoing patterns in educational attainment, employment, and other pertinent indicators.



Measuring the Payoff (continued)

- To illustrate the potential gains if the “Closing the Gaps” goals are met, TPG simulated each of the following:
 - the higher levels of income achieved by the incremental college attendees and graduates, as well as the corresponding value-added (output) which sustains the higher rates of compensation;
 - the spending associated with higher incomes (fully adjusted for taxes and out-of-state leakages);
 - the increase in productivity associated with the higher overall education levels in the workforce (adjusted for attrition and workforce participation);
 - the reduction in various social costs, including unemployment, incarceration, public assistance, and health care;
 - the gains in external research funding and their associated effects on overall activity;
 - the social returns to incremental research activity which compound over time; and
 - the economic development consequences associated with a more educated workforce (measured on a conservative basis as 80% of the spread between Texas growth in its “market share” of national output and that of states with comparable characteristics and a more aggressive program to encourage educational participation and success).



Measuring the Payoff (continued)

- The benefits of achieving the goals of “Closing the Gaps” expand over time as a larger pool of educated persons enter the workforce and other benefits compound. Thus, results are provided for 2015 (when full implementation is anticipated), 2020, 2025, and 2030. Following the completion of the program, it is assumed that the higher participation rates will be sustained, but additional incremental increases are not incorporated.
- The differential between the baseline scenario and the picture which emerges if “Closing the Gaps” goals are met is quite impressive. This initiative redefines economic opportunities within the state and brings substantial gains across a broad spectrum of business activity. Some key findings from this analysis are highlighted below.



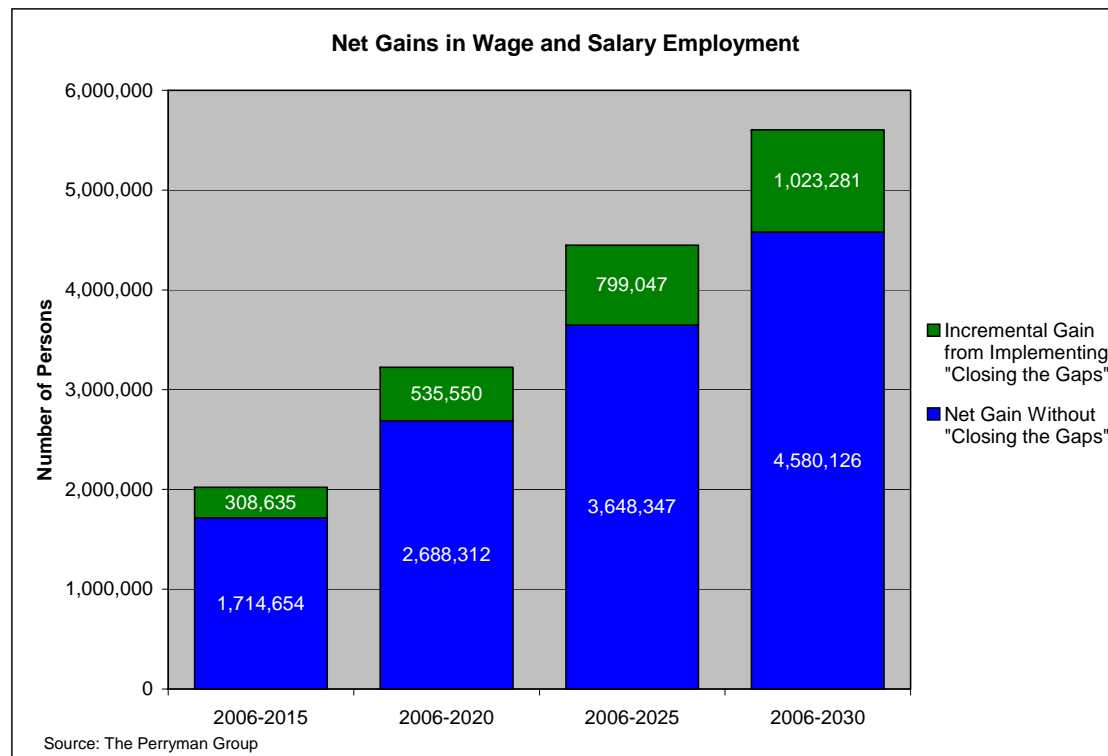
“A Tale of Two States”

- Texas has experienced substantial expansion in recent years and is consistently rated as one of the leading destinations for new activity. The state is also projected to grow at rates above the nation as a whole in the future.
- Despite these positive attributes and expectations, areas with better educated workers are achieving superior performance, and long-term success is likely to require continuing improvement in labor characteristics. Texas' demographic patterns are favorable in that large numbers of young people will be entering the workforce in the coming decades at a time when the “baby boomers” are beginning to retire, and there are likely to be tight labor market conditions in other areas of the country. The demographic trends are challenging, however, in that much of the growth is concentrated in demographic groups which have historically experienced relatively low levels of educational attainment. If these potential employees fail to receive proper training, this population increase could quickly transform from an asset to a liability.
- A key component of the state strategy for ongoing prosperity revolves around efforts to encourage activity in several industrial “clusters” with notable opportunities over an extended period. Most of these sectors are defined by rapid technological changes and the need for both skilled workers and research capability.
- In short, while Texas will likely see economic expansion in the future, the difference between the pattern with and without “Closing the Gaps” is dramatic.



Employment: With and Without “Closing the Gaps”

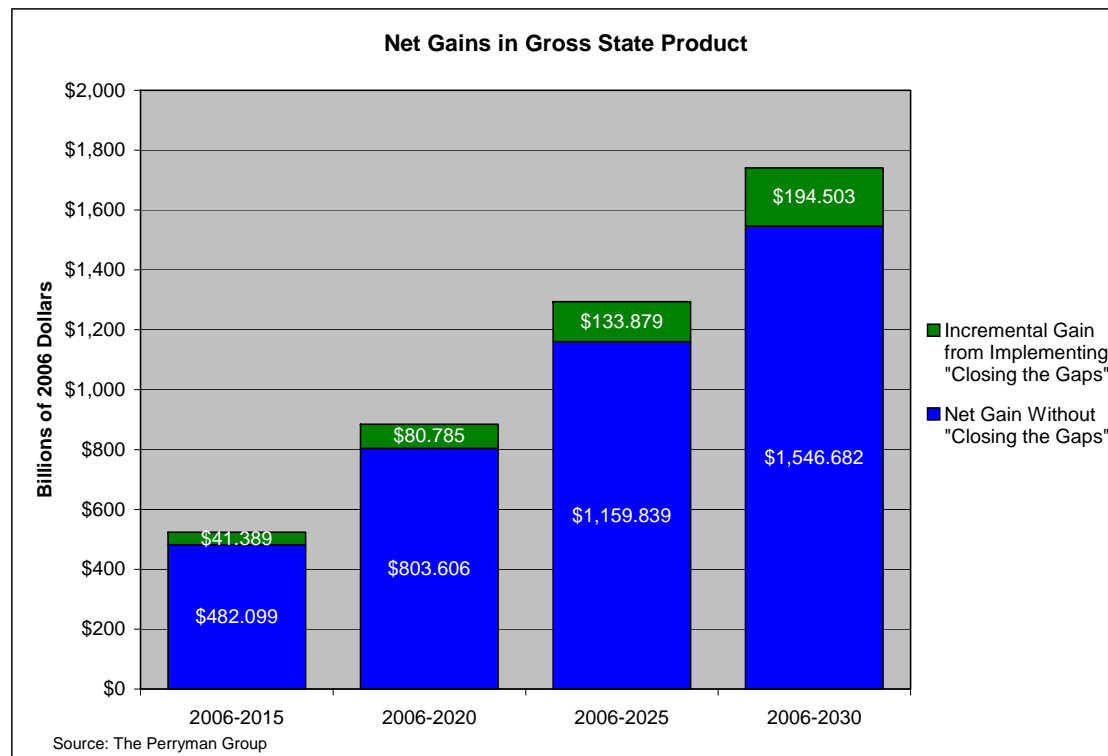
- By 2030, if the “Closing the Gaps” objectives are achieved, an additional 1,023,281 Texans will be employed relative to projected gains under a baseline scenario.





Gross State Product: With and Without “Closing the Gaps”

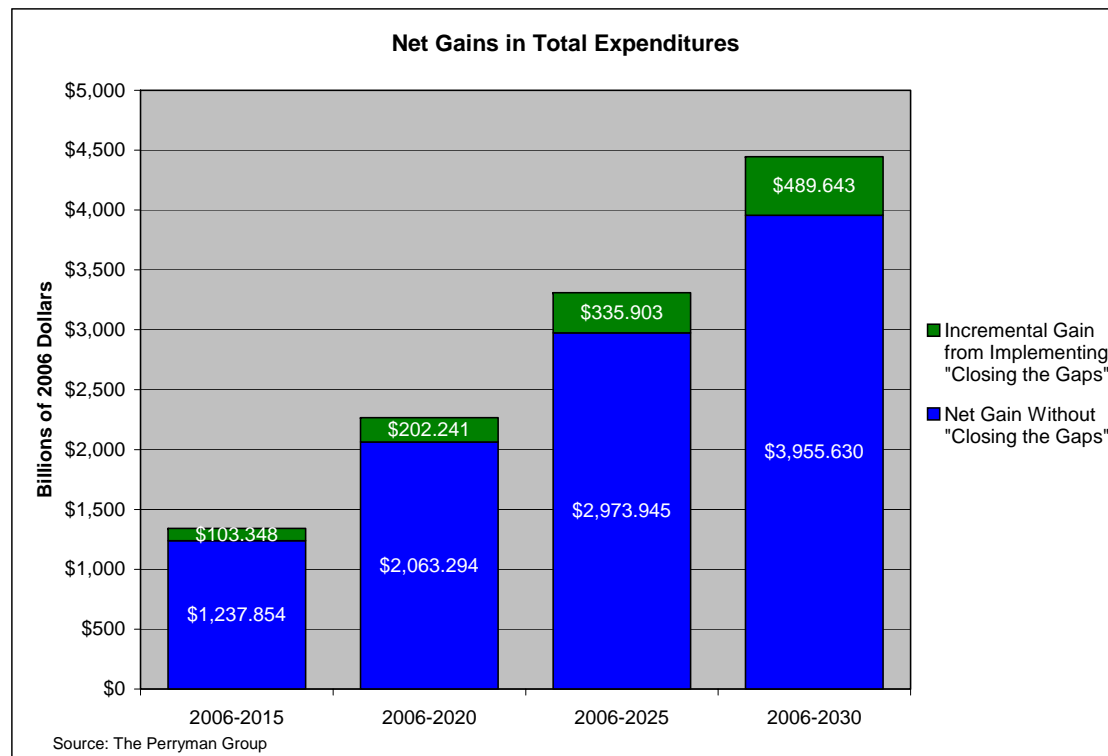
- Annual output (gross state product in constant (2006) dollars) could be expected to be some \$194.5 billion dollars higher if “Closing the Gaps” goals are met than under baseline conditions. Over the entire analysis period (2006-2030), Texas enjoys cumulative net gains from this initiative of about \$1.9 trillion.





Total Expenditures: With and Without “Closing the Gaps”

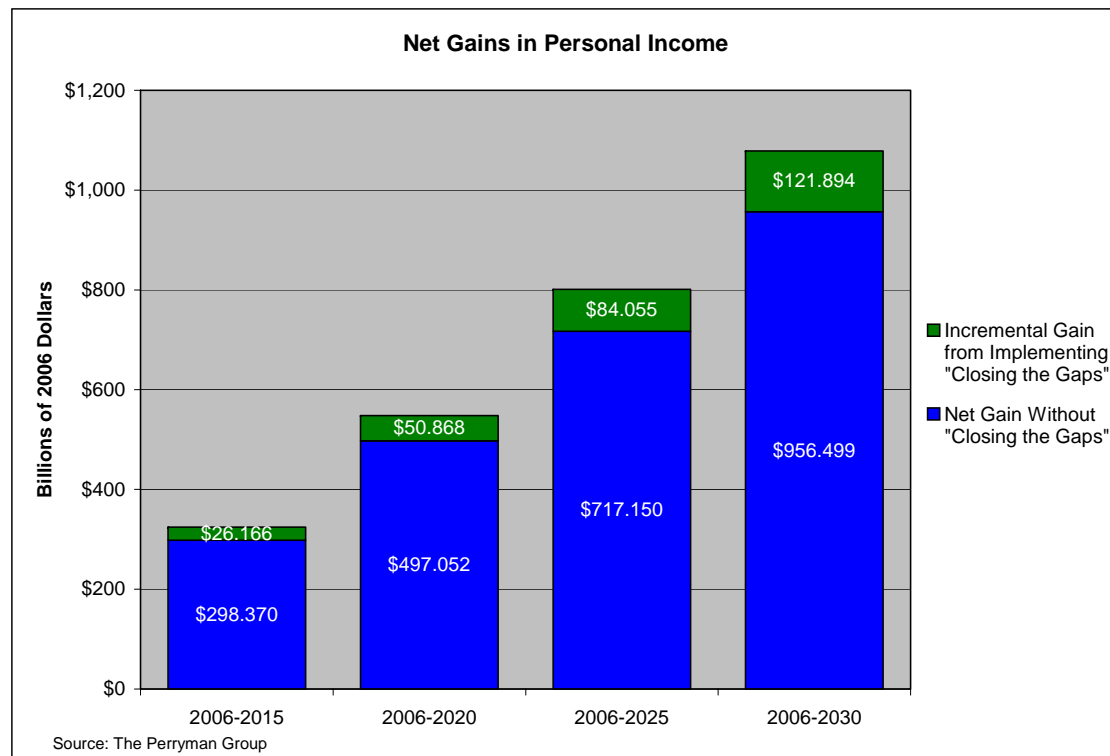
- Annual expenditures (a measure of all dollars changing hands in the economy—see Appendix A for more information) would be nearly \$489.6 billion higher (in constant 2006 dollars) by 2030 with successful implementation of “Closing the Gaps.”





Personal Income: With and Without “Closing the Gaps”

- Annual personal income in the state would be almost \$122 billion higher by 2030 (in constant 2006 dollars) if the “Closing the Gaps” targets are reached.





Fiscal Impacts of Achieving the Goals of “Closing the Gaps”

- The economic benefits associated with a more educated workforce and greater research activity translate into fiscal gains for the State and local governments as well. This increase stems from gains in production, income, sales, and other aggregates which stimulate tax collections as well as reduced public assistance social costs associated with the improved outcomes.
- By 2030, the net annual fiscal gains arising from achieving the goals of “Closing the Gaps” include approximately **\$8.7 billion** in State resources and \$7.5 billion in local revenues (in constant 2006 dollars). Over the entire 2006-2030 period, the State sees an incremental net benefit of more than \$85.3 billion, while local entities receive about \$73.5 billion. These amounts are several times as large as the estimated costs of this initiative.
- Over the implementation period through 2015, the cumulative State revenues are approximately equal to requisite outlays. Beyond that point, the State receives substantially more than is needed to maintain the patterns established by “Closing the Gaps” (much of the initial spending is for construction of new facilities for the expanded enrollments). Over the entire 2006-2030 period, the State generates about **\$8.08 in revenues for every \$1 in spending**.



Fiscal Impacts of Achieving the Goals of “Closing the Gaps” (continued)

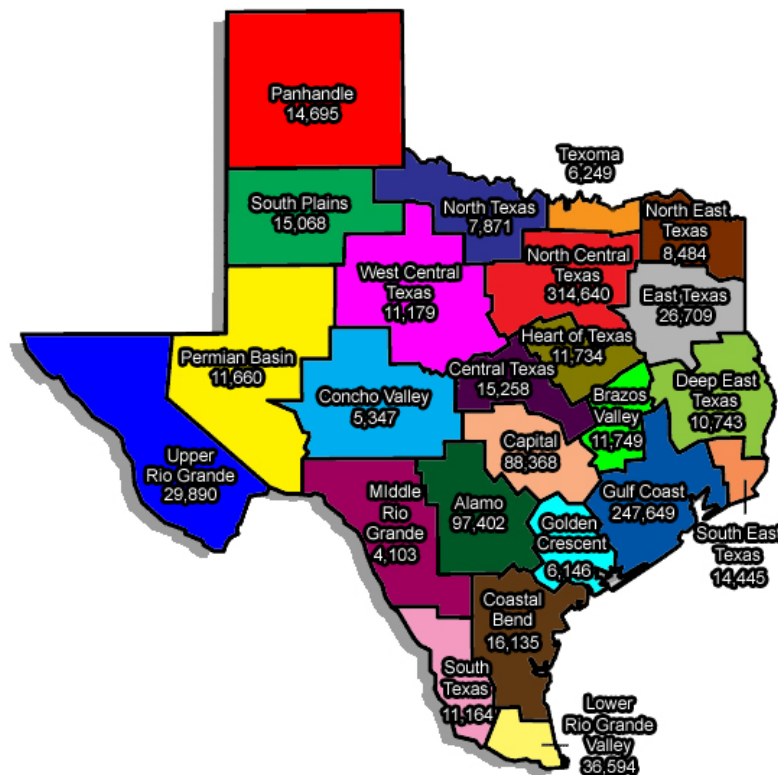
- The social return on public spending is also extremely impressive. In 2015, the **annual** returns per dollar of State outlays include \$11.92 in total expenditures, \$4.77 in gross state product, and \$3.02 in personal income. By 2030, these gains escalate to \$46.36 in spending, \$18.41 in output, and \$11.54 in income.
- In 2015, the annual gains per dollar of cumulative public (State and local) and private spending include \$6.21 in total expenditures, \$2.49 in gross state product, and \$1.57 in personal income. By 2030, the **annual “payoff” per dollar of cumulative outlays totals \$24.15 in total expenditures**, \$9.60 in gross state product, and \$6.01 in personal income.
- These findings indicate that “Closing the Gaps” represents an extremely beneficial commitment of public resources and demonstrates the critical role that expanding higher education can play in the future of Texas.



Regional Impacts: Employment

- By examining projected patterns in output by industry and population, it becomes possible to measure the incremental benefits of “Closing the Gaps” by region and metropolitan area within the state.
- Notable employment gains are observed in every portion of the state.

**Net Annual Gains in Employment
Associated with “Closing the Gaps”—2030**





Regional Impacts: Gross Product

- Every segment of Texas enjoys a significant output stimulus from the enhancement of higher education opportunities. The areas comprising the border region see a combined annual gain of about \$8.8 billion per year by 2030.

