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# A War Worth Waging

December 2010

An Economic Assessment of the Cost of Cancer in Texas and the Benefits of the Cancer Prevention and Research Institute of Texas (CPRIT) and its Programs

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# INTRODUCTION



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# INTRODUCTION

- Cancer is a devastating disease affecting individuals, their families, and all of society. Its prevention, early detection, and treatment are among the most important challenges the US currently faces.
- Investments in research, screening, and related activities aimed at reducing the incidence and severity of cancer not only change lives, but also generate important economic benefits. Such investments have the potential to both reduce the cost of cancer through improving outcomes and serve as a catalyst for business development in other related industries (such as biomedicine).
- The Cancer Prevention and Research Institute of Texas (CPRIT) is helping establish Texas as a center for cancer prevention and research. Through its operations and programs designed to systematically reduce the effects of the disease, CPRIT is not only working toward improving lives of countless persons potentially affected by cancer, but also providing a sizable economic stimulus.
- The Perryman Group (TPG) was asked to quantify the cost of cancer in Texas and well as the economic benefits of CPRIT and its screening/prevention and research programs. This report presents the findings from TPG's analysis.

## Highlights of Study Findings

- **The Perryman Group estimates that the annual direct medical costs and morbidity and mortality losses associated with cancer in Texas in 2010 to be approximately \$25.3**



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**billion, an increase of 15.8% since 2007.** A total of 104,141 new cases of cancer are expected to be diagnosed in the state in 2010, with 37,984 cancer deaths projected. When the numerous “multiplier” effects associated with the disease are included, these substantial direct losses represent only a portion of the overall toll on business activity.

- The Perryman Group’s analysis indicates a **total cost to the Texas economy of some \$121.3 billion in reduced annual spending, \$60.7 billion in output losses per annum, and 691,735 lost jobs from cancer treatment, morbidity, and mortality and the associated spillover effects. The yearly loss in State fiscal revenues is almost \$4.6 billion, while various local governments experience a combined loss of \$1.9 billion per annum.**
- In FY 2010, CPRIT awarded a total of \$216.1 million for research and prevention of cancer to entities including universities, hospitals and private companies. About \$165.1 million of the total was designated for cancer research, while \$21.7 million was awarded for prevention programs. The second-largest source of cancer research funding in the nation, CPRIT is expected to award \$3 billion through 2017 to invest in cancer research, prevention programs, and services.
  - Even beyond the potentially life-changing influence of spending to reduce the incidence and severity of the disease, this investment in research, screening, and related activities generates substantial economic impacts. Moreover, the investment has the potential to reduce the cost of cancer through improving outcomes.
  - Returns on investments in medical research include jobs created in the private sector, health care costs saved, the value of increased longevity, the value of reduced morbidity and disability, and the benefits of newer medicines and therapies.



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- The direct outlays and related “multiplier” effects emanating from CPRIT operations and programs generated a sizable increase in business activity in Texas including **\$452.5 million in output and 7,066 jobs during the Institute’s first year.**
    - These economic benefits include \$7.3 million in output and 81 jobs from operations, \$30.1 million in output and 576 jobs from prevention and screening, and \$415.1 million in output and 6,408 jobs from research programs.
    - **The ongoing outlays for CPRIT operations and programs alone generate \$265.6 million in annual State revenue, as well as \$169.7 million to various local governments.**
  - Even beyond these sizable gains in business activity directly stemming from CPRIT investments, improved outcomes from screening and prevention could further enhance the economy. **Over ten years, these outcomes-related screening effects total \$923.4 million in output and 10,521 person-years of employment.**
  - In addition, research sponsored by CPRIT could also generate breakthroughs which lessen the cost of cancer, facilitate the attraction of more researchers, and yield spinoff companies.
    - **The economic benefits of CPRIT-funded research activity associated compound over time, rising from a current \$328.4 million in output and 3,658 jobs to \$3.2 billion in output and 35,560 jobs in year 10.** This phenomenon occurs because research benefits are ongoing and continue to provide benefits beyond the initial year of the outlays.
    - **The cumulative ten-year total effect of secondary research benefits stemming from CPRIT activities**



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**includes \$17.2 billion in output and 191,331 person-years of employment.**

- Adding the economic benefits of CPRIT operations, prevention/screening programs, research, outcomes-based prevention/screening, and secondary research yields a total gross impact of the Institute's operations.
  - **The current total annual impact of all prevention and research programs (including initial outlays and downstream effects) associated with CPRIT on Texas business activity was found to be \$852.3 million in output and 11,537 jobs.**
  - **The cumulative effect of CPRIT prevention and research programs on Texas business activity over the first ten years of full funding includes \$23.5 billion in output and 285,989 jobs.**
  
- Because any State outlay involves positive economic effects, The Perryman Group isolated the impact of CPRIT programs net of the State spending. The results of this phase of the analysis clearly demonstrate the positive effects of the State's investment in CPRIT.
  - During Fiscal 2010, the **net economic benefits of prevention and research programs associated with the Institute totaled \$399.8 million in output and 4,471 jobs.**
  - These effects will grow over time as positive outcomes are realized and benefits compound. The **net stimulus is expected to rise to nearly \$3.3 billion in output and 36,654 jobs by year 10.**
  - The **net cumulative ten-year impact of all prevention and research programs associated with CPRIT includes gains in Texas business activity of \$18.1 billion in output and 201,852 person-years of employment.**



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- **This incremental business activity also generates taxes for the State and local governments.**
    - For Texas, tax receipts associated with CPRIT activities from all sources in the first year of full activity total \$51.2 million, while local public entities receive \$26.4 million.
    - By the tenth year, these annual increases rise to \$261.7 million and \$116.4 million, respectively.
  - **Over an extended time horizon, CPRIT and its programs will likely generate fiscal receipts totaling a substantial multiple of the commitment of public resources (in addition to the notable economic and health benefits).**
  - TPG also measured the benefits that would occur if CPRIT, in conjunction with other ongoing initiatives, serves as a catalyst for greater economic development in the biomedical and pharmaceutical arena.
    - If Texas achieves a concentration in the biomedical industry (pharmaceuticals and medical equipment) by 2035 equivalent to that of the US, **annual incremental gains in business activity include \$14.3 billion in output (gross product) and 143,173 permanent jobs as of 2035. There would also be a stimulus of \$676.2 million in annual State revenue and \$334.1 million to local governments.**
    - If Texas achieves a concentration in the biomedical industry (pharmaceuticals and medical equipment) by 2035 equivalent to that of California (a large state that has strategically used its academic research capabilities to foster industrial development), **the annual gain in business activity in the state would be almost \$17.6 billion in output and 173,983 permanent jobs by 2035. Incremental State fiscal revenues in such a scenario would include \$822.3 million per annum, with local governments receiving an additional \$405.9 million.**



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- The ultimate goal of CPRIT is reducing cancer incidence and the associated high human and economic costs. If CPRIT's screening/prevention programs, research advances, and other initiatives reduce the incidence of cancer over time to equal the average of current levels observed in the five states with the lowest incidence, substantial economic benefits would be realized.
    - **The potential annual impact of this substantial reduction in cancer incidence stemming from the catalytic effects of CPRIT initiatives includes some \$8.7 billion in annual output (gross product) in Texas as of 2035 and 98,796 jobs. Yearly State and local governmental resources would rise by \$653.3 million and \$271.4 million, respectively.**
    - The benefits of such advances would not be restricted to Texas; they would bring better outcomes throughout the country and, indeed, the entire world. **For the US as a whole, reducing cancer prevalence over time to equal the average of current levels of incidence in the five states with the lowest rates total \$168.0 billion in annual output and 1,871,458 jobs by 2035.**
  - **CPRIT's efforts in the areas of screening/prevention and cancer research stand to lower the cost of the disease in the future—both economically and, more importantly, in human terms. In addition, the Institute's operations and programs provide a sizable economic stimulus now which will only grow in the years to come and represent an excellent return to the commitment of fiscal resources.**



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## The Perryman Group's Perspective

- 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.
- The firm has conducted hundreds of impact analyses for the US and Texas economies as well as all Texas metro areas and regions. The firm 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 health care sector, including insurance, cost, affordability, and other areas relevant to the current analysis. From a public policy perspective, studies have been performed related to Medicaid and State Children's Health Insurance Program (SCHIP) coverage, wellness initiatives, obesity treatment, and funding for mental health and substance abuse.
- Moreover, the proprietary models developed and maintained by the firm have been used in the analysis of scores of major medical facilities. Representative examples include the Methodist Hospital, Parkland, University Health System, Menninger Clinic, Scott & White, M. D. Anderson Cancer



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Center (including an assessment of its contribution to improved outcomes and the resulting benefits), and the University of Kansas Cancer Center (including an investigation of the benefits of achieving the status of a Comprehensive Cancer Center). Similarly, they have been employed to evaluate educational institutions and specific instructional and research programs for the University of Texas, Texas A&M University, University of Texas Medical Branch, Baylor University, University of Texas Health Science Center at San Antonio, and Baylor College of Medicine.

## Report Approach and Methodology

- This report evaluates the full economic cost of cancer and the impact of CPRIT investments with particular attention given to the return on operations, prevention and screening programs, research supported by CPRIT, and economic development and social gains associated with CPRIT investments.
- The following is a short summary of the underlying methodology used for each of the impacts presented throughout this report. Specific assumptions and additional methodological detail are noted with the corresponding results. Additionally, further explanation of the methods and terms used in this study, including the pertinent input-output and econometric systems, may be found in Appendices A and B.
- The methods used in this study include dynamic input-output assessment making use of TPG's US Multi-Regional Input Assessment System (USMRIAS), which 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



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unit (a dollar's worth) of output for a given sector. Standard economic and fiscal measures (such as output, income, employment, and State revenues) are also quantified.

- The Perryman Group first estimated the economic cost of cancer in terms of Texas business activity including losses stemming from treatment, morbidity, and mortality as well as the associated spillover effects. Data regarding the numbers of Texans with cancer and the associated costs for direct medical expenses, morbidity costs, and mortality are the subject of reports by entities such as the National Institutes of Health, the American Cancer Society, and the Texas Department of State Health Services.
- The overall effect of CPRIT operations on business activity in Texas (including multiplier effects) was estimated using input data regarding direct employment at the Institute.
- The positive economic benefits of CPRIT-supported cancer prevention and screening programs were also assessed, including both the increase in business activity due to the screenings themselves as well as associated benefits from improved health.
- TPG estimated economic returns on research supported by the Institute (including the effects related to the specific outlays, anticipated recruitment efforts for high quality scholars in relevant areas, typical returns on medical research investments, and spinoff companies that surface from such endeavors).
- Some illustrative scenarios related to potential economic development and social gains stemming from the Institute's role as a catalyst for incremental business activity as well as social gains such as the economic value of increased quality of life, longevity, and productivity from improved outcomes were similarly provided.



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- The key models used in this analysis include The Perryman Group's Texas Econometric Model (described in Appendix A) as well as the firm's US Multi-Regional Impact Assessment System which was used to estimate the total (direct, indirect, and induced) economic effects. Although the models used in this process have been maintained for more than 25 years and are widely used and accepted, all economic models are based on estimates and do not give perfect results.
  - Impacts are expressed in terms of key measures of business activity (described more fully in the methodological appendices). In essence, total expenditures (or total spending) measures every dollar that changes hands in the local area as a result of the stimulus. Gross product (or output) is the amount of new production of goods and services that will come about locally as a result of the activity. Personal income is dollars that end up in the hands of people in the area; the vast majority of this derives from the earnings of employees, but payments such as interest and rents are also included. Job gains are expressed in either person-years of employment (for a temporary effect such as construction) or permanent jobs (for an ongoing impact).



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# THE ECONOMIC COST OF CANCER IN TEXAS



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# THE ECONOMIC COST OF CANCER IN TEXAS

## Overview of the Issue

- Cancer affects the longevity, quality of life, and finances of individuals suffering with the illness.
- Costs associated with cancer include direct medical outlays for treatment and care as well as indirect costs such as disease-related work disability or premature mortality. Prevention, early detection, effective treatment, and medical advances to minimize the consequences of the disease are vital national and, indeed, global priorities.

## Cancer Incidence

- Despite advances in many aspects of cancer prevention and treatment, the number of Americans diagnosed with the disease continues to rise. One factor in this upward trend is the aging of the US population, as cancer incidence increases among older age groups.
- Although it is difficult to determine the precise number of people who have cancer at any given time, the National Cancer Institute estimated that as of January 2006, there were some 11.4 million Americans with a history of cancer, although some were cancer-free at the time.<sup>1</sup>

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<sup>1</sup> *Cancer facts & figures 2010*. (2010). American Cancer Society.



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- The American Cancer Society estimates that there will be about 1,529,560 new cases of cancer and 569,490 deaths from cancer in the US in 2010.<sup>2</sup>
  - In Texas, a total of 104,141 new cases of cancer are expected in 2010, with 37,984 cancer deaths projected.<sup>3</sup> Like the nation, cancer is the second leading cause of death in the state after cardiovascular disease.<sup>4</sup>

## Cancer and Age

- Anyone can develop cancer, but there are certain risk factors that can increase the likelihood of being diagnosed with cancer such as smoking, alcohol abuse, obesity, poor nutrition, history of cancer in a first-degree relative, race (with blacks having a higher cancer incidence than any other racial group), and gender (with males reporting higher cancer incidence than female).<sup>5</sup>
- The American Cancer Society statistics also demonstrate that the risk of being diagnosed with cancer increases with age. In fact, about 77% of the people diagnosed with cancer between 2003 and 2007 were 55 years of age or older.<sup>6</sup>

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<sup>2</sup> *Cancer facts & figures 2010*. (2010). American Cancer Society.

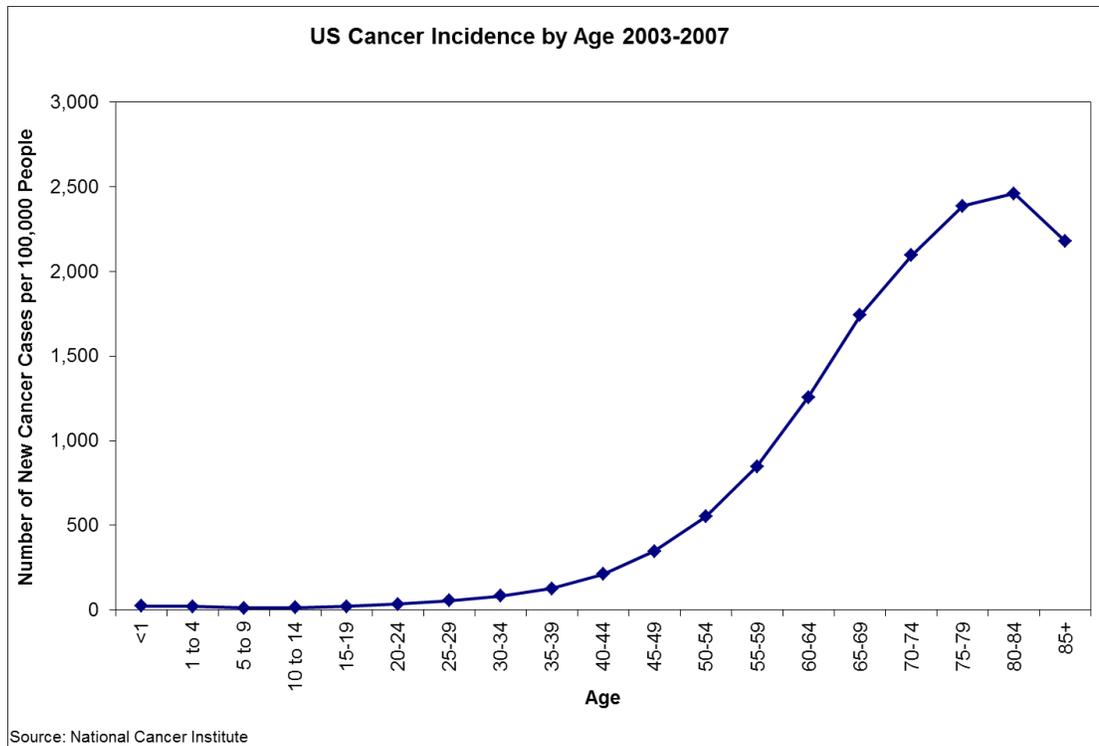
<sup>3</sup> *Expected new cancer cases and deaths by primary site, Texas, 2010*. (2010, October). Texas Department of State Health Services.

<sup>4</sup> *Cancer facts & figures 2010*. (2010). American Cancer Society.

<sup>5</sup> *Cancer facts & figures 2010*. (2010). American Cancer Society.

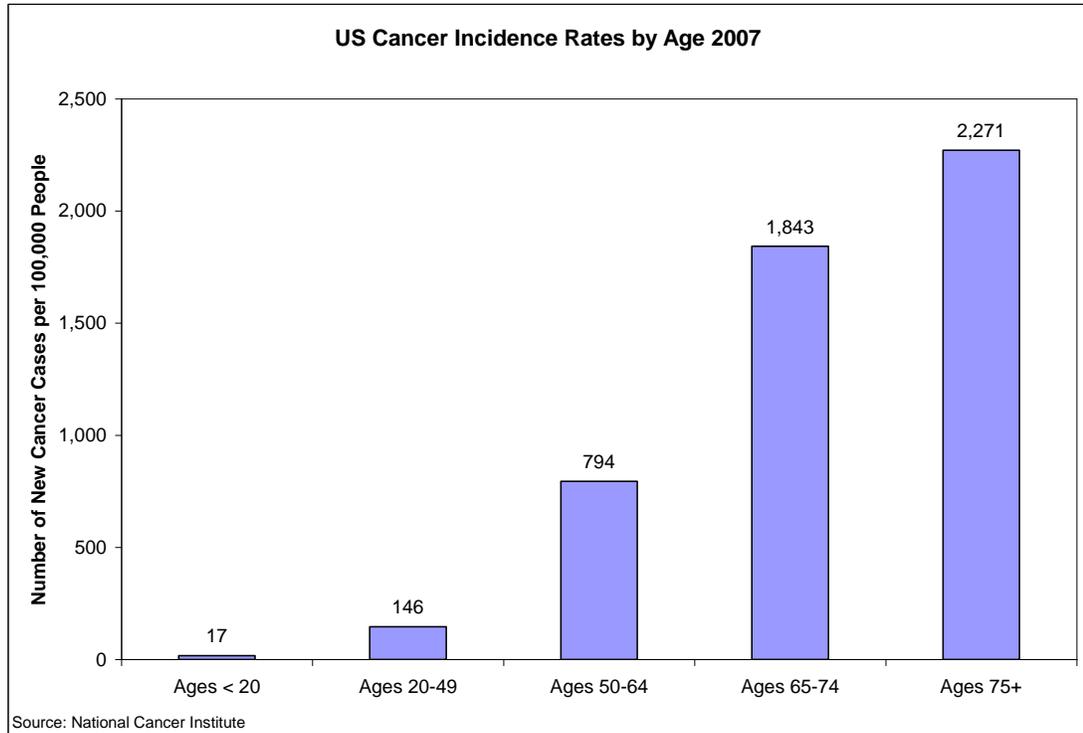
<sup>6</sup> *SEER State Factsheets*. (2010). National Cancer Institute.





- From 2003 to 2007, the median age at initial diagnosis for cancer in all sites was 66 years of age. According to the National Cancer Institute, cancer the incidence rate (per 100,000) for people younger than 20 years of age in 2007 was 17, while for people over 75 years of age it was 2,271, or almost 134 times higher.<sup>7</sup>

<sup>7</sup> SEER State Factsheets. (2010). National Cancer Institute.



## Cancer Costs

- Cancer affects individuals, businesses, and society as a whole through shortened life spans, lost productivity, increased health care expenditures, and premature mortality.
- The National Institute of Health (NIH) estimated the total overall cost of cancer in 2010 to be \$263.8 billion including
  - direct medical costs of \$102.8 billion (including the total of all health expenditures),
  - indirect morbidity costs (the cost of lost productivity due to illness) of \$20.9 billion, and
  - indirect mortality costs (the cost of lost productivity due to premature death) of \$140.1 billion.<sup>8</sup>

<sup>8</sup> *Cancer facts & figures 2010*. (2010). American Cancer Society.



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- A study directed by the Texas Department of State Health Services (DSHS) found that the total cost of cancer in the state was roughly \$21.9 billion in 2007, with \$10.0 billion in direct medical costs and \$11.8 billion in indirect costs from lost productivity due to cancer morbidity and mortality.<sup>9</sup>
  - These studies clearly portray the very large losses associated with cancer. However, they fail to capture numerous “multiplier” effects associated with the disease and, thus, represent only a portion of the overall toll on business activity.

## The Perryman Group’s More Comprehensive Measure of Cancer Cost

- Studies such as those described above reflect only the initial effect of the various categories of cost. However, these losses, in turn, generate further reductions in business activity as measured in the present study.
- The Perryman Group developed a more comprehensive measure of the cost of cancer in terms of Texas business activity. This includes losses stemming from treatment, morbidity, and mortality as well as the associated foregone spillover effects.

### Methods Used

- The cost of cancer includes direct medical outlays for treatment and care and indirect costs such as disease-related work disability or premature mortality. Most studies of cancer costs reflect only the initial effect of the various categories of cost.

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<sup>9</sup> Phillips, B.U., et al. (2009, March). *The cost of cancer in Texas 2007*. Department of Preventive Medicine and Community Health. University of Texas Medical Branch at Galveston.



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However, these losses, in turn, generate further reductions in business activity. This more comprehensive measure was the approach utilized by The Perryman Group.

- An important source of input data is the Texas Cancer Registry, which includes information regarding treatment costs and income losses attributable to morbidity and mortality. Though this is an excellent source of the necessary input data, it is characterized by a time lag of more than two years. In order to assess the full economic effects as of 2010, TPG updated these estimates using a projection model based on population, overall inflation, and health care costs. Patterns in mortality and morbidity were also updated using recent data from the American Cancer Society. This segment of the analysis indicates that **the annual direct medical costs and morbidity and mortality losses associated with cancer within the state is now estimated at approximately \$25.3 billion, an increase of 15.8% since 2007.**
- Because the treatment cost component represents a loss to various payers, there is a “multiplier” effect if these funds could be redeployed into business activity. To estimate the direct inputs for this segment of the analysis, the actual outlays are allocated based on the current incidence of health care spending across more than 500 industrial and consumer categories utilizing the direct requirements matrix from the impact system described in Appendix B.
- The mortality and morbidity estimates TPG used include productivity assumptions below historical patterns and future projections. Average compensation (rather than per-capita) was used to better capture any disparity between state and national earning patterns. Because the values were computed in terms of lost income, they do not reflect the full extent of the losses to the



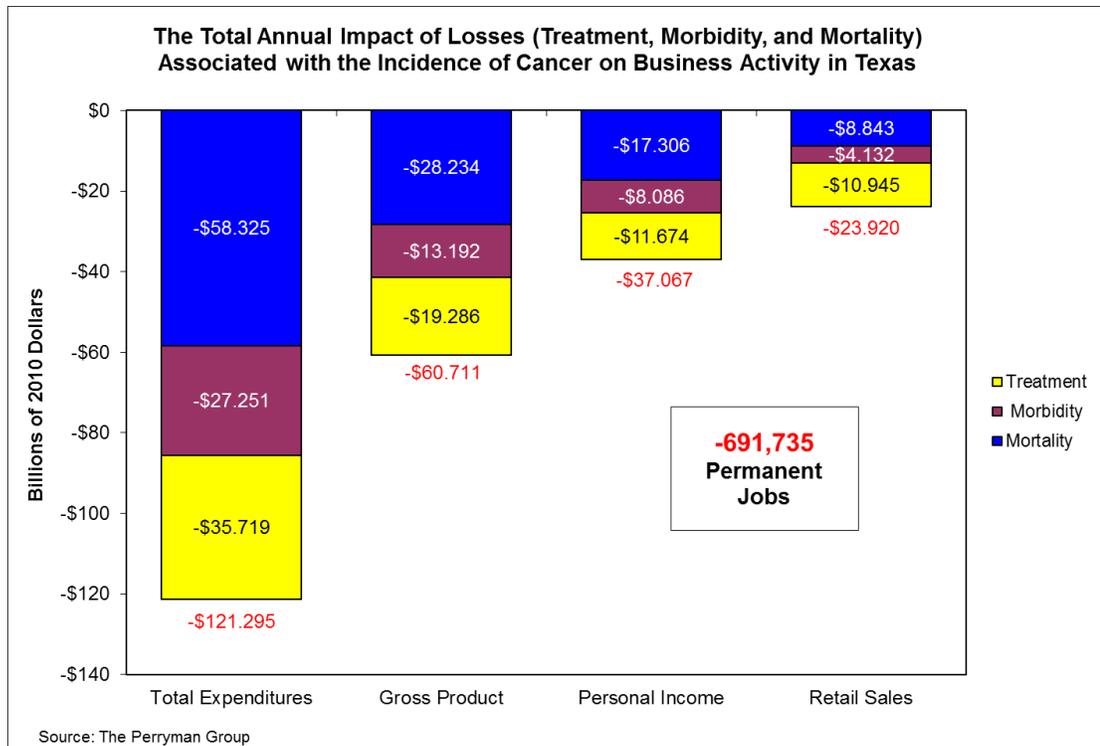
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economy. Foregone income necessarily means that production, spending, employment, and other measures of economic activity are also foregone. These aggregates were measured using relevant coefficients to capture the relationships among the pertinent variables, as well as data from the Regional Economic Information System of the US Department of Commerce. Because the original approach captures the overall income effects, there are no “multiplier” calculations applied to this segment of the analysis, with the exception of the induced spending derived from the higher earnings. The direct values in this category were assumed to follow standard consumer purchasing patterns for Texas as identified by ACCRA and the US Department of Labor.

## Economic Cost of Cancer in Texas

- The Perryman Group’s analysis indicates a **total cost to the Texas economy of some \$121.3 billion in reduced annual spending, \$60.7 billion in output losses per annum, and 691,735 lost jobs from cancer treatment, morbidity, and mortality and the associated spillover effects. The yearly loss in State fiscal revenues is almost \$4.6 billion, while various local governments experience a combined loss of \$1.9 billion per annum.**



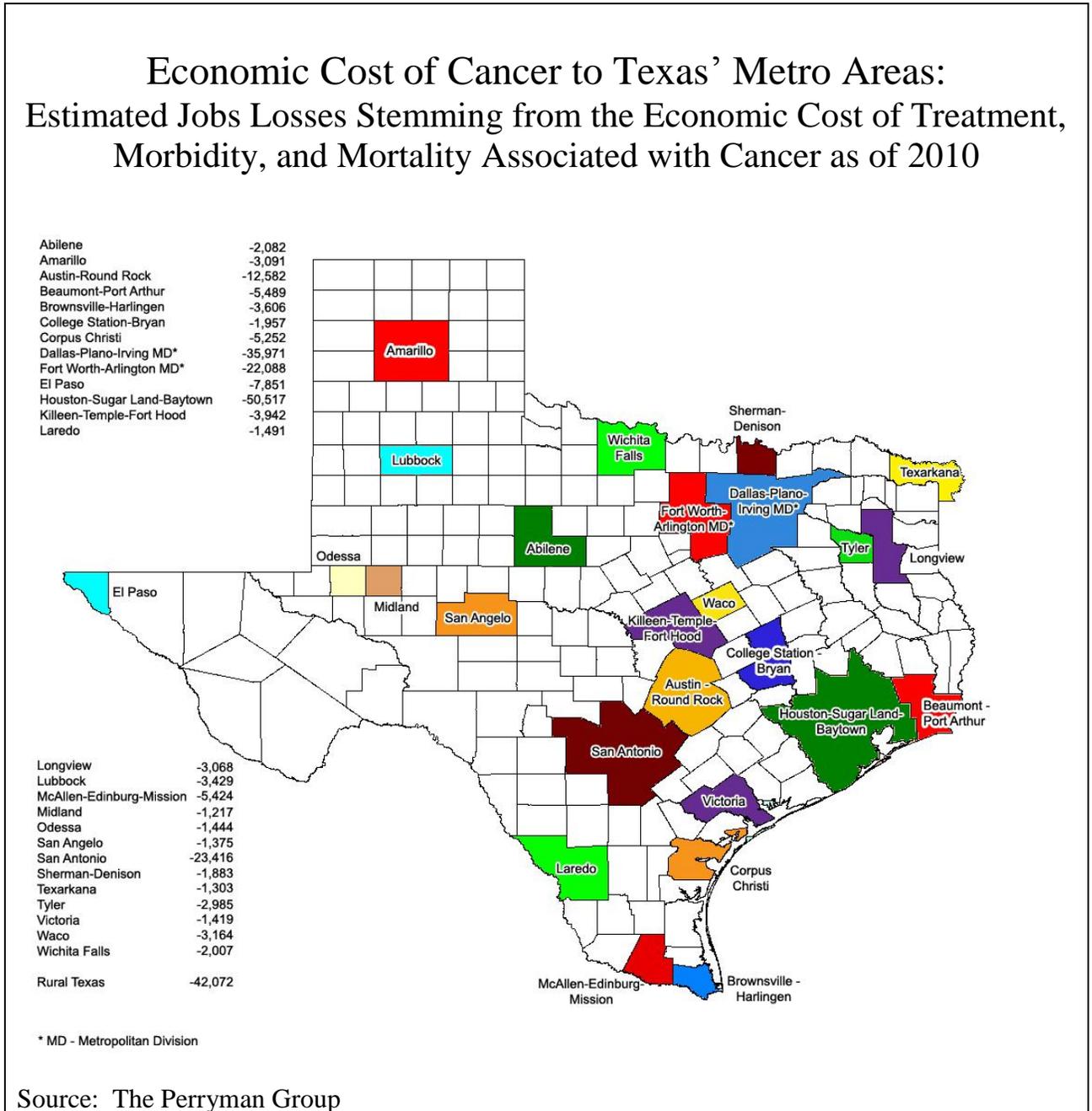


## Costs of Cancer to Regions of Texas

- The Perryman Group measured the economic cost of cancer for various regions, metropolitan areas, counties, and legislative districts (Congressional, House, and Senate) of Texas; results of this analysis are included in Appendix C.
- An important element of this segment of the analysis was allocating cancer costs to various geographic areas. The allocations of various categories of direct effects were accomplished based on health spending, cancer incidence, and cancer mortality rates at the county level. The relevant information was obtained from the US Department of Commerce and the National Cancer Institute. The county-level submodels of the USMRIAS reflect the unique industrial composition and characteristics of each county and multi-county area analyzed. They also capture spillover effects across regions. Highlights of

this analysis are provided below, with detailed findings being presented in Appendix C.

- The following map illustrates the estimated economic cost of cancer to Texas metropolitan areas in terms of job losses.



- On a regional basis, the state’s most populous areas naturally see the largest economic costs of cancer. The following table indicates the total cost of the disease by Council of Governments Region (defined in the map below).

## Texas Council of Governments Regions



### Current Regions

1 - Panhandle	13 - Heart of Texas
2 - South Plains	14 - Capital
3 - West Central Texas	15 - Brazos Valley
4 - North Texas	16 - Deep East Texas
5 - North Central Texas	17 - Middle Rio Grande
6 - Texoma	18 - Alamo
7 - North East Texas	19 - Golden Crescent
8 - East Texas	20 - Gulf Coast
9 - Rio Grande	21 - South East Texas
10 - Permian Basin	22 - Coastal Bend
11 - Concho Valley	23 - South Texas
12 - Central Texas	24 - Lower Rio Grande



## Economic Cost of Cancer to Texas' Regions: Total Annual Impact of Treatment, Morbidity, and Mortality

COG	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
Panhandle	(\$2,194,271,553)	(\$1,126,471,362)	(\$681,489,622)	(\$484,609,126)	-13,095
South Plains	(\$1,987,967,037)	(\$1,057,212,521)	(\$648,043,468)	(\$454,289,807)	-12,633
North Texas	(\$1,518,545,895)	(\$802,252,777)	(\$487,414,660)	(\$355,666,963)	-9,492
North Central Texas	(\$29,773,255,131)	(\$14,912,411,915)	(\$9,080,068,313)	(\$5,502,785,089)	-165,983
North East Texas	(\$1,733,567,723)	(\$905,044,257)	(\$562,214,948)	(\$433,652,012)	-11,338
East Texas	(\$5,812,266,589)	(\$2,966,815,412)	(\$1,801,882,880)	(\$1,278,366,258)	-34,831
West Central Texas	(\$2,224,480,874)	(\$1,146,299,218)	(\$691,693,172)	(\$504,206,451)	-13,502
Upper Rio Grande	(\$3,876,153,633)	(\$1,933,980,562)	(\$1,169,616,656)	(\$759,258,340)	-22,303
Permian Basin	(\$2,067,445,020)	(\$1,044,321,988)	(\$629,696,278)	(\$444,786,197)	-11,799
Concho Valley	(\$969,083,596)	(\$483,298,824)	(\$286,252,213)	(\$209,251,654)	-5,637
Heart of Texas	(\$2,333,933,291)	(\$1,166,040,472)	(\$707,762,131)	(\$509,704,051)	-14,099
Capital	(\$6,083,794,474)	(\$3,216,673,515)	(\$1,989,420,926)	(\$1,331,783,287)	-38,097
Brazos Valley	(\$1,351,431,081)	(\$706,805,909)	(\$431,957,189)	(\$322,440,615)	-8,604
Deep East Texas	(\$2,505,554,951)	(\$1,326,057,086)	(\$824,349,488)	(\$635,449,726)	-16,572
South East Texas	(\$2,565,308,276)	(\$1,314,085,964)	(\$835,051,616)	(\$595,357,570)	-15,976
Gulf Coast	(\$30,043,061,074)	(\$14,091,835,974)	(\$8,545,871,726)	(\$4,678,768,702)	-147,434
Golden Crescent	(\$1,185,372,116)	(\$601,946,447)	(\$369,513,994)	(\$267,328,564)	-7,096
Alamo	(\$11,450,061,496)	(\$5,845,677,285)	(\$3,589,406,223)	(\$2,400,182,839)	-68,928
South Texas	(\$813,053,740)	(\$435,607,505)	(\$262,850,398)	(\$214,596,981)	-5,348
Coastal Bend	(\$3,464,989,063)	(\$1,681,760,588)	(\$1,021,054,749)	(\$717,246,497)	-19,329
Lower Rio Grande Valley	(\$3,585,573,557)	(\$1,930,453,280)	(\$1,193,013,015)	(\$868,532,771)	-24,162
Texoma	(\$1,271,066,059)	(\$670,832,382)	(\$419,815,709)	(\$315,605,945)	-8,418
Central Texas	(\$1,840,328,568)	(\$997,606,203)	(\$624,323,364)	(\$468,016,971)	-12,646
Middle Rio Grande	(\$644,492,339)	(\$347,634,636)	(\$213,759,353)	(\$168,484,660)	-4,410
Border Region	(\$8,923,037,738)	(\$4,649,915,056)	(\$2,840,663,345)	(\$2,011,896,193)	-56,251
<b>TOTAL STATE IMPACT</b>	<b>(\$121,295,057,134)</b>	<b>(\$60,711,126,081)</b>	<b>(\$37,066,522,092)</b>	<b>(\$23,920,371,075)</b>	<b>-691,735</b>

NOTE: Allocations reflect best available evidence regarding mortality and incidence and industrial structure and composition of each area.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

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# THE ECONOMIC IMPACT OF THE CANCER PREVENTION AND RESEARCH INSTITUTE OF TEXAS (CPRIT) AND ITS PROGRAMS



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# THE ECONOMIC IMPACT OF THE CANCER PREVENTION AND RESEARCH INSTITUTE OF TEXAS (CPRIT) AND ITS PROGRAMS

- In FY 2010, CPRIT awarded a total of \$216.1 million for research and prevention of cancer to entities including universities, hospitals and private companies. About \$165.1 million of the total was designated for cancer research, while \$21.7 million was awarded for prevention programs. The second-largest source of cancer research funding in the nation, CPRIT is expected to award \$3 billion through 2017 to invest in cancer research, prevention programs, and services.
- Even beyond the potentially life-changing influence of spending to reduce the incidence and severity of the disease, this investment in research, screening, and related activities generates substantial economic impacts. Moreover, the investment has the potential to reduce the cost of cancer through improving outcomes.
- Returns on investments in medical research include jobs created in the private sector, health care costs saved, the value of increased longevity, the value of reduced morbidity and disability, and the benefits of newer medicines and therapies.
- Job creation occurs not only directly through the scientists and staff in the research facilities, but also indirectly through the provision of business services needed by those institutions and other multiplier effects.