Net Annual Gains in Gross State Product Associated with “Closing the Gaps”—2030





Regional Impacts: Total Expenditures

- The overall spending that occurs in Texas as a result of the “Closing the Gaps” initiative is also distributed throughout the state. While the large urban regions receive a substantial portion of the gains, notable increases occur in every area.

Net Annual Gains in Total Expenditures Associated with “Closing the Gaps”—2030

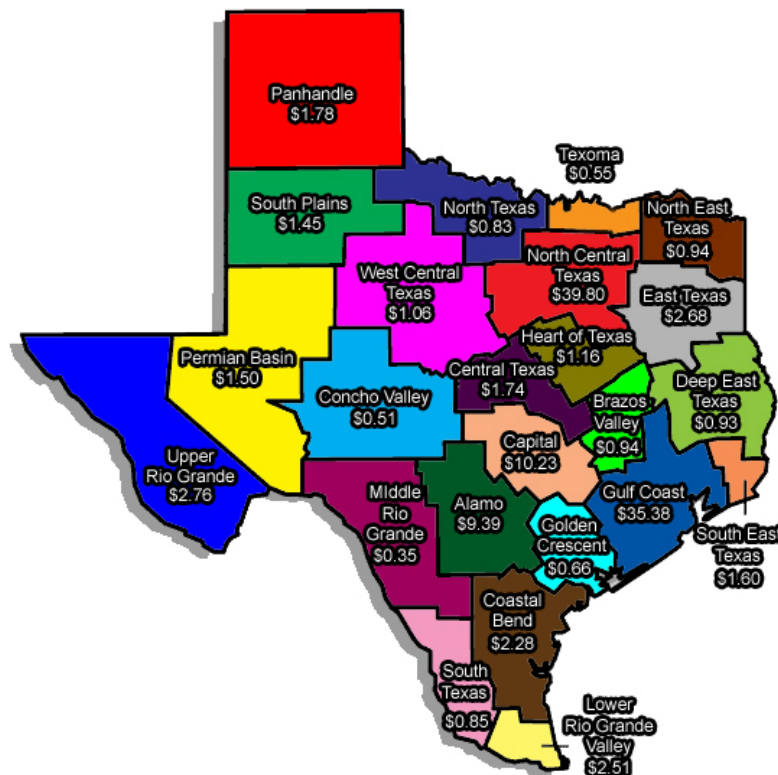




Regional Impacts: Personal Income

- The success of “Closing the Gaps” would stimulate impressive gains in personal income. By 2030, more than \$194.5 billion per year (in constant dollars) is distributed throughout the state.

**Net Annual Gains in Personal Income
Associated with “Closing the Gaps”—2030**





Metropolitan Area and Rural Texas Impacts: Employment

- The incremental benefits obtained from the "Closing the Gaps" effort are also experienced in every metropolitan area of the state, as well as its rural segments. While large urban centers with concentrations of technology sectors will obviously see the greatest relative gains, smaller cities and non-metropolitan areas also enjoy notable stimulus. In particular, **rural Texas is expected to enhance its annual economic performance by 79,202 permanent jobs.**

Projected 2006-2030 Net Gain in Wage and Salary Employment for the Texas Economy with "Closing the Gaps" Compared to Baseline Assumptions by Metropolitan Statistical Area (MSA) and Metropolitan Division (MD)			
MSA	Employment (Permanent Jobs)	MSA	Employment (Permanent Jobs)
Abilene	7,136	Longview	8,371
Amarillo	10,367	Lubbock	11,549
Austin-Round Rock	85,250	McAllen-Edinburg-Pharr	22,811
Beaumont-Port Arthur	14,445	Midland	5,476
Brownsville-Harlingen	13,712	Odessa	4,160
College Station-Bryan	8,997	San Angelo	4,386
Corpus Christi	13,130	San Antonio	92,546
Dallas-Plano-Irving MD	221,244	Sherman-Denison	4,440
El Paso	29,414	Texarkana	3,430
Fort Worth-Arlington MD	85,953	Tyler	9,562
Houston-Baytown-Sugar Land	243,609	Victoria	4,109
Killeen-Temple-Fort Hood	14,558	Waco	10,089
Laredo	9,266	Wichita Falls	6,067
Rural Texas	79,202	Total Metropolitan Areas	944,079
Texas	1,023,281		
SOURCES: Texas Econometric Model, The Perryman Group US Multi-Regional Impact Assessment System, The Perryman Group			



Metropolitan Area and Rural Texas Impacts: Total Expenditures

- In terms of total spending, incremental gains from "Closing the Gaps" add billions to the economies of metro areas across the state.

Projected 2006-2030 Net Gain in Total Expenditures for the Texas Economy with "Closing the Gaps" Compared to Baseline Assumptions by Metropolitan Statistical Area (MSA) and Metropolitan Division (MD)			
MSA	Total Expenditures (Billions of 2006 Dollars)	MSA	Total Expenditures (Billions of 2006 Dollars)
Abilene	\$2.2	Longview	\$3.3
Amarillo	\$3.9	Lubbock	\$3.9
Austin-Round Rock	\$40.8	McAllen-Edinburg-Pharr	\$5.6
Beaumont-Port Arthur	\$6.0	Midland	\$2.7
Brownsville-Harlingen	\$3.1	Odessa	\$1.7
College Station-Bryan	\$2.5	San Angelo	\$1.5
Corpus Christi	\$6.0	San Antonio	\$34.1
Dallas-Plano-Irving MD	\$129.0	Sherman-Denison	\$1.5
El Paso	\$10.7	Texarkana	\$1.2
Fort Worth-Arlington MD	\$40.5	Tyler	\$3.6
Houston-Baytown-Sugar Land	\$142.7	Victoria	\$1.8
Killeen-Temple-Fort Hood	\$4.9	Waco	\$3.3
Laredo	\$2.4	Wichita Falls	\$2.2
Rural Texas	\$28.7	Total Metropolitan Areas	\$461.0
Texas	\$489.6		
SOURCES: Texas Econometric Model, The Perryman Group US Multi-Regional Impact Assessment System, The Perryman Group			



Metropolitan Area and Rural Texas Impacts: Personal Income

- Income levels are also favorably affected if "Closing the Gaps" goals are achieved.

Projected 2006-2030 Net Gain in Personal Income for the Texas Economy with "Closing the Gaps" Compared to Baseline Assumptions by Metropolitan Statistical Area (MSA) and Metropolitan Division (MD)			
MSA	Personal Income (Billions of 2006 Dollars)	MSA	Personal Income (Billions of 2006 Dollars)
Abilene	\$0.6	Longview	\$0.8
Amarillo	\$1.1	Lubbock	\$1.1
Austin-Round Rock	\$9.8	McAllen-Edinburg-Pharr	\$1.6
Beaumont-Port Arthur	\$1.6	Midland	\$0.7
Brownsville-Harlingen	\$0.9	Odessa	\$0.4
College Station-Bryan	\$0.7	San Angelo	\$0.4
Corpus Christi	\$1.9	San Antonio	\$9.1
Dallas-Plano-Irving MD	\$29.7	Sherman-Denison	\$0.4
El Paso	\$2.8	Texarkana	\$0.4
Fort Worth-Arlington MD	\$9.8	Tyler	\$0.9
Houston-Baytown-Sugar Land	\$35.0	Victoria	\$0.5
Killeen-Temple-Fort Hood	\$1.7	Waco	\$0.9
Laredo	\$0.7	Wichita Falls	\$0.6
Rural Texas	\$8.0	Total Metropolitan Areas	\$113.9
Texas	\$121.9		
SOURCES: Texas Econometric Model, The Perryman Group US Multi-Regional Impact Assessment System, The Perryman Group			



Metropolitan Area and Rural Texas Impacts: Gross Product

- Meeting "Closing the Gaps" goals adds substantially to output (gross product) in each of the state's metro areas as well as smaller communities and rural areas.

Projected 2006-2030 Net Gain in Gross Product for the Texas Economy with "Closing the Gaps" Compared to Baseline Assumptions by Metropolitan Statistical Area (MSA) and Metropolitan Division (MD)			
MSA	Gross Product (Billions of 2006 Dollars)	MSA	Gross Product (Billions of 2006 Dollars)
Abilene	\$0.8	Longview	\$1.3
Amarillo	\$1.5	Lubbock	\$1.5
Austin-Round Rock	\$16.6	McAllen-Edinburg-Pharr	\$2.0
Beaumont-Port Arthur	\$2.3	Midland	\$1.1
Brownsville-Harlingen	\$1.1	Odessa	\$0.7
College Station-Bryan	\$0.9	San Angelo	\$0.6
Corpus Christi	\$2.0	San Antonio	\$12.9
Dallas-Plano-Irving MD	\$53.6	Sherman-Denison	\$0.6
El Paso	\$4.1	Texarkana	\$0.4
Fort Worth-Arlington MD	\$16.3	Tyler	\$1.4
Houston-Baytown-Sugar Land	\$57.2	Victoria	\$0.7
Killeen-Temple-Fort Hood	\$1.5	Waco	\$1.3
Laredo	\$0.9	Wichita Falls	\$0.8
Rural Texas	\$10.6	Total Metropolitan Areas	\$183.9
Texas	\$194.5		
SOURCES: Texas Econometric Model, The Perryman Group US Multi-Regional Impact Assessment System, The Perryman Group			



CONCLUSION



Conclusion

- The findings from this analysis are compelling. Texas is at a **critical juncture**. It can continue on its present path and likely enjoy moderate economic growth over an extended period. In such an environment, the **evolving demographic patterns within the state will pose a risk to long-term prosperity, and many residents will have relatively limited opportunities** to succeed.
- On the other hand, Texas can embrace the goals of the “Closing the Gaps” initiative and provide the resources necessary for its achievement. In so doing, the state
 - enhances its productivity and competitiveness,
 - improves its prospects for capturing emerging industries,
 - reduces social costs associated with an uneducated citizenry,
 - moves to the forefront of workforce quality and research output, and
 - receives impressive returns on the commitment of public resources.
- In the process, it accelerates economic growth, creates over **1,000,000 new jobs**, and offers legitimate opportunities for success to individuals and families from every socioeconomic stratum.
- In this “Tale of Two States,” it is obvious that **Texas should opt for “the best of times.”**

M. Ray Perryman



APPENDICES



APPENDIX A:

Detailed Impact Methodology



Methodology

- The basic modeling technique employed in much of this study is known as dynamic input-output analysis. This methodology essentially uses extensive survey data, industry information, and a variety of corroborative source materials to create a matrix describing the various goods and services (known as resources or inputs) required to produce one unit (a dollar's worth) of output for a given sector. Once the base information is compiled, it can be mathematically simulated to generate evaluations of the magnitude of successive rounds of activity involved in the overall production process.
- There are two essential steps in conducting an input-output analysis once the system is operational. The first major endeavor is to accurately define the levels of direct activity to be evaluated. The second step is the simulation of the input-output system to measure overall economic effects. In the case of a prospective evaluation, it is necessary to first calculate reasonable estimates of the direct activity.
- The incremental gains in educational participation, degrees, and certificates were based on the most recent goals of "Closing the Gaps" as set forth by the Texas Higher Education Coordinating Board. The values were adjusted to account for the increase that is likely to occur under baseline conditions, with only the increment above that level being attributed to the initiative. The gains in earnings were based on current surveys, with the resulting effects in gross product being derived from the output-income ratios by industry derived within the database of the Texas Econometric Model (see Appendix B for a full description). The enhancements are allocated based on current employment patterns. No "multiplier" effects are included for these items.
- The gains in productivity associated with a more educated workforce are calculated based on academic studies by the National Bureau of Economic Research and other reputable entities.



Methodology (continued)

- The consumer spending resulting from the additional income is simulated based on current spending patterns in the relevant areas as determined by the Bureau of Labor Statistics of the US Department of Labor. The level of outlays is fully adjusted to reflect leakages to out-of-state purchases and taxes.
- The enhanced external research funding was based on a reasonable incremental gain in the percentages of federal outlays which is consistent with the objectives of achieving the "Closing the Gaps" objectives. The incremental benefits associated with the research are based on academic studies of the rate of return and allocated across various industries based on typical funding patterns.
- The reductions in social costs are based on recent surveys and other research related to unemployment, public assistance, health costs, and incarceration at various education levels.
- The economic development benefits were obtained based on achieving an investment share of national output equal to 80% of the differential between (1) that achieved by Texas in recent years and (2) that obtained by other large states with comparable recruitment programs and cost structures and more aggressive approaches to achieving higher levels of educational attainment in the workforce. No "multiplier" effects are included in this calculation.
- The fiscal effects are derived from a submodel of the system described below which reflects the specific revenue structure of state and local governments in Texas.
- The geographic allocation of the impacts makes use of a "gravity model" in which activity flows to the various regions based on current and projected concentrations of the relevant sectors.



Methodology (continued)

- Once the direct input values were determined, the present study was conducted within the context of the US Multi-Regional Impact Assessment System (USMRIAS) which was developed and is maintained by The Perryman Group. This model has been used in hundreds of diverse applications across the country and has an excellent reputation for accuracy and credibility. In addition, the model has been in operation and continually updated for over two decades. The systems used in the current simulations reflect the unique industrial structures of the economy of the state of Texas as well as those of its regions and metropolitan areas. Because simulations are performed over an extended time period (2015, 2020, 2025, and 2030), the parameters are adjusted for productivity and real wage charges based on projections from the Texas Econometric Model.
- The USMRIAS is somewhat similar in format to the Input-Output Model of the United States and the Regional Input-Output Modeling System, both of which are maintained by the US Department of Commerce. The model developed by TPG, however, incorporates several important enhancements and refinements. Specifically, the expanded system includes (1) comprehensive 500-sector coverage for any county, multi-county, or urban region; (2) calculation of both total expenditures and value-added by industry and region; (3) direct estimation of expenditures for multiple basic input choices (expenditures, output, income, or employment); (4) extensive parameter localization; (5) price adjustments for real and nominal assessments by sectors and areas; (6) measurement of the induced impacts associated with payrolls and consumer spending; (7) embedded modules to estimate multi-sectoral direct spending effects; (8) estimation of retail spending activity by consumers; and (9) comprehensive linkage and integration capabilities with a wide variety of econometric, real estate, occupational, and fiscal impact models. The models used for the present investigation have been thoroughly tested for reasonableness and historical reliability.



Methodology (continued)

- As noted earlier, the impact assessment (input-output) process essentially estimates the amounts of all types of goods and services required to produce one unit (a dollar's worth) of a specific type of output. For purposes of illustrating the nature of the system, it is useful to think of inputs and outputs in dollar (rather than physical) terms. As an example, the construction of a new building will require specific dollar amounts of lumber, glass, concrete, hand tools, architectural services, interior design services, paint, plumbing, and numerous other elements. Each of these suppliers must, in turn, purchase additional dollar amounts of inputs. This process continues through multiple rounds of production, thus generating subsequent increments to business activity. The initial process of building the facility is known as the *direct effect*. The ensuing transactions in the output chain constitute the *indirect effect*.
- Another pattern that arises in response to any direct economic activity comes from the payroll dollars received by employees at each stage of the production cycle. As workers are compensated, they use some of their income for taxes, savings, and purchases from external markets. A substantial portion, however, is spent locally on food, clothing, healthcare services, utilities, housing, recreation, and other items. Typical purchasing patterns in the relevant areas are obtained from the *ACCRA Cost of Living Index*, a privately compiled inter-regional measure which has been widely used for several decades, and the *Consumer Expenditure Survey* of the US Department of Labor. These initial outlays by area residents generate further secondary activity as local providers acquire inputs to meet this consumer demand. These consumer spending impacts are known as the *induced effect*. The USMRIAS is designed to provide realistic, yet conservative, estimates of these phenomena.
- Sources for information used in this process include the Bureau of the Census, the Bureau of Labor Statistics, the Regional Economic Information System of the US Department of Commerce, and other public and private sources. The pricing data are compiled from the US Department of Labor and the US Department of Commerce. The verification and testing procedures make use of extensive public and private sources. Note that all monetary values, unless otherwise noted, are given in constant (2006) dollars to eliminate the effects of inflation.



Methodology (continued)

- The USMRIAS generates estimates of the effect on several measures of business activity. The most comprehensive measure of economic activity used in this study is **Total Expenditures**. This measure incorporates every dollar that changes hands in any transaction. For example, suppose a farmer sells wheat to a miller for \$0.50; the miller then sells flour to a baker for \$0.75; the baker, in turn, sells bread to a customer for \$1.25. The Total Expenditures recorded in this instance would be \$2.50, that is, $\$0.50 + \$0.75 + \$1.25$. This measure is quite broad, but is useful in that (1) it reflects the overall interplay of all industries in the economy, and (2) some key fiscal variables such as sales taxes are linked to aggregate spending.
- A second measure of business activity frequently employed in this analysis is that of **Gross Product**. This indicator represents the regional equivalent of Gross Domestic Product, the most commonly reported statistic regarding national economic performance. In other words, the Gross Product of, say, Amarillo is the amount of US output that is produced in that area. It is defined as the value of all final goods produced in a given region for a specific period of time. Stated differently, it captures the amount of value-added (gross area product) over intermediate goods and services at each stage of the production process, that is, it eliminates the double counting in the Total Expenditures concept. Using the example above, the Gross Product is \$1.25 (the value of the bread) rather than \$2.50. Alternatively, it may be viewed as the sum of the value-added by the farmer, \$0.50; the miller, \$0.25 ($\$0.75 - \0.50); and the baker, \$0.50 ($\$1.25 - \0.75). The total value-added is, therefore, \$1.25, which is equivalent to the final value of the bread. In many industries, the primary component of value-added is the wage and salary payments to employees.
- The third gauge of economic activity used in this evaluation is **Personal Income**. As the name implies, Personal Income is simply the income received by individuals, whether in the form of wages, salaries, interest, dividends, proprietors' profits, or other sources. It may thus be viewed as the segment of overall impacts which flows directly to the citizenry.



Methodology (continued)

- The fourth measure, **Retail Sales**, represents the component of Total Expenditures which occurs in retail outlets (general merchandise stores, automobile dealers and service stations, building materials stores, food stores, drugstores, restaurants, and so forth). Retail Sales is a commonly used measure of consumer activity.
- The final aggregates used are **Permanent Jobs and Person-Years of Employment**. The Person-Years of Employment measure reveals the full-time equivalent jobs generated by an activity. It should be noted that, unlike the dollar values described above, Permanent Jobs is a "stock" rather than a "flow." In other words, if an area produces \$1 million in output in 1999 and \$1 million in 2000, it is appropriate to say that \$2 million was achieved in the 1999-2000 period. If the same area has 100 people working in 1999 and 100 in 2000, it only has 100 Permanent Jobs. When a flow of jobs is measured, such as in a construction project or a cumulative assessment over multiple years, it is appropriate to measure employment in Person-Years (a person working for a year). This concept is distinct from Permanent Jobs, which anticipates that the relevant positions will be maintained on a continuing basis.