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- Many studies over an extended period of time support the conclusion that investing in medical and cancer research can yield returns far in excess of initial outlays.

## Methods Used

- Job creation from CPRIT operations occurs not only directly through the scientists and staff in the research facilities, but also indirectly through the provision of business services needed by those institutions and other multiplier effects. Starting with input information regarding employment levels at the Institute, the model (described in Appendix B) was used to estimate the multiplier/spinoff effects stemming from the direct operations of the Institute.
- In the case of the cancer-related health costs saved through screening programs, The Perryman Group utilized available studies of the returns on investment in cancer prevention and screening. These studies also formed the basis for estimates of the potential improvement in outcomes. TPG then used standard measures of productivity and worklife to obtain the likely incremental economic activity associated with reducing the incidence/severity of cancer through early detection.
- Because returns on direct spending for prevention and screening programs were estimated based on available studies of such returns they are unlikely to be specific to Texas or the exact programs offered by the Institute and will be subject to some range of error.
- Returns on investments in medical research include jobs created in the private sector, health care costs saved, the value of



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increased longevity, the value of reduced morbidity and disability, and the benefits of newer medicines and therapies.

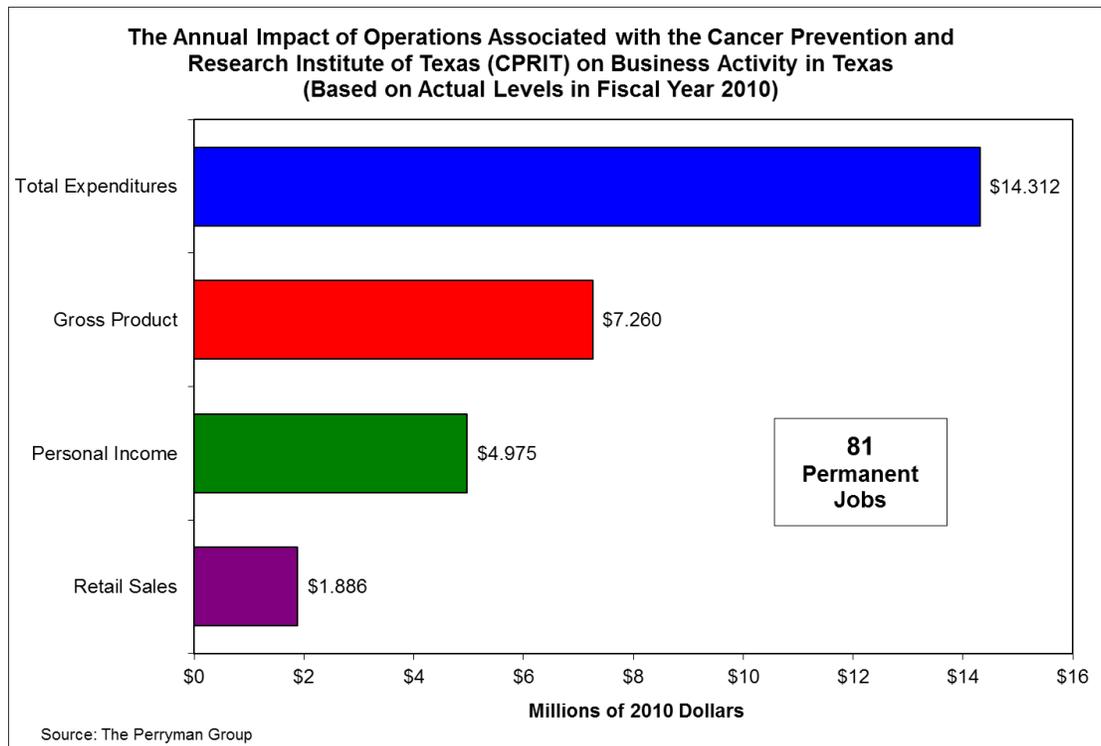
- Job creation occurs not only directly through the scientists and staff in the research facilities, but also indirectly through the provision of business services needed by those institutions and other multiplier effects. Additionally, revenues from licensing and royalty streams are economic gains generated by research and development facilities.
- TPG calculated the magnitude of these secondary effects based on typical annual rates of return to health-related research, the addition of four researchers per year, and standard patterns in spinoff companies from research outlays (fully adjusted for attrition). Spinoff firms from these investments were estimated using information from the Association of University Technology Managers (AUTM) which was fully adjusted for attrition, as well as data from the US Department of Commerce regarding typical firm size (excluding large pharmaceutical plants).
- The Perryman Group also estimated the outcomes-based economic benefits of CPRIT's programs (such as reduced morbidity and mortality); these results are described in a subsequent section.

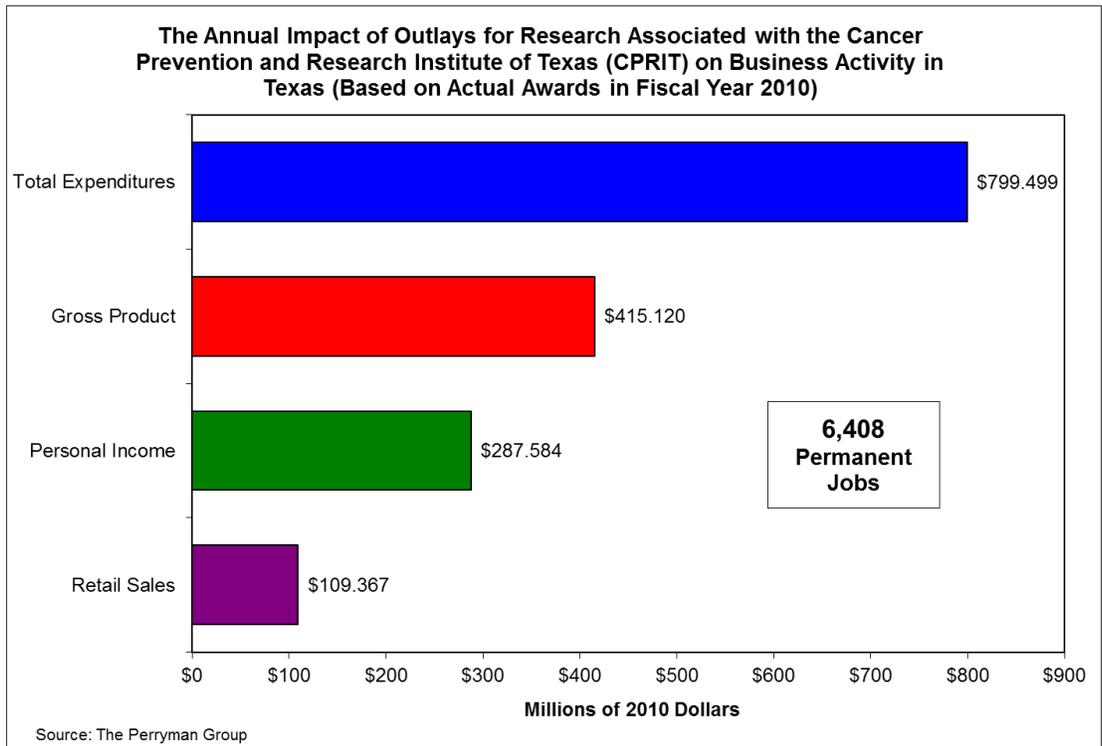
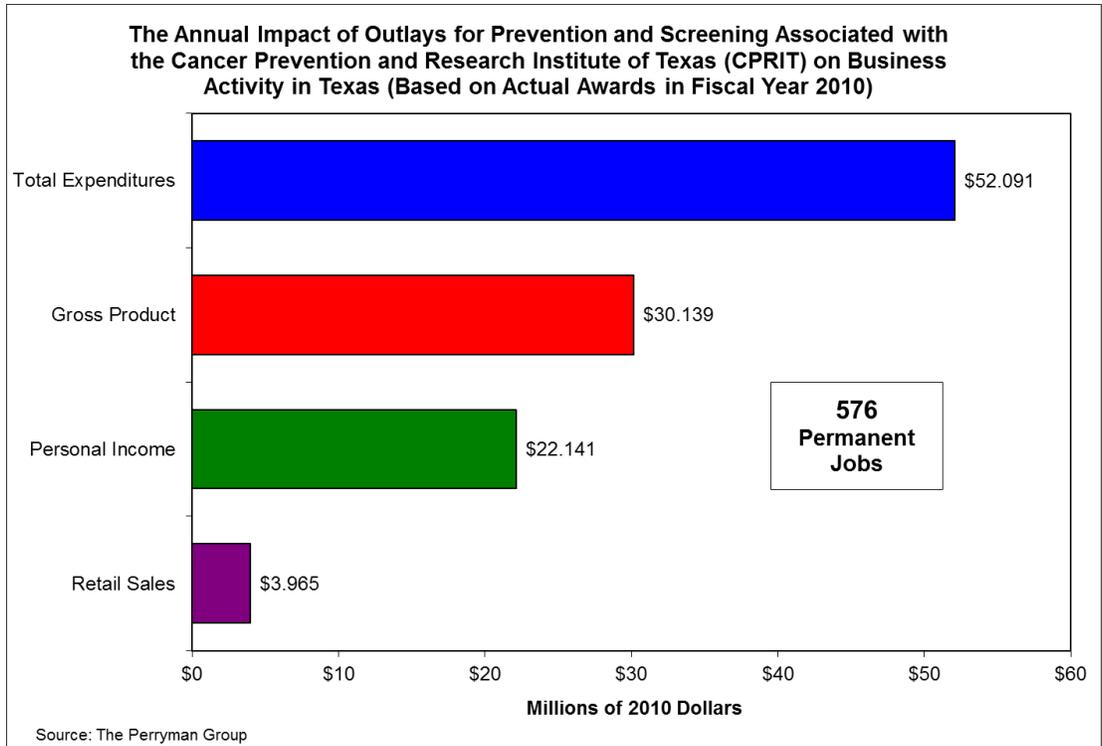
## Current Impact of CPRIT Direct Operations, Prevention and Screening, and Research Programs

- The direct outlays and related “multiplier” effects emanating from CPRIT operations and programs generated a sizable increase in business activity in Texas including **\$452.5 million in output and 7,066 jobs during the Institute's first year.**



- These economic benefits include
  - \$7.3 million in output and 81 jobs from operations,
  - \$30.1 million in output and 576 jobs from prevention and screening, and
  - \$415.1 million in output and 6,408 jobs from research programs.





- **Over the first 10 years (assuming that the original goals for screening and research are achieved by the third year of the program), the operations, prevention/screening, and research initiatives of CPRIT lead to cumulative economic benefits of some \$5.4 billion in output (gross product) and 84,137 person-years of employment to the state economy.**

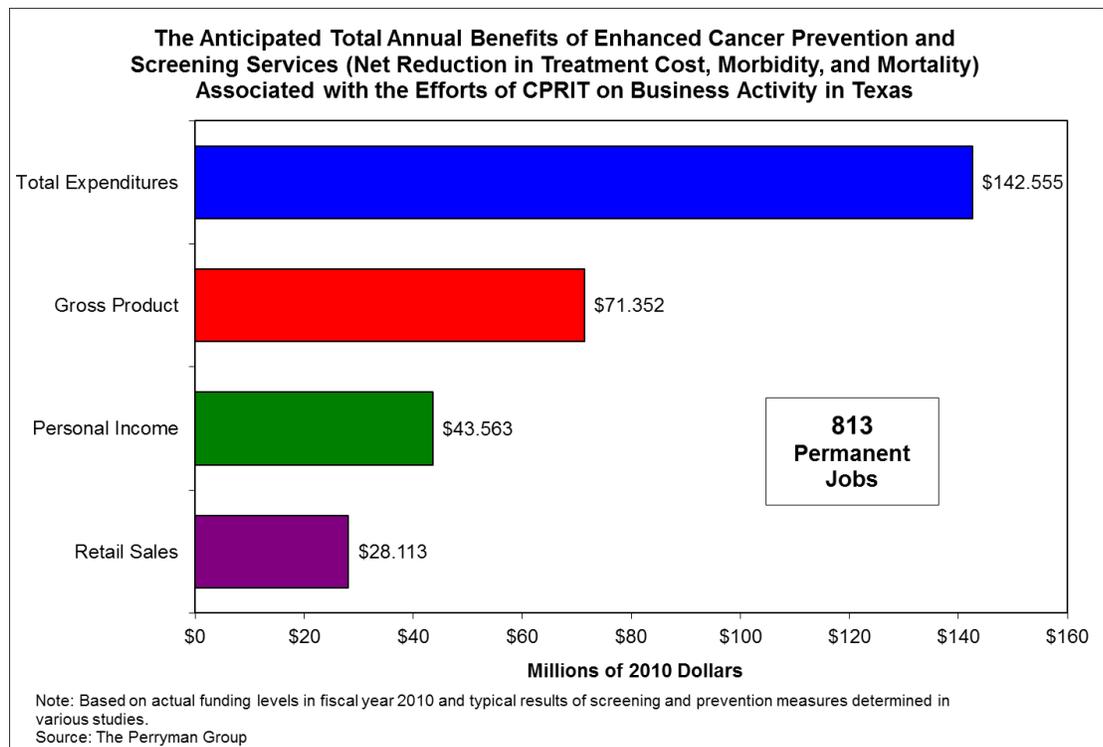
<b>The Ten-Year Impact of CPRIT on Business Activity in Texas</b>				
<b>(Monetary Values in Millions of 2010 Dollars)</b>				
	<b>Operations</b>	<b>Prevention &amp; Screening</b>	<b>Research &amp; Related Programs</b>	<b>TOTAL</b>
<b>Total Expenditures</b>	\$143.121	\$674.122	\$9,465.129	\$10,282.372
<b>Gross Product</b>	\$72.597	\$390.040	\$4,914.525	\$5,377.162
<b>Personal Income</b>	\$49.745	\$286.537	\$3,404.619	\$3,740.942
<b>Retail Sales</b>	\$18.861	\$51.316	\$1,294.772	\$1,364.948
<b>Employment (person-years)</b>	814	7,461	75,862	84,137

- **The ongoing outlays for CPRIT operations and programs alone generate \$265.6 million in annual State revenue, as well as \$169.7 million to various local governments.**
- Even beyond these sizable gains in business activity directly stemming from CPRIT investments, improved outcomes from screening and prevention could further enhance the economy. Research sponsored by CPRIT could also generate breakthroughs which lessen the cost of cancer, facilitate the attraction of more researchers, and yield spinoff companies. The following sections present findings from TPG’s analysis of these incremental effects.

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## Outcomes-Related Impact of CPRIT Screening Programs

- An even more important aspect of CPRIT's spending on prevention and screening programs (approximately \$21.7 million in FY 2010) is the reduced incidence and severity of cancer cases through earlier detection. Many studies have demonstrated that such programs reduce health care costs, morbidity, and mortality.
- TPG estimated the **total annual net benefits from screening and prevention to be \$71.4 million in output and 813 jobs** each year (on a net present value basis assuming typical outcomes from available academic studies).



- **Over ten years, these outcomes-related screening effects total \$923.4 million in output and 10,521 person-years of employment.**

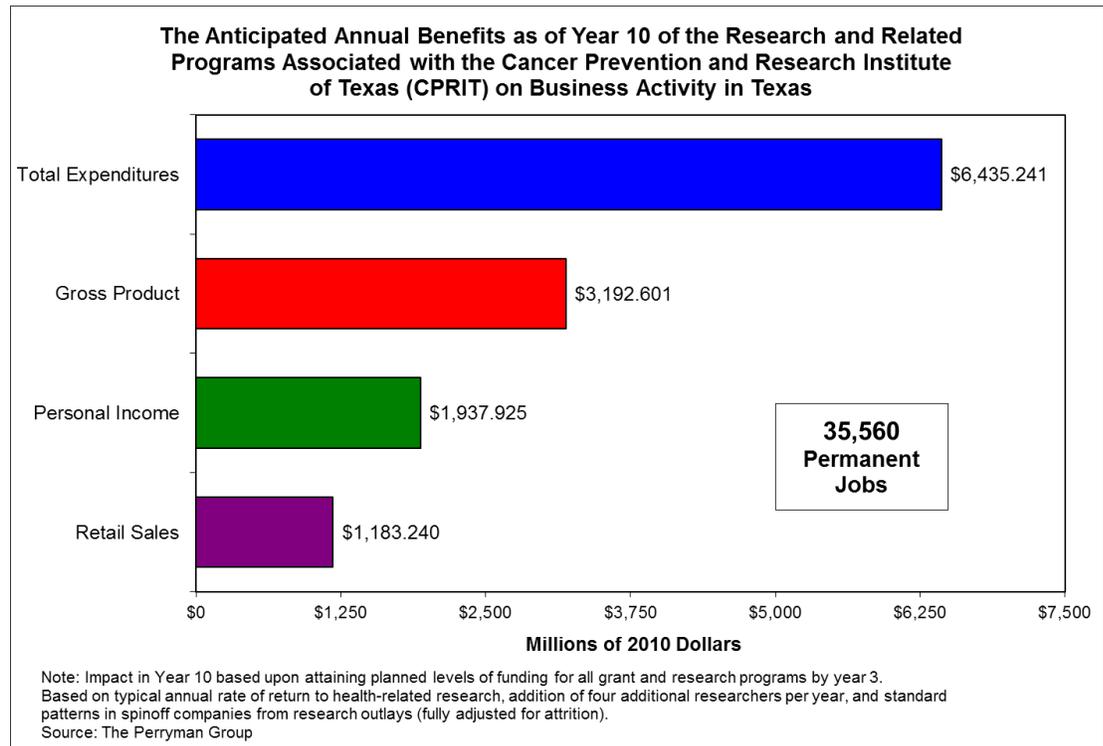
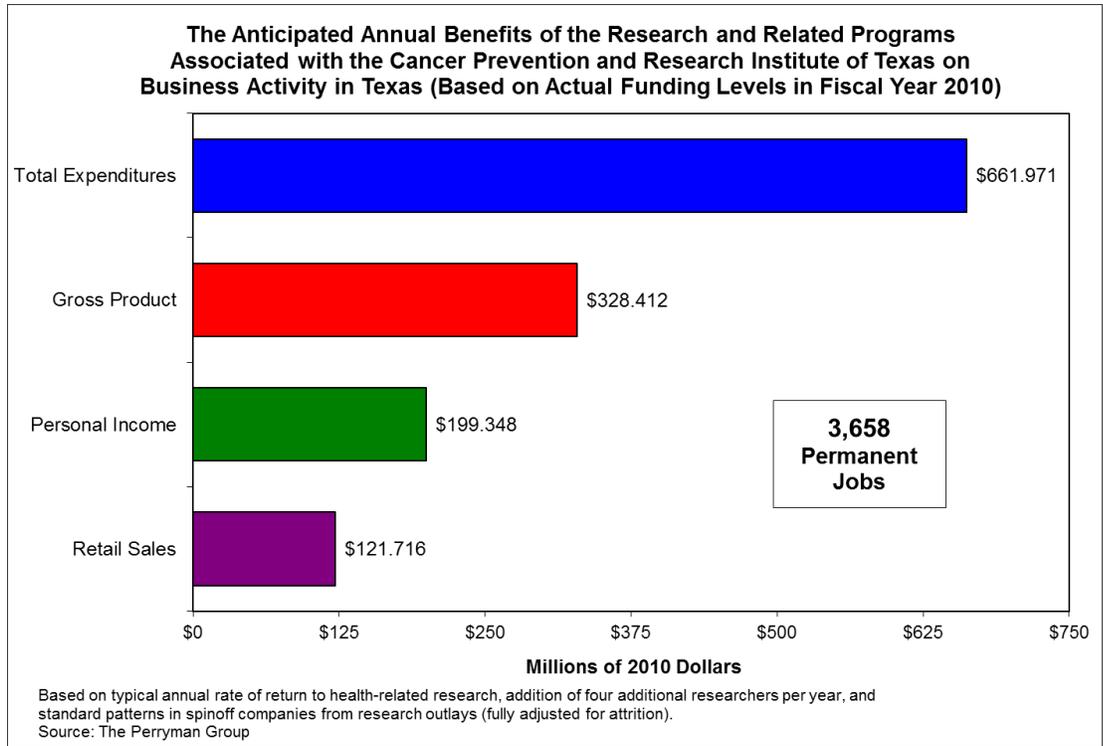
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## Secondary Impact of CPRIT Research

- The positive economic effects of research activities also go far beyond the initial stimulus. Research leads to better cancer outcomes (and, thus, lower costs), spinoff activity, and the attraction of top researchers (and associated grant inflows).
- Many studies over an extended period of time support the conclusion that investing in medical and cancer research can yield returns far in excess of initial outlays. The Perryman Group utilized studies of the relationship between research and reduced treatment costs (as well as reduced morbidity and mortality) to estimate the positive economic outcomes in these areas stemming from the Institute's research support.
- In addition, the economic benefits of new cancer-related therapeutics, diagnostics, and devices, are estimated based on available empirical analyses of typical rates of return. Direct investments from other sources, including annual rates of federal R&D expenditures, are also quantified. Estimates of spinoff firms were derived through information sources such as studies by the AUTM and others regarding typical firm formation rates until sufficient time elapses to have actual information. It should be noted that, in the early stages of the program, the anticipated returns are of necessity estimated based on typical responses observed in other contexts. As the results of specific initiatives begin to come to fruition, more specific measures can be developed.
- **The economic benefits of CPRIT-funded research activity associated compound over time, rising from a current \$328.4 million in output and 3,658 jobs to \$3.2 billion in output and 35,560 jobs in year 10.** This phenomenon occurs because



research benefits are ongoing and continue to provide benefits beyond the initial year of the outlays.



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- **The cumulative ten-year total effect of secondary research benefits stemming from CPRIT activities includes \$17.2 billion in output and 191,331 person-years of employment.**

## **Total Gross Impact of CPRIT Prevention and Research Programs**

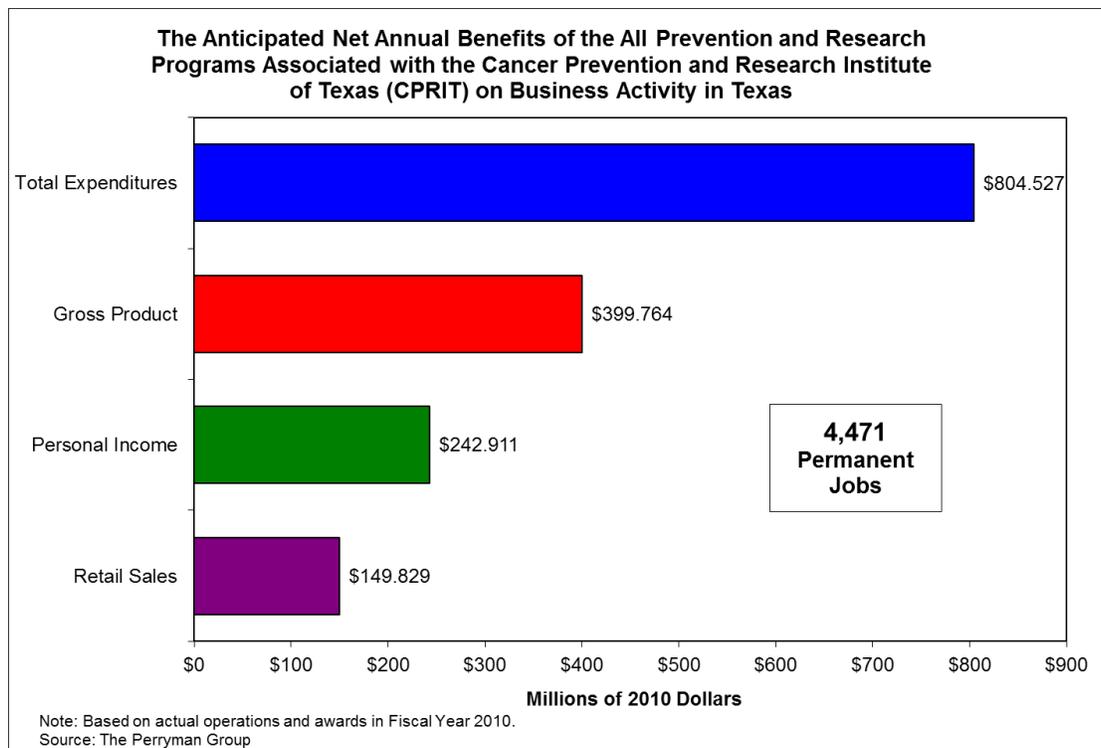
- Adding the economic benefits of CPRIT operations, prevention/screening programs, research, outcomes-based prevention/screening, and secondary research yields a total gross impact of the Institute's operations. **The current total annual impact of all prevention and research programs (including initial outlays and downstream effects) associated with CPRIT on Texas business activity was found to be \$852.3 million in output and 11,537 jobs.**
- Because of the cumulative nature of the research gains, these yearly effects rise to over \$3.8 billion in output (gross product) and 45,306 jobs by the tenth year.
- **The cumulative effect of CPRIT prevention and research programs on Texas business activity over the first ten years of full funding includes \$23.5 billion in output and 285,989 jobs.**



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## Total Net Economic and Fiscal Impact of CPRIT Prevention and Research Programs

- Because any State outlay involves positive economic effects, The Perryman Group isolated the impact of CPRIT programs net of the State spending.
- The results of this phase of the analysis clearly demonstrate the positive effects of the State's investment in CPRIT. During Fiscal 2010, the **net economic benefits of prevention and research programs associated with the Institute totaled \$399.8 million in output and 4,471 jobs.**



- These effects will grow over time as positive outcomes are realized and benefits compound. The **net stimulus is expected to rise to nearly \$3.3 billion in output and 36,654 jobs by year 10.**

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- **The net cumulative ten-year impact of all prevention and research programs associated with CPRIT includes gains in Texas business activity of \$18.1 billion in output and 201,852 person-years of employment.**
  - **This incremental business activity also generates taxes for the State and local governments.**
    - For Texas, tax receipts associated with CPRIT activities from all sources in the first year of full activity total \$51.2 million, while local public entities receive \$26.4 million.
    - By the tenth year, these annual increases rise to \$261.7 million and \$116.4 million, respectively.
    - Over the entire ten-year period, the total returns include \$1.557 billion in State fiscal resources and \$714.8 million to local taxing authorities.
    - It should also be noted that, even in the period after the CPRIT program is concluded, the ongoing research benefits will continue to generate a yearly stimulus of \$251.0 million in State revenues and \$155.5 million for local governments (in constant 2010 dollars).
  - **Thus, over an extended time horizon, the project will likely generate fiscal receipts totaling a substantial multiple of the commitment of public resources (in addition to the notable economic and health benefits). To the extent that it generates any of the potential economic benefits illustrated in the following section, the positive effects will be even more marked.**



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**POTENTIAL ECONOMIC  
DEVELOPMENT AND SOCIAL  
BENEFITS ASSOCIATED WITH THE  
CANCER PREVENTION AND  
RESEARCH INSTITUTE OF TEXAS**



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# POTENTIAL ECONOMIC DEVELOPMENT AND SOCIAL BENEFITS ASSOCIATED WITH THE CANCER PREVENTION AND RESEARCH INSTITUTE OF TEXAS

- TPG measured the benefits that would occur if CPRIT, in conjunction with other ongoing initiatives, serves as a catalyst for greater economic development in the biomedical and pharmaceutical arena.
- TPG also quantified the gains that would occur in Texas and the US if research breakthroughs that were facilitated by CPRIT funding were able to reduce cancer incidence in the state and nation over time to a level equal the current rate of the five states with the lowest prevalence.

## Methods Used

- Illustrations of potential economic development and societal gains are derived from analysis of the likely range of potential outcomes. They are forward-looking in nature, and more appropriately measured over a long time horizon. Inputs are based on reputable academic studies; nonetheless, they are subject to a range of error and changing conditions can affect actual results. Although the models used in this process have been maintained for more than 25 years and are widely used and accepted, all economic models are based on estimates and do not give perfect results.



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- The Perryman Group developed scenarios to illustrate the potential economic development effects of Institute activities and measure gains in business activity above baseline projections.
  - Scenarios involve the economic stimulus associated with a shift in Texas' relative position in industries related to the Institute (such as the biomedical industry cluster). The scenarios chosen are based on indications of the catalytic effect of the Institute (such as new company locations, related industrial development, and so on).
  - The ultimate goal of CPRIT is reducing cancer incidence. As noted, the disease involves a high human and economic cost. The Perryman Group developed scenarios to illustrate the potential economic benefit of reducing cancer incidence in Texas. Scenarios measure shifts in Texas' cancer incidence over time to the levels observed in other states.

## Impact Results: Catalyst for Economic Development

- An important role of CPRIT activity is as a catalyst for economic development. Investments in cancer research can be crucial to attracting top researchers and startup companies, which can later go on to grow into larger firms within the state.
- As this process occurs, supplier networks, training programs, related companies, and other resources tend to congregate, thus resulting in the establishment of a cluster of economic activity. Given the state's efforts to attract biomedical industries, CPRIT activity could serve as an impetus for a major concentration of emerging biomedical production sectors.

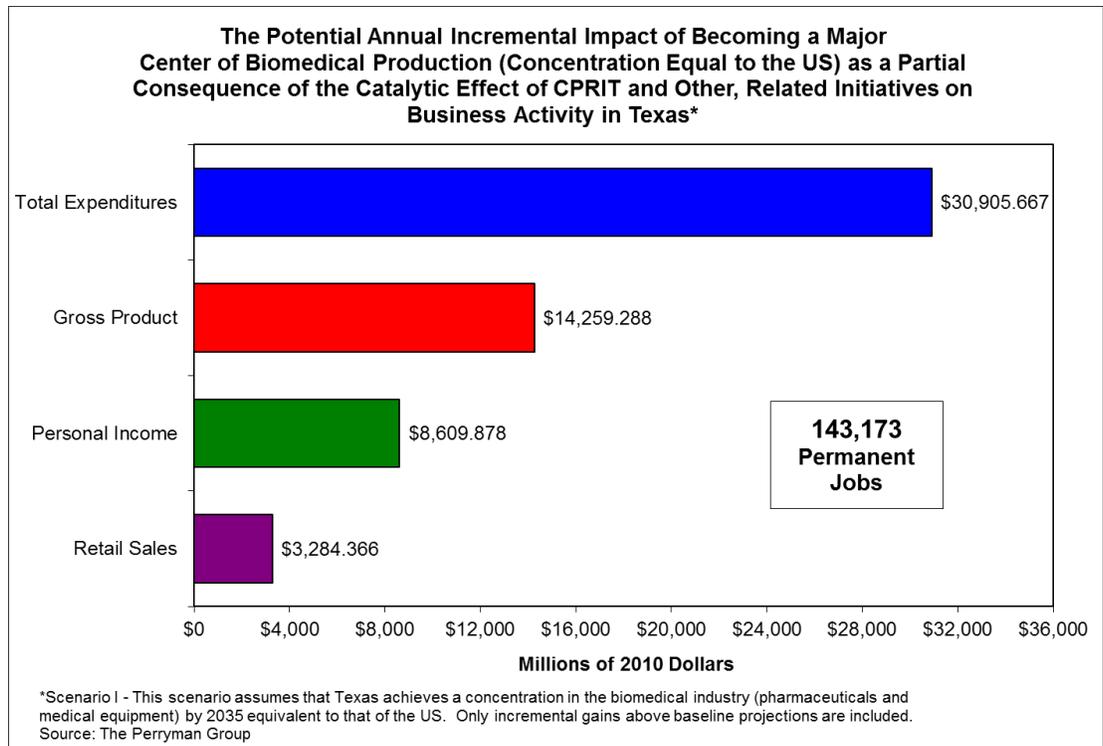


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- The Perryman Group developed two potential scenarios to illustrate the potential economic development effects of CPRIT initiatives. Only incremental gains above baseline projections (as derived from the Texas Econometric Model) are included.