APPENDIX B:

The Texas Econometric Model



The Texas Econometric Model

■ Model Logic and Structure

- The baseline forecast used in the analysis is obtained from a recent simulation of the Texas Econometric Model. This simulation is also used to make the dynamic adjustments in parameters which were required for the impact assessment at various points in time.
- The expanded version of the Texas Econometric Model, developed and maintained by The Perryman Group, revolves around a core system which projects output, income, and employment by industry in a simultaneous manner. For purposes of illustration, it is useful to initially consider the employment functions. Essentially, employment within the system is a derived demand relationship obtained from a neo-Classical production function. The expressions are augmented to include dynamic temporal adjustments to changes in relative factor input costs, output and (implicitly) productivity, and technological progress over time. Thus, the typical equation includes output, the relative real cost of labor and capital, dynamic lag structures, and a technological adjustment parameter. The functional form is logarithmic, thus preserving the theoretical consistency with the neo-Classical formulation.
- The income segment of the model is divided into wage and non-wage components. The wage equations, like their employment counterparts, are individually estimated at the North American Industry Classification System (NAICS) level of aggregation. Hence, income by place of work is measured for approximately 70 distinct production categories. The wage equations measure real compensation, with the form of the variable structure differing between "basic" and "non-basic."



The Texas Econometric Model (continued)

- The basic industries, comprised primarily of the various components of Mining, Agriculture, and Manufacturing, are export-oriented, i.e., they bring external dollars into the area and form the core of the economy. The production of these sectors typically flows into national and international markets; hence, the labor markets are influenced by conditions in areas beyond the borders of the particular region. Thus, real (inflation-adjusted) wages in the basic industry are expressed as a function of the corresponding national rates, as well as measures of local labor market conditions (the reciprocal of the unemployment rate), dynamic adjustment parameters, and ongoing trends.
- The “non-basic” sectors are somewhat different in nature, as the strength of their labor markets is linked to the health of the local export sectors. Consequently, wages in these industries are related to those in the basic segment of the economy. The relationship also includes the local labor market measures contained in the basic wage equations.
- Note that compensation rates in the export or “basic” sectors provide a key element of the interaction of the regional economies with national and international market phenomena, while the “non-basic” or local industries are strongly impacted by area production levels. Given the wage and employment equations, multiplicative identities in each industry provide expressions for total compensation; these totals may then be aggregated to determine aggregate wage and salary income. Simple linkage equations are then estimated for the calculation of personal income by place of work.



The Texas Econometric Model (continued)

- The non-labor aspects of personal income are modeled at the regional level using straightforward empirical expressions relating to national performance, dynamic responses, and evolving temporal patterns. In some instances (such as dividends, rents, and others) national variables (for example, interest rates) directly enter the forecasting system. These factors have numerous other implicit linkages into the system resulting from their simultaneous interaction with other phenomena in national and international markets which are explicitly included in various expressions.
- The output or gross area product expressions are also developed at the NAICS level. Regional output for basic industries is linked to national performance in the relevant industries, local and national production in key related sectors, relative area and national labor costs in the industry, dynamic adjustment parameters, and ongoing changes in industrial interrelationships (driven by technological changes in production processes).
- Output in the non-basic sectors is modeled as a function of basic production levels, output in related local support industries (if applicable), dynamic temporal adjustments, and ongoing patterns. The interindustry linkages are obtained from the input-output (impact assessment) system which is part of the overall integrated modeling structure maintained by The Perryman Group. Note that the dominant component of the econometric system involves the simultaneous estimation and projection of output, income, and employment at a disaggregated industrial level.
- Several other components of the model are critical to the multi-regional forecasting process. The demographic module includes (1) a linkage equation between wage and salary (establishment) employment and household employment, (2) a labor force participation rate function, and (3) a complete age-cohort-survival population system with endogenous migration. Given household employment, labor force participation (which is a function of economic conditions and evolving patterns of worker preferences), and the working age population (from the age-cohort-survival model), the unemployment rate and level become identities.



The Texas Econometric Model (continued)

- The population system uses Census information, fertility rates, and life tables to determine the “natural” changes in population by age group. Migration, the most difficult segment of population dynamics to track, is estimated in relation to relative regional and extra-regional economic conditions over time. Because evolving economic conditions determine migration in the system, population changes are allowed to interact simultaneously with overall economic conditions.
- Retail sales is related to income, interest rates, dynamic adjustments, and patterns in consumer behavior on a store group basis. Inflation at the state level relates to national patterns, indicators of relative economic conditions, and ongoing trends.
- A final significant segment of the forecasting system relates to real estate absorption and activity. The short-term demand for various types of property is determined by underlying economic and demographic factors, with short-term adjustments to reflect the current status of the pertinent building cycle. In some instances, this portion of the forecast requires integration with the Multi-Regional Industry-Occupation System which is maintained by The Perryman Group.
- The overall Texas Econometric Model contains numerous additional specifications, and individual expressions are modified to reflect alternative lag structures, empirical properties of the estimates, simulation requirements, and similar phenomena. Nonetheless, the above synopsis offers a basic understanding of the overall structure and underlying logic of the system.



The Texas Econometric Model (continued)

■ Model Simulation and Multi-Regional Structure

- The initial phase of the simulation process is the execution of a standard non-linear algorithm for the state system and that of each of the individual sub-areas. The external assumptions are derived from scenarios developed through national and international models and extensive analysis by The Perryman Group.
- Once the initial simulations are completed, they are merged into a single system with additive constraints and interregional flows. Using information on minimum regional requirements, import needs, export potential, and locations, it becomes possible to balance the various forecasts into a mathematically consistent set of results. This process is, in effect, a disciplining exercise with regard to the individual regional (including metropolitan and rural) systems. By compelling equilibrium across all regions and sectors, the algorithm ensures that the patterns in state activity are reasonable in light of smaller area dynamics and, conversely, that the regional outlooks are within plausible performance levels for the state as a whole.
- The iterative simulation process has the additional property of imposing a global convergence criterion across the entire multi-regional system, with balance being achieved simultaneously on both a sectoral and a geographic basis. This approach is particularly critical on non-linear dynamic systems, as independent simulations of individual systems often yield unstable, non-convergent outcomes.
- It should be noted that the underlying data for the modeling and simulation process are frequently updated and revised by the various public and private entities compiling them. Whenever those modifications to the database occur, they bring corresponding changes to the structural parameter estimates of the various systems and the solutions to the simulation and forecasting system. The multi-regional version of the Texas Econometric Model is automatically re-estimated and simulated with each such data release, thus providing a constantly evolving and current assessment of state and local business activity.



The Texas Econometric Model (continued)

■ The Final Forecast

- The process described above is followed to produce the preliminary forecast. Through the comprehensive multi-regional modeling and simulation process, a systematic analysis is generated which accounts for both historical patterns in economic performance and inter-relationships and best available information on the future course of pertinent external factors. While the best available techniques and data are employed in this effort, they are not capable of directly capturing "street sense," i.e., the contemporaneous and often non-quantifiable information that can materially affect economic outcomes. In order to provide a comprehensive approach to the prediction of business conditions, it is necessary to compile and assimilate extensive material regarding "what's happenin'" both across the state of Texas and elsewhere.
- This critical aspect of the forecasting methodology includes activities such as (1) daily review of hundreds of financial and business publications and electronic information sites; (2) review of all major newspapers in the state on a daily basis; (3) dozens of hours of direct telephone interviews with key business and political leaders in all parts of the state; (4) face-to-face discussions with representatives of major industry groups; and (5) frequent site visits to the various regions of the state. The insights arising from this "fact finding" are analyzed and evaluated for their effects on the likely course of the future activity.
- Another vital information resource stems from the firm's ongoing interaction with key players in the international, domestic, and state economic scenes. Such activities include visiting with corporate groups on a regular basis and being regularly involved in the policy process at all levels. The firm is also an active participant in many major corporate relocations, economic development initiatives, and regulatory proceedings.



The Texas Econometric Model (continued)

- Once organized, this information is carefully assessed and, when appropriate, independently verified. The impact on specific communities and sectors that is distinct from what is captured by the econometric system is then factored into the forecast analysis. For example, the opening or closing of a major facility, particularly in a relatively small area, can cause a sudden change in business performance that will not be accounted for by either a modeling system based on historical relationships or expected (primarily national and international) factors.
- The final step in the forecasting process is the integration of this material into the results in a logical and mathematically consistent manner. In some instances, this task is accomplished through “constant adjustment factors” which augment relevant equations. In other cases, anticipated changes in industrial structure or regulatory parameters are initially simulated within the context of the Texas Multi-Regional Impact Assessment System to estimate their ultimate effects by sector. Those findings are then factored into the simulation as constant adjustments on a distributed temporal basis. Once this scenario is formulated, the extended system is again balanced across regions and sectors through an iterative simulation algorithm analogous to that described in the preceding section.
- There are those who maintain that the best forecasts are generated by complex models that capture the interactive forces that drive economic activity. There are others who claim that the optimal approach is to rely on the informed judgment of those who are involved in the process. On this issue, The Perryman Group philosophy is to stand firmly in the middle. Well-developed models are invaluable tools which impose logic and consistency on millions of interrelated phenomena and, when properly structured, provide key insights into the ways in which changes in part of the economy work through the entire system. However, the knowledge on the streets (both Main and Wall) is equally essential to reliable forecasting. The Perryman Group’s forecast therefore combine the two approaches.



The Texas Econometric Model (continued)

- There is an irrefutable rationale in statistical theory for using judgmental, non-quantitative information in the preparation of forecasts. Specifically, the desirable property of statistical efficiency (minimum variance) can only be achieved if a prior condition, known as statistical sufficiency, is satisfied. Statistical sufficiency, in turn, requires that all relevant information be used, be it an economic time series published by a government agency or the thoughts and insights of a local building contractor.



APPENDIX C:

Detailed Sectoral & Geographic Results



Baseline Values for 2006



Detailed Sectoral Results: 2006

Table 1
2006 Baseline Indicators for the Texas Economy
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$29,720,859,933	\$10,639,600,767	\$5,808,513,850	83,926
Forestry & Fishery Products	\$4,158,355,278	\$417,666,330	\$111,069,681	5,583
Coal Mining	\$1,482,213,725	\$274,173,061	\$402,690,214	2,808
Crude Petroleum & Natural Gas	\$540,532,689,050	\$130,847,119,624	\$53,699,534,526	162,244
Miscellaneous Mining	\$2,892,020,959	\$1,003,208,000	\$758,537,779	10,274
New Construction	\$128,036,182,821	\$47,305,177,615	\$39,062,901,049	502,532
Maintenance & Repair Construction	\$22,139,069,323	\$11,826,294,404	\$9,252,897,950	125,633
Food Products & Tobacco	\$55,193,110,301	\$11,780,171,825	\$6,143,549,208	102,077
Textile Mill Products	\$1,058,066,659	\$227,149,738	\$217,746,050	3,572
Apparel	\$2,499,459,346	\$1,202,349,093	\$666,805,668	22,117
Paper & Allied Products	\$7,026,803,411	\$2,409,023,736	\$1,403,424,235	21,687
Printing & Publishing	\$20,583,208,734	\$11,097,975,605	\$6,674,925,772	87,188
Chemicals & Petroleum Refining	\$251,791,994,964	\$42,159,883,992	\$18,611,667,037	97,134
Rubber & Leather Products	\$14,487,092,265	\$5,357,873,592	\$3,600,694,883	51,081
Lumber Products & Furniture	\$14,302,055,892	\$4,791,024,418	\$3,689,547,841	57,306
Stone, Clay, & Glass Products	\$13,395,889,658	\$5,932,712,987	\$3,594,013,645	43,741
Primary Metal	\$11,477,563,997	\$2,995,481,007	\$2,593,577,385	25,929
Fabricated Metal Products	\$28,337,818,713	\$11,471,342,434	\$7,842,403,880	112,889
Machinery, Except Electrical	\$35,885,686,105	\$11,480,205,650	\$10,361,030,135	91,935
Electric & Electronic Equipment	\$30,879,077,441	\$15,060,455,594	\$10,789,699,800	120,606
Motor Vehicles & Equipment	\$25,373,553,143	\$7,410,800,792	\$4,513,857,597	32,090
Transp Equip, Except Motor Vehicles	\$11,776,019,474	\$5,534,803,877	\$3,689,854,759	58,471
Instruments & Related Products	\$6,027,797,674	\$1,731,452,735	\$2,018,476,946	18,129
Miscellaneous Manufacturing	\$6,060,345,172	\$1,544,636,479	\$1,440,674,167	16,173
Transportation	\$71,577,766,719	\$36,857,675,362	\$26,439,427,901	362,096
Communication	\$53,645,535,021	\$34,111,491,535	\$16,040,167,739	177,574
Electric, Gas, Water, Sanitary Services	\$199,196,640,702	\$35,670,489,448	\$17,162,388,931	48,449
Wholesale Trade	\$105,221,657,626	\$71,937,360,042	\$43,735,461,943	506,362
Retail Trade	\$89,810,293,186	\$70,618,407,582	\$44,170,542,200	1,166,843
Finance	\$83,169,573,240	\$47,202,403,214	\$34,868,722,534	289,034
Insurance	\$28,146,224,964	\$21,116,296,573	\$13,153,035,820	165,847
Real Estate	\$346,548,521,910	\$102,103,047,387	\$17,280,401,403	185,145
Hotels, Lodging Places, Amusements	\$31,664,705,432	\$13,695,011,891	\$9,751,200,540	213,552
Personal Services	\$20,497,668,383	\$12,009,540,800	\$10,008,604,550	213,801
Business Services	\$174,051,196,480	\$110,332,450,075	\$99,435,427,068	1,188,290
Eating & Drinking Places	\$37,039,553,664	\$20,363,856,639	\$11,708,192,050	753,624
Health Services	\$85,457,502,862	\$60,806,509,167	\$51,935,084,718	924,124
Miscellaneous Services	\$40,557,121,192	\$18,688,837,188	\$16,485,172,692	524,473
Households	\$3,122,967,516	\$3,122,967,516	\$2,865,407,613	126,050
Government	\$182,131,473,935	\$115,181,030,905	\$101,840,282,843	1,855,009
Total	\$2,816,955,336,873	\$1,118,317,958,676	\$713,827,614,600	10,555,398

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group



Results for 2015



Detailed Sectoral Results: 2015

Table 2
Projected 2015 Values of Indicators for the Texas Economy
Under Baseline Assumptions
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$37,810,235,735	\$13,535,470,172	\$7,389,465,798	88,170
Forestry & Fishery Products	\$4,879,533,448	\$490,101,660	\$130,332,352	5,669
Coal Mining	\$2,021,875,535	\$373,997,214	\$549,306,404	3,013
Crude Petroleum & Natural Gas	\$774,446,101,758	\$187,470,700,241	\$76,937,798,624	176,375
Miscellaneous Mining	\$3,944,981,971	\$1,368,467,770	\$1,034,715,137	11,026
New Construction	\$156,918,047,213	\$57,976,080,908	\$47,874,546,210	549,073
Maintenance & Repair Construction	\$27,133,107,601	\$14,494,020,227	\$11,340,127,809	137,268
Food Products & Tobacco	\$72,901,417,316	\$15,559,754,063	\$8,114,662,178	112,048
Textile Mill Products	\$1,495,403,395	\$321,038,836	\$307,748,269	3,799
Apparel	\$3,249,450,964	\$1,563,127,813	\$866,888,403	20,601
Paper & Allied Products	\$10,403,785,869	\$3,566,766,514	\$2,077,890,097	24,014
Printing & Publishing	\$29,394,549,206	\$15,848,840,393	\$9,532,354,094	97,600
Chemicals & Petroleum Refining	\$391,959,139,960	\$65,629,377,426	\$28,972,378,594	108,062
Rubber & Leather Products	\$22,088,207,889	\$8,169,053,084	\$5,489,914,447	56,519
Lumber Products & Furniture	\$19,551,402,638	\$6,549,495,272	\$5,043,738,881	61,919
Stone, Clay, & Glass Products	\$18,716,679,831	\$8,289,161,254	\$5,021,540,519	49,162
Primary Metal	\$16,093,493,866	\$4,200,173,070	\$3,636,635,940	28,525
Fabricated Metal Products	\$42,942,539,848	\$17,383,433,233	\$11,884,215,385	128,112
Machinery, Except Electrical	\$58,166,488,102	\$18,608,066,831	\$16,794,014,591	104,787
Electric & Electronic Equipment	\$50,051,362,689	\$24,411,232,060	\$17,488,837,839	137,466
Motor Vehicles & Equipment	\$39,414,921,095	\$11,511,833,870	\$7,011,762,996	37,500
Transp Equip, Except Motor Vehicles	\$15,678,663,851	\$7,369,071,498	\$4,912,695,037	67,099
Instruments & Related Products	\$8,371,520,338	\$2,404,674,570	\$2,803,299,267	19,295
Miscellaneous Manufacturing	\$8,416,722,923	\$2,145,220,592	\$2,000,835,751	17,213
Transportation	\$107,375,002,590	\$55,290,814,017	\$39,662,227,105	418,682
Communication	\$87,406,155,770	\$55,578,797,779	\$26,134,689,484	209,594
Electric, Gas, Water, Sanitary Services	\$286,481,575,349	\$51,300,754,744	\$24,682,686,416	53,044
Wholesale Trade	\$145,677,742,870	\$99,596,152,307	\$60,551,064,514	584,818
Retail Trade	\$134,562,305,930	\$105,807,201,248	\$66,180,498,935	1,328,958
Finance	\$124,109,084,642	\$70,437,382,658	\$52,032,553,105	342,106
Insurance	\$39,034,764,656	\$29,285,265,365	\$18,241,368,368	189,291
Real Estate	\$518,125,215,383	\$152,654,419,436	\$25,835,954,080	210,469
Hotels, Lodging Places, Amusements	\$44,915,088,357	\$19,425,813,717	\$13,831,678,769	256,555
Personal Services	\$26,121,156,206	\$15,304,330,489	\$12,754,442,016	244,736
Business Services	\$261,775,167,467	\$165,941,379,201	\$149,552,120,867	1,440,976
Eating & Drinking Places	\$52,060,893,325	\$28,622,390,479	\$16,456,433,111	922,610
Health Services	\$121,909,722,447	\$86,743,754,583	\$74,088,190,635	1,152,306
Miscellaneous Services	\$53,267,485,041	\$24,545,809,123	\$21,651,529,102	648,682
Households	\$3,904,069,751	\$3,904,069,751	\$3,582,090,153	139,262
Government	\$232,034,392,293	\$146,739,934,248	\$129,743,902,192	2,083,646
Total	\$4,054,809,455,119	\$1,600,417,427,717	\$1,012,197,133,476	12,270,052

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group

Table 3
Projected 2015 Values of Indicators for the Texas Economy
With "Closing the Gaps"
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$38,831,997,646	\$13,891,182,208	\$7,588,077,386	90,446
Forestry & Fishery Products	\$4,998,939,666	\$504,848,352	\$134,574,070	5,804
Coal Mining	\$2,085,780,422	\$387,433,372	\$567,168,878	3,114
Crude Petroleum & Natural Gas	\$793,015,424,660	\$191,963,754,150	\$78,782,710,175	180,152
Miscellaneous Mining	\$4,041,271,027	\$1,402,035,164	\$1,059,942,965	11,265
New Construction	\$160,662,930,486	\$59,359,692,669	\$49,017,082,652	560,670
Maintenance & Repair Construction	\$27,941,333,511	\$14,922,847,810	\$11,679,097,497	141,289
Food Products & Tobacco	\$74,885,300,632	\$15,993,933,439	\$8,340,423,288	115,038
Textile Mill Products	\$1,534,351,348	\$329,434,554	\$315,713,845	3,896
Apparel	\$3,373,034,380	\$1,625,884,786	\$900,474,096	21,445
Paper & Allied Products	\$10,691,074,946	\$3,669,146,613	\$2,135,281,819	24,660
Printing & Publishing	\$30,153,550,617	\$16,255,825,676	\$9,778,611,073	100,032
Chemicals & Petroleum Refining	\$401,520,181,786	\$67,226,947,413	\$29,678,512,870	110,471
Rubber & Leather Products	\$22,645,320,289	\$8,376,912,792	\$5,628,475,770	57,888
Lumber Products & Furniture	\$20,030,511,324	\$6,710,188,225	\$5,167,237,087	63,302
Stone, Clay, & Glass Products	\$19,179,768,861	\$8,496,105,920	\$5,146,151,546	50,290
Primary Metal	\$16,490,444,824	\$4,303,957,576	\$3,726,064,872	29,175
Fabricated Metal Products	\$43,999,934,888	\$17,809,989,184	\$12,175,386,062	130,969
Machinery, Except Electrical	\$59,574,676,905	\$19,060,166,036	\$17,200,532,382	107,071
Electric & Electronic Equipment	\$51,265,822,764	\$25,004,299,220	\$17,912,482,712	140,430
Motor Vehicles & Equipment	\$40,371,550,940	\$11,790,134,333	\$7,181,418,282	38,331
Transp Equip, Except Motor Vehicles	\$16,059,906,809	\$7,547,942,084	\$5,031,901,942	68,544
Instruments & Related Products	\$8,576,887,064	\$2,464,344,784	\$2,871,935,254	19,728
Miscellaneous Manufacturing	\$8,630,463,869	\$2,201,487,224	\$2,052,083,290	17,642
Transportation	\$110,125,760,846	\$56,738,960,328	\$40,693,838,805	428,892
Communication	\$89,678,496,530	\$57,020,328,661	\$26,807,552,561	214,526
Electric, Gas, Water, Sanitary Services	\$293,768,895,164	\$52,626,229,681	\$25,315,892,534	54,382
Wholesale Trade	\$149,353,599,132	\$102,107,853,884	\$62,073,865,939	598,183
Retail Trade	\$138,922,798,668	\$109,284,541,648	\$68,329,313,141	1,374,396
Finance	\$127,155,372,566	\$72,163,124,602	\$53,300,372,649	349,600
Insurance	\$40,081,628,097	\$30,053,192,772	\$18,717,970,366	193,867
Real Estate	\$531,602,652,767	\$156,419,072,013	\$26,472,114,516	215,115
Hotels, Lodging Places, Amusements	\$46,079,960,941	\$19,938,315,793	\$14,193,855,409	262,884
Personal Services	\$26,997,903,398	\$15,826,973,093	\$13,181,290,413	252,307
Business Services	\$268,277,784,934	\$170,052,781,129	\$153,244,534,670	1,473,157
Eating & Drinking Places	\$53,805,392,294	\$29,599,498,227	\$17,005,608,151	950,326
Health Services	\$125,143,021,322	\$89,043,223,841	\$76,050,205,723	1,180,370
Miscellaneous Services	\$55,026,725,589	\$25,387,075,491	\$22,389,723,354	668,539
Households	\$4,005,281,123	\$4,005,281,123	\$3,675,447,297	142,835
Government	\$237,571,943,454	\$150,241,914,645	\$132,840,268,593	2,127,655
Total	\$4,158,157,676,494	\$1,641,806,860,515	\$1,038,363,193,933	12,578,687

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group



Detailed Sectoral Results: 2015 (continued)

Table 4
Projected 2006-2015 Incremental Growth of Indicators for the Texas Economy
Under Baseline Forecast Assumptions
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$8,089,375,802	\$2,895,869,406	\$1,580,951,947	4,244
Forestry & Fishery Products	\$721,178,170	\$72,435,331	\$19,262,671	85
Coal Mining	\$539,661,810	\$99,824,153	\$146,616,190	206
Crude Petroleum & Natural Gas	\$233,913,412,708	\$56,623,580,617	\$23,238,264,098	14,131
Miscellaneous Mining	\$1,052,961,012	\$365,259,770	\$276,177,358	752
New Construction	\$28,881,864,392	\$10,670,903,293	\$8,811,645,161	46,541
Maintenance & Repair Construction	\$4,994,038,278	\$2,667,725,823	\$2,087,229,859	11,635
Food Products & Tobacco	\$17,708,307,015	\$3,779,582,238	\$1,971,112,969	9,970
Textile Mill Products	\$437,336,736	\$93,889,099	\$90,002,219	227
Apparel	\$749,991,619	\$360,778,720	\$200,082,735	-1,516
Paper & Allied Products	\$3,376,982,458	\$1,157,742,777	\$674,465,862	2,327
Printing & Publishing	\$8,811,340,472	\$4,750,864,788	\$2,857,428,322	10,412
Chemicals & Petroleum Refining	\$140,167,144,996	\$23,469,493,434	\$10,360,711,557	10,929
Rubber & Leather Products	\$7,601,115,624	\$2,811,179,492	\$1,889,219,564	5,437
Lumber Products & Furniture	\$5,249,346,746	\$1,758,470,854	\$1,354,191,041	4,613
Stone, Clay, & Glass Products	\$5,320,790,173	\$2,356,448,267	\$1,427,526,874	5,421
Primary Metal	\$4,615,929,869	\$1,204,692,063	\$1,043,058,555	2,596
Fabricated Metal Products	\$14,604,721,135	\$5,912,090,799	\$4,041,811,505	15,223
Machinery, Except Electrical	\$22,280,801,997	\$7,127,861,182	\$6,432,984,456	12,852
Electric & Electronic Equipment	\$19,172,285,248	\$9,350,776,465	\$6,699,138,039	16,860
Motor Vehicles & Equipment	\$14,041,367,952	\$4,101,033,078	\$2,497,905,399	5,410
Transp Equip, Except Motor Vehicles	\$3,902,644,376	\$1,834,267,621	\$1,222,840,278	8,628
Instruments & Related Products	\$2,343,722,664	\$673,221,836	\$784,822,322	1,166
Miscellaneous Manufacturing	\$2,356,377,751	\$600,584,113	\$560,161,584	1,040
Transportation	\$35,797,235,871	\$18,433,138,656	\$13,222,799,205	56,586
Communication	\$33,760,620,749	\$21,467,306,244	\$10,094,521,745	32,020
Electric, Gas, Water, Sanitary Services	\$87,284,934,647	\$15,630,265,296	\$7,520,297,486	4,595
Wholesale Trade	\$40,456,085,244	\$27,658,792,265	\$16,815,602,571	78,457
Retail Trade	\$44,752,012,744	\$35,188,793,666	\$22,009,956,735	162,115
Finance	\$40,939,511,401	\$23,234,979,443	\$17,163,830,571	53,072
Insurance	\$10,888,539,691	\$8,168,968,793	\$5,088,332,548	23,444
Real Estate	\$171,576,693,473	\$50,551,372,049	\$8,555,552,678	25,324
Hotels, Lodging Places, Amusements	\$13,250,382,925	\$5,730,801,826	\$4,080,478,229	43,003
Personal Services	\$5,623,487,823	\$3,294,789,689	\$2,745,837,466	30,935
Business Services	\$87,723,970,988	\$55,608,929,126	\$50,116,693,799	252,686
Eating & Drinking Places	\$15,021,339,661	\$8,258,533,841	\$4,748,241,061	168,986
Health Services	\$36,452,219,585	\$25,937,245,416	\$22,153,105,917	228,181
Miscellaneous Services	\$12,710,363,848	\$5,856,971,934	\$5,166,356,409	124,209
Households	\$781,102,235	\$781,102,235	\$716,682,540	13,211
Government	\$49,902,918,358	\$31,558,903,343	\$27,903,619,349	228,637
Total	\$1,237,854,118,245	\$482,099,469,042	\$298,369,518,876	1,714,654

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group

Table 5
Projected 2006-2015 Incremental Growth of Indicators for the Texas Economy
with "Closing the Gaps"
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$9,111,137,713	\$3,251,581,441	\$1,779,563,536	6,520
Forestry & Fishery Products	\$840,584,388	\$87,182,022	\$23,504,388	221
Coal Mining	\$603,566,697	\$113,260,311	\$164,478,664	306
Crude Petroleum & Natural Gas	\$252,482,735,610	\$61,116,634,526	\$25,083,175,649	17,908
Miscellaneous Mining	\$1,149,250,069	\$398,827,164	\$301,405,186	992
New Construction	\$32,626,747,665	\$12,054,515,054	\$9,954,181,603	58,138
Maintenance & Repair Construction	\$5,802,264,188	\$3,096,553,406	\$2,426,199,547	15,656
Food Products & Tobacco	\$19,692,190,331	\$4,213,761,615	\$2,196,874,080	12,961
Textile Mill Products	\$476,284,688	\$102,284,817	\$97,967,794	324
Apparel	\$873,575,035	\$423,535,693	\$233,668,429	-672
Paper & Allied Products	\$3,664,271,535	\$1,260,122,877	\$731,857,584	2,973
Printing & Publishing	\$9,570,341,883	\$5,157,850,071	\$3,103,685,302	12,844
Chemicals & Petroleum Refining	\$149,728,186,822	\$25,067,063,421	\$11,066,845,833	13,338
Rubber & Leather Products	\$8,158,228,024	\$3,019,039,200	\$2,027,780,887	6,806
Lumber Products & Furniture	\$5,728,455,432	\$1,919,163,807	\$1,477,689,246	5,996
Stone, Clay, & Glass Products	\$5,783,879,203	\$2,563,392,933	\$1,552,137,900	6,550
Primary Metal	\$5,012,880,827	\$1,308,476,570	\$1,132,487,487	3,245
Fabricated Metal Products	\$15,662,116,175	\$6,338,646,750	\$4,332,982,182	18,080
Machinery, Except Electrical	\$23,688,990,800	\$7,579,960,386	\$6,839,502,247	15,136
Electric & Electronic Equipment	\$20,386,745,323	\$9,943,843,626	\$7,122,782,913	19,824
Motor Vehicles & Equipment	\$14,997,997,797	\$4,379,333,541	\$2,667,560,685	6,240
Transp Equip, Except Motor Vehicles	\$4,283,887,335	\$2,013,138,206	\$1,342,047,183	10,073
Instruments & Related Products	\$2,549,089,390	\$732,892,049	\$853,458,308	1,599
Miscellaneous Manufacturing	\$2,570,118,697	\$656,850,745	\$611,409,123	1,469
Transportation	\$38,547,994,127	\$19,881,284,966	\$14,254,410,905	66,797
Communication	\$36,032,961,509	\$22,908,837,126	\$10,767,384,822	36,952
Electric, Gas, Water, Sanitary Services	\$94,572,254,462	\$16,955,740,233	\$8,153,503,603	5,933
Wholesale Trade	\$44,131,941,506	\$30,170,493,842	\$18,338,403,996	91,821
Retail Trade	\$49,112,505,481	\$38,666,134,067	\$24,158,770,941	207,553
Finance	\$43,985,799,326	\$24,960,721,388	\$18,431,650,115	60,566
Insurance	\$11,935,403,132	\$8,936,896,199	\$5,564,934,546	28,020
Real Estate	\$185,054,130,857	\$54,316,024,626	\$9,191,713,114	29,970
Hotels, Lodging Places, Amusements	\$14,415,255,509	\$6,243,303,902	\$4,442,654,868	49,332
Personal Services	\$6,500,235,014	\$3,817,432,293	\$3,172,685,863	38,506
Business Services	\$94,226,588,455	\$59,720,331,055	\$53,809,107,602	284,867
Eating & Drinking Places	\$16,765,838,630	\$9,235,641,589	\$5,297,416,101	196,702
Health Services	\$39,685,518,461	\$28,236,714,674	\$24,115,121,005	256,245
Miscellaneous Services	\$14,469,604,396	\$6,698,238,303	\$5,904,550,662	144,066
Households	\$882,313,607	\$882,313,607	\$810,039,684	16,785
Government	\$55,440,469,519	\$35,060,883,740	\$30,999,985,751	272,646
Total	\$1,341,202,339,621	\$523,488,901,840	\$324,535,579,333	2,023,289

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group



Detailed Sectoral Results: 2015 (continued)

Table 6
Projected 2006-2015 Net Gain in Indicators for the Texas Economy
with "Closing the Gaps" Compared to Baseline Assumptions
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$1,021,761,911	\$355,712,035	\$198,611,588	2,276
Forestry & Fishery Products	\$119,406,218	\$14,746,691	\$4,241,717	136
Coal Mining	\$63,904,888	\$13,436,157	\$17,862,474	100
Crude Petroleum & Natural Gas	\$18,569,322,902	\$4,493,053,909	\$1,844,911,551	3,776
Miscellaneous Mining	\$96,289,056	\$33,567,394	\$25,227,828	239
New Construction	\$3,744,883,273	\$1,383,611,761	\$1,142,536,442	11,597
Maintenance & Repair Construction	\$808,225,911	\$428,827,583	\$338,969,688	4,021
Food Products & Tobacco	\$1,983,883,316	\$434,179,377	\$225,761,110	2,991
Textile Mill Products	\$38,947,952	\$8,395,718	\$7,965,575	96
Apparel	\$123,583,416	\$62,756,973	\$33,585,694	844
Paper & Allied Products	\$287,289,077	\$102,380,100	\$57,391,722	646
Printing & Publishing	\$759,001,412	\$406,985,283	\$246,256,980	2,432
Chemicals & Petroleum Refining	\$9,561,041,826	\$1,597,569,987	\$706,134,275	2,409
Rubber & Leather Products	\$557,112,400	\$207,859,708	\$138,561,323	1,369
Lumber Products & Furniture	\$479,108,686	\$160,692,953	\$123,498,206	1,383
Stone, Clay, & Glass Products	\$463,089,030	\$206,944,666	\$124,611,026	1,128
Primary Metal	\$396,950,958	\$103,784,507	\$89,428,932	649
Fabricated Metal Products	\$1,057,395,040	\$426,555,950	\$291,170,677	2,857
Machinery, Except Electrical	\$1,408,188,803	\$452,099,205	\$406,517,791	2,284
Electric & Electronic Equipment	\$1,214,460,075	\$593,067,161	\$423,644,873	2,964
Motor Vehicles & Equipment	\$956,629,845	\$278,300,463	\$169,655,285	831
Transp Equip, Except Motor Vehicles	\$381,242,959	\$178,870,586	\$119,206,905	1,445
Instruments & Related Products	\$205,366,726	\$59,670,214	\$68,635,986	433
Miscellaneous Manufacturing	\$213,740,946	\$56,266,631	\$51,247,539	428
Transportation	\$2,750,758,256	\$1,448,146,311	\$1,031,611,700	10,211
Communication	\$2,272,340,760	\$1,441,530,882	\$672,863,077	4,933
Electric, Gas, Water, Sanitary Services	\$7,287,319,816	\$1,325,474,937	\$633,206,117	1,338
Wholesale Trade	\$3,675,856,262	\$2,511,701,577	\$1,522,801,425	13,364
Retail Trade	\$4,360,492,738	\$3,477,340,400	\$2,148,814,206	45,437
Finance	\$3,046,287,925	\$1,725,741,944	\$1,267,819,545	7,495
Insurance	\$1,046,863,441	\$767,927,406	\$476,601,998	4,576
Real Estate	\$13,477,437,384	\$3,764,652,577	\$636,160,436	4,646
Hotels, Lodging Places, Amusements	\$1,164,872,584	\$512,502,076	\$362,176,639	6,329
Personal Services	\$876,747,191	\$522,642,604	\$426,848,397	7,571
Business Services	\$6,502,617,467	\$4,111,401,928	\$3,692,413,803	32,181
Eating & Drinking Places	\$1,744,498,969	\$977,107,748	\$549,175,040	27,716
Health Services	\$3,233,298,875	\$2,299,469,258	\$1,962,015,088	28,064
Miscellaneous Services	\$1,759,240,548	\$841,266,369	\$738,194,252	19,857
Households	\$101,211,372	\$101,211,372	\$93,357,144	3,574
Government	\$5,537,551,161	\$3,501,980,397	\$3,096,366,401	44,009
Total	\$103,348,221,376	\$41,389,432,798	\$26,166,060,457	308,635