## Texas Achieves US Concentration in Biomedical Industries

- Scenario I assumes Texas achieves a concentration in the biomedical industry (pharmaceuticals and medical equipment) by 2035 equivalent to that of the US.
- Under these assumptions, **annual incremental gains in business activity include \$14.3 billion in output (gross product) and 143,173 permanent jobs as of 2035. There would also be a stimulus of \$676.2 million in annual State revenue and \$334.1 million to local governments.**

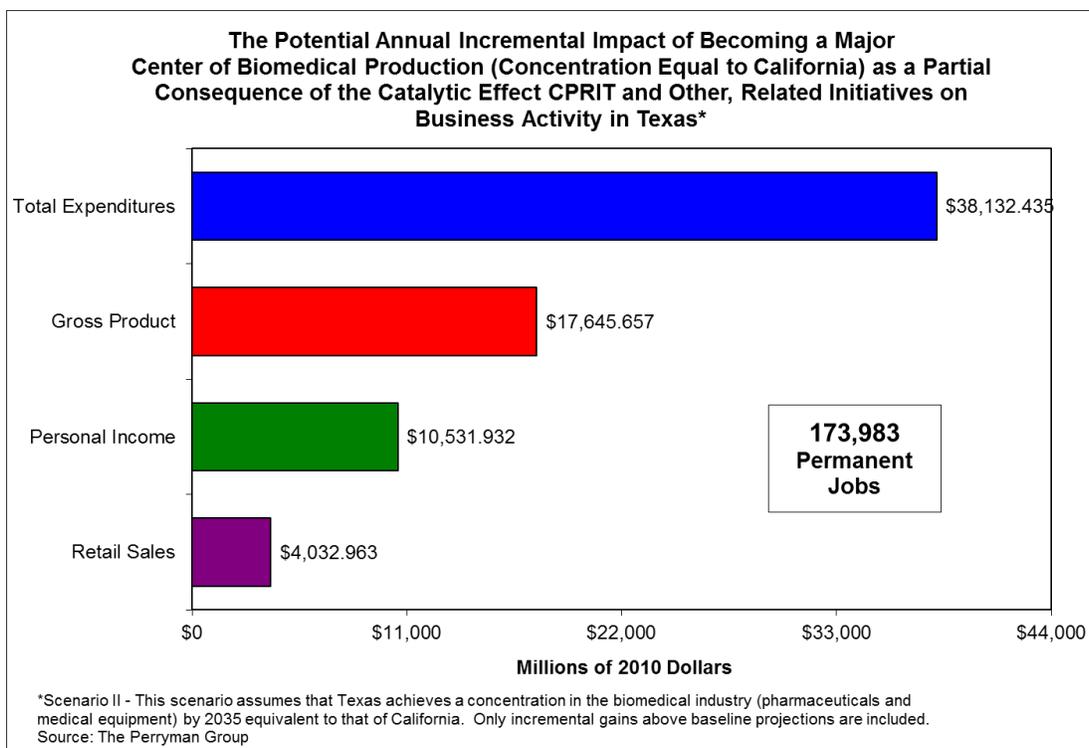




## Texas Achieves California Concentration in Biomedical Industries

- Scenario II presumes Texas achieves a concentration in the biomedical industry (pharmaceuticals and medical equipment) by 2035 equivalent to that of California. While there are certainly states with a higher relative presence in these sectors, California is representative of a large state that has strategically used its academic research capabilities to foster industrial development. The CPRIT initiative offers Texas an opportunity to leverage research into an enhanced presence in associated industries such as biomedicine and pharmaceuticals in a similar manner.
- The Perryman Group estimates that if Texas achieved a California-level concentration in biomedical industries, **the**

**annual gain in business activity in the state would be almost \$17.6 billion in output and 173,983 permanent jobs by 2035.**



- **Incremental State fiscal revenues in such a scenario would include \$822.3 million per annum, with local governments receiving an additional \$405.9 million.**

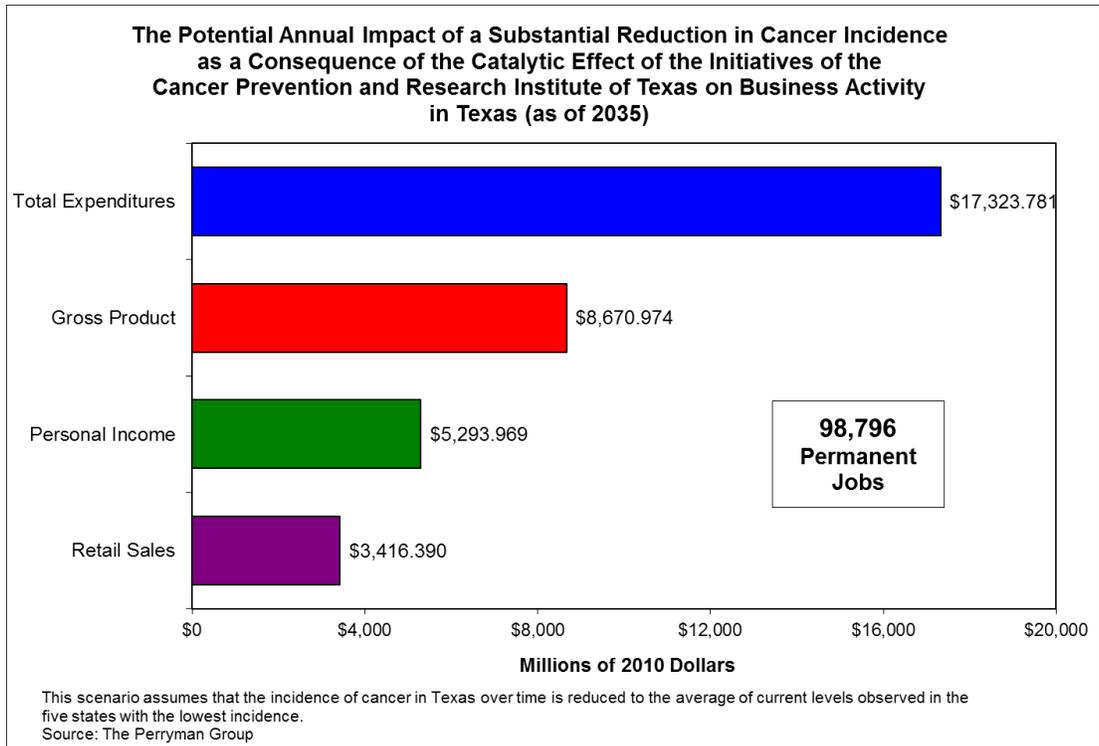
## Impact Results: Substantial Reduction in Cancer Incidence

- The ultimate goal of CPRIT is reducing cancer incidence and the associated high human and economic costs.
- If CPRIT's screening/prevention programs, research advances, and other initiatives reduce the incidence of cancer over time to equal the average of current levels observed in the five states

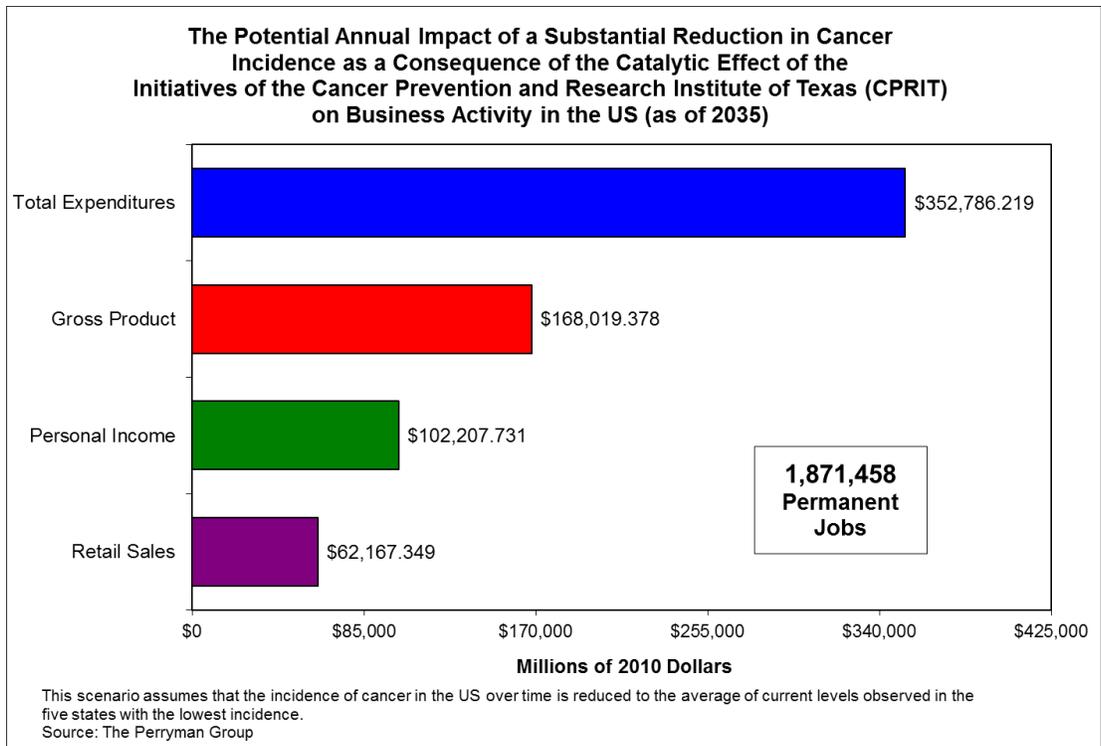


with the lowest incidence, substantial economic benefits would be realized.

- **The potential annual impact of this substantial reduction in cancer incidence stemming from the catalytic effects of CPRIT initiatives includes some \$8.7 billion in annual output (gross product) in Texas as of 2035 and 98,796 jobs.**



- **Yearly State and local governmental resources would rise by \$653.3 million and \$271.4 million, respectively.**
- **The benefits of such advances would not be restricted to Texas; they would bring better outcomes throughout the country and, indeed, the entire world. For the US as a whole, reducing cancer prevalence over time to equal the average of current levels of incidence in the five states with the lowest rates total \$168.0 billion in annual output and 1,871,458 jobs by 2035.**



- Clearly, the role of CPRIT and its programs in reducing cancer incidence involves the potential for substantial economic benefits. Reducing the tremendous cost of cancer would lead to gains in business activity across the US not to mention the immeasurable benefits to those who would otherwise be devastated by the disease.

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# CONCLUSION



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# CONCLUSION

- The human and economic costs of cancer are extremely high. The disease can be devastating to quality of life and financial stability of individuals and families.
- The aggregate economic costs stemming from treatment, morbidity, and mortality include some \$60.7 billion in output (gross product) and losses of more than 691,700 jobs in the state of Texas.
- The Cancer Prevention and Research Institute of Texas is playing a crucial role in the war on cancer. Through its operations, screening/prevention efforts, and research programs, CPRIT is generating sizable economic stimulus including some \$452.5 million in output (gross product) and almost 7,100 jobs. Moreover, the Institute's efforts stand to improve outcomes related to cancer prevention and treatment.
- Medical research and prevention programs have been shown to reduce incidence and enhance outcomes. Given the very high costs of cancer, reductions in treatment expenses, morbidity, and mortality stand to bring notable economic benefits.
- The Perryman Group estimates that over the next 10 years, CPRIT's operations and programs could generate economic benefits of some \$5.4 billion in output (gross product) and 84,137 jobs.
- Benefits of enhanced cancer prevention and screening (such as lower treatment costs, morbidity, and mortality) lead to additional gains in business activity, as do better outcomes due to discoveries enabled through CPRIT research programs. Finally,



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the Institute's role as a potential catalyst for development of Texas' biomedical industries could lead to substantial economic gains.

- **CPRIT's efforts in the areas of screening/prevention and cancer research stand to lower the cost of the disease in the future—both economically and, more importantly, in human terms. In addition, the Institute's operations and programs provide a sizable economic stimulus now which will only grow in the years to come and represent an excellent return to the commitment of fiscal resources.**



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# APPENDICES



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# APPENDIX A: Texas Econometric Model Methodology



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## The Texas Econometric Model

### Overview

- This Appendix provides a detailed methodological overview of the Texas Econometric Model, which was to provide baseline forecasts for the various scenarios used in the present analysis. The system was developed by Dr. M. Ray Perryman, President and CEO of The Perryman Group (TPG) approximately 30 years ago has been consistently maintained and updated since that time. It is formulated in an internally consistent manner and is designed to permit the integration of relevant global, national, state, and local factors into the projection process. It is the result of more than three decades of continuing research in econometrics, economic theory, statistical methods, and key policy issues and behavioral patterns, as well as intensive, ongoing study of all aspects of the global, US, Texas, and Waco economies. It is extensively used by scores of federal and State governmental entities on an ongoing basis, as well as hundreds of major corporations.
- This section describes the forecasting process in a comprehensive manner, focusing on both the modeling and the supplemental analysis. The overall methodology, while certainly not ensuring perfect foresight, permits an enormous body of relevant information to impact the economic outlook in a systematic manner.

### Model Logic and Structure

- The Texas Econometric Model revolves around a core system which projects output (real and nominal), income (real and nominal), 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 3-digit North American Industry Classification System (NAICS) level of aggregation. Hence, income by place of work is measured for approximately 90 production categories. The wage equations measure real compensation, with the form of the variable structure differing between “basic” and “non-basic.”
- 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



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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 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 3-digit 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 inter-industry 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 (real and nominal), income (real and nominal), and employment at a disaggregated industrial level. This process, of necessity, also produces projections of regional price deflators by industry. These values are affected by both national pricing patterns and local cost variations and permit changes in prices to impact other aspects of economic behavior. Income is converted from real to nominal terms using Texas Consumer Price Index, which fluctuates in response to national pricing patterns and unique local phenomena.
- Several other components of the model are critical to the forecasting process. The demographic module includes (1) a linkage equation between wage and



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- salary (establishment) employment and household employment, (2) a labor force participation rate function, and (3) a complete 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, the unemployment rate and level become identities.
- 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. Through this process, migration is treated as endogenous to the system, thus allowing population to vary in accordance with relative business performance (particularly employment).
  - 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. As noted earlier, prices are endogenous to the system.
  - 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. Moreover, it is updated on an ongoing basis as new data releases become available. Nonetheless, the above synopsis offers a basic understanding of the overall structure and underlying logic of the system.

### **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. The US model, which follows the basic structure outlined above, was used to some extent in the current analysis to define the demand for domestically produced goods on a per capita basis.
- 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



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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 re-estimated and simulated with each such data release, thus providing a constantly evolving and current assessment of state and local business activity.

### **The Final Forecast**

- The process described above is followed to produce an initial set of projections. 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 current events and factors 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.
- 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



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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 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.



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# APPENDIX B: US Multi-Regional Impact Assessment System Methodology



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## US Multi-Regional Impact Assessment System

- The basic modeling technique employed in this study is known as 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. This aspect of the process was described within the report. 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.
- 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 relevant economies (Texas and its various regions, metropolitan areas, and counties).
- 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.
- 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



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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 (2010) dollars to eliminate the effects of inflation.
- 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



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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.
- 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. A person-year is simply the equivalent of a person working for a year. As an example, it could be a carpenter employed for five months, a mason for three months, and a painter for four months. In the case of a construction project, these are typically spread over the course of the construction and development phase. 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 2007 and \$1 million in 2008, it is appropriate to say that \$2 million was achieved in the 2007-2008 period. If the same area has 100 people working in 2007 and 100 in 2008, 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.



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## APPENDIX C: Detailed Sectoral Results



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# The Economic Cost of Cancer in Texas



**The Total Annual Impact of Losses (Treatment, Morbidity, and Mortality)  
Associated with the Incidence of Cancer on Business Activity in Texas  
Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	(\$1,818,926,078)	(\$559,669,996)	(\$352,867,777)	-5,520
Forestry & Fishery Products	(\$134,101,716)	(\$44,608,609)	(\$15,331,193)	-242
Coal Mining	(\$188,631,255)	(\$53,512,330)	(\$57,177,190)	-458
Crude Petroleum & Natural Gas	(\$7,423,405,051)	(\$2,768,015,050)	(\$1,118,265,178)	-4,806
Miscellaneous Mining	(\$82,773,406)	(\$37,419,477)	(\$26,183,443)	-498
New Construction	(\$1,444,351,692)	(\$683,287,706)	(\$535,738,954)	-8,235
Maintenance & Repair Construction	(\$2,280,727,588)	(\$1,293,738,106)	(\$1,047,952,078)	-15,675
Food Products & Tobacco	(\$3,693,248,929)	(\$934,029,588)	(\$476,124,242)	-8,200
Textile Mill Products	(\$54,980,452)	(\$12,909,259)	(\$10,961,058)	-232
Apparel	(\$542,839,415)	(\$299,560,708)	(\$152,259,195)	-4,346
Paper & Allied Products	(\$585,692,091)	(\$252,608,357)	(\$118,970,988)	-1,833
Printing & Publishing	(\$1,125,693,903)	(\$605,278,260)	(\$379,119,151)	-6,011
Chemicals & Petroleum Refining	(\$7,094,774,355)	(\$1,609,836,168)	(\$931,304,195)	-3,314
Rubber & Leather Products	(\$583,825,991)	(\$254,620,541)	(\$155,588,087)	-2,728
Lumber Products & Furniture	(\$353,821,603)	(\$128,897,081)	(\$94,809,845)	-1,976
Stone, Clay, & Glass Products	(\$470,837,268)	(\$250,731,367)	(\$138,173,401)	-1,990
Primary Metal	(\$434,059,621)	(\$126,902,391)	(\$101,338,609)	-1,070
Fabricated Metal Products	(\$963,426,559)	(\$412,964,052)	(\$270,211,456)	-4,329
Machinery, Except Electrical	(\$1,377,885,512)	(\$515,045,900)	(\$399,583,388)	-3,149
Electric & Electronic Equipment	(\$1,054,048,247)	(\$562,510,294)	(\$389,620,615)	-3,077
Motor Vehicles & Equipment	(\$486,289,482)	(\$139,485,997)	(\$84,600,153)	-1,051
Transp. Equip., Exc. Motor Vehicles	(\$310,403,724)	(\$154,725,656)	(\$99,945,206)	-1,489
Instruments & Related Products	(\$162,307,629)	(\$58,958,165)	(\$49,012,876)	-605
Miscellaneous Manufacturing	(\$269,245,341)	(\$95,501,647)	(\$78,896,276)	-1,059
Transportation	(\$3,500,538,960)	(\$2,330,217,629)	(\$1,550,107,521)	-21,671
Communication	(\$3,517,403,984)	(\$2,263,933,382)	(\$986,469,354)	-9,013
Electric, Gas, Water, Sanitary Services	(\$8,693,062,757)	(\$1,896,228,480)	(\$850,357,208)	-2,974
Wholesale Trade	(\$4,911,678,340)	(\$3,562,004,281)	(\$2,069,734,037)	-23,985
Retail Trade	(\$17,749,272,406)	(\$14,797,230,860)	(\$8,856,422,933)	-242,302
Finance	(\$3,022,931,269)	(\$1,570,762,418)	(\$1,032,109,869)	-9,187
Insurance	(\$2,593,973,254)	(\$1,686,193,316)	(\$1,000,596,871)	-12,978
Real Estate	(\$17,349,668,741)	(\$3,668,667,422)	(\$596,013,030)	-5,974
Hotels, Lodging Places, Amusements	(\$1,928,481,877)	(\$996,167,753)	(\$663,227,096)	-15,528
Personal Services	(\$2,523,082,214)	(\$1,572,229,733)	(\$1,222,823,522)	-22,227
Business Services	(\$7,762,623,141)	(\$5,362,295,990)	(\$4,578,432,394)	-51,164
Eating & Drinking Places	(\$6,171,098,669)	(\$3,667,641,644)	(\$1,963,021,641)	-96,398
Health Services	(\$4,924,601,414)	(\$3,727,067,370)	(\$3,118,721,178)	-53,221
Miscellaneous Services	(\$3,545,751,834)	(\$1,591,077,735)	(\$1,364,586,708)	-33,945
Households	(\$164,591,365)	(\$164,591,365)	(\$129,864,176)	-9,275
<b>Total</b>	<b>(\$121,295,057,134)</b>	<b>(\$60,711,126,081)</b>	<b>(\$37,066,522,092)</b>	<b>-691,735</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Losses (Treatment, Morbidity, and Mortality)  
Associated with the Incidence of Cancer on Business Activity:  
Comptroller's Economic Region Results**

<b>Economic Region</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
High Plains	(\$4,182,238,590)	(\$2,183,683,883)	(\$1,329,533,090)	(\$938,898,932)	-25,728
Northwest Texas	(\$3,743,026,769)	(\$1,948,551,995)	(\$1,179,107,832)	(\$859,873,414)	-22,994
Metroplex	(\$31,044,321,190)	(\$15,583,244,297)	(\$9,499,884,022)	(\$5,818,391,033)	-174,401
Upper East Texas	(\$7,545,834,312)	(\$3,871,859,669)	(\$2,364,097,828)	(\$1,712,018,270)	-46,169
Southeast Texas	(\$5,070,863,227)	(\$2,640,143,050)	(\$1,659,401,104)	(\$1,230,807,296)	-32,548
Gulf Coast	(\$30,043,061,074)	(\$14,091,835,974)	(\$8,545,871,726)	(\$4,678,768,702)	-147,434
Capital	(\$6,083,794,474)	(\$3,216,673,515)	(\$1,989,420,926)	(\$1,331,783,287)	-38,097
Central Texas	(\$5,525,692,941)	(\$2,870,452,584)	(\$1,764,042,684)	(\$1,300,161,636)	-35,349
Alamo	(\$11,450,061,496)	(\$5,845,677,285)	(\$3,589,406,223)	(\$2,400,182,839)	-68,928
Coastal Bend	(\$4,650,361,178)	(\$2,283,707,035)	(\$1,390,568,743)	(\$984,575,061)	-26,425
South Texas Border	(\$5,043,119,636)	(\$2,713,695,420)	(\$1,669,622,766)	(\$1,251,614,412)	-33,921
West Texas	(\$3,036,528,616)	(\$1,527,620,812)	(\$915,948,492)	(\$654,037,851)	-17,436
Upper Rio Grande	(\$3,876,153,633)	(\$1,933,980,562)	(\$1,169,616,656)	(\$759,258,340)	-22,303
<b>TOTAL STATE IMPACT</b>	<b>(\$121,295,057,134)</b>	<b>(\$60,711,126,081)</b>	<b>(\$37,066,522,092)</b>	<b>(\$23,920,371,075)</b>	<b>-691,735</b>

**NOTE:** Allocations reflect best available evidence regarding mortality and incidence and industrial structure and composition of each area.

**SOURCE:** US Multi-Regional Impact Assessment System, The Perryman Group



**The Total Annual Impact of Losses (Treatment, Morbidity, and Mortality)  
Associated with the Incidence of Cancer on Business Activity:  
Council of Governments (COG) Region Results**

<b>COG</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Panhandle	(\$2,194,271,553)	(\$1,126,471,362)	(\$681,489,622)	(\$484,609,126)	-13,095
South Plains	(\$1,987,967,037)	(\$1,057,212,521)	(\$648,043,468)	(\$454,289,807)	-12,633
North Texas	(\$1,518,545,895)	(\$802,252,777)	(\$487,414,660)	(\$355,666,963)	-9,492
North Central Texas	(\$29,773,255,131)	(\$14,912,411,915)	(\$9,080,068,313)	(\$5,502,785,089)	-165,983
North East Texas	(\$1,733,567,723)	(\$905,044,257)	(\$562,214,948)	(\$433,652,012)	-11,338
East Texas	(\$5,812,266,589)	(\$2,966,815,412)	(\$1,801,882,880)	(\$1,278,366,258)	-34,831
West Central Texas	(\$2,224,480,874)	(\$1,146,299,218)	(\$691,693,172)	(\$504,206,451)	-13,502
Upper Rio Grande	(\$3,876,153,633)	(\$1,933,980,562)	(\$1,169,616,656)	(\$759,258,340)	-22,303
Permian Basin	(\$2,067,445,020)	(\$1,044,321,988)	(\$629,696,278)	(\$444,786,197)	-11,799
Concho Valley	(\$969,083,596)	(\$483,298,824)	(\$286,252,213)	(\$209,251,654)	-5,637
Heart of Texas	(\$2,333,933,291)	(\$1,166,040,472)	(\$707,762,131)	(\$509,704,051)	-14,099
Capital	(\$6,083,794,474)	(\$3,216,673,515)	(\$1,989,420,926)	(\$1,331,783,287)	-38,097
Brazos Valley	(\$1,351,431,081)	(\$706,805,909)	(\$431,957,189)	(\$322,440,615)	-8,604
Deep East Texas	(\$2,505,554,951)	(\$1,326,057,086)	(\$824,349,488)	(\$635,449,726)	-16,572
South East Texas	(\$2,565,308,276)	(\$1,314,085,964)	(\$835,051,616)	(\$595,357,570)	-15,976
Gulf Coast	(\$30,043,061,074)	(\$14,091,835,974)	(\$8,545,871,726)	(\$4,678,768,702)	-147,434
Golden Crescent	(\$1,185,372,116)	(\$601,946,447)	(\$369,513,994)	(\$267,328,564)	-7,096
Alamo	(\$11,450,061,496)	(\$5,845,677,285)	(\$3,589,406,223)	(\$2,400,182,839)	-68,928
South Texas	(\$813,053,740)	(\$435,607,505)	(\$262,850,398)	(\$214,596,981)	-5,348
Coastal Bend	(\$3,464,989,063)	(\$1,681,760,588)	(\$1,021,054,749)	(\$717,246,497)	-19,329
Lower Rio Grande Valley	(\$3,585,573,557)	(\$1,930,453,280)	(\$1,193,013,015)	(\$868,532,771)	-24,162
Texoma	(\$1,271,066,059)	(\$670,832,382)	(\$419,815,709)	(\$315,605,945)	-8,418
Central Texas	(\$1,840,328,568)	(\$997,606,203)	(\$624,323,364)	(\$468,016,971)	-12,646
Middle Rio Grande	(\$644,492,339)	(\$347,634,636)	(\$213,759,353)	(\$168,484,660)	-4,410
Border Region	(\$8,923,037,738)	(\$4,649,915,056)	(\$2,840,663,345)	(\$2,011,896,193)	-56,251
<b>TOTAL STATE IMPACT</b>	<b>(\$121,295,057,134)</b>	<b>(\$60,711,126,081)</b>	<b>(\$37,066,522,092)</b>	<b>(\$23,920,371,075)</b>	<b>-691,735</b>

**NOTE:** Allocations reflect best available evidence regarding mortality and incidence and industrial structure and composition of each area.

**SOURCE:** US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Losses (Treatment, Morbidity, and Mortality)  
Associated with the Incidence of Cancer on Business Activity:  
Metropolitan Statistical Area (MSA) and Rural Texas Results**

<b>MSA</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Abilene	(\$1,080,392,973)	(\$543,527,421)	(\$326,658,117)	(\$217,145,836)	-6,172
Amarillo	(\$1,416,421,951)	(\$743,966,387)	(\$451,210,467)	(\$306,367,058)	-8,626
Austin-Round Rock	(\$5,158,472,673)	(\$2,751,801,569)	(\$1,709,960,489)	(\$1,127,749,663)	-32,582
Beaumont-Port Arthur	(\$2,565,308,276)	(\$1,314,085,964)	(\$835,051,616)	(\$595,357,570)	-15,976
Brownsville-Harlingen	(\$1,448,513,641)	(\$757,916,293)	(\$465,048,898)	(\$339,941,019)	-9,458
College Station-Bryan	(\$850,748,263)	(\$440,689,481)	(\$269,412,190)	(\$195,436,873)	-5,329
Corpus Christi	(\$2,770,165,466)	(\$1,318,078,825)	(\$802,346,429)	(\$542,617,764)	-14,937
Dallas-Plano-Irving MD*	(\$18,212,455,957)	(\$9,068,092,646)	(\$5,497,636,819)	(\$3,170,313,602)	-98,518
Fort Worth-Arlington MD*	(\$10,433,152,205)	(\$5,279,536,636)	(\$3,234,947,623)	(\$2,073,730,827)	-60,523
El Paso	(\$3,771,786,278)	(\$1,877,551,425)	(\$1,134,986,995)	(\$730,629,118)	-21,589
Houston-Sugar Land-Baytown	(\$29,177,167,427)	(\$13,640,500,628)	(\$8,268,251,846)	(\$4,454,438,748)	-141,782
Killeen-Temple-Fort Hood	(\$1,562,314,930)	(\$850,369,878)	(\$532,540,429)	(\$394,558,128)	-10,771
Laredo	(\$612,166,862)	(\$324,577,698)	(\$194,311,054)	(\$153,101,040)	-3,887
Longview	(\$1,457,540,287)	(\$755,242,223)	(\$464,420,271)	(\$319,988,735)	-8,836
Lubbock	(\$1,473,804,499)	(\$788,922,932)	(\$486,263,882)	(\$323,582,512)	-9,381
McAllen-Edinburg-Mission	(\$2,068,965,461)	(\$1,133,322,485)	(\$704,110,116)	(\$508,069,337)	-14,205
Midland	(\$593,606,626)	(\$302,454,974)	(\$180,503,079)	(\$121,894,292)	-3,320
Odessa	(\$747,639,730)	(\$376,825,189)	(\$231,556,460)	(\$157,578,932)	-4,277
San Angelo	(\$683,808,318)	(\$338,384,840)	(\$198,788,843)	(\$141,720,952)	-3,922
San Antonio	(\$10,619,916,899)	(\$5,431,116,336)	(\$3,339,212,947)	(\$2,212,721,130)	-63,935
Sherman-Denison	(\$764,610,766)	(\$410,939,757)	(\$257,695,067)	(\$199,236,276)	-5,278
Texarkana	(\$579,576,819)	(\$314,454,616)	(\$196,823,567)	(\$143,003,010)	-3,910
Tyler	(\$1,405,690,223)	(\$704,176,199)	(\$416,346,187)	(\$288,521,182)	-7,952
Victoria	(\$699,855,377)	(\$344,612,500)	(\$211,242,224)	(\$147,102,936)	-3,932
Waco	(\$1,539,982,858)	(\$764,109,349)	(\$463,340,898)	(\$317,195,524)	-9,120
Wichita Falls	(\$939,442,835)	(\$507,152,125)	(\$309,162,027)	(\$218,970,573)	-5,970
Rural Area	(\$18,661,549,535)	(\$9,628,717,705)	(\$5,884,693,553)	(\$4,519,398,441)	-117,546
<b>TOTAL STATE IMPACT</b>	<b>(\$121,295,057,134)</b>	<b>(\$60,711,126,081)</b>	<b>(\$37,066,522,092)</b>	<b>(\$23,920,371,075)</b>	<b>-691,735</b>

\*Metropolitan Division

NOTE: Allocations reflect best available evidence regarding mortality and incidence and industrial structure and composition of each area.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Losses (Treatment, Morbidity, and Mortality)  
Associated with the Incidence of Cancer on Business Activity:  
County Results**

<b>County</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Anderson	(\$372,876,600)	(\$203,151,405)	(\$125,080,045)	(\$86,428,772)	-2,406
Andrews	(\$66,416,014)	(\$34,363,964)	(\$20,566,916)	(\$14,377,500)	-380
Angelina	(\$509,450,625)	(\$267,258,851)	(\$166,218,215)	(\$125,762,633)	-3,343
Aransas	(\$253,449,250)	(\$119,510,911)	(\$70,788,349)	(\$52,844,446)	-1,360
Archer	(\$41,406,988)	(\$21,416,582)	(\$12,497,326)	(\$9,779,072)	-251
Armstrong	(\$12,719,160)	(\$6,376,502)	(\$3,902,193)	(\$2,172,684)	-70
Atascosa	(\$239,344,039)	(\$117,206,289)	(\$70,992,535)	(\$48,755,296)	-1,315
Austin	(\$186,147,629)	(\$91,433,709)	(\$57,036,114)	(\$33,344,408)	-994
Bailey	(\$26,328,761)	(\$14,071,042)	(\$8,556,068)	(\$6,810,605)	-171
Bandera	(\$151,265,182)	(\$73,751,770)	(\$43,985,418)	(\$35,462,104)	-895
Bastrop	(\$377,803,931)	(\$191,526,979)	(\$117,182,036)	(\$88,498,013)	-2,359
Baylor	(\$43,895,328)	(\$23,488,599)	(\$14,357,526)	(\$10,341,900)	-279
Bee	(\$125,593,684)	(\$66,925,857)	(\$40,554,367)	(\$31,824,311)	-821
Bell	(\$1,170,524,625)	(\$645,561,596)	(\$406,784,757)	(\$293,500,013)	-8,138
Bexar	(\$8,494,240,738)	(\$4,368,231,582)	(\$2,695,448,694)	(\$1,714,178,343)	-50,889
Blanco	(\$58,290,536)	(\$28,522,281)	(\$16,971,883)	(\$13,124,303)	-347
Borden	(\$14,069,480)	(\$7,095,491)	(\$4,136,158)	(\$2,895,065)	-73
Bosque	(\$130,353,142)	(\$67,042,405)	(\$41,425,368)	(\$29,006,904)	-812
Bowie	(\$579,576,819)	(\$314,454,616)	(\$196,823,567)	(\$143,003,010)	-3,910
Brazoria	(\$1,312,586,819)	(\$650,632,560)	(\$404,501,756)	(\$300,387,941)	-7,785
Brazos	(\$620,327,102)	(\$319,787,258)	(\$195,009,983)	(\$133,861,581)	-3,808
Brewster	(\$45,428,421)	(\$25,601,563)	(\$15,964,425)	(\$11,794,251)	-319
Briscoe	(\$9,770,897)	(\$4,819,128)	(\$2,912,368)	(\$2,248,384)	-57
Brooks	(\$29,555,053)	(\$16,154,818)	(\$10,047,270)	(\$8,561,224)	-207
Brown	(\$237,741,421)	(\$132,887,761)	(\$82,719,688)	(\$69,056,170)	-1,756
Burleson	(\$117,466,549)	(\$63,020,143)	(\$38,655,186)	(\$30,415,641)	-764
Burnet	(\$307,276,401)	(\$151,776,717)	(\$91,423,958)	(\$65,924,335)	-1,787
Caldwell	(\$216,918,796)	(\$109,694,147)	(\$67,340,767)	(\$48,924,919)	-1,318
Calhoun	(\$81,681,950)	(\$35,004,958)	(\$21,402,917)	(\$14,907,011)	-393
Callahan	(\$108,906,517)	(\$53,055,520)	(\$31,321,971)	(\$23,938,667)	-617
Cameron	(\$1,448,513,641)	(\$757,916,293)	(\$465,048,898)	(\$339,941,019)	-9,458
Camp	(\$67,508,237)	(\$34,210,296)	(\$21,062,447)	(\$15,982,215)	-422
Carson	(\$15,539,295)	(\$6,388,174)	(\$3,349,065)	(\$1,826,427)	-59
Cass	(\$193,759,443)	(\$100,552,969)	(\$62,454,839)	(\$52,828,949)	-1,285
Castro	(\$18,862,137)	(\$9,747,520)	(\$5,940,676)	(\$5,133,372)	-124
Chambers	(\$156,371,327)	(\$67,272,709)	(\$39,981,540)	(\$23,773,849)	-700
Cherokee	(\$270,465,549)	(\$141,992,301)	(\$89,205,586)	(\$70,243,928)	-1,796
Childress	(\$43,047,175)	(\$21,907,564)	(\$13,273,822)	(\$11,017,480)	-275
Clay	(\$71,382,340)	(\$37,031,391)	(\$23,411,560)	(\$15,359,865)	-435
Cochran	(\$11,568,278)	(\$6,082,377)	(\$3,538,655)	(\$2,167,225)	-65



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**The Total Annual Impact of Losses (Treatment, Morbidity, and Mortality)  
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County	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
Coke	(\$38,413,986)	(\$18,676,933)	(\$11,320,884)	(\$8,174,607)	-209
Coleman	(\$84,415,011)	(\$43,676,012)	(\$26,059,458)	(\$19,466,592)	-509
Collin	(\$2,260,665,058)	(\$1,192,233,744)	(\$738,417,999)	(\$503,944,419)	-14,085
Collingsworth	(\$21,836,262)	(\$12,112,863)	(\$7,594,525)	(\$5,777,176)	-146
Colorado	(\$148,436,435)	(\$77,342,225)	(\$46,932,078)	(\$39,144,221)	-1,001
Comal	(\$601,792,767)	(\$301,019,918)	(\$181,363,191)	(\$138,232,464)	-3,730
Comanche	(\$102,442,054)	(\$53,942,072)	(\$33,217,019)	(\$24,920,304)	-659
Concho	(\$15,823,598)	(\$8,592,642)	(\$5,585,983)	(\$3,759,072)	-109
Cooke	(\$267,788,349)	(\$135,714,333)	(\$84,387,564)	(\$58,262,914)	-1,575
Coryell	(\$256,511,613)	(\$133,905,739)	(\$82,313,724)	(\$65,404,548)	-1,712
Cottle	(\$13,340,426)	(\$7,792,565)	(\$4,906,711)	(\$3,318,619)	-91
Crane	(\$13,000,821)	(\$6,970,100)	(\$4,197,588)	(\$2,725,375)	-78
Crockett	(\$17,538,042)	(\$9,137,622)	(\$5,410,777)	(\$5,035,543)	-114
Crosby	(\$31,467,986)	(\$17,170,094)	(\$10,372,755)	(\$6,190,422)	-193
Culberson	(\$9,502,055)	(\$5,729,330)	(\$3,539,020)	(\$3,514,761)	-79
Dallam	(\$22,074,103)	(\$12,119,155)	(\$7,370,146)	(\$4,726,565)	-143
Dallas	(\$11,968,085,341)	(\$5,878,260,338)	(\$3,532,284,323)	(\$1,799,702,863)	-60,705
Dawson	(\$78,653,395)	(\$40,479,542)	(\$23,617,169)	(\$18,385,707)	-467
Deaf Smith	(\$50,331,675)	(\$25,298,460)	(\$15,251,643)	(\$9,744,196)	-292
Delta	(\$29,437,263)	(\$15,546,622)	(\$9,875,492)	(\$5,154,237)	-175
Denton	(\$2,080,238,033)	(\$1,033,894,724)	(\$631,778,369)	(\$412,672,847)	-11,821
DeWitt	(\$158,563,381)	(\$81,623,695)	(\$50,723,377)	(\$37,220,939)	-1,009
Dickens	(\$19,581,695)	(\$10,519,224)	(\$6,572,838)	(\$4,917,570)	-125
Dimmit	(\$36,025,355)	(\$18,823,314)	(\$11,419,323)	(\$10,071,086)	-239
Donley	(\$26,831,285)	(\$15,539,276)	(\$9,746,591)	(\$8,933,229)	-214
Duval	(\$58,794,694)	(\$28,370,045)	(\$16,691,099)	(\$11,647,842)	-319
Eastland	(\$150,239,158)	(\$75,046,694)	(\$45,120,755)	(\$36,364,816)	-913
Ector	(\$747,639,730)	(\$376,825,189)	(\$231,556,460)	(\$157,578,932)	-4,277
Edwards	(\$13,204,671)	(\$6,672,994)	(\$3,805,013)	(\$3,052,231)	-75
El Paso	(\$3,771,786,278)	(\$1,877,551,425)	(\$1,134,986,995)	(\$730,629,118)	-21,589
Ellis	(\$646,607,556)	(\$315,094,110)	(\$193,047,903)	(\$144,636,239)	-3,771
Erath	(\$171,377,870)	(\$94,631,561)	(\$59,626,800)	(\$47,787,062)	-1,244
Falls	(\$119,153,514)	(\$64,708,126)	(\$40,323,580)	(\$29,286,970)	-804
Fannin	(\$238,666,944)	(\$124,178,292)	(\$77,733,079)	(\$58,106,755)	-1,564
Fayette	(\$221,344,425)	(\$114,302,070)	(\$68,539,888)	(\$46,772,238)	-1,316
Fisher	(\$27,854,171)	(\$14,800,114)	(\$8,993,036)	(\$7,469,658)	-187
Floyd	(\$25,371,553)	(\$12,025,706)	(\$7,123,438)	(\$4,768,161)	-137
Foard	(\$4,195,373)	(\$2,444,534)	(\$1,550,133)	(\$1,262,817)	-32
Fort Bend	(\$1,988,531,715)	(\$950,574,490)	(\$573,918,079)	(\$375,724,568)	-10,437
Franklin	(\$63,148,725)	(\$31,625,460)	(\$18,633,813)	(\$14,721,043)	-371

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Freestone	(\$132,703,090)	(\$65,956,252)	(\$38,780,427)	(\$32,669,513)	-785
Frio	(\$75,131,492)	(\$36,623,850)	(\$21,498,424)	(\$16,195,740)	-417
Gaines	(\$56,422,585)	(\$27,155,714)	(\$15,565,740)	(\$11,376,492)	-295
Galveston	(\$1,940,050,266)	(\$940,913,390)	(\$575,607,501)	(\$404,848,334)	-11,059
Garza	(\$28,361,611)	(\$14,004,782)	(\$8,405,453)	(\$6,542,011)	-161
Gillespie	(\$210,896,074)	(\$106,759,254)	(\$65,686,949)	(\$49,228,493)	-1,327
Glasscock	(\$1,730,442)	(\$834,304)	(\$464,033)	(\$249,906)	-8
Goliad	(\$46,453,061)	(\$24,868,983)	(\$15,333,057)	(\$13,484,655)	-318
Gonzales	(\$85,071,122)	(\$44,564,294)	(\$27,560,791)	(\$21,670,740)	-557
Gray	(\$173,991,043)	(\$83,008,820)	(\$50,177,244)	(\$39,007,742)	-953
Grayson	(\$764,610,766)	(\$410,939,757)	(\$257,695,067)	(\$199,236,276)	-5,278
Gregg	(\$845,287,456)	(\$450,018,401)	(\$278,489,870)	(\$186,708,935)	-5,265
Grimes	(\$120,053,019)	(\$61,962,228)	(\$38,478,623)	(\$28,968,294)	-761
Guadalupe	(\$508,546,755)	(\$261,646,870)	(\$160,886,845)	(\$130,458,932)	-3,306
Hale	(\$127,598,872)	(\$71,381,132)	(\$44,145,995)	(\$39,545,419)	-945
Hall	(\$26,620,680)	(\$13,836,088)	(\$8,252,052)	(\$6,354,827)	-164
Hamilton	(\$62,297,614)	(\$31,818,273)	(\$19,664,309)	(\$16,323,836)	-409
Hansford	(\$15,857,966)	(\$7,012,164)	(\$3,860,654)	(\$2,420,760)	-65
Hardeman	(\$24,744,403)	(\$13,953,204)	(\$8,555,929)	(\$8,268,570)	-190
Hardin	(\$335,677,215)	(\$169,111,845)	(\$102,073,434)	(\$80,185,761)	-2,020
Harris	(\$20,394,009,933)	(\$9,374,265,515)	(\$5,663,122,042)	(\$2,699,252,257)	-93,188
Harrison	(\$461,358,087)	(\$219,176,616)	(\$134,570,199)	(\$84,372,455)	-2,413
Hartley	(\$7,225,768)	(\$3,657,005)	(\$2,191,538)	(\$1,632,316)	-45
Haskell	(\$46,137,258)	(\$23,906,067)	(\$14,814,939)	(\$10,515,554)	-284
Hays	(\$481,507,660)	(\$251,993,457)	(\$154,113,636)	(\$115,023,979)	-3,083
Hemphill	(\$10,746,485)	(\$4,991,816)	(\$2,837,427)	(\$2,012,162)	-51
Henderson	(\$724,213,038)	(\$357,717,668)	(\$215,869,467)	(\$155,910,368)	-4,263
Hidalgo	(\$2,068,965,461)	(\$1,133,322,485)	(\$704,110,116)	(\$508,069,337)	-14,205
Hill	(\$265,156,200)	(\$127,659,315)	(\$76,090,560)	(\$63,446,239)	-1,627
Hockley	(\$96,679,746)	(\$50,194,044)	(\$30,329,041)	(\$24,032,186)	-612
Hood	(\$398,612,268)	(\$195,559,471)	(\$119,889,667)	(\$91,922,502)	-2,399
Hopkins	(\$199,865,937)	(\$108,842,777)	(\$67,966,800)	(\$55,300,701)	-1,401
Houston	(\$212,437,853)	(\$107,247,546)	(\$67,886,876)	(\$38,673,685)	-1,185
Howard	(\$222,643,102)	(\$109,110,475)	(\$66,132,628)	(\$47,888,254)	-1,252
Hudspeth	(\$5,058,675)	(\$2,789,857)	(\$1,615,909)	(\$2,024,351)	-39
Hunt	(\$454,556,620)	(\$238,539,566)	(\$147,917,373)	(\$121,651,643)	-3,054
Hutchinson	(\$139,931,047)	(\$67,693,829)	(\$40,951,429)	(\$35,966,725)	-799
Irion	(\$6,292,537)	(\$2,771,440)	(\$1,578,833)	(\$1,311,058)	-30
Jack	(\$55,368,970)	(\$27,792,762)	(\$16,991,001)	(\$12,452,240)	-321
Jackson	(\$86,086,476)	(\$44,291,720)	(\$26,048,972)	(\$21,046,346)	-517

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Jasper	(\$236,920,409)	(\$124,136,600)	(\$76,852,147)	(\$62,825,735)	-1,599
Jeff Davis	(\$14,813,941)	(\$7,538,136)	(\$4,603,010)	(\$3,771,300)	-94
Jefferson	(\$1,694,917,412)	(\$871,273,563)	(\$559,255,272)	(\$383,470,023)	-10,566
Jim Hogg	(\$31,304,823)	(\$16,005,797)	(\$9,291,555)	(\$8,257,649)	-188
Jim Wells	(\$179,895,442)	(\$100,033,919)	(\$60,272,234)	(\$47,617,440)	-1,212
Johnson	(\$760,132,835)	(\$392,258,961)	(\$246,776,839)	(\$179,318,328)	-4,872
Jones	(\$129,527,758)	(\$66,041,158)	(\$39,944,302)	(\$27,977,737)	-772
Karnes	(\$108,079,561)	(\$50,207,113)	(\$29,784,347)	(\$21,662,954)	-557
Kaufman	(\$510,558,261)	(\$257,378,787)	(\$159,095,105)	(\$120,773,680)	-3,222
Kendall	(\$203,842,598)	(\$97,974,282)	(\$59,338,338)	(\$44,586,796)	-1,164
Kenedy	(\$5,382,121)	(\$2,726,367)	(\$1,611,888)	(\$1,622,938)	-38
Kent	(\$5,018,563)	(\$2,496,405)	(\$1,483,764)	(\$1,137,540)	-28
Kerr	(\$436,037,469)	(\$220,970,732)	(\$133,223,556)	(\$100,374,523)	-2,691
Kimble	(\$44,448,314)	(\$20,118,301)	(\$11,744,335)	(\$9,113,772)	-229
King	(\$5,375,951)	(\$2,961,514)	(\$1,815,975)	(\$1,048,473)	-33
Kinney	(\$28,046,678)	(\$13,310,773)	(\$7,450,514)	(\$6,077,156)	-151
Kleberg	(\$158,464,572)	(\$81,381,762)	(\$49,119,309)	(\$36,487,849)	-967
Knox	(\$27,719,505)	(\$14,704,783)	(\$8,796,481)	(\$5,583,800)	-159
La Salle	(\$21,100,725)	(\$11,484,396)	(\$6,842,031)	(\$6,274,591)	-148
Lamar	(\$332,897,887)	(\$170,619,259)	(\$106,130,307)	(\$85,177,427)	-2,201
Lamb	(\$56,326,845)	(\$27,239,652)	(\$16,566,424)	(\$12,830,679)	-318
Lampasas	(\$135,278,691)	(\$70,902,544)	(\$43,441,949)	(\$35,653,567)	-921
Lavaca	(\$155,795,759)	(\$86,854,238)	(\$53,938,630)	(\$40,287,603)	-1,081
Lee	(\$102,266,042)	(\$52,051,332)	(\$31,568,515)	(\$22,608,472)	-608
Leon	(\$97,071,071)	(\$53,490,675)	(\$31,886,833)	(\$27,933,161)	-662
Liberty	(\$488,837,830)	(\$254,415,968)	(\$157,381,727)	(\$108,229,180)	-2,985
Limestone	(\$146,584,488)	(\$76,565,025)	(\$47,801,297)	(\$38,098,902)	-951
Lipscomb	(\$15,170,508)	(\$7,309,139)	(\$4,106,835)	(\$2,720,652)	-76
Live Oak	(\$85,428,506)	(\$41,965,429)	(\$25,384,369)	(\$21,717,556)	-506
Llano	(\$236,144,397)	(\$118,219,547)	(\$70,956,192)	(\$55,604,276)	-1,458
Loving	(\$2,715,784)	(\$1,118,023)	(\$596,130)	(\$319,524)	-10
Lubbock	(\$1,442,336,513)	(\$771,752,837)	(\$475,891,127)	(\$317,392,090)	-9,188
Lynn	(\$21,174,435)	(\$10,566,770)	(\$6,279,297)	(\$3,184,180)	-110
Madison	(\$65,902,104)	(\$34,555,580)	(\$20,507,046)	(\$18,610,469)	-444
Marion	(\$91,637,485)	(\$47,633,237)	(\$29,139,910)	(\$23,263,087)	-607
Martin	(\$23,446,048)	(\$11,245,507)	(\$6,689,354)	(\$4,477,425)	-118
Mason	(\$38,236,624)	(\$19,023,886)	(\$11,052,364)	(\$8,460,033)	-220
Matagorda	(\$238,118,139)	(\$113,022,510)	(\$69,825,688)	(\$56,103,287)	-1,361
Maverick	(\$163,377,642)	(\$86,120,964)	(\$52,134,326)	(\$43,145,365)	-1,101
McCulloch	(\$62,909,028)	(\$33,679,880)	(\$21,137,289)	(\$15,962,751)	-417

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McLennan	(\$1,539,982,858)	(\$764,109,349)	(\$463,340,898)	(\$317,195,524)	-9,120
McMullen	(\$1,986,916)	(\$945,879)	(\$539,535)	(\$324,679)	-9
Medina	(\$216,283,350)	(\$106,711,788)	(\$63,619,938)	(\$50,579,653)	-1,311
Menard	(\$19,553,961)	(\$10,300,638)	(\$6,079,245)	(\$5,035,543)	-122
Midland	(\$593,606,626)	(\$302,454,974)	(\$180,503,079)	(\$121,894,292)	-3,320
Milam	(\$148,398,053)	(\$76,416,723)	(\$47,768,399)	(\$37,129,919)	-956
Mills	(\$27,836,984)	(\$17,366,961)	(\$11,132,550)	(\$8,987,608)	-231
Mitchell	(\$57,290,120)	(\$29,922,951)	(\$18,061,963)	(\$13,654,555)	-352
Montague	(\$171,021,935)	(\$84,068,111)	(\$49,475,096)	(\$38,178,253)	-997
Montgomery	(\$2,347,304,756)	(\$1,136,773,196)	(\$692,907,846)	(\$425,549,695)	-12,529
Moore	(\$79,875,681)	(\$35,707,919)	(\$21,199,584)	(\$15,093,624)	-389
Morris	(\$84,101,971)	(\$38,569,445)	(\$24,219,216)	(\$14,021,447)	-427
Motley	(\$12,332,418)	(\$5,949,998)	(\$3,401,217)	(\$2,698,274)	-68
Nacogdoches	(\$311,328,292)	(\$170,473,851)	(\$107,613,936)	(\$86,561,544)	-2,279
Navarro	(\$324,226,712)	(\$165,187,670)	(\$102,728,501)	(\$70,792,185)	-2,021
Newton	(\$52,197,319)	(\$33,240,022)	(\$22,186,672)	(\$18,141,066)	-445
Nolan	(\$122,897,846)	(\$65,048,844)	(\$39,075,955)	(\$28,330,604)	-757
Nueces	(\$2,130,243,947)	(\$1,012,954,440)	(\$617,423,176)	(\$398,797,967)	-11,323
Ochiltree	(\$32,504,233)	(\$15,595,153)	(\$9,193,727)	(\$6,391,096)	-169
Oldham	(\$2,701,844)	(\$1,602,578)	(\$1,005,821)	(\$1,131,031)	-24
Orange	(\$534,713,648)	(\$273,700,556)	(\$173,722,911)	(\$131,701,785)	-3,391
Palo Pinto	(\$236,388,266)	(\$112,699,853)	(\$67,249,126)	(\$49,488,387)	-1,310
Panola	(\$164,376,271)	(\$84,231,007)	(\$51,552,600)	(\$37,141,261)	-990
Parker	(\$629,114,055)	(\$305,201,784)	(\$184,269,142)	(\$133,919,091)	-3,608
Parmer	(\$14,694,999)	(\$6,771,926)	(\$4,101,563)	(\$1,801,627)	-72
Pecos	(\$68,706,490)	(\$34,446,561)	(\$20,459,177)	(\$16,807,953)	-416
Polk	(\$443,197,560)	(\$230,862,048)	(\$139,161,278)	(\$110,453,621)	-2,747
Potter	(\$768,211,069)	(\$402,970,756)	(\$244,428,593)	(\$161,274,235)	-4,623
Presidio	(\$29,564,263)	(\$14,770,251)	(\$8,907,297)	(\$7,524,559)	-183
Rains	(\$83,416,484)	(\$39,794,502)	(\$23,315,361)	(\$19,340,949)	-465
Randall	(\$619,952,428)	(\$328,230,956)	(\$199,530,616)	(\$141,093,712)	-3,874
Reagan	(\$11,925,352)	(\$6,201,711)	(\$3,591,547)	(\$3,044,590)	-70
Real	(\$35,381,322)	(\$16,516,024)	(\$9,666,844)	(\$7,412,447)	-187
Red River	(\$119,215,290)	(\$58,519,762)	(\$34,950,019)	(\$27,315,995)	-708
Reeves	(\$61,817,832)	(\$31,997,825)	(\$19,177,867)	(\$16,999,416)	-399
Refugio	(\$49,722,608)	(\$25,177,687)	(\$14,488,252)	(\$14,824,895)	-310
Roberts	(\$3,170,678)	(\$1,491,797)	(\$861,464)	(\$916,096)	-18
Robertson	(\$112,954,611)	(\$57,882,080)	(\$35,747,021)	(\$31,159,651)	-756
Rockwall	(\$262,307,825)	(\$137,144,754)	(\$85,220,255)	(\$61,777,675)	-1,685
Runnels	(\$93,386,698)	(\$43,145,130)	(\$25,355,460)	(\$18,579,582)	-483

(continued)  
**The Total Annual Impact of Losses (Treatment, Morbidity, and Mortality)  
Associated with the Incidence of Cancer on Business Activity:  
County Results**

County	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
Rusk	(\$329,773,467)	(\$162,002,138)	(\$99,468,912)	(\$67,918,934)	-1,883
Sabine	(\$81,647,089)	(\$42,908,052)	(\$27,735,890)	(\$22,516,678)	-559
San Augustine	(\$78,506,549)	(\$38,227,951)	(\$22,572,470)	(\$17,472,781)	-448
San Jacinto	(\$169,863,382)	(\$85,841,363)	(\$52,446,310)	(\$41,534,312)	-1,066
San Patricio	(\$386,472,269)	(\$185,613,475)	(\$114,134,903)	(\$90,975,351)	-2,254
San Saba	(\$39,480,987)	(\$21,634,368)	(\$13,217,676)	(\$11,017,480)	-279
Schleicher	(\$9,946,285)	(\$4,997,333)	(\$3,036,392)	(\$1,604,979)	-54
Scurry	(\$87,559,940)	(\$48,584,085)	(\$28,649,212)	(\$24,456,866)	-586
Shackelford	(\$20,493,065)	(\$10,244,021)	(\$6,034,929)	(\$4,439,203)	-116
Shelby	(\$128,225,679)	(\$72,353,249)	(\$46,717,138)	(\$37,314,509)	-963
Sherman	(\$4,551,308)	(\$2,179,184)	(\$1,297,223)	(\$843,615)	-25
Smith	(\$1,405,690,223)	(\$704,176,199)	(\$416,346,187)	(\$288,521,182)	-7,952
Somervell	(\$26,479,117)	(\$12,250,700)	(\$7,865,268)	(\$3,904,761)	-143
Starr	(\$130,074,811)	(\$74,352,434)	(\$46,774,134)	(\$41,917,237)	-1,010
Stephens	(\$62,620,438)	(\$34,363,894)	(\$20,715,274)	(\$18,171,660)	-423
Sterling	(\$3,078,051)	(\$1,825,039)	(\$1,122,929)	(\$1,166,413)	-25
Stonewall	(\$10,319,474)	(\$5,854,459)	(\$3,570,270)	(\$3,087,873)	-74
Sutton	(\$23,402,037)	(\$12,359,999)	(\$7,381,625)	(\$6,173,399)	-148
Swisher	(\$27,613,688)	(\$13,244,624)	(\$7,909,372)	(\$5,686,195)	-156
Tarrant	(\$8,766,235,998)	(\$4,437,142,328)	(\$2,716,418,317)	(\$1,694,265,499)	-50,328
Taylor	(\$841,958,698)	(\$424,430,743)	(\$255,391,843)	(\$165,229,432)	-4,783
Terrell	(\$3,764,470)	(\$2,239,074)	(\$1,423,923)	(\$1,023,441)	-27
Terry	(\$57,063,591)	(\$29,802,216)	(\$17,046,034)	(\$15,338,416)	-347
Throckmorton	(\$7,953,177)	(\$4,148,504)	(\$2,366,851)	(\$1,825,838)	-45
Titus	(\$131,564,388)	(\$66,313,347)	(\$41,160,895)	(\$36,129,203)	-861
Tom Green	(\$677,515,781)	(\$335,613,400)	(\$197,210,010)	(\$140,409,893)	-3,892
Travis	(\$3,231,206,808)	(\$1,730,566,492)	(\$1,074,645,076)	(\$664,882,936)	-20,000
Trinity	(\$134,548,529)	(\$74,879,954)	(\$46,009,473)	(\$36,202,031)	-952
Tyler	(\$147,231,666)	(\$78,627,597)	(\$48,949,083)	(\$37,991,132)	-987
Upshur	(\$282,479,365)	(\$143,221,684)	(\$86,461,488)	(\$65,360,867)	-1,688
Upton	(\$15,445,584)	(\$7,777,194)	(\$4,507,613)	(\$3,262,272)	-84
Uvalde	(\$137,963,555)	(\$73,353,406)	(\$45,258,342)	(\$33,345,093)	-919
Val Verde	(\$179,837,227)	(\$103,286,918)	(\$65,489,477)	(\$48,079,716)	-1,323
Van Zandt	(\$318,862,545)	(\$182,522,294)	(\$112,416,600)	(\$90,076,305)	-2,333
Victoria	(\$571,720,366)	(\$284,738,558)	(\$174,506,250)	(\$118,711,270)	-3,221
Walker	(\$382,608,393)	(\$207,104,636)	(\$128,336,199)	(\$104,711,932)	-2,670
Waller	(\$193,463,769)	(\$88,377,730)	(\$51,348,930)	(\$41,794,205)	-1,038
Ward	(\$60,863,496)	(\$31,432,605)	(\$18,799,992)	(\$15,760,368)	-378
Washington	(\$217,656,623)	(\$116,107,945)	(\$71,672,497)	(\$51,491,818)	-1,410
Webb	(\$612,166,862)	(\$324,577,698)	(\$194,311,054)	(\$153,101,040)	-3,887

(continued)  
**The Total Annual Impact of Losses (Treatment, Morbidity, and Mortality)  
Associated with the Incidence of Cancer on Business Activity:  
County Results**

County	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
Wharton	(\$266,594,063)	(\$139,707,338)	(\$84,972,227)	(\$65,904,825)	-1,687
Wheeler	(\$30,440,139)	(\$16,858,967)	(\$10,243,451)	(\$8,683,196)	-210
Wichita	(\$826,653,507)	(\$448,704,152)	(\$273,253,141)	(\$193,831,636)	-5,284
Wilbarger	(\$107,158,514)	(\$53,766,987)	(\$33,497,818)	(\$25,650,911)	-664
Willacy	(\$68,094,456)	(\$39,214,501)	(\$23,854,001)	(\$20,522,415)	-499
Williamson	(\$851,035,478)	(\$468,020,495)	(\$296,678,974)	(\$210,419,817)	-5,821
Wilson	(\$204,601,468)	(\$104,573,836)	(\$63,577,988)	(\$50,467,541)	-1,324
Winkler	(\$36,503,120)	(\$18,775,445)	(\$11,302,451)	(\$8,764,278)	-217
Wise	(\$277,669,317)	(\$144,933,564)	(\$87,483,325)	(\$66,227,909)	-1,714
Wood	(\$394,321,784)	(\$196,967,665)	(\$118,904,207)	(\$87,097,001)	-2,347
Yoakum	(\$26,398,781)	(\$13,491,133)	(\$7,999,149)	(\$6,824,097)	-161
Young	(\$159,378,110)	(\$81,793,890)	(\$48,918,417)	(\$37,223,081)	-947
Zapata	(\$39,507,244)	(\$20,671,576)	(\$12,473,656)	(\$11,321,054)	-263
Zavala	(\$29,555,166)	(\$18,065,848)	(\$11,693,484)	(\$11,026,975)	-267
<b>TOTAL STATE IMPACT</b>	<b>(\$121,295,057,134)</b>	<b>(\$60,711,126,081)</b>	<b>(\$37,066,522,092)</b>	<b>(\$23,920,371,075)</b>	<b>-691,735</b>

**NOTE:** Allocations reflect best available evidence regarding mortality and incidence and industrial structure and composition of each area.