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group



Results for 2020



Detailed Sectoral Results: 2020

Table 7
Projected 2020 Values of Indicators for the Texas Economy
Under Baseline Assumptions
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$42,683,375,750	\$15,279,977,712	\$8,341,850,800	90,730
Forestry & Fishery Products	\$5,265,507,567	\$528,869,005	\$140,641,722	5,699
Coal Mining	\$2,328,783,799	\$430,767,690	\$632,687,736	3,077
Crude Petroleum & Natural Gas	\$920,502,274,317	\$222,826,618,337	\$91,447,834,076	181,621
Miscellaneous Mining	\$4,543,805,958	\$1,576,192,756	\$1,191,778,528	11,259
New Construction	\$176,811,537,271	\$65,326,074,167	\$53,943,904,235	584,177
Maintenance & Repair Construction	\$30,572,942,699	\$16,331,518,542	\$12,777,787,300	146,044
Food Products & Tobacco	\$83,589,708,777	\$17,841,015,424	\$9,304,376,694	116,987
Textile Mill Products	\$1,788,357,253	\$383,931,274	\$368,037,047	3,922
Apparel	\$3,675,701,334	\$1,768,172,854	\$980,603,460	19,621
Paper & Allied Products	\$12,695,324,827	\$4,352,382,877	\$2,535,566,386	25,196
Printing & Publishing	\$35,080,105,275	\$18,914,356,725	\$11,376,122,246	102,969
Chemicals & Petroleum Refining	\$491,557,638,514	\$82,306,083,710	\$36,334,384,256	113,741
Rubber & Leather Products	\$27,305,955,865	\$10,098,773,250	\$6,786,759,811	59,247
Lumber Products & Furniture	\$22,893,873,641	\$7,669,184,659	\$5,906,006,989	64,235
Stone, Clay, & Glass Products	\$22,300,993,076	\$9,876,566,218	\$5,983,184,056	52,088
Primary Metal	\$18,957,174,020	\$4,947,552,872	\$4,283,739,810	29,778
Fabricated Metal Products	\$53,153,860,192	\$21,517,045,405	\$14,710,166,779	136,466
Machinery, Except Electrical	\$74,595,855,152	\$23,863,992,882	\$21,537,554,023	111,862
Electric & Electronic Equipment	\$64,188,578,736	\$31,306,286,321	\$22,428,632,994	146,747
Motor Vehicles & Equipment	\$48,936,480,468	\$14,292,775,875	\$8,705,611,819	40,284
Transp Equip, Except Motor Vehicles	\$18,114,348,065	\$8,513,858,534	\$5,675,883,397	71,915
Instruments & Related Products	\$9,864,070,936	\$2,833,401,769	\$3,303,096,894	19,834
Miscellaneous Manufacturing	\$9,917,332,648	\$2,527,689,982	\$2,357,562,902	17,694
Transportation	\$133,781,525,613	\$68,888,375,071	\$49,416,280,544	452,395
Communication	\$112,473,467,489	\$71,518,304,975	\$33,629,887,073	228,934
Electric, Gas, Water, Sanitary Services	\$344,776,170,828	\$61,739,669,505	\$29,705,233,567	55,457
Wholesale Trade	\$171,065,788,340	\$116,953,310,604	\$71,103,624,904	627,107
Retail Trade	\$165,185,036,803	\$129,886,050,268	\$81,241,385,370	1,414,820
Finance	\$152,167,648,090	\$86,361,855,682	\$63,796,064,993	373,137
Insurance	\$45,811,408,139	\$34,369,343,737	\$21,408,167,276	201,832
Real Estate	\$634,914,997,487	\$187,064,009,732	\$31,659,595,466	224,224
Hotels, Lodging Places, Amusements	\$53,080,869,758	\$22,957,521,082	\$16,346,345,207	279,754
Personal Services	\$29,121,013,045	\$17,061,940,303	\$14,219,212,557	261,383
Business Services	\$322,793,254,745	\$204,614,895,269	\$184,406,033,599	1,585,745
Eating & Drinking Places	\$61,407,225,955	\$33,760,880,525	\$19,410,806,114	1,018,824
Health Services	\$146,020,313,532	\$103,899,426,452	\$88,740,919,169	1,289,250
Miscellaneous Services	\$60,799,382,141	\$28,016,528,801	\$24,713,004,392	722,045
Households	\$4,329,817,504	\$4,329,817,504	\$3,972,725,293	145,402
Government	\$261,207,569,503	\$165,189,225,594	\$146,056,319,559	2,208,209
Total	\$4,880,249,075,110	\$1,921,924,243,943	\$1,210,879,379,043	13,243,710

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group

Table 8
Projected 2020 Values of Indicators for the Texas Economy
With "Closing the Gaps"
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$44,572,689,722	\$15,936,695,298	\$8,708,906,754	94,552
Forestry & Fishery Products	\$5,475,816,495	\$555,393,850	\$148,323,081	5,920
Coal Mining	\$2,449,875,796	\$456,334,414	\$666,573,296	3,251
Crude Petroleum & Natural Gas	\$956,428,752,405	\$231,519,421,472	\$95,017,218,452	187,772
Miscellaneous Mining	\$4,724,422,050	\$1,639,171,736	\$1,239,103,380	11,646
New Construction	\$183,680,072,976	\$67,863,773,232	\$56,039,444,142	603,643
Maintenance & Repair Construction	\$32,068,718,282	\$17,124,580,134	\$13,404,888,151	153,057
Food Products & Tobacco	\$87,309,531,134	\$18,655,730,166	\$9,727,965,733	122,093
Textile Mill Products	\$1,864,108,128	\$400,265,742	\$383,535,556	4,083
Apparel	\$3,906,616,887	\$1,885,587,100	\$1,043,387,157	21,057
Paper & Allied Products	\$13,263,683,565	\$4,554,730,764	\$2,649,106,867	26,304
Printing & Publishing	\$36,551,997,916	\$19,703,920,331	\$11,853,818,400	107,106
Chemicals & Petroleum Refining	\$511,050,671,524	\$85,563,601,187	\$37,774,121,638	117,775
Rubber & Leather Products	\$28,424,369,263	\$10,515,894,182	\$7,064,910,857	61,558
Lumber Products & Furniture	\$23,807,215,091	\$7,975,521,510	\$6,141,434,812	66,520
Stone, Clay, & Glass Products	\$23,198,680,994	\$10,277,657,053	\$6,224,721,112	53,995
Primary Metal	\$19,718,424,401	\$5,146,597,297	\$4,455,246,513	30,861
Fabricated Metal Products	\$55,281,500,795	\$22,375,462,912	\$15,296,167,309	141,306
Machinery, Except Electrical	\$77,532,345,087	\$24,806,517,176	\$22,385,280,618	115,727
Electric & Electronic Equipment	\$66,720,304,418	\$32,542,515,297	\$23,311,917,506	151,752
Motor Vehicles & Equipment	\$50,868,142,036	\$14,854,862,358	\$9,048,252,396	41,701
Transp Equip, Except Motor Vehicles	\$18,831,502,059	\$8,850,335,411	\$5,900,124,632	74,364
Instruments & Related Products	\$10,257,958,582	\$2,947,851,388	\$3,434,741,468	20,543
Miscellaneous Manufacturing	\$10,327,232,131	\$2,635,594,025	\$2,455,844,619	18,408
Transportation	\$139,339,274,554	\$71,811,481,145	\$51,499,310,014	470,097
Communication	\$117,206,267,327	\$74,521,168,333	\$35,032,191,645	237,549
Electric, Gas, Water, Sanitary Services	\$359,050,553,394	\$64,335,902,426	\$30,945,520,397	57,730
Wholesale Trade	\$178,094,793,073	\$121,756,188,532	\$74,015,469,563	649,953
Retail Trade	\$173,870,116,679	\$136,811,216,608	\$85,521,238,902	1,496,247
Finance	\$158,241,093,226	\$89,802,621,573	\$66,324,346,525	386,088
Insurance	\$47,813,075,488	\$35,837,409,569	\$22,319,274,841	209,670
Real Estate	\$661,746,544,337	\$194,559,354,015	\$32,926,286,496	232,073
Hotels, Lodging Places, Amusements	\$55,325,144,000	\$23,945,259,435	\$17,044,269,881	290,862
Personal Services	\$30,752,962,142	\$18,035,931,684	\$15,013,693,877	274,841
Business Services	\$335,815,383,613	\$212,854,893,221	\$191,807,293,657	1,641,951
Eating & Drinking Places	\$64,781,243,379	\$35,651,320,490	\$20,472,879,409	1,068,978
Health Services	\$152,328,163,409	\$108,385,631,889	\$92,568,737,143	1,339,524
Miscellaneous Services	\$63,942,867,787	\$29,493,071,617	\$26,009,554,145	755,460
Households	\$4,513,338,049	\$4,513,338,049	\$4,142,049,814	151,452
Government	\$271,354,608,238	\$171,606,273,438	\$151,730,118,120	2,281,791
Total	\$5,082,490,060,432	\$2,002,709,076,060	\$1,261,747,268,878	13,779,260

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group



Detailed Sectoral Results: 2020 (continued)

Table 9
Projected 2006-2020 Incremental Growth of Indicators for the Texas Economy
Under Baseline Forecast Assumptions
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$12,962,515,817	\$4,640,376,945	\$2,533,336,950	6,804
Forestry & Fishery Products	\$1,107,152,288	\$111,202,676	\$29,572,041	116
Coal Mining	\$846,570,074	\$156,594,629	\$229,997,522	269
Crude Petroleum & Natural Gas	\$379,969,585,267	\$91,979,498,713	\$37,748,299,550	19,377
Miscellaneous Mining	\$1,651,784,999	\$572,984,756	\$433,240,748	985
New Construction	\$48,775,354,451	\$18,020,896,552	\$14,881,003,186	81,645
Maintenance & Repair Construction	\$8,433,873,376	\$4,505,224,138	\$3,524,889,350	20,411
Food Products & Tobacco	\$28,396,598,476	\$6,060,843,599	\$3,160,827,486	14,909
Textile Mill Products	\$730,290,593	\$156,781,537	\$150,290,996	350
Apparel	\$1,176,241,988	\$665,823,761	\$313,797,792	-2,497
Paper & Allied Products	\$5,668,521,415	\$1,943,359,141	\$1,132,142,151	3,508
Printing & Publishing	\$14,496,896,540	\$7,816,381,121	\$4,701,196,474	15,781
Chemicals & Petroleum Refining	\$239,765,643,550	\$40,146,199,718	\$17,722,717,219	16,607
Rubber & Leather Products	\$12,818,863,599	\$4,740,899,658	\$3,186,064,928	8,166
Lumber Products & Furniture	\$8,591,817,749	\$2,878,160,241	\$2,216,459,149	6,929
Stone, Clay, & Glass Products	\$8,905,103,418	\$3,943,853,231	\$2,389,170,411	8,347
Primary Metal	\$7,479,610,023	\$1,952,071,865	\$1,690,162,425	3,849
Fabricated Metal Products	\$24,816,041,478	\$10,045,702,972	\$6,867,762,899	23,578
Machinery, Except Electrical	\$38,710,169,047	\$12,383,787,232	\$11,176,523,889	19,927
Electric & Electronic Equipment	\$33,309,501,294	\$16,245,830,727	\$11,638,933,194	26,141
Motor Vehicles & Equipment	\$23,562,927,325	\$6,881,975,082	\$4,191,754,222	8,194
Transp Equip, Except Motor Vehicles	\$6,338,328,591	\$2,979,054,657	\$1,986,028,638	13,443
Instruments & Related Products	\$3,836,273,261	\$1,101,949,035	\$1,284,619,948	1,705
Miscellaneous Manufacturing	\$3,856,987,476	\$983,053,503	\$916,888,735	1,521
Transportation	\$62,203,758,894	\$32,030,699,709	\$22,976,852,643	90,300
Communication	\$58,827,932,468	\$37,406,813,440	\$17,589,719,334	51,360
Electric, Gas, Water, Sanitary Services	\$145,579,530,126	\$26,069,180,057	\$12,542,844,636	7,008
Wholesale Trade	\$65,844,130,714	\$45,015,950,563	\$27,368,162,962	120,745
Retail Trade	\$75,374,743,617	\$59,267,642,686	\$37,070,843,170	247,977
Finance	\$68,998,074,849	\$39,159,452,468	\$28,927,342,459	84,103
Insurance	\$17,665,183,175	\$13,253,047,164	\$8,255,131,456	35,985
Real Estate	\$288,366,475,577	\$84,960,962,345	\$14,379,194,064	39,079
Hotels, Lodging Places, Amusements	\$21,416,164,326	\$9,262,509,191	\$6,595,144,667	66,202
Personal Services	\$8,623,344,662	\$5,052,399,503	\$4,210,608,007	47,582
Business Services	\$148,732,058,265	\$94,282,445,194	\$84,970,606,531	397,455
Eating & Drinking Places	\$24,367,672,291	\$13,397,023,886	\$7,702,614,065	265,199
Health Services	\$60,562,810,670	\$43,092,917,285	\$36,805,834,451	365,126
Miscellaneous Services	\$20,242,260,949	\$9,327,691,613	\$8,227,831,700	197,572
Households	\$1,206,849,988	\$1,206,849,988	\$1,107,317,680	19,352
Government	\$79,076,095,568	\$50,008,194,688	\$44,216,036,716	353,200
Total	\$2,063,293,738,237	\$803,606,285,267	\$497,051,764,442	2,688,312

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group

Table 10
Projected 2006-2020 Incremental Growth of Indicators for the Texas Economy
with "Closing the Gaps"
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$14,851,829,789	\$5,297,094,531	\$2,900,392,904	10,627
Forestry & Fishery Products	\$1,317,461,217	\$137,727,520	\$37,253,400	337
Coal Mining	\$967,662,071	\$182,161,353	\$263,883,083	443
Crude Petroleum & Natural Gas	\$415,896,063,355	\$100,672,301,848	\$41,317,683,927	25,528
Miscellaneous Mining	\$1,832,401,091	\$635,963,736	\$480,565,601	1,372
New Construction	\$55,643,890,156	\$20,558,595,617	\$16,976,543,093	101,111
Maintenance & Repair Construction	\$9,929,648,960	\$5,298,285,730	\$4,151,990,201	27,424
Food Products & Tobacco	\$32,116,420,833	\$6,875,558,342	\$3,584,416,525	20,016
Textile Mill Products	\$806,041,468	\$173,116,004	\$165,789,505	511
Apparel	\$1,407,157,541	\$683,238,007	\$376,581,489	-1,060
Paper & Allied Products	\$6,236,880,153	\$2,145,707,028	\$1,245,682,632	4,616
Printing & Publishing	\$15,968,789,182	\$8,605,944,726	\$5,178,892,628	19,918
Chemicals & Petroleum Refining	\$259,258,676,560	\$43,403,717,195	\$19,162,454,601	20,641
Rubber & Leather Products	\$13,937,276,998	\$5,158,020,590	\$3,464,215,973	10,477
Lumber Products & Furniture	\$9,505,159,199	\$3,184,497,091	\$2,451,886,971	9,215
Stone, Clay, & Glass Products	\$9,802,791,336	\$4,344,944,066	\$2,630,707,466	10,254
Primary Metal	\$8,240,860,403	\$2,151,116,290	\$1,861,669,128	4,932
Fabricated Metal Products	\$26,943,682,082	\$10,904,120,478	\$7,453,763,428	28,417
Machinery, Except Electrical	\$41,646,658,982	\$13,326,311,526	\$12,024,250,483	23,792
Electric & Electronic Equipment	\$35,841,226,976	\$17,482,059,703	\$12,522,217,706	31,146
Motor Vehicles & Equipment	\$25,494,588,893	\$7,444,061,565	\$4,534,394,799	9,611
Transp Equip, Except Motor Vehicles	\$7,055,482,584	\$3,315,531,534	\$2,210,269,873	15,892
Instruments & Related Products	\$4,230,160,908	\$1,216,398,653	\$1,416,264,522	2,414
Miscellaneous Manufacturing	\$4,266,886,959	\$1,090,957,546	\$1,015,170,452	2,235
Transportation	\$67,761,507,835	\$34,953,805,783	\$25,059,882,114	108,001
Communication	\$63,560,732,307	\$40,409,676,798	\$18,992,023,906	59,975
Electric, Gas, Water, Sanitary Services	\$159,853,912,692	\$28,665,412,979	\$13,783,131,466	9,281
Wholesale Trade	\$72,873,135,447	\$49,818,828,490	\$30,280,007,621	143,591
Retail Trade	\$84,059,823,493	\$66,192,809,027	\$41,350,696,703	329,404
Finance	\$75,071,519,986	\$42,600,218,359	\$31,455,623,991	97,054
Insurance	\$19,666,850,524	\$14,721,112,996	\$9,166,239,021	43,823
Real Estate	\$315,198,022,427	\$92,456,306,628	\$15,645,885,094	46,929
Hotels, Lodging Places, Amusements	\$23,660,438,568	\$10,250,247,544	\$7,293,069,340	77,310
Personal Services	\$10,255,293,758	\$6,026,390,884	\$5,005,089,327	61,040
Business Services	\$161,764,187,133	\$102,522,443,146	\$92,371,866,588	453,661
Eating & Drinking Places	\$27,741,689,715	\$15,287,463,851	\$8,764,687,359	315,353
Health Services	\$66,870,660,548	\$47,579,122,722	\$40,633,652,425	415,399
Miscellaneous Services	\$23,385,746,594	\$10,804,234,429	\$9,524,381,453	230,986
Households	\$1,390,370,533	\$1,390,370,533	\$1,276,642,202	25,402
Government	\$89,223,134,303	\$56,425,242,533	\$49,889,835,278	426,782
Total	\$2,265,534,723,559	\$884,391,117,384	\$547,919,654,278	3,223,862

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group



Detailed Sectoral Results: 2020 (continued)