**SOURCE:** US Multi-Regional Impact Assessment System, The Perryman Group



**The Total Annual Impact of Losses (Treatment, Morbidity, and Mortality)  
Associated with the Incidence of Cancer on Business Activity:  
Results by Texas House District**

House District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
1	(\$949,075,717)	(\$501,210,266)	(\$312,637,531)	(\$233,116,492)	-6,229
2	(\$856,835,649)	(\$460,856,362)	(\$283,649,335)	(\$231,068,896)	-5,852
3	(\$876,129,490)	(\$451,467,227)	(\$278,717,326)	(\$223,798,606)	-5,715
4	(\$1,234,771,298)	(\$615,096,455)	(\$374,964,572)	(\$276,684,048)	-7,485
5	(\$1,205,667,473)	(\$593,576,260)	(\$360,998,341)	(\$252,812,538)	-6,871
6	(\$1,152,665,983)	(\$577,424,483)	(\$341,403,873)	(\$236,587,370)	-6,521
7	(\$1,098,311,696)	(\$576,770,117)	(\$353,432,184)	(\$238,642,747)	-6,696
8	(\$976,390,890)	(\$510,860,352)	(\$314,390,271)	(\$227,989,372)	-6,163
9	(\$836,628,017)	(\$448,099,704)	(\$281,491,580)	(\$226,691,247)	-5,847
10	(\$911,763,756)	(\$442,753,425)	(\$269,138,463)	(\$208,082,478)	-5,398
11	(\$977,053,139)	(\$495,472,992)	(\$308,113,975)	(\$213,977,808)	-5,854
12	(\$961,094,202)	(\$506,607,765)	(\$313,623,081)	(\$241,490,107)	-6,348
13	(\$906,465,666)	(\$476,608,518)	(\$295,523,433)	(\$218,516,452)	-5,834
14	(\$576,904,205)	(\$297,402,150)	(\$181,359,284)	(\$124,491,270)	-3,541
15	(\$1,056,287,140)	(\$511,547,938)	(\$311,808,531)	(\$191,497,363)	-5,638
16	(\$1,079,760,188)	(\$522,915,670)	(\$318,737,609)	(\$195,752,860)	-5,763
17	(\$1,010,740,280)	(\$520,627,856)	(\$316,528,402)	(\$236,808,896)	-6,316
18	(\$1,143,292,818)	(\$587,587,603)	(\$358,904,711)	(\$256,982,273)	-6,860
19	(\$837,033,999)	(\$432,260,334)	(\$270,187,351)	(\$208,956,327)	-5,313
20	(\$531,364,018)	(\$287,025,945)	(\$181,273,938)	(\$131,818,837)	-3,576
21	(\$898,306,229)	(\$461,774,989)	(\$296,405,294)	(\$203,239,112)	-5,600
22	(\$882,165,368)	(\$453,290,664)	(\$290,645,643)	(\$201,303,196)	-5,508
23	(\$1,048,794,449)	(\$500,092,868)	(\$304,760,991)	(\$210,004,083)	-5,787
24	(\$1,047,627,144)	(\$508,093,230)	(\$310,828,051)	(\$218,618,100)	-5,972
25	(\$748,174,487)	(\$370,860,559)	(\$230,566,001)	(\$171,221,126)	-4,438
26	(\$805,355,345)	(\$384,982,669)	(\$232,436,822)	(\$152,168,450)	-4,227
27	(\$805,355,345)	(\$384,982,669)	(\$232,436,822)	(\$152,168,450)	-4,227
28	(\$837,878,857)	(\$408,694,221)	(\$245,365,592)	(\$179,086,698)	-4,708
29	(\$802,530,471)	(\$392,794,510)	(\$243,761,443)	(\$185,270,102)	-4,709
30	(\$1,021,888,591)	(\$522,685,898)	(\$319,705,481)	(\$232,091,052)	-6,137
31	(\$412,026,807)	(\$220,767,365)	(\$134,232,205)	(\$110,816,446)	-2,758
32	(\$955,930,303)	(\$451,554,332)	(\$274,242,719)	(\$202,594,584)	-5,253
33	(\$947,958,556)	(\$450,764,726)	(\$274,753,313)	(\$177,465,095)	-5,039
34	(\$947,958,556)	(\$450,764,726)	(\$274,753,313)	(\$177,465,095)	-5,039
35	(\$786,781,211)	(\$402,153,469)	(\$242,860,443)	(\$185,386,891)	-4,739
36	(\$517,241,365)	(\$283,330,621)	(\$176,027,529)	(\$127,017,334)	-3,551
37	(\$579,405,456)	(\$303,166,517)	(\$186,019,559)	(\$135,976,408)	-3,783
38	(\$579,405,456)	(\$303,166,517)	(\$186,019,559)	(\$135,976,408)	-3,783
39	(\$517,241,365)	(\$283,330,621)	(\$176,027,529)	(\$127,017,334)	-3,551
40	(\$517,241,365)	(\$283,330,621)	(\$176,027,529)	(\$127,017,334)	-3,551

(continued)  
**The Total Annual Impact of Losses (Treatment, Morbidity, and Mortality)  
Associated with the Incidence of Cancer on Business Activity:  
Results by Texas House District**

House District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
41	(\$517,241,365)	(\$283,330,621)	(\$176,027,529)	(\$127,017,334)	-3,551
42	(\$428,516,803)	(\$227,204,388)	(\$136,017,738)	(\$107,170,728)	-2,721
43	(\$582,503,753)	(\$307,066,503)	(\$186,933,801)	(\$143,440,279)	-3,792
44	(\$798,219,346)	(\$410,785,000)	(\$252,025,624)	(\$202,597,213)	-5,188
45	(\$756,716,992)	(\$390,209,884)	(\$238,426,286)	(\$177,073,201)	-4,748
46	(\$549,305,157)	(\$294,196,304)	(\$182,689,663)	(\$113,030,099)	-3,400
47	(\$549,305,157)	(\$294,196,304)	(\$182,689,663)	(\$113,030,099)	-3,400
48	(\$516,993,089)	(\$276,890,639)	(\$171,943,212)	(\$106,381,270)	-3,200
49	(\$549,305,157)	(\$294,196,304)	(\$182,689,663)	(\$113,030,099)	-3,400
50	(\$516,993,089)	(\$276,890,639)	(\$171,943,212)	(\$106,381,270)	-3,200
51	(\$549,305,157)	(\$294,196,304)	(\$182,689,663)	(\$113,030,099)	-3,400
52	(\$468,069,513)	(\$257,411,272)	(\$163,173,436)	(\$115,730,899)	-3,202
53	(\$1,265,610,290)	(\$635,427,636)	(\$381,229,169)	(\$291,538,659)	-7,635
54	(\$899,059,696)	(\$474,448,283)	(\$293,511,962)	(\$216,042,907)	-5,881
55	(\$714,020,021)	(\$393,792,573)	(\$248,138,702)	(\$179,035,008)	-4,964
56	(\$985,589,029)	(\$489,029,984)	(\$296,538,175)	(\$203,005,135)	-5,837
57	(\$949,475,129)	(\$485,715,827)	(\$295,267,204)	(\$221,180,640)	-5,949
58	(\$890,485,978)	(\$459,301,366)	(\$288,202,207)	(\$208,325,231)	-5,684
59	(\$646,945,252)	(\$343,915,306)	(\$213,819,670)	(\$167,328,120)	-4,398
60	(\$1,106,094,616)	(\$560,801,694)	(\$341,729,440)	(\$269,442,738)	-6,918
61	(\$906,783,372)	(\$450,135,348)	(\$271,752,467)	(\$200,147,000)	-5,323
62	(\$1,003,277,710)	(\$535,118,049)	(\$335,428,145)	(\$257,343,030)	-6,842
63	(\$686,478,551)	(\$341,185,259)	(\$208,486,862)	(\$136,182,039)	-3,901
64	(\$707,280,931)	(\$351,524,206)	(\$214,804,646)	(\$140,308,768)	-4,019
65	(\$686,478,551)	(\$341,185,259)	(\$208,486,862)	(\$136,182,039)	-3,901
66	(\$610,379,566)	(\$321,903,111)	(\$199,372,860)	(\$136,064,993)	-3,803
67	(\$610,379,566)	(\$321,903,111)	(\$199,372,860)	(\$136,064,993)	-3,803
68	(\$1,037,373,754)	(\$530,036,467)	(\$323,820,059)	(\$236,908,680)	-6,247
69	(\$868,060,495)	(\$470,120,733)	(\$285,750,467)	(\$203,610,708)	-5,535
70	(\$610,379,566)	(\$321,903,111)	(\$199,372,860)	(\$136,064,993)	-3,803
71	(\$964,856,544)	(\$489,479,587)	(\$294,467,798)	(\$193,560,036)	-5,540
72	(\$860,779,827)	(\$432,797,368)	(\$255,242,068)	(\$186,695,920)	-5,039
73	(\$1,167,796,622)	(\$579,505,224)	(\$350,373,896)	(\$267,509,857)	-7,118
74	(\$633,240,881)	(\$340,976,544)	(\$209,639,582)	(\$164,016,965)	-4,261
75	(\$754,357,256)	(\$375,510,285)	(\$226,997,399)	(\$146,125,824)	-4,318
76	(\$754,357,256)	(\$375,510,285)	(\$226,997,399)	(\$146,125,824)	-4,318
77	(\$754,357,256)	(\$375,510,285)	(\$226,997,399)	(\$146,125,824)	-4,318
78	(\$754,357,256)	(\$375,510,285)	(\$226,997,399)	(\$146,125,824)	-4,318
79	(\$754,357,256)	(\$375,510,285)	(\$226,997,399)	(\$146,125,824)	-4,318
80	(\$569,520,406)	(\$291,140,932)	(\$174,658,039)	(\$143,370,565)	-3,635

(continued)  
**The Total Annual Impact of Losses (Treatment, Morbidity, and Mortality)  
Associated with the Incidence of Cancer on Business Activity:  
Results by Texas House District**

House District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
81	(\$850,558,864)	(\$429,964,598)	(\$263,425,826)	(\$180,720,709)	-4,874
82	(\$724,152,473)	(\$368,927,317)	(\$219,514,804)	(\$150,745,071)	-4,068
83	(\$768,003,995)	(\$405,624,404)	(\$247,789,037)	(\$171,356,835)	-4,807
84	(\$865,401,908)	(\$463,051,702)	(\$285,534,676)	(\$190,435,254)	-5,513
85	(\$723,496,980)	(\$371,981,296)	(\$224,390,473)	(\$171,796,701)	-4,410
86	(\$702,285,818)	(\$370,908,154)	(\$225,349,763)	(\$158,327,820)	-4,379
87	(\$868,177,353)	(\$447,246,033)	(\$270,274,465)	(\$179,037,901)	-5,096
88	(\$706,463,989)	(\$349,627,869)	(\$210,987,886)	(\$166,884,688)	-4,109
89	(\$691,834,186)	(\$363,669,166)	(\$225,519,675)	(\$157,527,115)	-4,361
90	(\$876,623,600)	(\$443,714,233)	(\$271,641,832)	(\$169,426,550)	-5,033
91	(\$876,623,600)	(\$443,714,233)	(\$271,641,832)	(\$169,426,550)	-5,033
92	(\$876,623,600)	(\$443,714,233)	(\$271,641,832)	(\$169,426,550)	-5,033
93	(\$876,623,600)	(\$443,714,233)	(\$271,641,832)	(\$169,426,550)	-5,033
94	(\$876,623,600)	(\$443,714,233)	(\$271,641,832)	(\$169,426,550)	-5,033
95	(\$876,623,600)	(\$443,714,233)	(\$271,641,832)	(\$169,426,550)	-5,033
96	(\$876,623,600)	(\$443,714,233)	(\$271,641,832)	(\$169,426,550)	-5,033
97	(\$876,623,600)	(\$443,714,233)	(\$271,641,832)	(\$169,426,550)	-5,033
98	(\$876,623,600)	(\$443,714,233)	(\$271,641,832)	(\$169,426,550)	-5,033
99	(\$876,623,600)	(\$443,714,233)	(\$271,641,832)	(\$169,426,550)	-5,033
100	(\$748,005,334)	(\$367,391,271)	(\$220,767,770)	(\$112,481,429)	-3,794
101	(\$748,005,334)	(\$367,391,271)	(\$220,767,770)	(\$112,481,429)	-3,794
102	(\$748,005,334)	(\$367,391,271)	(\$220,767,770)	(\$112,481,429)	-3,794
103	(\$748,005,334)	(\$367,391,271)	(\$220,767,770)	(\$112,481,429)	-3,794
104	(\$748,005,334)	(\$367,391,271)	(\$220,767,770)	(\$112,481,429)	-3,794
105	(\$748,005,334)	(\$367,391,271)	(\$220,767,770)	(\$112,481,429)	-3,794
106	(\$748,005,334)	(\$367,391,271)	(\$220,767,770)	(\$112,481,429)	-3,794
107	(\$748,005,334)	(\$367,391,271)	(\$220,767,770)	(\$112,481,429)	-3,794
108	(\$748,005,334)	(\$367,391,271)	(\$220,767,770)	(\$112,481,429)	-3,794
109	(\$748,005,334)	(\$367,391,271)	(\$220,767,770)	(\$112,481,429)	-3,794
110	(\$748,005,334)	(\$367,391,271)	(\$220,767,770)	(\$112,481,429)	-3,794
111	(\$748,005,334)	(\$367,391,271)	(\$220,767,770)	(\$112,481,429)	-3,794
112	(\$748,005,334)	(\$367,391,271)	(\$220,767,770)	(\$112,481,429)	-3,794
113	(\$748,005,334)	(\$367,391,271)	(\$220,767,770)	(\$112,481,429)	-3,794
114	(\$748,005,334)	(\$367,391,271)	(\$220,767,770)	(\$112,481,429)	-3,794
115	(\$748,005,334)	(\$367,391,271)	(\$220,767,770)	(\$112,481,429)	-3,794
116	(\$849,424,074)	(\$436,823,158)	(\$269,544,869)	(\$171,417,834)	-5,089
117	(\$849,424,074)	(\$436,823,158)	(\$269,544,869)	(\$171,417,834)	-5,089
118	(\$849,424,074)	(\$436,823,158)	(\$269,544,869)	(\$171,417,834)	-5,089
119	(\$849,424,074)	(\$436,823,158)	(\$269,544,869)	(\$171,417,834)	-5,089
120	(\$849,424,074)	(\$436,823,158)	(\$269,544,869)	(\$171,417,834)	-5,089

(continued)  
**The Total Annual Impact of Losses (Treatment, Morbidity, and Mortality)  
Associated with the Incidence of Cancer on Business Activity:  
Results by Texas House District**

House District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
121	(\$849,424,074)	(\$436,823,158)	(\$269,544,869)	(\$171,417,834)	-5,089
122	(\$849,424,074)	(\$436,823,158)	(\$269,544,869)	(\$171,417,834)	-5,089
123	(\$849,424,074)	(\$436,823,158)	(\$269,544,869)	(\$171,417,834)	-5,089
124	(\$849,424,074)	(\$436,823,158)	(\$269,544,869)	(\$171,417,834)	-5,089
125	(\$849,424,074)	(\$436,823,158)	(\$269,544,869)	(\$171,417,834)	-5,089
126	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
127	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
128	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
129	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
130	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
131	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
132	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
133	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
134	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
135	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
136	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
137	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
138	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
139	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
140	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
141	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
142	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
143	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
144	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
145	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
146	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
147	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
148	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
149	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
150	(\$815,760,397)	(\$374,970,621)	(\$226,524,882)	(\$107,970,090)	-3,728
<b>TOTAL</b>	<b>(\$121,295,057,134)</b>	<b>(\$60,711,126,081)</b>	<b>(\$37,066,522,092)</b>	<b>(\$23,920,371,075)</b>	<b>-691,735</b>

NOTE: Allocations reflect best available evidence regarding mortality and incidence and industrial structure and composition of each area.

In cases in which a county was part of more than one district, allocations are based on the percentage of the population residing in a district. This convention is adopted because of a lack of subcounty data sufficient for allocation purposes. In some instances, this approach will result in districts which reflect the same proportion of a large urban county reporting identical results.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Losses (Treatment, Morbidity, and Mortality)  
Associated with the Incidence of Cancer on Business Activity:  
Results by Texas Senate District**

Senate District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
1	(\$4,984,420,807)	(\$2,540,621,620)	(\$1,553,830,001)	(\$1,114,154,536)	-30,149
2	(\$4,209,164,980)	(\$2,144,126,290)	(\$1,307,060,606)	(\$867,054,640)	-24,794
3	(\$5,140,610,852)	(\$2,639,313,846)	(\$1,620,421,706)	(\$1,191,075,912)	-31,824
4	(\$4,411,320,175)	(\$2,184,090,832)	(\$1,359,634,792)	(\$878,262,129)	-25,024
5	(\$3,244,356,384)	(\$1,718,939,927)	(\$1,065,114,853)	(\$791,463,068)	-21,124
6	(\$3,874,861,887)	(\$1,781,110,448)	(\$1,075,993,188)	(\$512,857,929)	-17,706
7	(\$4,078,801,987)	(\$1,874,853,103)	(\$1,132,624,408)	(\$539,850,451)	-18,638
8	(\$3,343,108,414)	(\$1,713,243,297)	(\$1,048,636,356)	(\$645,397,473)	-19,235
9	(\$3,742,600,343)	(\$1,862,590,883)	(\$1,131,405,506)	(\$664,369,723)	-20,426
10	(\$4,295,455,639)	(\$2,174,199,740)	(\$1,331,044,975)	(\$830,190,094)	-24,661
11	(\$4,350,810,921)	(\$2,072,877,767)	(\$1,265,918,519)	(\$785,309,828)	-22,925
12	(\$3,867,578,729)	(\$1,951,911,078)	(\$1,194,608,288)	(\$750,680,089)	-22,168
13	(\$3,904,458,666)	(\$1,802,751,525)	(\$1,088,992,725)	(\$541,532,289)	-18,138
14	(\$2,778,837,855)	(\$1,488,287,183)	(\$924,194,765)	(\$571,799,325)	-17,200
15	(\$4,078,801,987)	(\$1,874,853,103)	(\$1,132,624,408)	(\$539,850,451)	-18,638
16	(\$3,590,425,602)	(\$1,763,478,101)	(\$1,059,685,297)	(\$539,910,859)	-18,211
17	(\$4,290,270,673)	(\$2,029,863,677)	(\$1,238,685,588)	(\$710,228,370)	-21,676
18	(\$4,390,211,104)	(\$2,187,390,982)	(\$1,330,686,412)	(\$964,780,157)	-25,634
19	(\$3,569,963,208)	(\$1,838,689,594)	(\$1,125,598,381)	(\$781,907,459)	-21,894
20	(\$3,477,625,445)	(\$1,752,470,544)	(\$1,075,003,244)	(\$734,414,767)	-20,556
21	(\$2,949,649,281)	(\$1,509,553,676)	(\$918,553,184)	(\$689,816,954)	-18,106
22	(\$4,467,215,814)	(\$2,237,775,845)	(\$1,373,802,309)	(\$994,914,199)	-27,281
23	(\$3,710,106,456)	(\$1,822,260,705)	(\$1,095,008,140)	(\$557,907,888)	-18,818
24	(\$4,546,292,435)	(\$2,374,325,341)	(\$1,455,974,546)	(\$1,075,073,575)	-29,056
25	(\$4,031,849,289)	(\$2,072,242,469)	(\$1,272,196,547)	(\$881,363,234)	-24,771
26	(\$3,907,350,740)	(\$2,009,386,528)	(\$1,239,906,399)	(\$788,522,038)	-23,409
27	(\$2,611,489,247)	(\$1,391,234,041)	(\$856,483,648)	(\$627,205,423)	-17,355
28	(\$3,852,098,565)	(\$2,000,132,517)	(\$1,210,716,629)	(\$872,986,025)	-23,672
29	(\$3,545,479,101)	(\$1,764,898,340)	(\$1,066,887,776)	(\$686,791,371)	-20,294
30	(\$4,473,639,570)	(\$2,308,416,463)	(\$1,411,270,963)	(\$1,026,562,307)	-27,564
31	(\$3,576,200,980)	(\$1,825,236,617)	(\$1,103,957,933)	(\$764,138,513)	-20,791
<b>TOTAL</b>	<b>(\$121,295,057,134)</b>	<b>(\$60,711,126,081)</b>	<b>(\$37,066,522,092)</b>	<b>(\$23,920,371,075)</b>	<b>-691,735</b>

NOTE: Allocations reflect best available evidence regarding mortality and incidence and industrial structure and composition of each area.

In cases in which a county was part of more than one district, allocations are based on the percentage of the population residing in a district. This convention is adopted because of a lack of subcounty data sufficient for allocation purposes. In some instances, this approach will result in districts which reflect the same proportion of a large urban county reporting identical results.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Losses (Treatment, Morbidity, and Mortality)  
Associated with the Incidence of Cancer on Business Activity:  
Results by US Congressional District in Texas**

US Congressional District in Texas	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
1	(\$4,709,136,529)	(\$2,411,736,533)	(\$1,473,132,298)	(\$1,048,197,760)	-28,518
2	(\$4,086,281,644)	(\$1,991,879,612)	(\$1,238,882,319)	(\$731,320,258)	-22,034
3	(\$3,222,095,636)	(\$1,647,255,899)	(\$1,007,224,338)	(\$614,080,434)	-18,412
4	(\$4,059,998,317)	(\$2,130,165,213)	(\$1,323,980,825)	(\$1,010,292,956)	-26,636
5	(\$4,266,829,724)	(\$2,162,686,567)	(\$1,315,090,816)	(\$862,488,455)	-24,865
6	(\$4,041,707,606)	(\$2,041,361,313)	(\$1,251,806,061)	(\$831,900,629)	-23,643
7	(\$3,874,861,887)	(\$1,781,110,448)	(\$1,075,993,188)	(\$512,857,929)	-17,706
8	(\$4,870,009,030)	(\$2,457,059,906)	(\$1,509,228,636)	(\$1,065,844,468)	-28,879
9	(\$3,924,343,983)	(\$1,812,257,270)	(\$1,094,731,905)	(\$545,289,534)	-18,242
10	(\$3,466,911,058)	(\$1,718,035,097)	(\$1,050,348,459)	(\$622,573,835)	-18,903
11	(\$4,303,318,091)	(\$2,193,970,034)	(\$1,322,857,814)	(\$969,232,801)	-25,772
12	(\$4,018,797,151)	(\$2,025,320,874)	(\$1,236,080,969)	(\$801,611,252)	-23,189
13	(\$4,050,437,795)	(\$2,096,287,571)	(\$1,270,882,557)	(\$911,135,937)	-24,529
14	(\$4,330,183,932)	(\$2,110,890,661)	(\$1,291,545,632)	(\$928,470,139)	-24,650
15	(\$2,771,089,472)	(\$1,471,525,642)	(\$905,022,871)	(\$676,472,337)	-18,206
16	(\$3,620,914,827)	(\$1,802,449,368)	(\$1,089,587,515)	(\$701,403,953)	-20,725
17	(\$4,099,293,259)	(\$2,064,735,684)	(\$1,264,870,823)	(\$912,270,732)	-25,121
18	(\$3,874,861,887)	(\$1,781,110,448)	(\$1,075,993,188)	(\$512,857,929)	-17,706
19	(\$3,705,668,504)	(\$1,919,251,716)	(\$1,165,177,019)	(\$819,950,593)	-22,538
20	(\$3,992,293,147)	(\$2,053,068,844)	(\$1,266,860,886)	(\$805,663,821)	-23,918
21	(\$4,127,163,149)	(\$2,107,703,542)	(\$1,290,354,616)	(\$874,118,493)	-24,937
22	(\$3,943,105,038)	(\$1,859,830,246)	(\$1,127,687,473)	(\$662,297,790)	-19,857
23	(\$3,520,951,689)	(\$1,823,649,207)	(\$1,120,235,770)	(\$770,185,813)	-21,762
24	(\$3,609,405,329)	(\$1,795,445,134)	(\$1,088,932,205)	(\$623,136,738)	-19,492
25	(\$3,154,094,122)	(\$1,665,873,380)	(\$1,026,543,426)	(\$698,464,461)	-19,790
26	(\$3,737,056,813)	(\$1,875,413,946)	(\$1,147,525,172)	(\$729,956,074)	-21,310
27	(\$3,654,374,383)	(\$1,802,934,807)	(\$1,101,201,453)	(\$760,843,473)	-21,112
28	(\$2,631,466,145)	(\$1,385,767,360)	(\$846,498,581)	(\$651,878,425)	-17,064
29	(\$3,874,861,887)	(\$1,781,110,448)	(\$1,075,993,188)	(\$512,857,929)	-17,706
30	(\$3,470,744,749)	(\$1,704,695,498)	(\$1,024,362,454)	(\$521,913,830)	-17,604
31	(\$2,812,055,605)	(\$1,531,848,315)	(\$963,527,180)	(\$708,888,465)	-19,303
32	(\$3,470,744,749)	(\$1,704,695,498)	(\$1,024,362,454)	(\$521,913,830)	-17,604
<b>TOTAL</b>	<b>(\$121,295,057,134)</b>	<b>(\$60,711,126,081)</b>	<b>(\$37,066,522,092)</b>	<b>(\$23,920,371,075)</b>	<b>-691,735</b>

NOTE: Allocations reflect best available evidence regarding mortality and incidence and industrial structure and composition of each area.

In cases in which a county was part of more than one district, allocations are based on the percentage of the population residing in a district. This convention is adopted because of a lack of subcounty data sufficient for allocation purposes. In some instances, this approach will result in districts which reflect the same proportion of a large urban county reporting identical results.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group



**The Total Annual Impact of Direct Medical Expenses and Related Outlays  
Associated with Cancer Treatment on Business Activity in Texas  
Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	(\$647,131,175)	(\$171,443,564)	(\$116,762,508)	-1,923
Forestry & Fishery Products	(\$15,813,409)	(\$15,161,076)	(\$5,622,918)	-70
Coal Mining	(\$66,144,576)	(\$19,119,353)	(\$20,147,301)	-132
Crude Petroleum & Natural Gas	(\$1,046,748,374)	(\$229,198,418)	(\$105,706,023)	-528
Miscellaneous Mining	(\$22,583,616)	(\$9,692,899)	(\$5,697,685)	-54
New Construction	(\$146,897,615)	(\$64,285,449)	(\$52,975,202)	-780
Maintenance & Repair Construction	(\$744,422,385)	(\$400,666,407)	(\$330,174,041)	-4,859
Food Products & Tobacco	(\$1,280,486,030)	(\$329,844,973)	(\$168,500,528)	-2,939
Textile Mill Products	(\$18,262,361)	(\$4,311,347)	(\$3,647,695)	-76
Apparel	(\$248,033,976)	(\$137,745,357)	(\$69,797,741)	-1,971
Paper & Allied Products	(\$240,009,272)	(\$106,647,873)	(\$48,214,666)	-737
Printing & Publishing	(\$431,662,531)	(\$219,952,025)	(\$143,567,693)	-2,526
Chemicals & Petroleum Refining	(\$1,251,848,575)	(\$202,625,356)	(\$95,144,504)	-706
Rubber & Leather Products	(\$175,856,042)	(\$75,780,241)	(\$44,300,744)	-896
Lumber Products & Furniture	(\$102,375,401)	(\$36,518,851)	(\$26,035,872)	-546
Stone, Clay, & Glass Products	(\$157,853,612)	(\$83,390,067)	(\$43,613,332)	-724
Primary Metal	(\$107,784,371)	(\$30,053,780)	(\$22,370,311)	-336
Fabricated Metal Products	(\$228,289,903)	(\$84,599,016)	(\$54,617,320)	-964
Machinery, Except Electrical	(\$191,328,296)	(\$77,752,689)	(\$55,546,866)	-591
Electric & Electronic Equipment	(\$219,615,789)	(\$123,661,230)	(\$73,928,867)	-623
Motor Vehicles & Equipment	(\$100,480,828)	(\$21,490,659)	(\$13,961,759)	-192
Transp. Equip., Exc. Motor Vehicles	(\$54,646,470)	(\$24,899,557)	(\$16,270,878)	-186
Instruments & Related Products	(\$43,058,127)	(\$18,255,010)	(\$13,875,490)	-177
Miscellaneous Manufacturing	(\$98,763,817)	(\$39,202,185)	(\$27,038,225)	-434
Transportation	(\$1,032,822,072)	(\$701,697,626)	(\$464,077,675)	-6,701
Communication	(\$1,320,800,230)	(\$809,068,862)	(\$345,417,510)	-3,169
Electric, Gas, Water, Sanitary Services	(\$1,962,125,640)	(\$445,139,621)	(\$194,247,170)	-846
Wholesale Trade	(\$1,715,704,219)	(\$1,161,003,711)	(\$669,444,986)	-7,821
Retail Trade	(\$8,734,643,521)	(\$7,237,888,905)	(\$4,328,026,083)	-118,822
Finance	(\$554,920,969)	(\$303,406,985)	(\$176,674,652)	-1,619
Insurance	(\$1,225,541,385)	(\$862,617,800)	(\$515,706,801)	-6,479
Real Estate	(\$3,901,945,232)	(\$712,303,202)	(\$114,767,653)	-1,047
Hotels, Lodging Places, Amusements	(\$656,181,591)	(\$329,707,639)	(\$216,299,605)	-5,503
Personal Services	(\$730,190,213)	(\$447,231,169)	(\$347,953,166)	-6,121
Business Services	(\$1,861,334,929)	(\$1,196,959,926)	(\$976,412,641)	-12,433
Eating & Drinking Places	(\$2,210,239,785)	(\$1,294,749,003)	(\$688,875,736)	-32,600
Health Services	(\$1,119,610,269)	(\$781,736,143)	(\$660,965,233)	-11,426
Miscellaneous Services	(\$1,006,498,254)	(\$429,281,420)	(\$372,151,264)	-9,289
Households	(\$46,672,349)	(\$46,672,349)	(\$45,684,972)	-3,277
<b>Total</b>	<b>(\$35,719,327,210)</b>	<b>(\$19,285,761,745)</b>	<b>(\$11,674,223,316)</b>	<b>-250,125</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Direct Medical Expenses and Related Outlays  
Associated with Cancer Treatment on Business Activity:  
Comptroller's Economic Region Results**

<b>Economic Region</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
High Plains	(\$1,265,089,661)	(\$708,459,854)	(\$428,537,010)	(\$427,006,965)	-9,378
Northwest Texas	(\$1,028,924,121)	(\$578,926,472)	(\$350,360,730)	(\$368,485,404)	-7,832
Metroplex	(\$9,295,178,634)	(\$5,006,419,675)	(\$3,018,256,375)	(\$2,688,626,214)	-63,525
Upper East Texas	(\$2,160,705,887)	(\$1,199,643,412)	(\$729,267,248)	(\$756,754,243)	-16,229
Southeast Texas	(\$1,452,978,098)	(\$825,461,249)	(\$508,232,572)	(\$545,106,357)	-11,441
Gulf Coast	(\$8,412,555,792)	(\$4,265,732,395)	(\$2,581,760,286)	(\$2,177,322,300)	-52,831
Capital	(\$1,980,091,991)	(\$1,117,256,671)	(\$678,964,547)	(\$636,637,260)	-14,577
Central Texas	(\$1,654,051,768)	(\$927,064,148)	(\$563,385,383)	(\$581,135,350)	-12,624
Alamo	(\$3,499,971,211)	(\$1,922,264,372)	(\$1,162,513,143)	(\$1,098,992,008)	-25,141
Coastal Bend	(\$1,303,933,795)	(\$697,867,941)	(\$424,384,118)	(\$441,828,465)	-9,419
South Texas Border	(\$1,637,708,935)	(\$936,484,379)	(\$569,395,610)	(\$586,899,479)	-12,852
West Texas	(\$838,594,572)	(\$459,598,322)	(\$277,139,595)	(\$288,352,920)	-6,127
Upper Rio Grande	(\$1,189,542,746)	(\$640,582,854)	(\$382,026,697)	(\$347,736,343)	-8,148
<b>TOTAL STATE IMPACT</b>	<b>(\$35,719,327,210)</b>	<b>(\$19,285,761,745)</b>	<b>(\$11,674,223,316)</b>	<b>(\$10,944,883,306)</b>	<b>-250,125</b>

**NOTE:** Allocations reflect best available evidence regarding incidence and industrial structure and composition of each area.

**SOURCE:** US Multi-Regional Impact Assessment System, The Perryman Group



**The Total Annual Impact of Direct Medical Expenses and Related Outlays  
Associated with Cancer Treatment on Business Activity:  
Council of Governments (COG) Region Results**

<b>COG</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Panhandle	(\$646,630,338)	(\$357,690,239)	(\$216,194,109)	(\$219,325,016)	-4,751
South Plains	(\$618,459,322)	(\$350,769,614)	(\$212,342,901)	(\$207,681,948)	-4,626
North Texas	(\$413,002,919)	(\$235,536,938)	(\$143,168,934)	(\$152,169,889)	-3,211
North Central Texas	(\$8,911,522,327)	(\$4,787,825,457)	(\$2,884,380,569)	(\$2,548,224,950)	-60,510
North East Texas	(\$499,886,999)	(\$283,516,790)	(\$173,712,570)	(\$188,118,884)	-3,929
East Texas	(\$1,660,818,887)	(\$916,126,622)	(\$555,554,678)	(\$568,635,359)	-12,300
West Central Texas	(\$615,921,202)	(\$343,389,534)	(\$207,191,797)	(\$216,315,515)	-4,621
Upper Rio Grande	(\$1,189,542,746)	(\$640,582,854)	(\$382,026,697)	(\$347,736,343)	-8,148
Permian Basin	(\$563,857,384)	(\$311,122,650)	(\$188,537,683)	(\$196,585,145)	-4,148
Concho Valley	(\$274,737,189)	(\$148,475,673)	(\$88,601,912)	(\$91,767,775)	-1,980
Heart of Texas	(\$673,412,468)	(\$366,139,959)	(\$220,364,459)	(\$222,421,958)	-4,903
Capital	(\$1,980,091,991)	(\$1,117,256,671)	(\$678,964,547)	(\$636,637,260)	-14,577
Brazos Valley	(\$408,014,926)	(\$229,303,037)	(\$139,491,615)	(\$146,388,130)	-3,132
Deep East Texas	(\$746,090,499)	(\$427,944,676)	(\$262,230,424)	(\$285,702,829)	-5,952
South East Texas	(\$706,887,599)	(\$397,516,574)	(\$246,002,148)	(\$259,403,527)	-5,489
Gulf Coast	(\$8,412,555,792)	(\$4,265,732,395)	(\$2,581,760,286)	(\$2,177,322,300)	-52,831
Golden Crescent	(\$337,508,956)	(\$186,318,135)	(\$113,870,291)	(\$119,463,605)	-2,532
Alamo	(\$3,499,971,211)	(\$1,922,264,372)	(\$1,162,513,143)	(\$1,098,992,008)	-25,141
South Texas	(\$250,453,784)	(\$144,681,743)	(\$87,985,780)	(\$100,740,643)	-2,039
Coastal Bend	(\$966,424,840)	(\$511,549,806)	(\$310,513,828)	(\$322,364,860)	-6,887
Lower Rio Grande Valley	(\$1,193,275,402)	(\$679,407,648)	(\$412,938,268)	(\$411,388,895)	-9,237
Texoma	(\$383,656,307)	(\$218,594,218)	(\$133,875,807)	(\$140,401,264)	-3,016
Central Texas	(\$572,624,374)	(\$331,621,152)	(\$203,529,309)	(\$212,325,262)	-4,589
Middle Rio Grande	(\$193,979,749)	(\$112,394,987)	(\$68,471,562)	(\$74,769,941)	-1,576
Border Region	(\$2,828,866,714)	(\$1,578,065,883)	(\$952,050,092)	(\$935,242,632)	-21,013
<b>TOTAL STATE IMPACT</b>	<b>(\$35,719,327,210)</b>	<b>(\$19,285,761,745)</b>	<b>(\$11,674,223,316)</b>	<b>(\$10,944,883,306)</b>	<b>-250,125</b>

NOTE: Allocations reflect best available evidence regarding incidence and industrial structure and composition of each area.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Direct Medical Expenses and Related Outlays  
Associated with Cancer Treatment on Business Activity:  
Metropolitan Statistical Area (MSA) and Rural Texas Results**

<b>MSA</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Abilene	(\$295,069,877)	(\$159,718,429)	(\$95,997,747)	(\$92,926,382)	-2,082
Amarillo	(\$421,130,166)	(\$236,103,089)	(\$142,624,542)	(\$137,894,659)	-3,091
Austin-Round Rock	(\$1,707,378,682)	(\$968,132,826)	(\$589,117,732)	(\$544,895,173)	-12,582
Beaumont-Port Arthur	(\$706,887,599)	(\$397,516,574)	(\$246,002,148)	(\$259,403,527)	-5,489
Brownsville-Harlingen	(\$477,150,368)	(\$266,187,281)	(\$160,849,275)	(\$160,629,218)	-3,606
College Station-Bryan	(\$259,452,993)	(\$143,826,839)	(\$87,440,234)	(\$89,902,339)	-1,957
Corpus Christi	(\$759,677,492)	(\$394,690,205)	(\$239,531,745)	(\$241,912,586)	-5,252
Dallas-Plano-Irving MD*	(\$5,459,846,150)	(\$2,910,661,812)	(\$1,747,229,785)	(\$1,477,123,744)	-35,971
Fort Worth-Arlington MD*	(\$3,124,256,868)	(\$1,699,010,446)	(\$1,028,759,407)	(\$956,410,821)	-22,088
El Paso	(\$1,152,432,430)	(\$619,136,638)	(\$369,022,056)	(\$333,347,314)	-7,851
Houston-Sugar Land-Baytown	(\$8,122,916,470)	(\$4,101,155,991)	(\$2,481,111,629)	(\$2,065,952,398)	-50,517
Killeen-Temple-Fort Hood	(\$492,747,073)	(\$285,685,231)	(\$175,226,309)	(\$180,638,394)	-3,942
Laredo	(\$188,511,438)	(\$107,671,097)	(\$65,155,631)	(\$72,672,216)	-1,491
Longview	(\$408,368,131)	(\$227,884,571)	(\$139,569,009)	(\$141,184,639)	-3,068
Lubbock	(\$464,584,310)	(\$263,390,963)	(\$159,536,452)	(\$148,598,342)	-3,429
McAllen-Edinburg-Mission	(\$691,665,877)	(\$398,395,374)	(\$243,154,828)	(\$240,526,969)	-5,424
Midland	(\$171,589,292)	(\$94,828,198)	(\$56,985,877)	(\$56,126,461)	-1,217
Odessa	(\$193,102,098)	(\$106,708,657)	(\$65,370,574)	(\$67,947,827)	-1,444
San Angelo	(\$196,169,350)	(\$104,517,851)	(\$61,916,770)	(\$62,230,865)	-1,375
San Antonio	(\$3,266,470,208)	(\$1,795,519,536)	(\$1,086,230,719)	(\$1,017,411,017)	-23,416
Sherman-Denison	(\$234,577,952)	(\$135,691,664)	(\$82,956,492)	(\$87,957,003)	-1,883
Texarkana	(\$162,903,268)	(\$95,309,666)	(\$58,542,567)	(\$60,027,528)	-1,303
Tyler	(\$425,729,991)	(\$229,384,722)	(\$136,561,473)	(\$134,772,692)	-2,985
Victoria	(\$195,695,585)	(\$105,354,582)	(\$64,428,132)	(\$66,571,916)	-1,419
Waco	(\$446,907,443)	(\$240,595,317)	(\$144,251,917)	(\$138,396,800)	-3,164
Wichita Falls	(\$256,058,770)	(\$148,130,363)	(\$90,202,185)	(\$93,828,500)	-2,007
Rural Area	(\$5,438,047,329)	(\$3,050,553,823)	(\$1,856,448,083)	(\$2,015,593,976)	-42,072
<b>TOTAL STATE IMPACT</b>	<b>(\$35,719,327,210)</b>	<b>(\$19,285,761,745)</b>	<b>(\$11,674,223,316)</b>	<b>(\$10,944,883,306)</b>	<b>-250,125</b>