Table 11
Projected 2006-2020 Net Gain in Indicators for the Texas Economy
with "Closing the Gaps" Compared to Baseline Assumptions
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$1,889,313,972	\$656,717,586	\$367,055,953	3,823
Forestry & Fishery Products	\$210,308,929	\$26,524,845	\$7,681,359	221
Coal Mining	\$121,091,997	\$25,566,724	\$33,885,560	174
Crude Petroleum & Natural Gas	\$35,926,478,088	\$8,692,803,135	\$3,569,384,377	6,151
Miscellaneous Mining	\$180,616,092	\$62,978,980	\$47,324,853	387
New Construction	\$6,868,535,705	\$2,537,699,065	\$2,095,539,907	19,466
Maintenance & Repair Construction	\$1,495,775,584	\$793,061,592	\$627,100,852	7,013
Food Products & Tobacco	\$3,719,822,357	\$814,714,743	\$423,589,039	5,106
Textile Mill Products	\$75,750,875	\$16,334,468	\$15,498,509	161
Apparel	\$230,915,553	\$117,414,246	\$62,783,697	1,436
Paper & Allied Products	\$568,358,738	\$202,347,887	\$113,540,481	1,108
Printing & Publishing	\$1,471,892,642	\$789,563,606	\$477,696,154	4,137
Chemicals & Petroleum Refining	\$19,493,033,010	\$3,257,517,476	\$1,439,737,382	4,034
Rubber & Leather Products	\$1,118,413,399	\$417,120,933	\$278,151,046	2,311
Lumber Products & Furniture	\$913,341,450	\$306,336,850	\$235,427,823	2,286
Stone, Clay, & Glass Products	\$897,687,918	\$401,090,835	\$241,537,055	1,908
Primary Metal	\$761,250,381	\$199,044,425	\$171,506,702	1,083
Fabricated Metal Products	\$2,127,640,603	\$858,417,506	\$586,000,530	4,839
Machinery, Except Electrical	\$2,936,489,936	\$942,524,294	\$847,726,595	3,865
Electric & Electronic Equipment	\$2,531,725,682	\$1,236,228,976	\$883,284,512	5,005
Motor Vehicles & Equipment	\$1,931,661,568	\$562,086,483	\$342,640,577	1,417
Transp Equip, Except Motor Vehicles	\$717,153,993	\$336,476,877	\$224,241,235	2,449
Instruments & Related Products	\$393,887,647	\$114,449,619	\$131,644,574	709
Miscellaneous Manufacturing	\$409,899,483	\$107,904,043	\$98,281,717	714
Transportation	\$5,557,748,940	\$2,923,106,074	\$2,083,029,471	17,701
Communication	\$4,732,799,838	\$3,002,863,358	\$1,402,304,572	8,616
Electric, Gas, Water, Sanitary Services	\$14,274,382,566	\$2,596,232,922	\$1,240,286,830	2,273
Wholesale Trade	\$7,029,004,733	\$4,802,877,928	\$2,911,844,659	22,846
Retail Trade	\$8,685,079,876	\$6,925,166,341	\$4,279,853,533	81,427
Finance	\$6,073,445,137	\$3,440,765,892	\$2,528,281,532	12,950
Insurance	\$2,001,667,349	\$1,468,065,832	\$911,107,565	7,839
Real Estate	\$26,831,546,850	\$7,495,344,283	\$1,266,691,030	7,850
Hotels, Lodging Places, Amusements	\$2,244,274,242	\$987,738,353	\$697,924,674	11,108
Personal Services	\$1,631,949,097	\$973,991,382	\$794,481,320	13,458
Business Services	\$13,032,128,868	\$8,239,997,952	\$7,401,260,058	56,206
Eating & Drinking Places	\$3,374,017,424	\$1,890,439,965	\$1,062,073,294	50,154
Health Services	\$6,307,849,878	\$4,486,205,437	\$3,827,817,975	50,273
Miscellaneous Services	\$3,143,485,645	\$1,476,542,816	\$1,296,549,752	33,414
Households	\$183,520,544	\$183,520,544	\$169,324,522	6,050
Government	\$10,147,038,735	\$6,417,047,844	\$5,673,798,562	73,582
Total	\$202,240,985,322	\$80,784,832,117	\$50,867,889,836	535,550

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group



Results for 2025



Detailed Sectoral Results: 2025

Table 12
Projected 2025 Values of Indicators for the Texas Economy
Under Baseline Assumptions
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$47,745,252,088	\$17,092,049,889	\$9,331,121,598	93,408
Forestry & Fishery Products	\$5,630,685,759	\$685,547,602	\$150,395,633	5,717
Coal Mining	\$2,607,626,597	\$482,346,745	\$708,444,197	3,079
Crude Petroleum & Natural Gas	\$1,065,639,155,017	\$257,960,002,822	\$105,866,541,943	183,581
Miscellaneous Mining	\$5,087,870,018	\$1,764,922,169	\$1,334,479,134	11,267
New Construction	\$196,261,914,482	\$72,512,351,736	\$59,878,071,777	615,425
Maintenance & Repair Construction	\$33,936,158,002	\$18,128,087,934	\$14,183,423,984	153,856
Food Products & Tobacco	\$94,664,901,790	\$20,204,855,330	\$10,537,157,251	121,440
Textile Mill Products	\$2,121,325,274	\$455,414,104	\$436,560,585	4,046
Apparel	\$4,095,418,045	\$1,970,074,921	\$1,092,575,468	18,585
Paper & Allied Products	\$15,282,611,437	\$5,239,391,449	\$3,052,310,703	26,280
Printing & Publishing	\$41,330,550,016	\$22,284,447,568	\$13,403,078,063	108,018
Chemicals & Petroleum Refining	\$608,122,890,908	\$101,823,691,961	\$44,950,518,641	119,019
Rubber & Leather Products	\$33,240,778,110	\$12,293,694,550	\$8,261,830,426	61,779
Lumber Products & Furniture	\$26,479,632,976	\$8,870,372,842	\$6,831,036,979	66,296
Stone, Clay, & Glass Products	\$26,370,305,095	\$11,678,765,317	\$7,074,949,016	54,903
Primary Metal	\$21,995,593,996	\$5,740,537,283	\$4,970,329,520	30,926
Fabricated Metal Products	\$64,969,034,692	\$26,299,908,687	\$17,979,979,861	144,616
Machinery, Except Electrical	\$94,282,437,968	\$30,161,936,262	\$27,221,527,215	118,801
Electric & Electronic Equipment	\$81,128,578,533	\$39,568,324,433	\$28,347,770,726	155,850
Motor Vehicles & Equipment	\$59,914,824,538	\$17,499,197,950	\$10,658,617,041	43,052
Transp Equip, Except Motor Vehicles	\$20,711,078,242	\$9,734,338,195	\$6,489,533,308	76,678
Instruments & Related Products	\$11,470,444,968	\$3,294,824,143	\$3,841,009,599	20,282
Miscellaneous Manufacturing	\$11,532,380,404	\$2,939,326,879	\$2,741,494,430	18,094
Transportation	\$165,590,792,756	\$85,267,981,415	\$61,166,002,053	487,058
Communication	\$142,845,606,173	\$90,830,983,117	\$42,711,243,300	249,082
Electric, Gas, Water, Sanitary Services	\$410,121,363,925	\$73,441,147,063	\$35,335,246,276	57,763
Wholesale Trade	\$198,313,272,206	\$135,581,719,444	\$82,429,062,276	667,793
Retail Trade	\$199,904,275,469	\$157,186,009,549	\$98,317,018,265	1,495,712
Finance	\$184,104,125,793	\$104,487,216,184	\$77,185,386,789	404,992
Insurance	\$53,027,375,924	\$39,783,018,785	\$24,780,267,189	214,125
Real Estate	\$767,687,354,284	\$226,182,520,938	\$38,280,196,841	237,682
Hotels, Lodging Places, Amusements	\$61,769,816,041	\$26,715,497,701	\$19,022,121,170	302,626
Personal Services	\$31,949,237,981	\$18,718,991,345	\$15,600,178,647	276,888
Business Services	\$392,907,201,771	\$249,067,027,980	\$224,467,835,881	1,730,869
Eating & Drinking Places	\$71,185,455,217	\$39,136,821,624	\$22,501,701,516	1,114,285
Health Services	\$172,773,274,414	\$122,935,252,526	\$104,999,494,991	1,430,825
Miscellaneous Services	\$68,418,747,464	\$31,527,554,086	\$27,810,032,719	797,172
Households	\$4,734,652,650	\$4,734,652,650	\$4,344,172,547	150,572
Government	\$290,946,135,550	\$183,996,072,213	\$162,684,878,655	2,331,305
Total	\$5,790,900,136,573	\$2,278,156,877,390	\$1,430,977,595,942	14,203,745

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group

Table 13
Projected 2025 Values of Indicators for the Texas Economy
With "Closing the Gaps"
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$50,708,902,529	\$18,122,921,216	\$9,906,939,712	98,941
Forestry & Fishery Products	\$5,947,344,620	\$605,642,698	\$162,021,170	6,029
Coal Mining	\$2,797,154,201	\$522,265,848	\$761,452,679	3,331
Crude Petroleum & Natural Gas	\$1,124,154,975,450	\$272,118,937,303	\$111,680,205,137	192,208
Miscellaneous Mining	\$5,372,280,308	\$1,864,080,155	\$1,409,004,672	11,805
New Construction	\$206,991,676,436	\$76,476,647,483	\$63,151,643,515	643,839
Maintenance & Repair Construction	\$36,260,944,301	\$19,360,691,146	\$15,157,875,850	164,228
Food Products & Tobacco	\$100,562,726,851	\$21,495,391,596	\$11,208,209,187	128,894
Textile Mill Products	\$2,246,880,965	\$482,481,684	\$462,263,530	4,280
Apparel	\$4,453,523,329	\$2,151,985,328	\$1,189,908,147	20,635
Paper & Allied Products	\$16,232,883,039	\$5,576,617,123	\$3,242,141,931	27,903
Printing & Publishing	\$43,755,883,983	\$23,586,097,705	\$14,190,234,131	114,078
Chemicals & Petroleum Refining	\$641,975,773,290	\$107,482,266,320	\$47,451,101,476	124,886
Rubber & Leather Products	\$35,146,037,390	\$13,003,649,350	\$8,735,637,305	65,146
Lumber Products & Furniture	\$27,963,847,441	\$9,368,143,583	\$7,213,635,367	69,578
Stone, Clay, & Glass Products	\$27,859,733,558	\$12,343,756,732	\$7,475,603,691	57,699
Primary Metal	\$23,236,004,147	\$6,064,834,857	\$5,249,845,604	32,492
Fabricated Metal Products	\$68,616,780,602	\$27,772,165,069	\$18,985,180,720	151,738
Machinery, Except Electrical	\$99,496,007,463	\$31,834,567,297	\$28,726,647,318	124,496
Electric & Electronic Equipment	\$85,622,113,907	\$41,762,139,526	\$29,915,848,840	163,221
Motor Vehicles & Equipment	\$63,237,093,054	\$18,466,351,605	\$11,248,126,817	45,153
Transp Equip, Except Motor Vehicles	\$21,863,853,414	\$10,275,258,634	\$6,850,030,163	80,298
Instruments & Related Products	\$12,113,849,419	\$3,481,632,880	\$4,056,076,410	21,292
Miscellaneous Manufacturing	\$12,200,392,528	\$3,114,813,994	\$2,901,576,030	19,119
Transportation	\$175,193,394,402	\$90,306,216,027	\$64,759,042,722	513,548
Communication	\$151,212,107,445	\$96,140,912,181	\$45,193,218,851	262,094
Electric, Gas, Water, Sanitary Services	\$433,893,858,301	\$77,759,586,302	\$37,399,427,026	61,081
Wholesale Trade	\$209,740,593,671	\$143,390,208,130	\$87,163,935,008	701,598
Retail Trade	\$214,321,049,538	\$168,669,679,736	\$105,420,325,930	1,617,483
Finance	\$194,416,620,522	\$110,330,532,555	\$81,481,403,972	424,477
Insurance	\$56,265,227,654	\$42,160,808,360	\$26,256,277,929	225,709
Real Estate	\$812,976,434,523	\$238,894,067,113	\$40,428,748,259	249,228
Hotels, Lodging Places, Amusements	\$65,426,487,771	\$28,323,253,433	\$20,158,642,532	319,338
Personal Services	\$34,466,149,200	\$20,221,144,670	\$16,825,544,393	296,977
Business Services	\$415,140,732,030	\$263,128,418,895	\$237,102,427,362	1,815,918
Eating & Drinking Places	\$76,596,183,812	\$42,166,038,208	\$24,205,188,762	1,190,629
Health Services	\$183,194,201,344	\$130,347,049,852	\$111,324,003,265	1,508,109
Miscellaneous Services	\$73,274,317,441	\$33,792,600,729	\$29,799,786,779	847,022
Households	\$5,016,797,677	\$5,016,797,677	\$4,604,476,813	159,357
Government	\$306,852,343,252	\$194,055,252,878	\$171,578,963,001	2,438,937
Total	\$6,126,803,160,807	\$2,412,035,905,878	\$1,515,032,622,005	15,002,792

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group



Detailed Sectoral Results: 2025 (continued)

Table 14
Projected 2006-2025 Incremental Growth of Indicators for the Texas Economy
Under Baseline Forecast Assumptions
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$18,024,392,155	\$6,452,449,122	\$3,522,607,748	9,482
Forestry & Fishery Products	\$1,472,330,481	\$147,881,272	\$39,325,951	134
Coal Mining	\$1,125,412,872	\$208,173,684	\$305,753,983	271
Crude Petroleum & Natural Gas	\$525,106,465,967	\$127,112,883,198	\$52,167,007,417	21,337
Miscellaneous Mining	\$2,195,849,059	\$761,714,169	\$575,941,355	993
New Construction	\$68,225,731,661	\$25,207,174,121	\$20,815,170,729	112,893
Maintenance & Repair Construction	\$11,797,088,679	\$6,301,793,530	\$4,930,526,034	28,223
Food Products & Tobacco	\$39,471,791,489	\$8,424,683,505	\$4,393,608,043	19,363
Textile Mill Products	\$1,063,258,615	\$228,264,366	\$218,814,535	474
Apparel	\$1,595,958,699	\$767,725,828	\$425,769,800	-3,532
Paper & Allied Products	\$8,255,808,026	\$2,830,367,712	\$1,648,886,468	4,593
Printing & Publishing	\$20,747,341,282	\$11,186,471,963	\$6,728,152,292	20,830
Chemicals & Petroleum Refining	\$356,330,895,944	\$59,663,807,969	\$26,338,851,604	21,886
Rubber & Leather Products	\$18,753,685,845	\$6,935,820,957	\$4,661,135,542	10,698
Lumber Products & Furniture	\$12,177,577,084	\$4,079,348,424	\$3,141,489,138	8,991
Stone, Clay, & Glass Products	\$12,974,415,438	\$5,746,052,329	\$3,480,935,370	11,162
Primary Metal	\$10,518,029,998	\$2,745,056,276	\$2,376,752,135	4,997
Fabricated Metal Products	\$36,631,215,979	\$14,828,566,253	\$10,137,575,981	31,727
Machinery, Except Electrical	\$58,396,751,863	\$18,681,730,613	\$16,860,497,081	26,866
Electric & Electronic Equipment	\$50,249,501,092	\$24,507,868,839	\$17,558,070,927	35,244
Motor Vehicles & Equipment	\$34,541,271,396	\$10,088,397,158	\$6,144,759,444	10,961
Transp Equip, Except Motor Vehicles	\$8,935,058,767	\$4,199,534,318	\$2,799,678,549	18,206
Instruments & Related Products	\$5,442,647,293	\$1,563,371,408	\$1,822,532,653	2,153
Miscellaneous Manufacturing	\$5,472,035,232	\$1,394,690,400	\$1,300,820,263	1,921
Transportation	\$94,013,026,037	\$48,410,306,053	\$34,726,574,152	124,962
Communication	\$89,200,071,152	\$56,719,491,582	\$26,671,075,292	71,508
Electric, Gas, Water, Sanitary Services	\$210,924,723,223	\$37,770,657,615	\$18,172,857,345	9,314
Wholesale Trade	\$93,091,614,580	\$63,644,359,403	\$38,693,600,334	161,431
Retail Trade	\$110,093,982,283	\$86,567,601,967	\$54,146,476,065	328,869
Finance	\$100,934,552,553	\$57,284,812,970	\$42,316,664,255	115,958
Insurance	\$24,881,150,960	\$18,666,722,212	\$11,627,231,369	48,278
Real Estate	\$421,138,832,374	\$124,079,473,551	\$20,999,795,438	52,537
Hotels, Lodging Places, Amusements	\$30,105,110,609	\$13,020,485,810	\$9,270,920,630	89,074
Personal Services	\$11,451,569,598	\$6,709,450,545	\$5,591,574,097	63,087
Business Services	\$218,856,005,291	\$138,734,577,905	\$125,032,408,813	542,579
Eating & Drinking Places	\$34,145,901,553	\$18,772,964,986	\$10,793,509,466	360,661
Health Services	\$87,315,771,553	\$62,128,743,359	\$53,064,410,273	506,700
Miscellaneous Services	\$27,861,626,272	\$12,838,716,898	\$11,324,860,026	272,698
Households	\$1,611,685,134	\$1,611,685,134	\$1,478,764,934	24,522
Government	\$108,814,661,614	\$68,815,041,308	\$60,844,595,812	476,296
Total	\$2,973,944,799,700	\$1,159,838,918,714	\$717,149,981,342	3,648,347