\*Metropolitan Division

NOTE: Allocations reflect best available evidence regarding incidence and industrial structure and composition of each area.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Direct Medical Expenses and Related Outlays  
Associated with Cancer Treatment on Business Activity:  
County Results**

<b>County</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Anderson	(\$85,606,353)	(\$50,509,474)	(\$30,975,712)	(\$32,058,492)	-687
Andrews	(\$19,728,080)	(\$11,111,370)	(\$6,748,136)	(\$6,840,278)	-145
Angelina	(\$160,585,303)	(\$90,759,051)	(\$55,112,814)	(\$57,943,239)	-1,241
Aransas	(\$70,104,987)	(\$36,643,113)	(\$22,077,470)	(\$24,038,802)	-501
Archer	(\$12,113,038)	(\$6,702,981)	(\$4,024,977)	(\$4,383,932)	-91
Armstrong	(\$3,792,018)	(\$2,028,916)	(\$1,252,810)	(\$1,057,620)	-26
Atascosa	(\$66,984,907)	(\$35,817,056)	(\$21,744,548)	(\$22,093,465)	-474
Austin	(\$50,791,911)	(\$27,142,488)	(\$16,544,589)	(\$14,812,707)	-340
Bailey	(\$7,846,360)	(\$4,540,776)	(\$2,711,890)	(\$2,825,915)	-59
Bandera	(\$46,267,625)	(\$24,918,929)	(\$14,981,350)	(\$16,535,361)	-342
Bastrop	(\$118,093,528)	(\$64,468,895)	(\$39,056,895)	(\$40,713,115)	-878
Baylor	(\$10,950,339)	(\$6,301,546)	(\$3,822,753)	(\$4,029,626)	-84
Bee	(\$35,435,781)	(\$20,290,777)	(\$12,446,443)	(\$13,895,261)	-287
Bell	(\$369,204,101)	(\$215,875,073)	(\$132,700,339)	(\$133,672,412)	-2,954
Bexar	(\$2,609,043,726)	(\$1,437,881,553)	(\$870,321,103)	(\$785,638,062)	-18,497
Blanco	(\$17,809,997)	(\$9,550,183)	(\$5,715,488)	(\$5,969,311)	-128
Borden	(\$5,779,815)	(\$3,143,951)	(\$1,863,953)	(\$1,809,984)	-38
Bosque	(\$39,273,320)	(\$21,994,713)	(\$13,387,952)	(\$13,368,617)	-293
Bowie	(\$162,903,268)	(\$95,309,666)	(\$58,542,567)	(\$60,027,528)	-1,303
Brazoria	(\$379,425,296)	(\$207,299,233)	(\$127,494,071)	(\$138,962,466)	-2,884
Brazos	(\$191,710,759)	(\$104,989,374)	(\$63,584,889)	(\$62,389,722)	-1,406
Brewster	(\$15,348,427)	(\$9,166,803)	(\$5,592,947)	(\$5,697,057)	-124
Briscoe	(\$2,946,841)	(\$1,588,404)	(\$954,907)	(\$1,028,416)	-22
Brooks	(\$9,622,454)	(\$5,640,700)	(\$3,499,204)	(\$4,168,578)	-83
Brown	(\$72,871,857)	(\$43,547,405)	(\$26,524,569)	(\$29,874,811)	-620
Burleson	(\$34,874,333)	(\$20,208,843)	(\$12,459,849)	(\$13,895,261)	-283
Burnet	(\$85,454,397)	(\$46,377,143)	(\$27,835,501)	(\$28,624,238)	-619
Caldwell	(\$60,342,734)	(\$32,764,756)	(\$20,206,549)	(\$21,398,702)	-455
Calhoun	(\$22,543,407)	(\$10,646,947)	(\$6,492,003)	(\$6,822,293)	-145
Callahan	(\$29,939,637)	(\$15,817,607)	(\$9,508,695)	(\$10,421,446)	-214
Cameron	(\$477,150,368)	(\$266,187,281)	(\$160,849,275)	(\$160,629,218)	-3,606
Camp	(\$20,396,803)	(\$11,276,105)	(\$6,886,383)	(\$7,312,950)	-154
Carson	(\$4,413,084)	(\$1,926,621)	(\$1,093,597)	(\$891,748)	-22
Cass	(\$57,066,395)	(\$32,566,545)	(\$20,021,540)	(\$23,382,534)	-463
Castro	(\$6,375,762)	(\$3,560,871)	(\$2,149,635)	(\$2,453,087)	-50
Chambers	(\$44,052,911)	(\$20,364,701)	(\$12,292,291)	(\$11,219,118)	-263
Cherokee	(\$84,913,625)	(\$48,794,480)	(\$29,974,824)	(\$33,252,611)	-684
Childress	(\$12,289,878)	(\$6,765,555)	(\$4,094,216)	(\$4,724,389)	-96
Clay	(\$20,371,590)	(\$11,328,990)	(\$7,085,633)	(\$7,045,670)	-154
Cochran	(\$2,742,128)	(\$1,540,236)	(\$941,580)	(\$888,239)	-20



(continued)  
**The Total Annual Impact of Direct Medical Expenses and Related Outlays  
Associated with Cancer Treatment on Business Activity:  
County Results**

County	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
Coke	(\$9,017,342)	(\$4,880,469)	(\$2,981,225)	(\$3,304,759)	-66
Coleman	(\$22,457,470)	(\$12,580,214)	(\$7,581,406)	(\$8,198,204)	-170
Collin	(\$786,145,998)	(\$438,974,137)	(\$267,815,295)	(\$253,527,425)	-5,730
Collingsworth	(\$5,797,016)	(\$3,469,609)	(\$2,141,638)	(\$2,352,673)	-48
Colorado	(\$48,520,164)	(\$27,037,545)	(\$16,467,365)	(\$18,569,336)	-387
Comal	(\$190,307,927)	(\$103,537,525)	(\$62,068,438)	(\$64,335,059)	-1,408
Comanche	(\$29,797,616)	(\$16,979,832)	(\$10,274,544)	(\$10,798,615)	-227
Concho	(\$4,732,532)	(\$2,714,344)	(\$1,720,096)	(\$1,689,187)	-38
Cooke	(\$75,883,905)	(\$41,475,329)	(\$25,624,471)	(\$26,539,949)	-570
Coryell	(\$80,150,171)	(\$45,317,921)	(\$27,629,456)	(\$30,291,669)	-639
Cottle	(\$4,645,248)	(\$2,843,661)	(\$1,758,786)	(\$1,688,184)	-37
Crane	(\$3,136,058)	(\$1,804,469)	(\$1,118,475)	(\$1,117,291)	-24
Crockett	(\$4,971,130)	(\$2,868,086)	(\$1,731,751)	(\$2,223,242)	-42
Crosby	(\$8,580,364)	(\$4,996,542)	(\$3,057,539)	(\$2,698,101)	-65
Culberson	(\$2,987,482)	(\$1,909,269)	(\$1,171,378)	(\$1,528,479)	-29
Dallam	(\$7,461,750)	(\$4,322,894)	(\$2,590,506)	(\$2,241,615)	-55
Dallas	(\$3,429,918,636)	(\$1,795,167,413)	(\$1,071,695,316)	(\$816,925,055)	-21,291
Dawson	(\$22,925,623)	(\$12,750,158)	(\$7,558,237)	(\$8,116,859)	-169
Deaf Smith	(\$15,405,409)	(\$8,212,213)	(\$4,897,968)	(\$4,317,089)	-103
Delta	(\$8,209,236)	(\$4,588,497)	(\$2,877,272)	(\$2,386,138)	-58
Denton	(\$677,192,705)	(\$362,564,806)	(\$217,103,447)	(\$201,759,191)	-4,623
DeWitt	(\$43,583,475)	(\$24,392,677)	(\$14,972,889)	(\$15,562,692)	-336
Dickens	(\$5,400,348)	(\$3,138,124)	(\$1,922,693)	(\$2,094,554)	-42
Dimmit	(\$10,217,739)	(\$5,812,311)	(\$3,575,467)	(\$4,446,484)	-86
Donley	(\$8,502,261)	(\$5,249,118)	(\$3,250,279)	(\$4,029,626)	-79
Duval	(\$14,717,108)	(\$7,797,936)	(\$4,713,157)	(\$5,005,536)	-105
Eastland	(\$40,108,184)	(\$21,826,490)	(\$13,256,673)	(\$15,145,835)	-309
Ector	(\$193,102,098)	(\$106,708,657)	(\$65,370,574)	(\$67,947,827)	-1,444
Edwards	(\$3,240,756)	(\$1,844,067)	(\$1,080,551)	(\$1,227,561)	-24
El Paso	(\$1,152,432,430)	(\$619,136,638)	(\$369,022,056)	(\$333,347,314)	-7,851
Ellis	(\$187,844,753)	(\$101,524,178)	(\$61,026,806)	(\$65,379,709)	-1,379
Erath	(\$52,147,565)	(\$30,694,275)	(\$18,896,593)	(\$20,981,844)	-438
Falls	(\$35,417,059)	(\$20,541,689)	(\$12,529,695)	(\$12,713,302)	-275
Fannin	(\$73,194,450)	(\$41,427,224)	(\$25,294,844)	(\$25,904,312)	-563
Fayette	(\$67,622,939)	(\$37,253,542)	(\$22,433,015)	(\$21,676,607)	-488
Fisher	(\$7,631,873)	(\$4,504,166)	(\$2,731,090)	(\$3,096,693)	-63
Floyd	(\$7,760,943)	(\$4,097,372)	(\$2,448,950)	(\$2,301,686)	-52
Foard	(\$1,891,894)	(\$1,159,056)	(\$725,161)	(\$768,743)	-16
Fort Bend	(\$641,526,282)	(\$331,089,080)	(\$199,720,566)	(\$189,560,007)	-4,247
Franklin	(\$15,238,413)	(\$8,398,628)	(\$5,082,136)	(\$5,964,958)	-118

**(continued)**  
**The Total Annual Impact of Direct Medical Expenses and Related Outlays**  
**Associated with Cancer Treatment on Business Activity:**  
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<b>County</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Freestone	(\$34,997,557)	(\$19,297,789)	(\$11,617,690)	(\$13,895,261)	-270
Frio	(\$21,543,462)	(\$11,442,494)	(\$6,830,059)	(\$7,380,297)	-153
Gaines	(\$14,371,614)	(\$7,531,197)	(\$4,475,717)	(\$4,704,075)	-98
Galveston	(\$539,299,639)	(\$289,898,178)	(\$175,705,741)	(\$179,109,915)	-3,888
Garza	(\$7,546,177)	(\$4,094,088)	(\$2,504,474)	(\$2,892,616)	-57
Gillespie	(\$63,963,793)	(\$34,791,099)	(\$21,187,109)	(\$22,232,418)	-479
Glasscock	(\$701,075)	(\$360,457)	(\$210,944)	(\$157,070)	-4
Goliad	(\$12,554,265)	(\$7,324,209)	(\$4,550,580)	(\$5,697,057)	-109
Gonzales	(\$26,564,704)	(\$15,006,176)	(\$9,178,108)	(\$10,063,185)	-207
Gray	(\$48,349,304)	(\$25,692,641)	(\$15,626,490)	(\$18,052,303)	-356
Grayson	(\$234,577,952)	(\$135,691,664)	(\$82,956,492)	(\$87,957,003)	-1,883
Gregg	(\$239,746,548)	(\$136,701,220)	(\$84,049,312)	(\$82,954,709)	-1,839
Grimes	(\$33,016,760)	(\$18,727,466)	(\$11,602,925)	(\$12,768,067)	-263
Guadalupe	(\$163,895,993)	(\$90,881,087)	(\$55,145,777)	(\$61,556,007)	-1,275
Hale	(\$42,000,213)	(\$25,071,324)	(\$15,224,172)	(\$18,051,123)	-356
Hall	(\$7,927,412)	(\$4,488,438)	(\$2,669,250)	(\$2,758,676)	-58
Hamilton	(\$16,533,053)	(\$9,263,227)	(\$5,636,100)	(\$6,530,773)	-131
Hansford	(\$4,652,363)	(\$2,224,265)	(\$1,292,601)	(\$1,226,396)	-27
Hardeman	(\$8,029,998)	(\$4,875,197)	(\$2,969,493)	(\$3,751,720)	-72
Hardin	(\$93,597,986)	(\$52,083,357)	(\$31,449,425)	(\$35,293,963)	-715
Harris	(\$5,556,658,201)	(\$2,743,242,747)	(\$1,654,995,928)	(\$1,247,907,425)	-32,543
Harrison	(\$122,892,533)	(\$64,416,858)	(\$39,722,614)	(\$37,931,771)	-847
Hartley	(\$1,833,843)	(\$1,001,539)	(\$608,984)	(\$629,231)	-14
Haskell	(\$11,460,481)	(\$6,494,753)	(\$4,027,430)	(\$4,314,511)	-90
Hays	(\$163,439,484)	(\$91,343,427)	(\$54,885,969)	(\$56,692,665)	-1,223
Hemphill	(\$3,108,077)	(\$1,585,273)	(\$940,022)	(\$994,496)	-20
Henderson	(\$206,700,851)	(\$111,071,624)	(\$66,855,940)	(\$68,781,542)	-1,492
Hidalgo	(\$691,665,877)	(\$398,395,374)	(\$243,154,828)	(\$240,526,969)	-5,424
Hill	(\$75,232,759)	(\$40,058,478)	(\$23,951,235)	(\$27,234,712)	-564
Hockley	(\$26,700,597)	(\$14,988,001)	(\$9,201,769)	(\$10,509,745)	-214
Hood	(\$119,965,638)	(\$64,619,088)	(\$39,307,364)	(\$42,380,546)	-890
Hopkins	(\$62,669,620)	(\$36,365,786)	(\$22,319,896)	(\$24,594,612)	-509
Houston	(\$56,088,253)	(\$30,864,321)	(\$19,020,458)	(\$17,004,678)	-394
Howard	(\$59,407,892)	(\$32,175,680)	(\$19,559,369)	(\$21,259,749)	-441
Hudspeth	(\$2,410,895)	(\$1,438,639)	(\$836,463)	(\$1,203,284)	-21
Hunt	(\$139,881,443)	(\$80,199,331)	(\$48,856,839)	(\$55,164,187)	-1,130
Hutchinson	(\$38,351,398)	(\$20,914,096)	(\$12,781,228)	(\$16,473,814)	-303
Irion	(\$2,466,749)	(\$1,208,869)	(\$709,837)	(\$813,811)	-16
Jack	(\$13,556,442)	(\$7,405,044)	(\$4,558,019)	(\$5,072,750)	-103
Jackson	(\$23,550,017)	(\$13,245,256)	(\$7,958,589)	(\$9,046,329)	-181



**(continued)**  
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<b>County</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Jasper	(\$69,225,724)	(\$39,658,810)	(\$24,261,221)	(\$27,658,121)	-563
Jeff Davis	(\$5,067,910)	(\$2,828,898)	(\$1,726,618)	(\$1,930,584)	-40
Jefferson	(\$465,912,006)	(\$261,826,668)	(\$162,703,921)	(\$166,048,370)	-3,585
Jim Hogg	(\$7,883,048)	(\$4,504,644)	(\$2,667,133)	(\$3,334,863)	-63
Jim Wells	(\$54,723,839)	(\$32,485,501)	(\$19,706,213)	(\$21,676,607)	-447
Johnson	(\$224,597,947)	(\$126,118,552)	(\$77,424,078)	(\$80,453,562)	-1,744
Jones	(\$37,793,705)	(\$20,819,477)	(\$12,679,842)	(\$12,889,678)	-281
Karnes	(\$28,633,545)	(\$14,630,786)	(\$8,741,710)	(\$9,587,730)	-196
Kaufman	(\$151,261,531)	(\$82,802,430)	(\$50,353,414)	(\$53,913,613)	-1,150
Kendall	(\$60,134,817)	(\$32,035,640)	(\$19,417,166)	(\$20,703,939)	-439
Kenedy	(\$2,114,911)	(\$1,113,710)	(\$687,208)	(\$914,892)	-19
Kent	(\$2,077,072)	(\$1,123,683)	(\$680,487)	(\$704,350)	-14
Kerr	(\$119,360,202)	(\$65,880,457)	(\$39,523,546)	(\$42,380,546)	-898
Kimble	(\$10,959,714)	(\$5,652,139)	(\$3,343,200)	(\$3,751,720)	-76
King	(\$2,440,715)	(\$1,398,997)	(\$844,752)	(\$659,392)	-17
Kinney	(\$8,650,522)	(\$4,520,135)	(\$2,621,705)	(\$2,931,963)	-60
Kleberg	(\$45,397,028)	(\$24,960,550)	(\$15,110,702)	(\$16,257,455)	-343
Knox	(\$7,264,863)	(\$4,149,460)	(\$2,513,442)	(\$2,441,132)	-53
La Salle	(\$6,535,109)	(\$3,841,447)	(\$2,338,064)	(\$2,918,005)	-57
Lamar	(\$101,311,766)	(\$56,145,289)	(\$34,304,181)	(\$37,794,212)	-785
Lamb	(\$15,813,285)	(\$8,628,291)	(\$5,219,453)	(\$5,771,844)	-115
Lampasas	(\$43,392,801)	(\$24,492,237)	(\$14,896,514)	(\$16,674,313)	-348
Lavaca	(\$48,115,175)	(\$28,319,446)	(\$17,332,573)	(\$18,219,483)	-390
Lee	(\$29,525,182)	(\$16,309,868)	(\$9,975,204)	(\$10,043,603)	-219
Leon	(\$30,828,098)	(\$18,400,675)	(\$11,056,207)	(\$12,924,477)	-255
Liberty	(\$130,381,698)	(\$73,318,859)	(\$45,153,472)	(\$46,541,146)	-995
Limestone	(\$41,584,331)	(\$23,651,973)	(\$14,625,969)	(\$16,813,266)	-336
Lipscomb	(\$4,830,746)	(\$2,504,915)	(\$1,484,754)	(\$1,400,505)	-31
Live Oak	(\$29,467,694)	(\$15,996,572)	(\$9,747,590)	(\$11,672,019)	-227
Llano	(\$72,300,794)	(\$39,633,110)	(\$23,887,607)	(\$25,428,328)	-540
Loving	(\$888,906)	(\$337,735)	(\$208,389)	(\$187,705)	-4
Lubbock	(\$456,003,946)	(\$258,394,421)	(\$156,478,913)	(\$145,900,241)	-3,364
Lynn	(\$6,428,323)	(\$3,458,823)	(\$2,041,362)	(\$1,453,497)	-40
Madison	(\$18,462,288)	(\$10,592,733)	(\$6,375,959)	(\$7,781,346)	-151
Marion	(\$25,278,746)	(\$14,112,872)	(\$8,637,150)	(\$9,726,683)	-202
Martin	(\$5,301,871)	(\$2,852,490)	(\$1,712,367)	(\$1,811,773)	-37
Mason	(\$11,194,673)	(\$6,043,428)	(\$3,605,766)	(\$3,890,673)	-81
Matagorda	(\$65,878,989)	(\$34,924,488)	(\$21,424,310)	(\$25,199,595)	-496
Maverick	(\$49,826,245)	(\$28,348,377)	(\$17,144,530)	(\$19,453,366)	-403
McCulloch	(\$18,488,877)	(\$10,695,630)	(\$6,588,116)	(\$7,086,583)	-148

**(continued)**  
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<b>County</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
McLennan	(\$446,907,443)	(\$240,595,317)	(\$144,251,917)	(\$138,396,800)	-3,164
McMullen	(\$785,831)	(\$397,231)	(\$232,467)	(\$192,199)	-5
Medina	(\$67,541,919)	(\$36,210,741)	(\$21,682,222)	(\$23,621,944)	-498
Menard	(\$5,602,619)	(\$3,243,961)	(\$1,951,893)	(\$2,223,242)	-44
Midland	(\$171,589,292)	(\$94,828,198)	(\$56,985,877)	(\$56,126,461)	-1,217
Milam	(\$43,236,220)	(\$24,291,342)	(\$15,090,455)	(\$16,652,423)	-343
Mills	(\$8,364,996)	(\$5,433,135)	(\$3,364,781)	(\$3,779,283)	-77
Mitchell	(\$14,764,463)	(\$8,451,545)	(\$5,126,763)	(\$5,661,480)	-116
Montague	(\$45,195,928)	(\$24,320,693)	(\$14,661,174)	(\$16,257,455)	-339
Montgomery	(\$678,087,126)	(\$354,256,539)	(\$216,493,525)	(\$200,878,220)	-4,603
Moore	(\$22,636,015)	(\$11,165,044)	(\$6,691,623)	(\$6,978,664)	-146
Morris	(\$21,154,785)	(\$10,819,340)	(\$6,725,000)	(\$6,251,675)	-144
Motley	(\$3,608,439)	(\$1,942,645)	(\$1,148,675)	(\$1,266,877)	-26
Nacogdoches	(\$97,109,218)	(\$56,275,354)	(\$34,831,652)	(\$38,489,873)	-813
Navarro	(\$92,749,533)	(\$50,745,878)	(\$31,002,673)	(\$30,594,131)	-686
Newton	(\$13,902,563)	(\$9,465,171)	(\$6,061,449)	(\$7,322,001)	-140
Nolan	(\$34,404,223)	(\$19,537,679)	(\$11,750,476)	(\$12,187,161)	-261
Nueces	(\$585,529,770)	(\$302,486,831)	(\$183,309,310)	(\$177,581,437)	-3,953
Ochiltree	(\$9,522,184)	(\$4,977,203)	(\$3,019,819)	(\$3,054,052)	-65
Oldham	(\$1,346,427)	(\$839,149)	(\$522,364)	(\$688,567)	-13
Orange	(\$147,377,607)	(\$83,606,549)	(\$51,848,801)	(\$58,061,194)	-1,188
Palo Pinto	(\$63,684,491)	(\$33,197,831)	(\$19,860,257)	(\$21,398,702)	-449
Panola	(\$45,272,219)	(\$25,031,808)	(\$15,455,128)	(\$16,319,980)	-342
Parker	(\$184,100,067)	(\$97,921,528)	(\$59,040,078)	(\$61,000,196)	-1,324
Parmer	(\$4,607,018)	(\$2,185,056)	(\$1,325,507)	(\$848,803)	-26
Pecos	(\$18,612,385)	(\$10,153,978)	(\$6,128,388)	(\$7,086,583)	-142
Polk	(\$130,334,149)	(\$74,691,967)	(\$45,133,588)	(\$50,717,703)	-1,022
Potter	(\$214,348,214)	(\$120,036,208)	(\$72,775,088)	(\$69,198,400)	-1,568
Presidio	(\$11,295,603)	(\$6,102,607)	(\$3,677,235)	(\$4,029,626)	-83
Rains	(\$21,280,389)	(\$11,348,524)	(\$6,749,066)	(\$7,898,203)	-154
Randall	(\$198,576,850)	(\$112,111,345)	(\$67,503,045)	(\$66,746,890)	-1,475
Reagan	(\$2,987,358)	(\$1,743,492)	(\$1,034,073)	(\$1,258,629)	-24
Real	(\$9,643,843)	(\$5,042,228)	(\$2,995,389)	(\$3,334,863)	-68
Red River	(\$32,118,286)	(\$17,644,518)	(\$10,590,935)	(\$11,721,898)	-240
Reeves	(\$17,469,497)	(\$9,819,081)	(\$5,962,608)	(\$7,225,536)	-142
Refugio	(\$14,482,702)	(\$8,176,626)	(\$4,839,100)	(\$6,669,725)	-119
Roberts	(\$1,294,646)	(\$672,982)	(\$399,249)	(\$546,244)	-10
Robertson	(\$32,867,901)	(\$18,628,622)	(\$11,395,496)	(\$13,617,356)	-268
Rockwall	(\$79,391,848)	(\$44,841,020)	(\$27,501,397)	(\$28,068,427)	-609
Runnels	(\$24,453,911)	(\$12,565,318)	(\$7,494,208)	(\$8,116,148)	-170



**(continued)**  
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Rusk	(\$89,005,672)	(\$47,193,243)	(\$28,996,101)	(\$29,605,692)	-638
Sabine	(\$25,228,810)	(\$14,666,760)	(\$9,262,811)	(\$10,856,272)	-216
San Augustine	(\$21,452,715)	(\$11,645,601)	(\$7,025,452)	(\$7,829,248)	-158
San Jacinto	(\$50,557,419)	(\$27,919,671)	(\$17,003,562)	(\$18,897,555)	-389
San Patricio	(\$104,042,735)	(\$55,560,260)	(\$34,144,965)	(\$40,292,348)	-798
San Saba	(\$11,743,031)	(\$6,948,217)	(\$4,211,664)	(\$4,724,389)	-98
Schleicher	(\$2,895,788)	(\$1,539,924)	(\$947,371)	(\$774,012)	-20
Scurry	(\$26,671,133)	(\$16,024,423)	(\$9,594,054)	(\$11,131,533)	-222
Shackelford	(\$4,792,917)	(\$2,652,460)	(\$1,610,107)	(\$1,812,308)	-37
Shelby	(\$39,879,125)	(\$23,942,002)	(\$15,035,698)	(\$16,813,115)	-344
Sherman	(\$1,280,368)	(\$643,823)	(\$385,909)	(\$353,767)	-8
Smith	(\$425,729,991)	(\$229,384,722)	(\$136,561,473)	(\$134,772,692)	-2,985
Somervell	(\$7,081,319)	(\$3,484,624)	(\$2,201,761)	(\$1,721,300)	-46
Starr	(\$41,341,412)	(\$25,216,105)	(\$15,712,151)	(\$19,175,460)	-378
Stephens	(\$17,211,409)	(\$10,320,830)	(\$6,261,139)	(\$7,805,088)	-148
Sterling	(\$1,348,622)	(\$855,282)	(\$528,893)	(\$694,763)	-13
Stonewall	(\$2,797,031)	(\$1,729,864)	(\$1,069,693)	(\$1,313,730)	-25
Sutton	(\$6,369,184)	(\$3,721,066)	(\$2,252,760)	(\$2,640,100)	-52
Swisher	(\$8,606,415)	(\$4,519,458)	(\$2,679,588)	(\$2,615,610)	-58
Tarrant	(\$2,636,513,975)	(\$1,430,344,545)	(\$865,124,932)	(\$785,499,109)	-18,409
Taylor	(\$227,336,535)	(\$123,081,344)	(\$73,809,209)	(\$69,615,258)	-1,587
Terrell	(\$1,615,034)	(\$998,651)	(\$627,785)	(\$606,810)	-14
Terry	(\$17,326,879)	(\$9,852,115)	(\$5,785,602)	(\$7,035,529)	-134
Throckmorton	(\$2,086,824)	(\$1,182,983)	(\$697,970)	(\$787,534)	-16
Titus	(\$39,215,231)	(\$21,678,522)	(\$13,249,042)	(\$15,995,329)	-310
Tom Green	(\$193,702,601)	(\$103,308,982)	(\$61,206,933)	(\$61,417,054)	-1,360
Travis	(\$1,063,812,565)	(\$604,574,899)	(\$366,803,740)	(\$320,318,462)	-7,671
Trinity	(\$38,705,527)	(\$23,089,319)	(\$14,144,801)	(\$15,385,322)	-324
Tyler	(\$43,021,692)	(\$24,966,649)	(\$15,336,919)	(\$16,785,702)	-347
Upshur	(\$79,615,911)	(\$43,990,109)	(\$26,523,596)	(\$28,624,238)	-591
Upton	(\$4,694,982)	(\$2,582,478)	(\$1,541,415)	(\$1,592,730)	-33
Uvalde	(\$41,097,442)	(\$23,232,717)	(\$14,169,893)	(\$14,590,024)	-320
Val Verde	(\$55,697,094)	(\$33,979,585)	(\$20,924,294)	(\$21,398,702)	-470
Van Zandt	(\$97,993,079)	(\$59,430,264)	(\$36,342,777)	(\$40,018,352)	-835
Victoria	(\$160,597,913)	(\$87,383,426)	(\$53,385,549)	(\$54,052,566)	-1,165
Walker	(\$150,757,952)	(\$87,762,471)	(\$53,571,951)	(\$57,387,428)	-1,223
Waller	(\$52,135,986)	(\$26,624,495)	(\$15,707,884)	(\$18,063,839)	-366
Ward	(\$15,974,380)	(\$9,064,233)	(\$5,465,139)	(\$6,530,773)	-128
Washington	(\$66,254,788)	(\$37,755,326)	(\$23,016,289)	(\$23,011,900)	-505
Webb	(\$188,511,438)	(\$107,671,097)	(\$65,155,631)	(\$72,672,216)	-1,491

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County Results**

County	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
Wharton	(\$75,039,637)	(\$42,771,571)	(\$26,188,594)	(\$29,111,098)	-599
Wheeler	(\$8,375,039)	(\$5,004,604)	(\$3,063,033)	(\$3,662,336)	-72
Wichita	(\$223,574,141)	(\$130,098,391)	(\$79,091,575)	(\$82,398,898)	-1,762
Wilbarger	(\$31,200,491)	(\$17,277,176)	(\$10,526,052)	(\$11,255,161)	-237
Willacy	(\$24,459,157)	(\$14,824,993)	(\$8,934,164)	(\$10,232,707)	-207
Williamson	(\$301,690,371)	(\$174,980,850)	(\$108,164,578)	(\$105,772,229)	-2,356
Wilson	(\$62,293,293)	(\$34,237,004)	(\$20,870,116)	(\$22,927,181)	-483
Winkler	(\$8,558,782)	(\$4,899,867)	(\$3,000,311)	(\$3,463,640)	-68
Wise	(\$79,044,879)	(\$44,625,821)	(\$27,170,318)	(\$29,457,954)	-612
Wood	(\$116,386,167)	(\$62,865,320)	(\$37,824,602)	(\$39,377,443)	-849
Yoakum	(\$8,260,607)	(\$4,627,858)	(\$2,811,077)	(\$3,332,589)	-65
Young	(\$41,473,809)	(\$23,224,202)	(\$13,945,311)	(\$15,517,748)	-315
Zapata	(\$12,717,887)	(\$7,289,897)	(\$4,450,865)	(\$5,558,104)	-107
Zavala	(\$9,071,000)	(\$5,774,120)	(\$3,621,669)	(\$4,468,974)	-88
<b>TOTAL STATE IMPACT</b>	<b>(\$35,719,327,210)</b>	<b>(\$19,285,761,745)</b>	<b>(\$11,674,223,316)</b>	<b>(\$10,944,883,306)</b>	<b>-250,125</b>

NOTE: Allocations reflect best available evidence regarding incidence and industrial structure and composition of each area.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group



**The Total Annual Impact of Direct Medical Expenses and Related Outlays  
Associated with Cancer Treatment on Business Activity:  
Results by Texas House District**

House District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
1	(\$266,403,193)	(\$152,808,422)	(\$93,926,257)	(\$99,388,419)	-2,111
2	(\$259,154,911)	(\$150,978,118)	(\$91,948,682)	(\$103,080,742)	-2,120
3	(\$258,762,552)	(\$144,821,240)	(\$88,423,462)	(\$98,457,148)	-2,020
4	(\$357,962,383)	(\$193,874,054)	(\$117,209,354)	(\$122,695,155)	-2,642
5	(\$339,291,413)	(\$182,548,392)	(\$110,957,196)	(\$113,246,402)	-2,441
6	(\$349,098,592)	(\$188,095,472)	(\$111,980,408)	(\$110,513,608)	-2,448
7	(\$316,377,947)	(\$177,990,469)	(\$108,630,377)	(\$107,213,793)	-2,376
8	(\$254,937,774)	(\$144,205,114)	(\$88,222,045)	(\$93,361,149)	-1,980
9	(\$252,895,592)	(\$146,188,527)	(\$90,416,835)	(\$101,646,629)	-2,095
10	(\$263,077,512)	(\$141,582,657)	(\$84,978,042)	(\$92,614,420)	-1,944
11	(\$275,279,770)	(\$151,883,851)	(\$93,446,511)	(\$96,182,962)	-2,058
12	(\$292,869,942)	(\$166,734,690)	(\$101,598,096)	(\$109,011,819)	-2,301
13	(\$300,821,411)	(\$171,387,751)	(\$104,735,754)	(\$107,980,103)	-2,331
14	(\$178,291,006)	(\$97,640,118)	(\$59,133,947)	(\$58,022,442)	-1,308
15	(\$305,139,207)	(\$159,415,443)	(\$97,422,086)	(\$90,395,199)	-2,071
16	(\$311,920,078)	(\$162,958,008)	(\$99,587,022)	(\$92,403,981)	-2,117
17	(\$312,055,899)	(\$172,627,948)	(\$104,843,270)	(\$109,265,203)	-2,352
18	(\$321,743,689)	(\$179,893,915)	(\$109,771,477)	(\$115,337,889)	-2,431
19	(\$231,297,738)	(\$131,778,029)	(\$81,063,867)	(\$91,387,367)	-1,854
20	(\$178,996,887)	(\$103,032,725)	(\$63,764,516)	(\$64,249,926)	-1,403
21	(\$246,933,363)	(\$138,768,134)	(\$86,233,078)	(\$88,005,636)	-1,900
22	(\$242,559,060)	(\$136,435,582)	(\$84,766,651)	(\$87,332,525)	-1,875
23	(\$292,130,745)	(\$153,717,863)	(\$93,116,932)	(\$93,609,679)	-2,051
24	(\$291,221,805)	(\$156,545,016)	(\$94,881,100)	(\$96,719,354)	-2,099
25	(\$216,272,419)	(\$118,160,563)	(\$72,671,621)	(\$79,208,605)	-1,644
26	(\$259,818,144)	(\$134,091,078)	(\$80,886,829)	(\$76,771,803)	-1,720
27	(\$259,818,144)	(\$134,091,078)	(\$80,886,829)	(\$76,771,803)	-1,720
28	(\$249,065,616)	(\$132,302,991)	(\$79,843,385)	(\$83,191,339)	-1,772
29	(\$229,031,866)	(\$124,063,158)	(\$76,246,761)	(\$84,953,455)	-1,736
30	(\$290,329,282)	(\$161,517,430)	(\$98,488,700)	(\$103,550,795)	-2,191
31	(\$125,329,838)	(\$72,605,267)	(\$44,422,862)	(\$51,540,765)	-1,037
32	(\$261,099,404)	(\$136,123,872)	(\$82,878,461)	(\$90,687,401)	-1,879
33	(\$260,560,748)	(\$134,606,640)	(\$81,572,643)	(\$79,023,739)	-1,759
34	(\$260,560,748)	(\$134,606,640)	(\$81,572,643)	(\$79,023,739)	-1,759
35	(\$228,585,862)	(\$126,942,131)	(\$77,169,549)	(\$84,814,339)	-1,744
36	(\$172,916,469)	(\$99,598,843)	(\$60,788,707)	(\$60,131,742)	-1,356
37	(\$190,860,147)	(\$106,474,912)	(\$64,339,710)	(\$64,251,687)	-1,443
38	(\$190,860,147)	(\$106,474,912)	(\$64,339,710)	(\$64,251,687)	-1,443
39	(\$172,916,469)	(\$99,598,843)	(\$60,788,707)	(\$60,131,742)	-1,356
40	(\$172,916,469)	(\$99,598,843)	(\$60,788,707)	(\$60,131,742)	-1,356

(continued)  
**The Total Annual Impact of Direct Medical Expenses and Related Outlays  
Associated with Cancer Treatment on Business Activity:  
Results by Texas House District**

House District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
41	(\$172,916,469)	(\$99,598,843)	(\$60,788,707)	(\$60,131,742)	-1,356
42	(\$131,958,007)	(\$75,369,768)	(\$45,608,942)	(\$50,870,551)	-1,044
43	(\$184,906,671)	(\$104,282,053)	(\$63,068,267)	(\$67,034,339)	-1,437
44	(\$252,753,990)	(\$140,124,267)	(\$85,194,001)	(\$94,546,373)	-1,965
45	(\$241,592,215)	(\$133,658,365)	(\$80,808,007)	(\$84,060,678)	-1,806
46	(\$180,848,136)	(\$102,777,733)	(\$62,356,636)	(\$54,454,139)	-1,304
47	(\$180,848,136)	(\$102,777,733)	(\$62,356,636)	(\$54,454,139)	-1,304
48	(\$170,210,010)	(\$96,731,984)	(\$58,688,598)	(\$51,250,954)	-1,227
49	(\$180,848,136)	(\$102,777,733)	(\$62,356,636)	(\$54,454,139)	-1,304
50	(\$170,210,010)	(\$96,731,984)	(\$58,688,598)	(\$51,250,954)	-1,227
51	(\$180,848,136)	(\$102,777,733)	(\$62,356,636)	(\$54,454,139)	-1,304
52	(\$165,929,704)	(\$96,239,467)	(\$59,490,518)	(\$58,174,726)	-1,296
53	(\$355,113,404)	(\$194,945,727)	(\$117,343,467)	(\$126,882,682)	-2,658
54	(\$272,836,798)	(\$155,060,659)	(\$94,485,147)	(\$97,430,792)	-2,119
55	(\$225,214,502)	(\$131,683,795)	(\$80,947,207)	(\$81,540,171)	-1,802
56	(\$286,020,763)	(\$153,981,003)	(\$92,321,227)	(\$88,573,952)	-2,025
57	(\$278,462,024)	(\$154,778,033)	(\$93,288,048)	(\$96,859,329)	-2,089
58	(\$263,871,266)	(\$148,113,265)	(\$90,812,030)	(\$93,822,179)	-2,036
59	(\$194,074,722)	(\$111,173,013)	(\$68,003,236)	(\$74,103,484)	-1,558
60	(\$318,634,494)	(\$176,164,104)	(\$106,820,109)	(\$118,417,290)	-2,453
61	(\$263,144,946)	(\$142,547,349)	(\$86,210,397)	(\$90,458,150)	-1,935
62	(\$307,772,402)	(\$177,118,888)	(\$108,251,336)	(\$113,861,315)	-2,446
63	(\$223,473,593)	(\$119,646,386)	(\$71,644,137)	(\$66,580,533)	-1,526
64	(\$230,245,520)	(\$123,272,034)	(\$73,815,172)	(\$68,598,125)	-1,572
65	(\$223,473,593)	(\$119,646,386)	(\$71,644,137)	(\$66,580,533)	-1,526
66	(\$212,259,419)	(\$118,523,017)	(\$72,310,130)	(\$68,452,405)	-1,547
67	(\$212,259,419)	(\$118,523,017)	(\$72,310,130)	(\$68,452,405)	-1,547
68	(\$285,461,315)	(\$158,517,858)	(\$96,831,815)	(\$103,491,007)	-2,171
69	(\$235,687,179)	(\$136,801,373)	(\$83,116,552)	(\$86,782,830)	-1,853
70	(\$212,259,419)	(\$118,523,017)	(\$72,310,130)	(\$68,452,405)	-1,547
71	(\$261,740,758)	(\$142,619,024)	(\$85,559,685)	(\$81,802,420)	-1,848
72	(\$244,155,538)	(\$132,665,419)	(\$78,908,973)	(\$81,514,826)	-1,763
73	(\$360,674,163)	(\$195,283,194)	(\$117,654,064)	(\$123,806,776)	-2,667
74	(\$191,705,807)	(\$110,876,263)	(\$67,571,686)	(\$73,242,724)	-1,540
75	(\$230,486,486)	(\$123,827,328)	(\$73,804,411)	(\$66,669,463)	-1,570
76	(\$230,486,486)	(\$123,827,328)	(\$73,804,411)	(\$66,669,463)	-1,570
77	(\$230,486,486)	(\$123,827,328)	(\$73,804,411)	(\$66,669,463)	-1,570
78	(\$230,486,486)	(\$123,827,328)	(\$73,804,411)	(\$66,669,463)	-1,570
79	(\$230,486,486)	(\$123,827,328)	(\$73,804,411)	(\$66,669,463)	-1,570
80	(\$173,385,995)	(\$95,949,626)	(\$57,813,717)	(\$65,221,032)	-1,345

(continued)  
**The Total Annual Impact of Direct Medical Expenses and Related Outlays  
Associated with Cancer Treatment on Business Activity:  
Results by Texas House District**

House District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
81	(\$221,388,960)	(\$122,719,893)	(\$75,119,021)	(\$78,251,745)	-1,657
82	(\$207,647,826)	(\$114,817,794)	(\$68,916,371)	(\$68,765,113)	-1,481
83	(\$234,476,524)	(\$132,045,061)	(\$80,021,708)	(\$77,794,744)	-1,743
84	(\$273,602,368)	(\$155,036,653)	(\$93,887,348)	(\$87,540,145)	-2,018
85	(\$212,634,091)	(\$119,235,185)	(\$72,130,279)	(\$78,431,010)	-1,622
86	(\$224,624,280)	(\$126,487,139)	(\$76,122,867)	(\$74,623,392)	-1,660
87	(\$242,677,681)	(\$133,771,695)	(\$80,946,217)	(\$77,422,579)	-1,745
88	(\$202,988,022)	(\$110,600,472)	(\$67,056,369)	(\$75,876,805)	-1,521
89	(\$228,759,588)	(\$128,246,106)	(\$78,386,303)	(\$76,238,638)	-1,698
90	(\$263,651,398)	(\$143,034,455)	(\$86,512,493)	(\$78,549,911)	-1,841
91	(\$263,651,398)	(\$143,034,455)	(\$86,512,493)	(\$78,549,911)	-1,841
92	(\$263,651,398)	(\$143,034,455)	(\$86,512,493)	(\$78,549,911)	-1,841
93	(\$263,651,398)	(\$143,034,455)	(\$86,512,493)	(\$78,549,911)	-1,841
94	(\$263,651,398)	(\$143,034,455)	(\$86,512,493)	(\$78,549,911)	-1,841
95	(\$263,651,398)	(\$143,034,455)	(\$86,512,493)	(\$78,549,911)	-1,841
96	(\$263,651,398)	(\$143,034,455)	(\$86,512,493)	(\$78,549,911)	-1,841
97	(\$263,651,398)	(\$143,034,455)	(\$86,512,493)	(\$78,549,911)	-1,841
98	(\$263,651,398)	(\$143,034,455)	(\$86,512,493)	(\$78,549,911)	-1,841
99	(\$263,651,398)	(\$143,034,455)	(\$86,512,493)	(\$78,549,911)	-1,841
100	(\$214,369,915)	(\$112,197,963)	(\$66,980,957)	(\$51,057,816)	-1,331
101	(\$214,369,915)	(\$112,197,963)	(\$66,980,957)	(\$51,057,816)	-1,331
102	(\$214,369,915)	(\$112,197,963)	(\$66,980,957)	(\$51,057,816)	-1,331
103	(\$214,369,915)	(\$112,197,963)	(\$66,980,957)	(\$51,057,816)	-1,331
104	(\$214,369,915)	(\$112,197,963)	(\$66,980,957)	(\$51,057,816)	-1,331
105	(\$214,369,915)	(\$112,197,963)	(\$66,980,957)	(\$51,057,816)	-1,331
106	(\$214,369,915)	(\$112,197,963)	(\$66,980,957)	(\$51,057,816)	-1,331
107	(\$214,369,915)	(\$112,197,963)	(\$66,980,957)	(\$51,057,816)	-1,331
108	(\$214,369,915)	(\$112,197,963)	(\$66,980,957)	(\$51,057,816)	-1,331
109	(\$214,369,915)	(\$112,197,963)	(\$66,980,957)	(\$51,057,816)	-1,331
110	(\$214,369,915)	(\$112,197,963)	(\$66,980,957)	(\$51,057,816)	-1,331
111	(\$214,369,915)	(\$112,197,963)	(\$66,980,957)	(\$51,057,816)	-1,331
112	(\$214,369,915)	(\$112,197,963)	(\$66,980,957)	(\$51,057,816)	-1,331
113	(\$214,369,915)	(\$112,197,963)	(\$66,980,957)	(\$51,057,816)	-1,331
114	(\$214,369,915)	(\$112,197,963)	(\$66,980,957)	(\$51,057,816)	-1,331
115	(\$214,369,915)	(\$112,197,963)	(\$66,980,957)	(\$51,057,816)	-1,331
116	(\$260,904,373)	(\$143,788,155)	(\$87,032,110)	(\$78,563,806)	-1,850
117	(\$260,904,373)	(\$143,788,155)	(\$87,032,110)	(\$78,563,806)	-1,850
118	(\$260,904,373)	(\$143,788,155)	(\$87,032,110)	(\$78,563,806)	-1,850
119	(\$260,904,373)	(\$143,788,155)	(\$87,032,110)	(\$78,563,806)	-1,850
120	(\$260,904,373)	(\$143,788,155)	(\$87,032,110)	(\$78,563,806)	-1,850

(continued)  
**The Total Annual Impact of Direct Medical Expenses and Related Outlays  
Associated with Cancer Treatment on Business Activity:  
Results by Texas House District**

House District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
121	(\$260,904,373)	(\$143,788,155)	(\$87,032,110)	(\$78,563,806)	-1,850
122	(\$260,904,373)	(\$143,788,155)	(\$87,032,110)	(\$78,563,806)	-1,850
123	(\$260,904,373)	(\$143,788,155)	(\$87,032,110)	(\$78,563,806)	-1,850
124	(\$260,904,373)	(\$143,788,155)	(\$87,032,110)	(\$78,563,806)	-1,850
125	(\$260,904,373)	(\$143,788,155)	(\$87,032,110)	(\$78,563,806)	-1,850
126	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
127	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
128	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
129	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
130	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
131	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
132	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
133	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
134	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
135	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
136	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
137	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
138	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
139	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
140	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
141	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
142	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
143	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
144	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
145	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
146	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
147	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
148	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
149	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
150	(\$222,266,328)	(\$109,729,710)	(\$66,199,837)	(\$49,916,297)	-1,302
<b>TOTAL</b>	<b>(\$35,719,327,210)</b>	<b>(\$19,285,761,745)</b>	<b>(\$11,674,223,316)</b>	<b>(\$10,944,883,306)</b>	<b>-250,125</b>

NOTE: Allocations reflect best available evidence regarding incidence and industrial structure and composition of each area. In cases in which a county was part of more than one district, allocations are based on the percentage of the population residing in a district. This convention is adopted because of a lack of subcounty data sufficient for allocation purposes. In some instances, this approach will result in districts which reflect the same proportion of a large urban county reporting identical results.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Direct Medical Expenses and Related Outlays  
Associated with Cancer Treatment on Business Activity:  
Results by Texas Senate District**

Senate District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
1	(\$1,423,040,736)	(\$785,780,874)	(\$478,547,173)	(\$493,855,215)	-10,616
2	(\$1,244,158,639)	(\$681,889,750)	(\$411,776,133)	(\$390,810,459)	-8,874
3	(\$1,494,976,619)	(\$832,465,174)	(\$507,476,476)	(\$534,671,075)	-11,361
4	(\$1,226,992,997)	(\$659,577,588)	(\$405,462,835)	(\$393,607,729)	-8,761
5	(\$1,038,345,532)	(\$591,795,643)	(\$362,686,432)	(\$376,330,441)	-8,091
6	(\$1,055,765,058)	(\$521,216,122)	(\$314,449,226)	(\$237,102,411)	-6,183
7	(\$1,111,331,640)	(\$548,648,549)	(\$330,999,186)	(\$249,581,485)	-6,509
8	(\$1,078,387,661)	(\$588,351,751)	(\$356,244,268)	(\$314,515,241)	-7,434
9	(\$1,129,676,211)	(\$602,300,918)	(\$361,460,094)	(\$310,947,511)	-7,504
10	(\$1,291,891,848)	(\$700,868,827)	(\$423,911,216)	(\$384,894,564)	-9,020
11	(\$1,208,924,627)	(\$630,122,792)	(\$382,445,600)	(\$356,270,324)	-8,137
12	(\$1,178,667,982)	(\$637,996,924)	(\$385,227,259)	(\$351,162,428)	-8,198
13	(\$1,085,767,676)	(\$539,190,865)	(\$325,287,832)	(\$253,847,464)	-6,467
14	(\$914,878,806)	(\$519,934,413)	(\$315,451,217)	(\$275,473,877)	-6,597
15	(\$1,111,331,640)	(\$548,648,549)	(\$330,999,186)	(\$249,581,485)	-6,509
16	(\$1,028,975,591)	(\$538,550,224)	(\$321,508,595)	(\$245,077,516)	-6,387
17	(\$1,214,807,753)	(\$622,567,798)	(\$377,624,663)	(\$330,295,344)	-7,822
18	(\$1,296,218,358)	(\$700,938,394)	(\$425,714,988)	(\$442,344,234)	-9,449
19	(\$1,088,851,498)	(\$603,645,462)	(\$365,000,092)	(\$356,001,176)	-7,984
20	(\$1,030,292,295)	(\$559,730,487)	(\$340,249,882)	(\$335,716,456)	-7,466
21	(\$874,995,922)	(\$485,689,077)	(\$295,320,934)	(\$316,327,567)	-6,662
22	(\$1,309,219,941)	(\$715,000,439)	(\$432,712,939)	(\$442,534,347)	-9,681
23	(\$1,063,274,777)	(\$556,501,898)	(\$332,225,548)	(\$253,246,767)	-6,600
24	(\$1,329,031,912)	(\$748,406,206)	(\$454,299,313)	(\$472,004,242)	-10,185
25	(\$1,274,611,163)	(\$704,393,292)	(\$425,637,305)	(\$413,116,247)	-9,303
26	(\$1,200,160,114)	(\$661,425,514)	(\$400,347,707)	(\$361,393,509)	-8,509
27	(\$860,371,108)	(\$486,364,452)	(\$295,001,022)	(\$296,271,409)	-6,616
28	(\$1,151,422,563)	(\$643,361,211)	(\$388,066,754)	(\$393,798,540)	-8,565
29	(\$1,083,286,484)	(\$581,988,440)	(\$346,880,732)	(\$313,346,475)	-7,380
30	(\$1,304,227,671)	(\$726,932,718)	(\$441,344,038)	(\$458,047,970)	-9,839
31	(\$1,015,442,384)	(\$561,477,392)	(\$339,864,672)	(\$342,709,801)	-7,418
<b>TOTAL</b>	<b>(\$35,719,327,210)</b>	<b>(\$19,285,761,745)</b>	<b>(\$11,674,223,316)</b>	<b>(\$10,944,883,306)</b>	<b>-250,125</b>

**NOTE:** Allocations reflect best available evidence regarding incidence and industrial structure and composition of each area. In cases in which a county was part of more than one district, allocations are based on the percentage of the population residing in a district. This convention is adopted because of a lack of subcounty data sufficient for allocation purposes. In some instances, this approach will result in districts which reflect the same proportion of a large urban county reporting identical results.

**SOURCE:** US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Direct Medical Expenses and Related Outlays  
Associated with Cancer Treatment on Business Activity:  
Results by US Congressional District in Texas**

<b>US Congressional District in Texas</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
1	(\$1,377,503,431)	(\$761,376,253)	(\$463,215,956)	(\$474,205,765)	-10,264
2	(\$1,115,452,649)	(\$588,940,521)	(\$360,714,014)	(\$324,348,738)	-7,556
3	(\$1,032,645,575)	(\$562,209,657)	(\$340,177,521)	(\$298,317,672)	-7,082
4	(\$1,227,993,904)	(\$697,228,573)	(\$426,196,649)	(\$451,326,472)	-9,580
5	(\$1,223,050,216)	(\$666,797,030)	(\$402,364,613)	(\$381,771,561)	-8,678
6	(\$1,191,078,315)	(\$650,027,043)	(\$393,557,487)	(\$378,591,088)	-8,536
7	(\$1,055,765,058)	(\$521,216,122)	(\$314,449,226)	(\$237,102,411)	-6,183
8	(\$1,437,366,521)	(\$789,255,843)	(\$482,573,189)	(\$495,572,308)	-10,670
9	(\$1,092,182,939)	(\$542,501,755)	(\$327,285,038)	(\$255,743,064)	-6,509
10	(\$1,023,572,734)	(\$546,966,607)	(\$331,154,165)	(\$289,022,285)	-6,885
11	(\$1,218,484,446)	(\$675,356,999)	(\$407,554,759)	(\$427,583,734)	-9,089
12	(\$1,199,107,407)	(\$650,319,662)	(\$393,329,747)	(\$369,310,334)	-8,471
13	(\$1,152,047,437)	(\$643,344,539)	(\$390,014,533)	(\$403,459,245)	-8,646
14	(\$1,223,705,650)	(\$656,960,613)	(\$400,224,540)	(\$420,373,283)	-8,923
15	(\$875,434,472)	(\$496,760,288)	(\$302,633,765)	(\$314,177,582)	-6,823
16	(\$1,106,335,133)	(\$594,371,173)	(\$354,261,173)	(\$320,013,421)	-7,537
17	(\$1,206,036,844)	(\$659,530,431)	(\$399,523,398)	(\$406,815,103)	-8,926
18	(\$1,055,765,058)	(\$521,216,122)	(\$314,449,226)	(\$237,102,411)	-6,183
19	(\$1,084,406,646)	(\$603,946,890)	(\$364,625,148)	(\$363,865,927)	-7,990
20	(\$1,226,250,551)	(\$675,804,330)	(\$409,050,918)	(\$369,249,889)	-8,693
21	(\$1,265,995,355)	(\$697,167,334)	(\$420,970,251)	(\$400,919,548)	-9,134
22	(\$1,150,861,621)	(\$588,046,738)	(\$355,528,548)	(\$315,461,772)	-7,396
23	(\$1,080,054,917)	(\$600,569,086)	(\$363,577,488)	(\$350,948,056)	-7,930
24	(\$1,072,491,141)	(\$570,842,347)	(\$342,627,864)	(\$288,785,830)	-7,064
25	(\$1,017,953,212)	(\$572,894,248)	(\$347,458,412)	(\$331,641,142)	-7,517
26	(\$1,158,028,828)	(\$624,150,272)	(\$376,097,672)	(\$345,835,211)	-8,008
27	(\$1,069,896,497)	(\$572,034,019)	(\$346,532,478)	(\$346,818,751)	-7,646
28	(\$826,832,555)	(\$467,147,352)	(\$284,091,115)	(\$305,038,077)	-6,460
29	(\$1,055,765,058)	(\$521,216,122)	(\$314,449,226)	(\$237,102,411)	-6,183
30	(\$994,676,404)	(\$520,598,550)	(\$310,791,642)	(\$236,908,266)	-6,174
31	(\$907,910,232)	(\$526,366,677)	(\$323,951,911)	(\$330,563,684)	-7,214
32	(\$994,676,404)	(\$520,598,550)	(\$310,791,642)	(\$236,908,266)	-6,174
<b>TOTAL</b>	<b>(\$35,719,327,210)</b>	<b>(\$19,285,761,745)</b>	<b>(\$11,674,223,316)</b>	<b>(\$10,944,883,306)</b>	<b>-250,125</b>

**NOTE:** Allocations reflect best available evidence regarding incidence and industrial structure and composition of each area. In cases in which a county was part of more than one district, allocations are based on the percentage of the population residing in a district. This convention is adopted because of a lack of subcounty data sufficient for allocation purposes. In some instances, this approach will result in districts which reflect the same proportion of a large urban county reporting identical results.

**SOURCE:** US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
of Cancer on Business Activity in Texas  
Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	(\$373,153,044)	(\$123,629,037)	(\$75,186,707)	-1,145
Forestry & Fishery Products	(\$37,668,402)	(\$9,377,440)	(\$3,091,559)	-55
Coal Mining	(\$39,005,356)	(\$10,952,296)	(\$11,792,009)	-104
Crude Petroleum & Natural Gas	(\$2,030,618,879)	(\$808,475,232)	(\$322,445,106)	-1,362
Miscellaneous Mining	(\$19,167,180)	(\$8,829,409)	(\$6,523,601)	-141
New Construction	(\$413,168,668)	(\$197,118,605)	(\$153,734,040)	-2,374
Maintenance & Repair Construction	(\$489,229,781)	(\$284,394,840)	(\$228,573,327)	-3,444
Food Products & Tobacco	(\$768,333,963)	(\$192,399,991)	(\$97,961,448)	-1,675
Textile Mill Products	(\$11,692,718)	(\$2,737,968)	(\$2,328,909)	-50
Apparel	(\$93,879,523)	(\$51,529,402)	(\$26,259,495)	-756
Paper & Allied Products	(\$110,081,206)	(\$46,480,488)	(\$22,532,046)	-349
Printing & Publishing	(\$221,011,304)	(\$122,705,482)	(\$75,010,348)	-1,110
Chemicals & Petroleum Refining	(\$1,860,654,572)	(\$448,120,227)	(\$266,271,456)	-830
Rubber & Leather Products	(\$129,916,275)	(\$56,950,924)	(\$35,438,975)	-583
Lumber Products & Furniture	(\$80,071,961)	(\$29,417,450)	(\$21,900,776)	-455
Stone, Clay, & Glass Products	(\$99,668,299)	(\$53,289,117)	(\$30,112,247)	-403
Primary Metal	(\$103,900,949)	(\$30,841,024)	(\$25,147,115)	-234
Fabricated Metal Products	(\$234,101,105)	(\$104,566,433)	(\$68,655,025)	-1,072
Machinery, Except Electrical	(\$377,854,039)	(\$139,254,141)	(\$109,556,950)	-815
Electric & Electronic Equipment	(\$265,721,425)	(\$139,749,596)	(\$100,530,679)	-781
Motor Vehicles & Equipment	(\$122,859,106)	(\$37,575,108)	(\$22,494,493)	-274
Transp. Equip., Exc. Motor Vehicles	(\$81,444,797)	(\$41,342,562)	(\$26,645,730)	-415
Instruments & Related Products	(\$37,974,491)	(\$12,961,744)	(\$11,189,349)	-136
Miscellaneous Manufacturing	(\$54,289,108)	(\$17,928,322)	(\$16,513,973)	-199
Transportation	(\$785,833,824)	(\$518,595,187)	(\$345,841,531)	-4,767
Communication	(\$699,499,013)	(\$463,295,346)	(\$204,140,201)	-1,861
Electric, Gas, Water, Sanitary Services	(\$2,143,437,961)	(\$462,093,003)	(\$208,935,418)	-678
Wholesale Trade	(\$1,017,744,206)	(\$764,588,300)	(\$445,916,023)	-5,147
Retail Trade	(\$2,870,669,777)	(\$2,407,239,916)	(\$1,442,048,491)	-39,322
Finance	(\$785,927,260)	(\$403,583,884)	(\$272,409,664)	-2,410
Insurance	(\$435,771,240)	(\$262,264,079)	(\$154,411,156)	-2,070
Real Estate	(\$4,282,369,684)	(\$941,441,464)	(\$153,250,519)	-1,569
Hotels, Lodging Places, Amusements	(\$405,158,551)	(\$212,231,355)	(\$142,322,136)	-3,192
Personal Services	(\$570,938,743)	(\$358,250,952)	(\$278,598,700)	-5,129
Business Services	(\$1,879,239,837)	(\$1,326,433,346)	(\$1,147,047,691)	-12,334
Eating & Drinking Places	(\$1,261,318,467)	(\$755,637,450)	(\$405,746,280)	-20,316
Health Services	(\$1,211,683,057)	(\$937,928,055)	(\$782,661,804)	-13,310
Miscellaneous Services	(\$808,614,376)	(\$369,969,037)	(\$316,036,796)	-7,852
Households	(\$37,550,803)	(\$37,550,803)	(\$26,806,505)	-1,910
<b>Total</b>	<b>(\$27,251,222,949)</b>	<b>(\$13,191,729,014)</b>	<b>(\$8,086,068,278)</b>	<b>-140,629</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
of Cancer on Business Activity:  
Comptroller's Economic Region Results**

<b>Economic Region</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
High Plains	(\$909,219,103)	(\$459,682,449)	(\$280,754,529)	(\$159,884,175)	-5,100
Northwest Texas	(\$761,537,705)	(\$384,480,841)	(\$232,646,788)	(\$138,444,287)	-4,262
Metroplex	(\$7,043,669,770)	(\$3,428,119,873)	(\$2,101,052,296)	(\$1,019,266,372)	-35,997
Upper East Texas	(\$1,597,025,539)	(\$791,503,161)	(\$483,861,753)	(\$283,066,150)	-8,863
Southeast Texas	(\$1,072,851,584)	(\$537,969,456)	(\$340,954,284)	(\$204,076,166)	-6,264
Gulf Coast	(\$7,072,750,962)	(\$3,213,805,055)	(\$1,950,147,614)	(\$821,536,507)	-30,973
Capital	(\$1,431,749,321)	(\$734,539,077)	(\$459,087,877)	(\$243,820,593)	-8,248
Central Texas	(\$1,171,715,502)	(\$589,226,464)	(\$364,241,421)	(\$218,508,798)	-6,899
Alamo	(\$2,528,208,462)	(\$1,247,729,298)	(\$771,832,549)	(\$415,321,967)	-13,942
Coastal Bend	(\$1,022,659,288)	(\$484,544,089)	(\$295,119,030)	(\$166,328,361)	-5,197
South Texas Border	(\$1,134,101,122)	(\$592,041,567)	(\$366,517,079)	(\$221,727,199)	-7,022
West Texas	(\$653,247,124)	(\$317,537,077)	(\$189,837,811)	(\$108,598,628)	-3,359
Upper Rio Grande	(\$852,487,469)	(\$410,550,606)	(\$250,015,249)	(\$131,409,043)	-4,502
<b>TOTAL STATE IMPACT</b>	<b>(\$27,251,222,949)</b>	<b>(\$13,191,729,014)</b>	<b>(\$8,086,068,278)</b>	<b>(\$4,131,988,245)</b>	<b>-140,629</b>

NOTE: Allocations reflect best available evidence regarding incidence and industrial structure and composition of each area.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group



**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
of Cancer on Business Activity:  
Council of Governments (COG) Region Results**

<b>COG</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Panhandle	(\$478,164,314)	(\$237,171,829)	(\$143,471,698)	(\$82,081,414)	-2,574
South Plains	(\$431,054,788)	(\$222,510,621)	(\$137,282,831)	(\$77,802,761)	-2,525
North Texas	(\$310,759,573)	(\$159,371,792)	(\$96,833,584)	(\$57,428,720)	-1,769
North Central Texas	(\$6,776,077,168)	(\$3,291,765,184)	(\$2,014,867,125)	(\$966,331,269)	-34,368
North East Texas	(\$351,575,974)	(\$177,123,476)	(\$110,778,539)	(\$70,293,595)	-2,116
East Texas	(\$1,245,449,565)	(\$614,379,685)	(\$373,083,213)	(\$212,772,554)	-6,747
West Central Texas	(\$450,778,132)	(\$225,109,048)	(\$135,813,204)	(\$81,015,566)	-2,493
Upper Rio Grande	(\$852,487,469)	(\$410,550,606)	(\$250,015,249)	(\$131,409,043)	-4,502
Permian Basin	(\$449,319,057)	(\$219,113,978)	(\$131,723,416)	(\$73,978,527)	-2,282
Concho Valley	(\$203,928,067)	(\$98,423,099)	(\$58,114,395)	(\$34,620,101)	-1,076
Heart of Texas	(\$481,127,640)	(\$231,885,463)	(\$141,351,484)	(\$83,482,812)	-2,669
Capital	(\$1,431,749,321)	(\$734,539,077)	(\$459,087,877)	(\$243,820,593)	-8,248
Brazos Valley	(\$294,667,031)	(\$149,242,681)	(\$91,397,800)	(\$54,961,072)	-1,710
Deep East Texas	(\$533,483,410)	(\$271,965,269)	(\$170,085,860)	(\$106,239,127)	-3,218
South East Texas	(\$539,368,175)	(\$266,004,187)	(\$170,868,424)	(\$97,837,039)	-3,047
Gulf Coast	(\$7,072,750,962)	(\$3,213,805,055)	(\$1,950,147,614)	(\$821,536,507)	-30,973
Golden Crescent	(\$257,299,270)	(\$125,898,361)	(\$77,422,302)	(\$44,705,975)	-1,380
Alamo	(\$2,528,208,462)	(\$1,247,729,298)	(\$771,832,549)	(\$415,321,967)	-13,942
South Texas	(\$188,259,104)	(\$97,346,403)	(\$58,502,445)	(\$38,069,887)	-1,107
Coastal Bend	(\$765,360,018)	(\$358,645,728)	(\$217,696,728)	(\$121,622,386)	-3,818
Lower Rio Grande Valley	(\$810,005,257)	(\$423,885,203)	(\$264,330,208)	(\$155,454,259)	-5,064
Texoma	(\$267,592,602)	(\$136,354,689)	(\$86,185,170)	(\$52,935,103)	-1,629
Central Texas	(\$395,920,831)	(\$208,098,321)	(\$131,492,137)	(\$80,064,914)	-2,520
Middle Rio Grande	(\$135,836,761)	(\$70,809,961)	(\$43,684,426)	(\$28,203,053)	-852
Border Region	(\$1,987,783,515)	(\$1,003,281,204)	(\$616,974,322)	(\$353,368,155)	-11,532
<b>TOTAL STATE IMPACT</b>	<b>(\$27,251,222,949)</b>	<b>(\$13,191,729,014)</b>	<b>(\$8,086,068,278)</b>	<b>(\$4,131,988,245)</b>	<b>-140,629</b>

**NOTE:** Allocations reflect best available evidence regarding incidence and industrial structure and composition of each area.