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group

Table 15
Projected 2006-2025 Incremental Growth of Indicators for the Texas Economy
with "Closing the Gaps"
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$20,988,042,596	\$7,483,320,450	\$4,098,425,862	15,015
Forestry & Fishery Products	\$1,788,989,342	\$187,976,369	\$50,951,489	445
Coal Mining	\$1,314,940,476	\$248,092,788	\$358,762,465	523
Crude Petroleum & Natural Gas	\$583,622,286,400	\$141,271,817,679	\$57,980,670,611	29,963
Miscellaneous Mining	\$2,480,259,349	\$860,872,156	\$650,466,893	1,532
New Construction	\$78,955,493,616	\$29,171,469,868	\$24,088,742,466	141,307
Maintenance & Repair Construction	\$14,121,874,978	\$7,534,396,742	\$5,904,977,900	38,595
Food Products & Tobacco	\$45,369,616,549	\$9,715,219,772	\$5,064,659,979	26,816
Textile Mill Products	\$1,188,814,305	\$255,331,947	\$244,517,480	708
Apparel	\$1,954,063,983	\$949,636,234	\$523,102,479	-1,482
Paper & Allied Products	\$9,206,079,628	\$3,167,593,386	\$1,838,717,697	6,216
Printing & Publishing	\$23,172,675,249	\$12,488,122,100	\$7,515,308,359	26,890
Chemicals & Petroleum Refining	\$390,183,778,326	\$65,322,382,328	\$28,839,434,439	27,753
Rubber & Leather Products	\$20,658,945,125	\$7,645,775,758	\$5,134,942,422	14,065
Lumber Products & Furniture	\$13,661,791,549	\$4,577,119,165	\$3,524,087,527	12,273
Stone, Clay, & Glass Products	\$14,463,843,900	\$6,411,043,744	\$3,881,590,045	13,958
Primary Metal	\$11,758,440,149	\$3,069,353,850	\$2,656,268,219	6,563
Fabricated Metal Products	\$40,278,961,888	\$16,300,822,635	\$11,142,776,839	38,849
Machinery, Except Electrical	\$63,610,321,359	\$20,354,361,647	\$18,365,617,183	32,561
Electric & Electronic Equipment	\$54,743,036,465	\$26,701,683,932	\$19,126,149,040	42,615
Motor Vehicles & Equipment	\$37,863,539,911	\$11,055,550,813	\$6,734,269,220	13,063
Transp Equip, Except Motor Vehicles	\$10,087,833,940	\$4,740,454,757	\$3,160,175,404	21,827
Instruments & Related Products	\$6,086,051,745	\$1,750,180,145	\$2,037,599,464	3,163
Miscellaneous Manufacturing	\$6,140,047,356	\$1,570,177,515	\$1,460,901,863	2,946
Transportation	\$103,615,627,683	\$53,448,540,665	\$38,319,614,822	151,453
Communication	\$97,566,572,424	\$62,029,420,646	\$29,153,051,112	84,520
Electric, Gas, Water, Sanitary Services	\$234,697,217,599	\$42,089,096,855	\$20,237,038,095	12,632
Wholesale Trade	\$104,518,936,045	\$71,452,848,088	\$43,428,473,065	195,236
Retail Trade	\$124,510,756,352	\$98,051,272,155	\$61,249,783,730	450,641
Finance	\$111,247,047,281	\$63,128,129,341	\$46,612,681,438	135,443
Insurance	\$28,119,002,690	\$21,044,511,787	\$13,103,242,109	59,862
Real Estate	\$466,427,912,613	\$136,791,019,726	\$23,148,346,856	64,083
Hotels, Lodging Places, Amusements	\$33,761,782,339	\$14,628,241,542	\$10,407,441,991	105,786
Personal Services	\$13,968,480,816	\$8,211,603,870	\$6,816,939,842	83,176
Business Services	\$241,089,535,550	\$152,795,968,820	\$137,667,000,293	627,627
Eating & Drinking Places	\$39,556,630,148	\$21,802,181,569	\$12,496,996,712	437,005
Health Services	\$97,736,698,482	\$69,540,540,685	\$59,388,918,548	583,985
Miscellaneous Services	\$32,717,196,249	\$15,103,763,541	\$13,314,614,087	322,549
Households	\$1,893,830,161	\$1,893,830,161	\$1,739,069,200	33,306
Government	\$124,720,869,317	\$78,874,221,972	\$69,738,680,159	583,928
Total	\$3,309,847,823,933	\$1,293,717,947,202	\$801,205,007,405	4,447,394

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group



Detailed Sectoral Results: 2025 (continued)

Table 16
Projected 2006-2025 Net Gain in Indicators for the Texas Economy
with "Closing the Gaps" Compared to Baseline Assumptions
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$2,963,650,441	\$1,030,871,327	\$575,818,114	5,533
Forestry & Fishery Products	\$316,658,861	\$40,095,097	\$11,625,537	312
Coal Mining	\$189,527,604	\$39,919,103	\$53,008,482	252
Crude Petroleum & Natural Gas	\$58,515,820,433	\$14,158,934,481	\$5,813,663,194	8,626
Miscellaneous Mining	\$284,410,290	\$99,157,987	\$74,525,538	539
New Construction	\$10,729,761,954	\$3,964,295,747	\$3,273,571,738	28,413
Maintenance & Repair Construction	\$2,324,786,299	\$1,232,603,212	\$974,451,866	10,371
Food Products & Tobacco	\$5,897,825,060	\$1,290,536,266	\$671,051,936	7,453
Textile Mill Products	\$125,555,690	\$27,067,580	\$25,702,945	234
Apparel	\$358,105,284	\$181,910,407	\$97,332,679	2,050
Paper & Allied Products	\$950,271,602	\$337,225,674	\$189,831,228	1,623
Printing & Publishing	\$2,425,333,967	\$1,301,650,138	\$787,156,068	6,060
Chemicals & Petroleum Refining	\$33,852,882,382	\$5,658,574,359	\$2,500,582,835	5,867
Rubber & Leather Products	\$1,905,259,280	\$709,954,800	\$473,806,879	3,367
Lumber Products & Furniture	\$1,484,214,465	\$497,770,741	\$382,598,389	3,282
Stone, Clay, & Glass Products	\$1,489,428,462	\$664,991,415	\$400,654,675	2,796
Primary Metal	\$1,240,410,151	\$324,297,574	\$279,516,084	1,566
Fabricated Metal Products	\$3,647,745,910	\$1,472,256,381	\$1,005,200,859	7,122
Machinery, Except Electrical	\$5,213,569,496	\$1,672,631,034	\$1,505,120,103	5,695
Electric & Electronic Equipment	\$4,493,535,374	\$2,193,815,093	\$1,568,078,113	7,371
Motor Vehicles & Equipment	\$3,322,268,515	\$967,153,655	\$589,509,776	2,101
Transp Equip, Except Motor Vehicles	\$1,152,775,172	\$540,920,439	\$360,496,855	3,620
Instruments & Related Products	\$643,404,452	\$186,808,737	\$215,066,811	1,010
Miscellaneous Manufacturing	\$668,012,124	\$175,487,115	\$160,081,601	1,025
Transportation	\$9,602,601,647	\$5,038,234,612	\$3,593,040,669	26,491
Communication	\$8,366,501,272	\$5,309,929,064	\$2,481,975,821	13,012
Electric, Gas, Water, Sanitary Services	\$23,772,494,376	\$4,318,439,240	\$2,064,180,750	3,318
Wholesale Trade	\$11,427,321,465	\$7,808,488,685	\$4,734,872,731	33,805
Retail Trade	\$14,416,774,069	\$11,483,670,187	\$7,103,307,665	121,772
Finance	\$10,312,494,728	\$5,843,316,371	\$4,296,017,183	19,485
Insurance	\$3,237,851,730	\$2,377,789,574	\$1,476,010,741	11,584
Real Estate	\$45,289,080,239	\$12,711,546,175	\$2,148,551,418	11,546
Hotels, Lodging Places, Amusements	\$3,656,671,730	\$1,607,755,732	\$1,136,521,361	16,712
Personal Services	\$2,516,911,218	\$1,502,153,325	\$1,225,365,745	20,089
Business Services	\$22,233,530,259	\$14,061,390,916	\$12,634,591,481	85,048
Eating & Drinking Places	\$5,410,728,595	\$3,029,216,583	\$1,703,487,245	76,344
Health Services	\$10,420,926,929	\$7,411,797,326	\$6,324,508,274	77,284
Miscellaneous Services	\$4,855,569,977	\$2,265,046,643	\$1,989,754,061	49,851
Households	\$282,145,028	\$282,145,028	\$260,304,267	8,784
Government	\$15,906,207,703	\$10,059,180,664	\$8,894,084,347	107,633
Total	\$335,903,024,234	\$133,879,028,489	\$84,055,026,063	799,047

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group



Results for 2030



Detailed Sectoral Results: 2030

Table 17
Projected 2030 Values of Indicators for the Texas Economy
Under Baseline Assumptions
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$52,915,967,786	\$18,943,084,847	\$10,341,663,481	96,189
Forestry & Fishery Products	\$5,967,080,526	\$599,335,183	\$159,380,738	5,723
Coal Mining	\$2,830,445,830	\$523,562,820	\$768,980,085	3,011
Crude Petroleum & Natural Gas	\$1,198,143,676,328	\$290,035,463,385	\$119,030,280,716	181,674
Miscellaneous Mining	\$5,522,623,712	\$1,915,733,103	\$1,448,509,117	11,018
New Construction	\$214,613,563,462	\$79,292,685,196	\$65,477,025,389	641,971
Maintenance & Repair Construction	\$37,109,389,350	\$19,823,171,299	\$15,506,657,955	160,493
Food Products & Tobacco	\$105,893,592,191	\$22,601,457,036	\$11,787,023,614	125,344
Textile Mill Products	\$2,495,979,575	\$535,846,301	\$513,663,000	4,172
Apparel	\$4,494,774,364	\$2,162,182,750	\$1,199,115,731	17,510
Paper & Allied Products	\$18,149,989,289	\$6,222,424,686	\$3,624,996,081	27,252
Printing & Publishing	\$48,073,793,200	\$25,920,243,586	\$15,589,843,416	112,678
Chemicals & Petroleum Refining	\$742,189,195,655	\$124,271,664,766	\$54,860,275,404	123,822
Rubber & Leather Products	\$39,847,868,126	\$14,737,245,848	\$9,903,989,858	64,080
Lumber Products & Furniture	\$30,243,554,252	\$10,131,243,229	\$7,802,027,983	68,074
Stone, Clay, & Glass Products	\$30,946,055,529	\$13,705,253,644	\$8,302,587,487	57,572
Primary Metal	\$25,138,552,493	\$6,560,804,762	\$5,680,541,729	31,952
Fabricated Metal Products	\$78,416,268,934	\$31,743,440,892	\$21,701,460,440	152,463
Machinery, Except Electrical	\$117,430,705,167	\$37,567,308,619	\$33,904,969,001	125,523
Electric & Electronic Equipment	\$101,047,304,161	\$49,283,157,507	\$35,307,728,333	164,669
Motor Vehicles & Equipment	\$72,338,413,007	\$21,127,729,546	\$12,868,725,687	45,773
Transp Equip, Except Motor Vehicles	\$23,434,337,813	\$11,014,287,473	\$7,342,829,475	81,335
Instruments & Related Products	\$13,163,767,635	\$3,781,222,048	\$4,408,038,048	20,634
Miscellaneous Manufacturing	\$13,234,846,281	\$3,373,244,556	\$3,146,207,121	18,408
Transportation	\$203,662,997,708	\$104,872,574,220	\$75,229,130,368	522,458
Communication	\$179,060,227,757	\$113,858,710,533	\$53,539,518,013	269,932
Electric, Gas, Water, Sanitary Services	\$482,163,504,084	\$86,341,858,597	\$41,542,254,710	59,936
Wholesale Trade	\$226,967,976,504	\$155,172,208,955	\$94,339,411,891	706,197
Retail Trade	\$238,494,776,134	\$187,529,966,884	\$117,296,617,124	1,570,204
Finance	\$219,854,020,168	\$124,776,858,939	\$92,173,477,975	437,521
Insurance	\$60,553,490,016	\$45,429,376,597	\$28,297,301,830	226,085
Real Estate	\$916,099,839,736	\$269,909,058,715	\$45,680,682,371	250,749
Hotels, Lodging Places, Amusements	\$70,778,310,371	\$30,611,679,121	\$21,796,302,505	324,743
Personal Services	\$34,493,306,438	\$20,209,555,704	\$16,842,396,770	290,905
Business Services	\$472,107,488,062	\$299,272,724,981	\$269,714,949,665	1,873,785
Eating & Drinking Places	\$81,102,252,078	\$44,588,945,357	\$25,636,398,096	1,207,024
Health Services	\$201,924,838,840	\$143,677,783,142	\$122,715,774,047	1,575,017
Miscellaneous Services	\$75,903,188,460	\$34,976,405,856	\$30,852,218,620	872,900
Households	\$5,104,381,557	\$5,104,381,557	\$4,683,408,873	154,641
Government	\$320,673,326,436	\$202,795,725,113	\$179,307,077,237	2,452,087
Total	\$6,772,585,669,014	\$2,664,999,607,354	\$1,670,326,439,984	15,135,524

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group

Table 18
Projected 2030 Values of Indicators for the Texas Economy
With "Closing the Gaps"
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$56,953,165,715	\$20,356,964,830	\$11,127,190,544	103,012
Forestry & Fishery Products	\$6,389,859,138	\$650,431,340	\$173,971,761	6,102
Coal Mining	\$3,075,569,599	\$573,967,164	\$837,152,940	3,299
Crude Petroleum & Natural Gas	\$1,281,453,795,952	\$310,196,095,324	\$127,307,169,161	192,305
Miscellaneous Mining	\$5,911,952,846	\$2,051,306,804	\$1,550,547,355	11,672
New Construction	\$229,488,082,849	\$84,788,333,114	\$70,015,132,244	678,979
Maintenance & Repair Construction	\$40,174,206,723	\$21,450,838,867	\$16,793,717,718	173,178
Food Products & Tobacco	\$113,988,609,074	\$24,362,436,596	\$12,703,327,713	134,502
Textile Mill Products	\$2,679,013,553	\$575,255,489	\$551,185,295	4,462
Apparel	\$4,947,264,109	\$2,389,981,269	\$1,321,718,461	19,771
Paper & Allied Products	\$19,528,172,366	\$6,706,898,376	\$3,900,293,446	29,252
Printing & Publishing	\$51,580,352,838	\$27,804,410,066	\$16,727,578,510	120,302
Chemicals & Petroleum Refining	\$794,265,122,016	\$132,981,014,324	\$58,707,762,107	131,350
Rubber & Leather Products	\$42,701,886,703	\$15,798,350,742	\$10,613,622,119	68,313
Lumber Products & Furniture	\$32,378,058,995	\$10,846,882,318	\$8,352,369,465	72,230
Stone, Clay, & Glass Products	\$33,141,056,182	\$14,683,008,456	\$8,892,600,387	61,166
Primary Metal	\$26,920,567,902	\$7,026,474,764	\$6,082,402,488	33,939
Fabricated Metal Products	\$83,951,585,483	\$33,979,591,963	\$23,228,836,851	161,718
Machinery, Except Electrical	\$125,631,506,126	\$40,195,803,668	\$36,272,560,266	132,979
Electric & Electronic Equipment	\$108,111,857,238	\$52,731,019,736	\$37,774,056,057	174,346
Motor Vehicles & Equipment	\$77,401,084,765	\$22,603,029,658	\$13,767,763,960	48,530
Transp Equip, Except Motor Vehicles	\$25,080,087,073	\$11,786,855,372	\$7,857,751,458	86,108
Instruments & Related Products	\$14,093,243,569	\$4,050,300,098	\$4,718,878,540	21,901
Miscellaneous Manufacturing	\$14,191,552,267	\$3,622,572,927	\$3,374,979,780	19,668
Transportation	\$218,355,622,178	\$112,536,204,904	\$80,704,432,999	556,776
Communication	\$192,051,776,139	\$122,109,114,631	\$57,403,541,564	287,070
Electric, Gas, Water, Sanitary Services	\$516,989,560,427	\$92,642,307,099	\$44,559,477,242	64,070
Wholesale Trade	\$243,312,332,827	\$166,342,153,175	\$101,117,337,363	750,024
Retail Trade	\$258,648,567,121	\$203,530,462,017	\$127,222,011,574	1,715,496
Finance	\$235,351,223,257	\$133,562,324,419	\$98,641,871,330	463,569
Insurance	\$65,105,454,444	\$48,790,599,799	\$30,385,634,722	240,898
Real Estate	\$983,057,622,057	\$288,981,814,637	\$48,905,674,187	265,809
Hotels, Lodging Places, Amusements	\$75,975,125,112	\$32,886,612,813	\$23,407,531,023	346,317
Personal Services	\$37,683,954,288	\$22,107,438,778	\$18,396,539,069	315,260
Business Services	\$505,616,952,743	\$320,480,820,882	\$288,788,582,931	1,987,184
Eating & Drinking Places	\$88,302,956,919	\$48,604,444,157	\$27,905,423,885	1,302,498
Health Services	\$216,935,460,239	\$154,355,107,519	\$131,829,138,058	1,677,498
Miscellaneous Services	\$82,423,137,592	\$38,027,423,458	\$33,533,970,951	938,325
Households	\$5,482,669,968	\$5,482,669,968	\$5,032,001,703	165,484
Government	\$342,898,676,660	\$216,851,169,215	\$191,734,561,100	2,593,441
Total	\$7,262,228,745,053	\$2,859,502,490,738	\$1,792,220,298,326	16,158,805

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group



Detailed Sectoral Results: 2030 (continued)

Table 19
Projected 2006-2030 Incremental Growth of Indicators for the Texas Economy
Under Baseline Forecast Assumptions
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$23,195,107,853	\$8,303,484,080	\$4,533,149,630	12,264
Forestry & Fishery Products	\$1,808,725,248	\$181,668,854	\$48,311,057	139
Coal Mining	\$1,348,232,105	\$249,389,759	\$366,289,871	203
Crude Petroleum & Natural Gas	\$657,610,987,278	\$159,188,343,761	\$65,330,746,190	19,430
Miscellaneous Mining	\$2,630,602,753	\$912,525,104	\$689,971,338	744
New Construction	\$86,577,380,641	\$31,987,507,581	\$26,414,124,340	139,440
Maintenance & Repair Construction	\$14,970,320,027	\$7,996,876,895	\$6,256,760,005	34,860
Food Products & Tobacco	\$50,700,481,890	\$10,821,285,211	\$5,643,474,406	23,267
Textile Mill Products	\$1,437,912,915	\$308,696,563	\$295,916,949	600
Apparel	\$1,995,315,018	\$959,833,656	\$532,310,064	-4,607
Paper & Allied Products	\$11,123,185,878	\$3,813,400,950	\$2,221,571,846	5,564
Printing & Publishing	\$27,490,584,466	\$14,822,267,981	\$8,914,917,645	25,490
Chemicals & Petroleum Refining	\$490,397,200,691	\$82,111,780,774	\$36,248,608,367	26,688
Rubber & Leather Products	\$25,360,775,861	\$9,379,372,256	\$6,303,294,975	12,999
Lumber Products & Furniture	\$15,941,498,360	\$5,340,218,811	\$4,112,480,142	10,768
Stone, Clay, & Glass Products	\$17,550,165,872	\$7,772,540,657	\$4,708,573,841	13,831
Primary Metal	\$13,660,988,496	\$3,565,323,755	\$3,086,964,344	6,023
Fabricated Metal Products	\$50,078,450,221	\$20,272,098,458	\$13,859,056,560	39,574
Machinery, Except Electrical	\$81,545,019,062	\$26,087,102,969	\$23,543,938,866	33,588
Electric & Electronic Equipment	\$70,168,226,719	\$34,222,701,913	\$24,518,028,533	44,063
Motor Vehicles & Equipment	\$46,964,859,864	\$13,716,928,753	\$8,354,868,090	13,682
Transp Equip, Except Motor Vehicles	\$11,658,318,338	\$5,479,483,596	\$3,652,974,717	22,864
Instruments & Related Products	\$7,135,969,961	\$2,049,769,314	\$2,389,561,102	2,505
Miscellaneous Manufacturing	\$7,174,501,109	\$1,828,608,077	\$1,705,532,955	2,235
Transportation	\$132,085,230,989	\$68,014,898,858	\$48,789,702,467	160,362
Communication	\$125,414,692,736	\$79,747,218,999	\$37,499,350,274	92,358
Electric, Gas, Water, Sanitary Services	\$282,966,863,382	\$50,671,369,149	\$24,379,865,779	11,487
Wholesale Trade	\$121,746,318,878	\$83,234,848,913	\$50,603,949,948	199,835
Retail Trade	\$148,684,482,948	\$116,911,559,303	\$73,126,074,924	403,361
Finance	\$136,684,446,928	\$77,574,455,725	\$57,304,755,441	148,487
Insurance	\$32,407,265,051	\$24,313,080,024	\$15,144,266,010	60,238
Real Estate	\$569,551,317,826	\$167,806,011,328	\$28,400,280,968	65,605
Hotels, Lodging Places, Amusements	\$39,113,604,939	\$16,916,667,230	\$12,045,101,965	111,191
Personal Services	\$13,995,638,055	\$8,200,014,904	\$6,833,792,220	77,104
Business Services	\$298,056,291,583	\$188,940,274,906	\$170,279,522,597	685,495
Eating & Drinking Places	\$44,062,698,414	\$24,225,088,719	\$13,928,206,046	453,399
Health Services	\$116,467,335,979	\$82,871,273,975	\$70,780,689,329	650,893
Miscellaneous Services	\$35,346,067,267	\$16,287,568,668	\$14,367,045,928	348,427
Households	\$1,981,414,041	\$1,981,414,041	\$1,818,001,260	28,591
Government	\$138,541,852,500	\$87,614,694,208	\$77,466,794,395	597,078
Total	\$3,955,630,332,141	\$1,546,681,648,678	\$956,498,825,383	4,580,126

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group

Table 20
Projected 2006-2030 Incremental Growth of Indicators for the Texas Economy
with "Closing the Gaps"
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$27,232,305,782	\$9,717,364,064	\$5,318,676,694	19,087
Forestry & Fishery Products	\$2,231,503,860	\$232,765,010	\$62,902,079	519
Coal Mining	\$1,593,355,874	\$299,794,103	\$434,462,726	491
Crude Petroleum & Natural Gas	\$740,921,106,902	\$179,348,975,700	\$73,607,634,635	30,061
Miscellaneous Mining	\$3,019,931,887	\$1,048,098,805	\$792,009,576	1,398
New Construction	\$101,451,900,028	\$37,483,155,499	\$30,952,231,195	176,447
Maintenance & Repair Construction	\$18,035,137,400	\$9,624,544,463	\$7,540,819,768	47,545
Food Products & Tobacco	\$58,795,498,773	\$12,582,264,771	\$6,559,778,505	32,424
Textile Mill Products	\$1,620,946,894	\$348,105,751	\$333,439,245	890
Apparel	\$2,447,804,763	\$1,187,632,176	\$654,912,793	-2,346
Paper & Allied Products	\$12,501,368,955	\$4,297,874,640	\$2,496,869,211	7,565
Printing & Publishing	\$30,997,144,104	\$16,706,434,461	\$10,052,652,738	33,114
Chemicals & Petroleum Refining	\$542,473,127,052	\$90,821,130,332	\$40,096,095,070	34,217
Rubber & Leather Products	\$28,214,794,437	\$10,440,477,150	\$7,012,927,236	17,232
Lumber Products & Furniture	\$18,076,003,103	\$6,055,857,900	\$4,662,821,625	14,925
Stone, Clay, & Glass Products	\$19,745,166,525	\$8,750,295,469	\$5,298,586,741	17,425
Primary Metal	\$15,443,003,905	\$4,030,993,758	\$3,488,825,104	8,010
Fabricated Metal Products	\$55,613,766,770	\$22,508,249,529	\$15,386,432,971	48,829
Machinery, Except Electrical	\$89,745,820,021	\$28,715,598,018	\$25,911,530,132	41,044
Electric & Electronic Equipment	\$77,232,779,797	\$37,670,564,142	\$26,984,356,257	53,740
Motor Vehicles & Equipment	\$52,027,531,622	\$15,192,228,866	\$9,253,906,363	16,440
Transp Equip, Except Motor Vehicles	\$13,304,067,599	\$6,252,051,495	\$4,167,896,699	27,637
Instruments & Related Products	\$8,065,445,894	\$2,318,847,364	\$2,700,401,594	3,772
Miscellaneous Manufacturing	\$8,131,207,095	\$2,077,936,449	\$1,934,305,613	3,495
Transportation	\$146,777,855,459	\$75,678,529,543	\$54,265,005,098	194,681
Communication	\$138,406,241,118	\$87,997,623,096	\$41,363,373,825	109,496
Electric, Gas, Water, Sanitary Services	\$317,792,919,725	\$56,971,817,652	\$27,397,088,311	15,621
Wholesale Trade	\$138,090,675,201	\$94,404,793,133	\$57,381,875,420	243,662
Retail Trade	\$168,838,273,935	\$132,912,054,436	\$83,051,469,374	548,654
Finance	\$152,181,650,017	\$86,359,921,205	\$63,773,148,796	174,535
Insurance	\$36,959,229,480	\$27,674,303,226	\$17,232,598,902	75,051
Real Estate	\$636,509,100,147	\$186,878,767,250	\$31,625,272,785	80,664
Hotels, Lodging Places, Amusements	\$44,310,419,680	\$19,191,600,923	\$13,656,330,482	132,765
Personal Services	\$17,186,285,904	\$10,097,897,978	\$8,387,934,519	101,460
Business Services	\$331,565,756,264	\$210,148,370,807	\$189,353,155,863	798,894
Eating & Drinking Places	\$51,263,403,255	\$28,240,587,519	\$16,197,231,835	548,874
Health Services	\$131,477,957,377	\$93,548,598,352	\$79,894,053,340	753,374
Miscellaneous Services	\$41,866,016,399	\$19,338,586,270	\$17,048,798,259	413,852
Households	\$2,359,702,452	\$2,359,702,452	\$2,166,594,091	39,434
Government	\$160,767,202,725	\$101,670,138,310	\$89,894,278,257	738,432
Total	\$4,445,273,408,180	\$1,741,184,532,062	\$1,078,392,683,726	5,603,407

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group



Detailed Sectoral Results: 2030 (continued)

Table 21
Projected 2006-2030 Net Gain in Indicators for the Texas Economy
with "Closing the Gaps" Compared to Baseline Assumptions
by Detailed Industrial Category

Category	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$4,037,197,929	\$1,413,879,984	\$785,527,064	6,823
Forestry & Fishery Products	\$422,778,612	\$51,096,157	\$14,591,023	379
Coal Mining	\$245,123,769	\$50,404,344	\$68,172,855	288
Crude Petroleum & Natural Gas	\$83,310,119,624	\$20,160,631,939	\$8,276,888,445	10,631
Miscellaneous Mining	\$389,329,135	\$135,573,701	\$102,038,239	654
New Construction	\$14,874,519,387	\$5,495,647,918	\$4,538,106,855	37,007
Maintenance & Repair Construction	\$3,064,817,373	\$1,627,667,568	\$1,284,059,763	12,685
Food Products & Tobacco	\$8,095,016,883	\$1,760,979,560	\$916,304,099	9,157
Textile Mill Products	\$183,033,979	\$39,409,188	\$37,522,295	289
Apparel	\$452,489,745	\$227,798,520	\$122,602,730	2,261
Paper & Allied Products	\$1,378,183,077	\$484,473,690	\$275,297,364	2,000
Printing & Publishing	\$3,506,559,638	\$1,884,166,480	\$1,137,735,093	7,624
Chemicals & Petroleum Refining	\$52,075,926,360	\$8,709,349,558	\$3,847,486,703	7,528
Rubber & Leather Products	\$2,854,018,577	\$1,061,104,894	\$709,632,261	4,233
Lumber Products & Furniture	\$2,134,504,743	\$715,639,089	\$550,341,482	4,156
Stone, Clay, & Glass Products	\$2,195,000,653	\$977,754,812	\$590,012,900	3,594
Primary Metal	\$1,782,015,409	\$465,670,002	\$401,860,759	1,987
Fabricated Metal Products	\$5,535,316,549	\$2,236,151,071	\$1,527,376,411	9,256
Machinery, Except Electrical	\$8,200,800,959	\$2,628,495,048	\$2,367,591,265	7,456
Electric & Electronic Equipment	\$7,064,553,077	\$3,447,862,229	\$2,466,327,724	9,677
Motor Vehicles & Equipment	\$5,062,671,758	\$1,475,300,112	\$899,038,273	2,758
Transp Equip, Except Motor Vehicles	\$1,645,749,261	\$772,567,898	\$514,921,983	4,773
Instruments & Related Products	\$929,475,934	\$269,078,050	\$310,840,492	1,267
Miscellaneous Manufacturing	\$956,705,986	\$249,328,372	\$228,772,658	1,260
Transportation	\$14,692,624,470	\$7,663,630,685	\$5,475,302,631	34,318
Communication	\$12,991,548,383	\$8,250,404,097	\$3,864,023,551	17,138
Electric, Gas, Water, Sanitary Services	\$34,826,056,343	\$6,300,448,502	\$3,017,222,532	4,134
Wholesale Trade	\$16,344,356,323	\$11,169,944,220	\$6,777,925,472	43,827
Retail Trade	\$20,153,790,987	\$16,000,495,133	\$9,925,394,450	145,293
Finance	\$15,497,203,089	\$8,785,465,480	\$6,468,393,356	26,048
Insurance	\$4,551,964,429	\$3,361,223,202	\$2,088,332,891	14,813
Real Estate	\$66,957,782,321	\$19,072,755,922	\$3,224,991,817	15,060
Hotels, Lodging Places, Amusements	\$5,196,814,741	\$2,274,933,693	\$1,611,228,517	21,574
Personal Services	\$3,190,647,849	\$1,897,883,074	\$1,554,142,300	24,356
Business Services	\$33,509,464,681	\$21,208,095,901	\$19,073,633,267	113,399
Eating & Drinking Places	\$7,200,704,841	\$4,015,498,800	\$2,269,025,789	95,474
Health Services	\$15,010,621,398	\$10,677,324,377	\$9,113,364,011	102,481
Miscellaneous Services	\$6,519,949,132	\$3,051,017,602	\$2,681,752,330	65,425
Households	\$378,288,411	\$378,288,411	\$348,592,831	10,843
Government	\$22,225,350,225	\$14,055,444,102	\$12,427,483,862	141,354
Total	\$489,643,076,038	\$194,502,883,384	\$121,893,858,343	1,023,281

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group



Results for 2030 by Geographic Area



Results by Major Economic Region

Table 22
Projected 2006-2030 Net Gain in Indicators for the Texas Economy
with "Closing the Gaps" Compared to Baseline Assumptions
by Major Economic Region

Economic Region	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
High Plains	\$11,694,533,394	\$4,341,601,156	\$3,226,179,121	29,763
Northwest Texas	\$6,592,367,273	\$2,381,161,930	\$1,887,302,851	19,050
Metroplex	\$173,426,043,458	\$71,613,927,172	\$40,351,406,361	320,889
Upper East Texas	\$13,524,426,945	\$5,134,076,188	\$3,613,761,980	35,193
Southeast Texas	\$9,448,485,928	\$3,579,529,837	\$2,532,181,067	25,187
Gulf Coast	\$144,201,377,928	\$57,779,570,309	\$35,382,167,829	247,649
Capital	\$41,988,774,987	\$16,892,915,326	\$10,231,571,984	88,368
Central Texas	\$12,686,458,648	\$4,374,918,379	\$3,846,911,482	38,741
Alamo	\$35,285,511,792	\$13,429,114,542	\$9,392,936,461	97,402
Coastal Bend	\$9,744,114,038	\$3,378,425,483	\$2,935,872,621	22,281
South Texas Border	\$12,738,319,476	\$4,533,394,836	\$3,716,943,302	51,861
West Texas	\$7,515,278,173	\$2,847,804,489	\$2,013,395,505	17,008
Upper Rio Grande	\$10,797,383,997	\$4,216,443,737	\$2,763,227,781	29,890
Texas	\$489,643,076,038	\$194,502,883,384	\$121,893,858,343	1,023,281

SOURCES: Texas Econometric Model, The Perryman Group

US Multi-Regional Impact Assessment System, The Perryman Group



Results for COG Regions

Table 23
Projected 2006-2030 Net Gain in Indicators for the Texas Economy
with "Closing the Gaps" Compared to Baseline Assumptions
by Council of Governments (COG) Region

COG	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Panhandle	\$6,381,948,265	\$2,355,039,111	\$1,775,372,328	14,695
South Plains	\$5,312,585,129	\$1,986,562,045	\$1,450,806,793	15,068
North Texas	\$2,852,221,490	\$1,017,842,611	\$829,379,759	7,871
North Central Texas	\$171,169,777,349	\$70,710,159,217	\$39,797,496,301	314,640
North East Texas	\$3,329,372,314	\$1,217,405,176	\$937,778,047	8,484
East Texas	\$10,195,054,631	\$3,916,671,012	\$2,675,983,933	26,709
West Central Texas	\$3,740,145,783	\$1,363,319,318	\$1,057,923,091	11,179
Upper Rio Grande	\$10,797,383,997	\$4,216,443,737	\$2,763,227,781	29,890
Permian Basin	\$5,668,833,443	\$2,166,784,766	\$1,499,379,392	11,660
Concho Valley	\$1,846,444,730	\$681,019,723	\$514,016,112	5,347
Heart of Texas	\$4,149,599,116	\$1,522,561,488	\$1,163,384,406	11,734
Capital	\$41,988,774,987	\$16,892,915,326	\$10,231,571,984	88,368
Brazos Valley	\$3,339,604,843	\$1,217,321,196	\$944,624,609	11,749
Deep East Texas	\$3,477,244,218	\$1,314,678,271	\$934,658,319	10,743
South East Texas	\$5,971,241,710	\$2,264,851,566	\$1,597,522,748	14,445
Gulf Coast	\$144,201,377,928	\$57,779,570,309	\$35,382,167,829	247,649
Golden Crescent	\$2,499,052,817	\$956,241,640	\$659,915,394	6,146
Alamo	\$35,285,511,792	\$13,429,114,542	\$9,392,936,461	97,402
South Texas	\$2,847,233,323	\$990,390,827	\$854,532,535	11,164
Coastal Bend	\$7,245,061,221	\$2,422,183,843	\$2,275,957,226	16,135
Lower Rio Grande Valley	\$8,795,230,685	\$3,179,692,546	\$2,514,991,547	36,594
Texoma	\$2,256,266,109	\$903,767,956	\$553,910,060	6,249
Central Texas	\$5,197,254,688	\$1,635,035,696	\$1,738,902,467	15,258
Middle Rio Grande	\$1,095,855,467	\$363,311,463	\$347,419,220	4,103
Texas	\$489,643,076,038	\$194,502,883,384	\$121,893,858,343	1,023,281

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group



Results for Metro Areas

Table 24
Projected 2006-2030 Net Gain in Indicators for the Texas Economy
with "Closing the Gaps" Compared to Baseline Assumptions
by Metropolitan Statistical Area (MSA) and Metropolitan Division (MD)

MSA	Total Expenditures (2006 Dollars)	Gross Product (2006 Dollars)	Personal Income (2006 Dollars)	Employment (Permanent Jobs)
Abilene	\$2,157,769,693	\$767,046,733	\$630,526,448	7,136
Amarillo	\$3,895,580,935	\$1,468,696,702	\$1,051,401,223	10,367
Austin-Round Rock	\$40,750,639,415	\$16,556,051,912	\$9,762,755,804	85,250
Beaumont-Port Arthur	\$5,971,241,710	\$2,264,851,566	\$1,597,522,748	14,445
Brownsville-Harlingen	\$3,076,164,579	\$1,123,099,682	\$868,238,411	13,712
College Station-Bryan	\$2,506,092,692	\$882,283,634	\$741,207,590	8,997
Corpus Christi	\$6,003,957,313	\$2,041,359,132	\$1,850,736,697	13,130
Dallas-Plano-Irving MD	\$129,016,097,329	\$53,571,500,076	\$29,711,650,333	221,244
El Paso	\$10,662,916,942	\$4,135,302,085	\$2,758,485,852	29,414
Fort Worth-Arlington MD	\$40,463,636,595	\$16,338,821,600	\$9,798,276,748	85,953
Houston-Baytown-Sugar Land	\$142,703,035,726	\$57,184,663,528	\$35,008,867,992	243,609
Killeen-Temple-Fort Hood	\$4,876,539,352	\$1,509,271,604	\$1,657,367,933	14,558
Laredo	\$2,441,811,062	\$873,246,284	\$708,108,902	9,266
Longview	\$3,283,461,248	\$1,277,914,178	\$844,744,852	8,371
Lubbock	\$3,921,668,167	\$1,486,278,578	\$1,050,414,391	11,549
McAllen-Edinburg-Pharr	\$5,612,595,941	\$2,036,005,397	\$1,597,754,245	22,811
Midland	\$2,702,777,373	\$1,087,836,926	\$658,123,886	5,476
Odessa	\$1,694,569,965	\$673,224,629	\$421,766,708	4,160
San Angelo	\$1,510,285,163	\$551,476,269	\$426,195,737	4,386
San Antonio	\$34,085,170,607	\$12,932,784,158	\$9,114,340,493	92,546
Sherman-Denison	\$1,525,313,089	\$626,271,790	\$358,613,463	4,440
Texarkana	\$1,187,808,339	\$404,397,077	\$365,586,135	3,430
Tyler	\$3,614,137,516	\$1,395,288,862	\$941,553,337	9,562
Victoria	\$1,761,714,171	\$688,728,809	\$450,054,902	4,109
Waco	\$3,343,623,480	\$1,256,831,216	\$906,335,577	10,089
Wichita Falls	\$2,207,595,285	\$781,316,756	\$648,653,032	6,067
Total Metropolitan Areas	\$460,976,203,689	\$183,914,549,182	\$113,929,283,439	944,079
Rural Texas	\$28,666,872,350	\$10,588,334,201	\$7,964,574,903	79,202
Texas	\$489,643,076,038	\$194,502,883,384	\$121,893,858,343	1,023,281

SOURCES: Texas Econometric Model, The Perryman Group
US Multi-Regional Impact Assessment System, The Perryman Group