**SOURCE:** US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
of Cancer on Business Activity:  
Metropolitan Statistical Area (MSA) and Rural Texas Results**

<b>MSA</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Abilene	(\$220,163,313)	(\$107,603,856)	(\$64,656,215)	(\$34,976,603)	-1,148
Amarillo	(\$305,000,920)	(\$155,607,416)	(\$94,547,516)	(\$51,871,314)	-1,699
Austin-Round Rock	(\$1,231,303,703)	(\$637,477,976)	(\$400,805,282)	(\$209,216,390)	-7,164
Beaumont-Port Arthur	(\$539,368,175)	(\$266,004,187)	(\$170,868,424)	(\$97,837,039)	-3,047
Brownsville-Harlingen	(\$327,347,759)	(\$165,838,352)	(\$102,615,599)	(\$60,701,779)	-1,977
College Station-Bryan	(\$190,350,937)	(\$95,638,543)	(\$58,615,108)	(\$33,974,092)	-1,086
Corpus Christi	(\$607,943,422)	(\$279,276,580)	(\$170,180,037)	(\$91,203,721)	-2,932
Dallas-Plano-Irving MD*	(\$4,180,481,329)	(\$2,021,254,982)	(\$1,231,842,810)	(\$561,679,603)	-20,614
Fort Worth-Arlington MD*	(\$2,356,319,744)	(\$1,155,008,525)	(\$711,603,995)	(\$361,427,632)	-12,411
El Paso	(\$826,759,767)	(\$397,283,469)	(\$241,837,644)	(\$125,971,944)	-4,344
Houston-Sugar Land-Baytown	(\$6,861,457,872)	(\$3,108,029,092)	(\$1,884,709,822)	(\$779,696,341)	-29,731
Killeen-Temple-Fort Hood	(\$339,751,739)	(\$179,432,280)	(\$113,531,765)	(\$68,263,246)	-2,173
Laredo	(\$144,242,924)	(\$73,888,646)	(\$44,000,547)	(\$27,462,829)	-817
Longview	(\$310,842,577)	(\$156,332,268)	(\$96,284,597)	(\$53,139,206)	-1,711
Lubbock	(\$322,007,912)	(\$167,761,621)	(\$104,316,367)	(\$56,129,407)	-1,904
McAllen-Edinburg-Mission	(\$466,348,293)	(\$248,926,883)	(\$156,135,462)	(\$90,895,137)	-2,978
Midland	(\$136,347,434)	(\$67,043,672)	(\$39,873,440)	(\$21,282,942)	-679
Odessa	(\$158,359,540)	(\$77,148,734)	(\$47,453,356)	(\$25,677,482)	-810
San Angelo	(\$143,729,977)	(\$68,902,364)	(\$40,325,193)	(\$23,486,420)	-750
San Antonio	(\$2,354,772,512)	(\$1,164,088,910)	(\$721,283,811)	(\$384,479,605)	-12,992
Sherman-Denison	(\$157,614,027)	(\$81,898,568)	(\$51,989,711)	(\$33,238,950)	-1,012
Texarkana	(\$113,541,067)	(\$59,733,873)	(\$37,696,897)	(\$22,684,402)	-712
Tyler	(\$322,773,692)	(\$156,495,111)	(\$92,231,434)	(\$50,848,054)	-1,639
Victoria	(\$158,135,236)	(\$74,945,667)	(\$45,975,574)	(\$25,208,038)	-787
Waco	(\$318,269,093)	(\$152,544,400)	(\$93,006,507)	(\$52,300,148)	-1,738
Wichita Falls	(\$192,559,585)	(\$101,143,831)	(\$61,671,593)	(\$35,373,796)	-1,118
Rural Area	(\$3,965,430,401)	(\$1,972,419,210)	(\$1,208,009,575)	(\$752,962,125)	-22,657
<b>TOTAL STATE IMPACT</b>	<b>(\$27,251,222,949)</b>	<b>(\$13,191,729,014)</b>	<b>(\$8,086,068,278)</b>	<b>(\$4,131,988,245)</b>	<b>-140,629</b>

\*Metropolitan Division

NOTE: Allocations reflect best available evidence regarding incidence and industrial structure and composition of each area.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
of Cancer on Business Activity:  
County Results**

<b>County</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Anderson	(\$62,844,526)	(\$33,380,679)	(\$20,574,883)	(\$11,919,775)	-376
Andrews	(\$15,249,185)	(\$7,588,631)	(\$4,507,910)	(\$2,466,483)	-77
Angelina	(\$112,163,812)	(\$56,794,636)	(\$35,758,619)	(\$21,896,749)	-677
Aransas	(\$57,622,619)	(\$26,062,687)	(\$15,320,811)	(\$9,084,263)	-270
Archer	(\$9,287,537)	(\$4,666,485)	(\$2,687,795)	(\$1,714,512)	-51
Armstrong	(\$3,196,720)	(\$1,556,081)	(\$948,044)	(\$399,887)	-16
Atascosa	(\$53,881,402)	(\$25,436,245)	(\$15,388,623)	(\$8,349,120)	-263
Austin	(\$38,612,290)	(\$18,337,113)	(\$11,545,259)	(\$5,312,438)	-187
Bailey	(\$4,882,693)	(\$2,514,474)	(\$1,541,791)	(\$1,053,678)	-30
Bandera	(\$34,569,940)	(\$16,079,642)	(\$9,551,164)	(\$6,248,713)	-182
Bastrop	(\$83,354,962)	(\$40,787,389)	(\$25,080,072)	(\$15,385,485)	-476
Baylor	(\$7,935,482)	(\$4,137,262)	(\$2,535,836)	(\$1,522,795)	-47
Bee	(\$26,351,865)	(\$13,631,876)	(\$8,216,326)	(\$5,251,019)	-156
Bell	(\$252,116,016)	(\$135,283,912)	(\$86,305,502)	(\$50,514,802)	-1,635
Bexar	(\$1,875,004,284)	(\$933,487,584)	(\$581,346,706)	(\$296,892,609)	-10,330
Blanco	(\$12,922,465)	(\$6,057,942)	(\$3,595,751)	(\$2,290,296)	-70
Borden	(\$4,605,398)	(\$2,194,777)	(\$1,261,798)	(\$604,329)	-20
Bosque	(\$27,194,184)	(\$13,453,064)	(\$8,374,702)	(\$4,682,619)	-155
Bowie	(\$113,541,067)	(\$59,733,873)	(\$37,696,897)	(\$22,684,402)	-712
Brazoria	(\$294,713,080)	(\$140,091,462)	(\$87,519,413)	(\$51,184,180)	-1,551
Brazos	(\$140,659,998)	(\$70,550,280)	(\$43,168,344)	(\$23,577,075)	-790
Brewster	(\$10,582,453)	(\$5,783,347)	(\$3,650,068)	(\$2,152,918)	-69
Briscoe	(\$2,306,730)	(\$1,092,342)	(\$661,935)	(\$413,265)	-12
Brooks	(\$7,149,791)	(\$3,767,081)	(\$2,344,690)	(\$1,575,306)	-45
Brown	(\$47,360,878)	(\$25,673,900)	(\$16,150,459)	(\$11,289,691)	-327
Burleson	(\$26,217,216)	(\$13,584,151)	(\$8,309,026)	(\$5,251,019)	-153
Burnet	(\$64,080,433)	(\$30,461,267)	(\$18,380,668)	(\$10,817,099)	-338
Caldwell	(\$45,913,198)	(\$22,557,876)	(\$13,817,789)	(\$8,086,569)	-253
Calhoun	(\$19,176,120)	(\$7,900,987)	(\$4,836,280)	(\$2,628,657)	-81
Callahan	(\$22,969,924)	(\$10,832,446)	(\$6,346,084)	(\$3,938,264)	-117
Cameron	(\$327,347,759)	(\$165,838,352)	(\$102,615,599)	(\$60,701,779)	-1,977
Camp	(\$14,057,919)	(\$6,842,028)	(\$4,229,666)	(\$2,590,946)	-80
Carson	(\$3,904,904)	(\$1,568,092)	(\$793,601)	(\$329,209)	-13
Cass	(\$40,523,501)	(\$20,145,533)	(\$12,571,490)	(\$8,736,536)	-244
Castro	(\$4,031,728)	(\$1,999,831)	(\$1,225,901)	(\$868,724)	-24
Chambers	(\$38,792,374)	(\$16,196,602)	(\$9,556,500)	(\$4,341,564)	-151
Cherokee	(\$59,724,626)	(\$29,996,921)	(\$19,061,924)	(\$11,931,575)	-358
Childress	(\$8,712,235)	(\$4,288,020)	(\$2,599,548)	(\$1,785,346)	-51
Clay	(\$15,419,308)	(\$7,767,882)	(\$4,931,902)	(\$2,520,742)	-85
Cochran	(\$2,196,140)	(\$1,130,014)	(\$646,182)	(\$318,426)	-11



(continued)  
**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
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County Results**

County	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
Coke	(\$7,321,787)	(\$3,435,125)	(\$2,075,297)	(\$1,216,280)	-36
Coleman	(\$17,015,584)	(\$8,536,700)	(\$5,072,795)	(\$3,098,101)	-93
Collin	(\$558,040,566)	(\$285,260,550)	(\$178,197,773)	(\$95,314,086)	-3,170
Collingsworth	(\$4,024,422)	(\$2,165,984)	(\$1,365,709)	(\$860,453)	-25
Colorado	(\$33,799,788)	(\$17,030,686)	(\$10,317,396)	(\$6,980,867)	-208
Comal	(\$134,853,509)	(\$64,752,549)	(\$39,127,901)	(\$24,312,218)	-763
Comanche	(\$20,222,192)	(\$10,287,447)	(\$6,386,565)	(\$3,939,216)	-120
Concho	(\$3,516,972)	(\$1,863,242)	(\$1,224,985)	(\$657,801)	-23
Cooke	(\$60,458,865)	(\$29,695,276)	(\$18,507,134)	(\$10,029,446)	-317
Coryell	(\$57,265,018)	(\$28,788,391)	(\$17,774,554)	(\$11,447,221)	-349
Cottle	(\$3,267,648)	(\$1,859,204)	(\$1,182,089)	(\$615,179)	-20
Crane	(\$2,548,998)	(\$1,335,146)	(\$795,884)	(\$416,476)	-14
Crockett	(\$3,754,069)	(\$1,871,795)	(\$1,098,130)	(\$840,163)	-21
Crosby	(\$6,496,937)	(\$3,456,406)	(\$2,077,343)	(\$993,709)	-36
Culberson	(\$1,893,334)	(\$1,109,726)	(\$687,669)	(\$577,612)	-15
Dallam	(\$5,014,281)	(\$2,674,347)	(\$1,639,626)	(\$855,703)	-30
Dallas	(\$2,706,013,992)	(\$1,294,156,845)	(\$779,720,067)	(\$313,054,393)	-12,509
Dawson	(\$16,418,106)	(\$8,171,493)	(\$4,732,424)	(\$3,034,204)	-88
Deaf Smith	(\$10,520,238)	(\$5,145,025)	(\$3,118,438)	(\$1,638,963)	-57
Delta	(\$6,393,505)	(\$3,303,558)	(\$2,110,019)	(\$839,338)	-35
Denton	(\$504,792,988)	(\$241,597,670)	(\$149,236,859)	(\$76,244,795)	-2,595
DeWitt	(\$31,160,298)	(\$15,505,396)	(\$9,683,381)	(\$5,881,141)	-182
Dickens	(\$3,843,058)	(\$1,998,741)	(\$1,258,685)	(\$766,725)	-23
Dimmit	(\$7,710,306)	(\$3,885,836)	(\$2,342,297)	(\$1,680,326)	-46
Donley	(\$5,680,574)	(\$3,190,565)	(\$2,014,457)	(\$1,522,795)	-42
Duval	(\$12,316,894)	(\$5,748,242)	(\$3,347,569)	(\$1,858,012)	-60
Eastland	(\$29,674,526)	(\$14,335,560)	(\$8,580,701)	(\$5,723,611)	-163
Ector	(\$158,359,540)	(\$77,148,734)	(\$47,453,356)	(\$25,677,482)	-810
Edwards	(\$2,352,615)	(\$1,141,365)	(\$644,388)	(\$432,673)	-12
El Paso	(\$826,759,767)	(\$397,283,469)	(\$241,837,644)	(\$125,971,944)	-4,344
Ellis	(\$140,579,134)	(\$65,487,415)	(\$40,484,399)	(\$24,399,435)	-735
Erath	(\$35,128,269)	(\$18,843,302)	(\$12,003,988)	(\$7,929,039)	-238
Falls	(\$23,219,321)	(\$12,239,640)	(\$7,703,024)	(\$4,603,295)	-147
Fannin	(\$49,519,709)	(\$24,760,845)	(\$15,688,325)	(\$9,666,707)	-300
Fayette	(\$50,054,550)	(\$25,089,033)	(\$15,013,532)	(\$8,191,590)	-270
Fisher	(\$5,314,398)	(\$2,705,499)	(\$1,645,888)	(\$1,151,114)	-33
Floyd	(\$5,870,426)	(\$2,644,215)	(\$1,559,924)	(\$824,387)	-28
Foard	(\$1,282,342)	(\$715,404)	(\$459,122)	(\$275,092)	-9
Fort Bend	(\$513,956,957)	(\$236,378,820)	(\$142,731,772)	(\$71,318,814)	-2,365
Franklin	(\$11,844,913)	(\$5,748,412)	(\$3,355,466)	(\$2,171,871)	-63

(continued)  
**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
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County	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
Freestone	(\$27,298,177)	(\$13,035,673)	(\$7,589,750)	(\$5,251,019)	-144
Frio	(\$17,004,433)	(\$7,990,663)	(\$4,655,163)	(\$2,801,922)	-84
Gaines	(\$10,892,429)	(\$5,083,548)	(\$2,873,099)	(\$1,731,637)	-51
Galveston	(\$418,571,915)	(\$194,624,339)	(\$119,567,274)	(\$67,685,634)	-2,146
Garza	(\$6,030,417)	(\$2,872,857)	(\$1,710,117)	(\$1,061,439)	-30
Gillespie	(\$45,540,285)	(\$22,320,102)	(\$13,803,495)	(\$8,401,630)	-263
Glasscock	(\$573,125)	(\$263,705)	(\$140,868)	(\$51,707)	-2
Goliad	(\$9,378,067)	(\$4,848,780)	(\$2,978,392)	(\$2,152,918)	-58
Gonzales	(\$17,799,165)	(\$8,988,644)	(\$5,590,285)	(\$3,537,118)	-107
Gray	(\$40,187,435)	(\$18,330,216)	(\$11,046,571)	(\$6,712,598)	-191
Grayson	(\$157,614,027)	(\$81,898,568)	(\$51,989,711)	(\$33,238,950)	-1,012
Gregg	(\$182,421,007)	(\$94,379,513)	(\$58,551,061)	(\$31,348,583)	-1,033
Grimes	(\$24,226,440)	(\$12,032,229)	(\$7,477,960)	(\$4,520,639)	-138
Guadalupe	(\$115,851,568)	(\$57,441,348)	(\$35,567,277)	(\$23,262,014)	-684
Hale	(\$26,207,647)	(\$14,187,395)	(\$8,862,634)	(\$6,604,780)	-181
Hall	(\$5,248,110)	(\$2,623,719)	(\$1,567,458)	(\$1,011,789)	-30
Hamilton	(\$11,512,846)	(\$5,673,371)	(\$3,529,043)	(\$2,467,979)	-70
Hansford	(\$4,121,568)	(\$1,760,552)	(\$944,255)	(\$439,734)	-14
Hardeman	(\$5,242,340)	(\$2,846,831)	(\$1,751,861)	(\$1,417,775)	-37
Hardin	(\$71,752,847)	(\$34,694,633)	(\$20,937,613)	(\$13,337,588)	-387
Harris	(\$4,823,963,489)	(\$2,155,747,816)	(\$1,302,723,455)	(\$473,602,242)	-19,731
Harrison	(\$100,832,257)	(\$46,113,422)	(\$28,254,803)	(\$13,872,301)	-467
Hartley	(\$1,233,300)	(\$608,243)	(\$362,815)	(\$230,467)	-7
Haskell	(\$8,666,058)	(\$4,349,008)	(\$2,693,815)	(\$1,551,441)	-49
Hays	(\$116,206,613)	(\$58,743,814)	(\$36,289,997)	(\$21,424,157)	-682
Hemphill	(\$2,621,347)	(\$1,168,289)	(\$650,700)	(\$349,122)	-11
Henderson	(\$153,926,245)	(\$73,365,700)	(\$44,331,334)	(\$25,992,544)	-825
Hidalgo	(\$466,348,293)	(\$248,926,883)	(\$156,135,462)	(\$90,895,137)	-2,978
Hill	(\$53,831,568)	(\$24,842,803)	(\$14,794,187)	(\$10,291,997)	-302
Hockley	(\$20,291,338)	(\$10,210,850)	(\$6,127,443)	(\$3,926,422)	-115
Hood	(\$89,789,938)	(\$42,202,381)	(\$25,975,171)	(\$16,015,608)	-487
Hopkins	(\$41,419,296)	(\$21,884,657)	(\$13,784,654)	(\$9,294,303)	-270
Houston	(\$42,997,776)	(\$21,000,551)	(\$13,431,558)	(\$5,980,819)	-218
Howard	(\$49,145,232)	(\$23,166,234)	(\$14,022,290)	(\$8,034,059)	-244
Hudspeth	(\$1,474,344)	(\$751,999)	(\$433,880)	(\$457,050)	-10
Hunt	(\$98,314,319)	(\$49,504,856)	(\$30,975,960)	(\$20,846,545)	-602
Hutchinson	(\$31,628,204)	(\$14,568,515)	(\$8,769,153)	(\$6,079,660)	-155
Irion	(\$2,125,629)	(\$868,766)	(\$483,255)	(\$276,916)	-8
Jack	(\$10,934,443)	(\$5,329,084)	(\$3,247,846)	(\$1,933,323)	-57
Jackson	(\$17,609,340)	(\$8,734,333)	(\$5,088,342)	(\$3,378,820)	-95

(continued)  
**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
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<b>County</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Jasper	(\$49,393,441)	(\$24,877,554)	(\$15,487,695)	(\$10,372,908)	-305
Jeff Davis	(\$3,838,173)	(\$1,855,165)	(\$1,133,204)	(\$726,724)	-22
Jefferson	(\$353,528,527)	(\$175,303,355)	(\$114,033,013)	(\$62,749,676)	-2,010
Jim Hogg	(\$5,993,111)	(\$2,941,344)	(\$1,694,067)	(\$1,260,245)	-32
Jim Wells	(\$39,446,503)	(\$21,286,510)	(\$12,783,339)	(\$8,191,590)	-241
Johnson	(\$164,072,675)	(\$81,583,491)	(\$51,916,428)	(\$30,403,400)	-960
Jones	(\$28,714,823)	(\$14,152,693)	(\$8,531,703)	(\$4,730,734)	-154
Karnes	(\$23,776,513)	(\$10,649,332)	(\$6,298,609)	(\$3,623,203)	-108
Kaufman	(\$109,089,274)	(\$53,026,759)	(\$33,032,451)	(\$20,373,953)	-630
Kendall	(\$46,901,843)	(\$21,533,652)	(\$13,038,899)	(\$7,824,018)	-237
Kenedy	(\$1,819,122)	(\$897,673)	(\$514,576)	(\$393,960)	-11
Kent	(\$1,635,078)	(\$762,935)	(\$446,335)	(\$241,236)	-7
Kerr	(\$87,114,718)	(\$42,680,290)	(\$25,791,470)	(\$16,015,608)	-494
Kimble	(\$8,825,275)	(\$3,814,302)	(\$2,215,802)	(\$1,417,775)	-40
King	(\$1,629,491)	(\$867,579)	(\$539,299)	(\$216,711)	-9
Kinney	(\$6,943,846)	(\$3,147,846)	(\$1,730,003)	(\$1,127,830)	-33
Kleberg	(\$34,237,424)	(\$17,092,534)	(\$10,302,709)	(\$6,143,692)	-189
Knox	(\$5,542,777)	(\$2,860,207)	(\$1,702,685)	(\$853,799)	-29
La Salle	(\$4,775,600)	(\$2,507,797)	(\$1,478,262)	(\$1,102,714)	-30
Lamar	(\$69,421,820)	(\$34,315,449)	(\$21,532,329)	(\$14,228,687)	-425
Lamb	(\$11,707,848)	(\$5,375,536)	(\$3,277,214)	(\$2,041,506)	-58
Lampasas	(\$30,370,706)	(\$15,359,977)	(\$9,451,709)	(\$6,301,223)	-190
Lavaca	(\$32,595,231)	(\$17,724,322)	(\$11,084,720)	(\$6,700,858)	-209
Lee	(\$21,364,419)	(\$10,492,821)	(\$6,337,140)	(\$3,695,855)	-114
Leon	(\$21,544,097)	(\$11,417,134)	(\$6,779,163)	(\$4,893,601)	-133
Liberty	(\$101,476,966)	(\$51,263,393)	(\$31,760,762)	(\$17,506,003)	-564
Limestone	(\$31,315,296)	(\$15,769,883)	(\$9,883,315)	(\$6,353,733)	-183
Lipscomb	(\$3,698,414)	(\$1,720,149)	(\$939,260)	(\$473,742)	-16
Live Oak	(\$24,540,917)	(\$11,389,960)	(\$6,857,231)	(\$4,410,856)	-122
Llano	(\$52,023,751)	(\$24,960,038)	(\$14,955,504)	(\$9,609,365)	-292
Loving	(\$1,018,002)	(\$434,715)	(\$215,950)	(\$73,369)	-3
Lubbock	(\$315,510,974)	(\$164,305,214)	(\$102,239,025)	(\$55,135,699)	-1,867
Lynn	(\$4,741,179)	(\$2,282,533)	(\$1,361,073)	(\$556,839)	-23
Madison	(\$12,830,300)	(\$6,490,278)	(\$3,830,163)	(\$2,940,571)	-79
Marion	(\$17,978,597)	(\$9,085,344)	(\$5,557,371)	(\$3,675,713)	-110
Martin	(\$4,295,610)	(\$1,986,806)	(\$1,178,227)	(\$632,136)	-19
Mason	(\$8,682,233)	(\$4,168,919)	(\$2,392,555)	(\$1,470,285)	-44
Matagorda	(\$52,487,245)	(\$23,791,179)	(\$14,738,706)	(\$9,433,329)	-264
Maverick	(\$35,112,835)	(\$17,881,000)	(\$10,833,354)	(\$7,351,426)	-216
McCulloch	(\$13,358,367)	(\$6,913,382)	(\$4,376,173)	(\$2,678,020)	-81

(continued)  
**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
of Cancer on Business Activity:  
County Results**

County	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
McLennan	(\$318,269,093)	(\$152,544,400)	(\$93,006,507)	(\$52,300,148)	-1,738
McMullen	(\$669,443)	(\$305,497)	(\$170,952)	(\$73,743)	-3
Medina	(\$49,112,444)	(\$23,290,679)	(\$13,859,360)	(\$8,926,732)	-269
Menard	(\$4,163,966)	(\$2,104,840)	(\$1,230,941)	(\$840,163)	-23
Midland	(\$136,347,434)	(\$67,043,672)	(\$39,873,440)	(\$21,282,942)	-679
Milam	(\$31,667,128)	(\$15,684,065)	(\$9,829,584)	(\$6,168,410)	-185
Mills	(\$5,141,109)	(\$3,152,704)	(\$2,052,448)	(\$1,379,933)	-41
Mitchell	(\$11,333,893)	(\$5,720,257)	(\$3,445,524)	(\$2,132,615)	-63
Montague	(\$35,172,433)	(\$16,713,408)	(\$9,741,622)	(\$6,143,692)	-184
Montgomery	(\$553,336,241)	(\$259,450,325)	(\$157,924,713)	(\$74,777,756)	-2,631
Moore	(\$18,522,995)	(\$7,940,566)	(\$4,692,740)	(\$2,629,214)	-78
Morris	(\$17,979,385)	(\$7,930,731)	(\$4,999,437)	(\$2,226,465)	-81
Motley	(\$2,767,238)	(\$1,271,518)	(\$715,074)	(\$455,110)	-13
Nacogdoches	(\$64,519,501)	(\$34,424,856)	(\$21,942,527)	(\$14,545,322)	-443
Navarro	(\$65,174,332)	(\$32,224,456)	(\$20,196,862)	(\$11,351,967)	-376
Newton	(\$8,982,676)	(\$5,574,978)	(\$3,778,539)	(\$2,544,506)	-71
Nolan	(\$25,009,460)	(\$12,856,605)	(\$7,717,262)	(\$4,570,902)	-140
Nueces	(\$466,855,072)	(\$214,769,177)	(\$131,217,078)	(\$67,108,022)	-2,230
Ochiltree	(\$7,677,729)	(\$3,544,271)	(\$2,060,339)	(\$1,115,234)	-35
Oldham	(\$753,703)	(\$424,531)	(\$268,824)	(\$246,357)	-6
Orange	(\$114,086,802)	(\$56,006,198)	(\$35,897,798)	(\$21,749,775)	-650
Palo Pinto	(\$49,548,031)	(\$22,813,169)	(\$13,596,580)	(\$8,086,569)	-247
Panola	(\$33,647,571)	(\$16,717,242)	(\$10,190,865)	(\$5,888,276)	-183
Parker	(\$140,147,024)	(\$65,313,175)	(\$39,462,884)	(\$23,051,973)	-721
Parmer	(\$3,325,794)	(\$1,511,312)	(\$914,606)	(\$314,487)	-15
Pecos	(\$13,785,136)	(\$6,681,659)	(\$3,940,917)	(\$2,678,020)	-75
Polk	(\$100,266,082)	(\$50,030,291)	(\$30,117,740)	(\$19,166,219)	-553
Potter	(\$156,833,261)	(\$80,118,095)	(\$48,599,482)	(\$26,150,074)	-866
Presidio	(\$7,939,398)	(\$3,766,900)	(\$2,272,783)	(\$1,522,795)	-43
Rains	(\$15,843,163)	(\$7,253,780)	(\$4,224,915)	(\$2,926,900)	-79
Randall	(\$141,066,034)	(\$72,365,148)	(\$44,206,388)	(\$24,992,144)	-805
Reagan	(\$2,277,268)	(\$1,134,761)	(\$650,801)	(\$454,976)	-12
Real	(\$7,936,138)	(\$3,539,470)	(\$2,058,563)	(\$1,260,245)	-37
Red River	(\$23,246,915)	(\$10,913,960)	(\$6,507,084)	(\$4,171,461)	-125
Reeves	(\$12,387,870)	(\$6,190,786)	(\$3,687,248)	(\$2,730,530)	-72
Refugio	(\$10,884,637)	(\$5,249,775)	(\$2,979,299)	(\$2,520,489)	-59
Roberts	(\$1,044,456)	(\$455,718)	(\$257,193)	(\$205,886)	-5
Robertson	(\$23,473,722)	(\$11,504,112)	(\$7,137,738)	(\$5,145,999)	-143
Rockwall	(\$57,257,551)	(\$28,917,329)	(\$18,085,281)	(\$10,607,058)	-338
Runnels	(\$19,339,639)	(\$8,585,196)	(\$5,015,352)	(\$2,944,130)	-88

**(continued)**  
**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
of Cancer on Business Activity:  
County Results**

<b>County</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Rusk	(\$68,847,291)	(\$32,819,375)	(\$20,138,649)	(\$10,973,524)	-356
Sabine	(\$18,827,277)	(\$9,431,014)	(\$6,168,309)	(\$3,901,746)	-114
San Augustine	(\$16,425,194)	(\$7,655,294)	(\$4,479,294)	(\$2,780,405)	-84
San Jacinto	(\$37,521,265)	(\$18,222,772)	(\$11,152,003)	(\$7,141,386)	-213
San Patricio	(\$83,465,732)	(\$38,444,717)	(\$23,642,148)	(\$15,011,436)	-431
San Saba	(\$7,848,009)	(\$4,155,901)	(\$2,549,297)	(\$1,785,346)	-52
Schleicher	(\$2,528,429)	(\$1,238,701)	(\$748,227)	(\$297,974)	-12
Scurry	(\$19,074,532)	(\$10,200,476)	(\$5,970,009)	(\$4,182,774)	-114
Shackelford	(\$3,994,556)	(\$1,931,281)	(\$1,125,412)	(\$669,111)	-20
Shelby	(\$25,576,045)	(\$14,020,822)	(\$9,175,124)	(\$5,951,857)	-179
Sherman	(\$829,539)	(\$389,717)	(\$231,412)	(\$124,810)	-4
Smith	(\$322,773,692)	(\$156,495,111)	(\$92,231,434)	(\$50,848,054)	-1,639
Somervell	(\$6,029,031)	(\$2,721,927)	(\$1,757,739)	(\$680,189)	-30
Starr	(\$28,259,595)	(\$15,641,446)	(\$9,885,765)	(\$7,246,406)	-201
Stephens	(\$12,799,607)	(\$6,776,760)	(\$4,072,977)	(\$2,927,333)	-77
Sterling	(\$962,744)	(\$539,596)	(\$330,434)	(\$262,551)	-7
Stonewall	(\$2,041,030)	(\$1,119,039)	(\$678,377)	(\$481,847)	-13
Sutton	(\$4,806,980)	(\$2,436,073)	(\$1,445,856)	(\$997,694)	-27
Swisher	(\$5,991,979)	(\$2,747,607)	(\$1,646,797)	(\$968,245)	-31
Tarrant	(\$1,992,124,317)	(\$977,826,966)	(\$602,019,885)	(\$296,840,099)	-10,396
Taylor	(\$168,478,566)	(\$82,618,717)	(\$49,778,427)	(\$26,307,605)	-877
Terrell	(\$1,194,924)	(\$689,031)	(\$441,994)	(\$231,913)	-8
Terry	(\$12,519,151)	(\$6,286,327)	(\$3,548,818)	(\$2,622,099)	-67
Throckmorton	(\$1,590,611)	(\$804,321)	(\$452,833)	(\$282,041)	-8
Titus	(\$27,205,572)	(\$13,147,302)	(\$8,221,162)	(\$5,940,532)	-162
Tom Green	(\$141,604,348)	(\$68,033,598)	(\$39,841,937)	(\$23,209,504)	-743
Travis	(\$777,199,467)	(\$404,037,796)	(\$253,988,141)	(\$124,351,875)	-4,434
Trinity	(\$26,288,258)	(\$14,210,052)	(\$8,745,260)	(\$5,726,349)	-173
Tyler	(\$30,522,083)	(\$15,722,448)	(\$9,849,191)	(\$6,230,859)	-188
Upshur	(\$59,574,279)	(\$29,133,379)	(\$17,594,886)	(\$10,817,099)	-322
Upton	(\$3,713,999)	(\$1,793,487)	(\$1,024,122)	(\$577,108)	-18
Uvalde	(\$28,397,559)	(\$14,694,414)	(\$9,115,219)	(\$5,513,570)	-176
Val Verde	(\$37,469,158)	(\$20,927,308)	(\$13,456,282)	(\$8,086,569)	-258
Van Zandt	(\$66,584,065)	(\$37,114,007)	(\$22,940,476)	(\$15,122,934)	-452
Victoria	(\$129,581,049)	(\$62,195,899)	(\$38,160,902)	(\$20,426,464)	-648
Walker	(\$105,925,303)	(\$54,548,702)	(\$34,177,276)	(\$21,686,708)	-662
Waller	(\$40,513,296)	(\$17,716,452)	(\$10,228,671)	(\$6,826,325)	-193
Ward	(\$11,992,006)	(\$5,972,494)	(\$3,559,143)	(\$2,467,979)	-67
Washington	(\$45,715,257)	(\$23,664,498)	(\$14,695,406)	(\$8,632,170)	-274
Webb	(\$144,242,924)	(\$73,888,646)	(\$44,000,547)	(\$27,462,829)	-817

(continued)  
**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
of Cancer on Business Activity:  
County Results**

County	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
Wharton	(\$56,602,018)	(\$28,628,167)	(\$17,356,416)	(\$10,880,648)	-322
Wheeler	(\$5,988,614)	(\$3,214,895)	(\$1,946,445)	(\$1,363,507)	-37
Wichita	(\$167,852,741)	(\$88,709,464)	(\$54,051,896)	(\$31,138,542)	-982
Wilbarger	(\$22,408,980)	(\$10,762,345)	(\$6,774,343)	(\$4,253,325)	-126
Willacy	(\$16,309,205)	(\$9,119,967)	(\$5,579,147)	(\$3,857,342)	-109
Williamson	(\$208,629,463)	(\$111,351,101)	(\$71,629,283)	(\$39,968,303)	-1,320
Wilson	(\$44,597,523)	(\$22,067,211)	(\$13,403,880)	(\$8,664,181)	-264
Winkler	(\$6,792,065)	(\$3,369,059)	(\$2,014,746)	(\$1,288,152)	-36
Wise	(\$59,975,728)	(\$30,284,892)	(\$18,204,797)	(\$11,132,160)	-333
Wood	(\$86,394,326)	(\$41,683,185)	(\$25,200,946)	(\$14,864,331)	-466
Yoakum	(\$6,360,252)	(\$3,106,961)	(\$1,818,210)	(\$1,225,233)	-34
Young	(\$31,956,320)	(\$15,864,424)	(\$9,469,272)	(\$5,893,742)	-171
Zapata	(\$9,763,474)	(\$4,874,967)	(\$2,922,067)	(\$2,100,408)	-57
Zavala	(\$5,138,704)	(\$3,084,925)	(\$2,026,060)	(\$1,647,700)	-45
<b>TOTAL STATE IMPACT</b>	<b>(\$27,251,222,949)</b>	<b>(\$13,191,729,014)</b>	<b>(\$8,086,068,278)</b>	<b>(\$4,131,988,245)</b>	<b>-140,629</b>

NOTE: Allocations reflect best available evidence regarding incidence and industrial structure and composition of each area.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
of Cancer on Business Activity:  
Results by Texas House District**

House District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
1	(\$190,022,550)	(\$96,895,481)	(\$60,825,195)	(\$37,323,116)	-1,146
2	(\$180,741,547)	(\$93,872,642)	(\$58,141,351)	(\$38,896,379)	-1,133
3	(\$179,532,022)	(\$89,313,339)	(\$55,510,715)	(\$36,646,193)	-1,079
4	(\$263,015,520)	(\$126,392,459)	(\$77,363,786)	(\$46,366,497)	-1,455
5	(\$260,858,781)	(\$123,772,014)	(\$75,280,301)	(\$42,144,676)	-1,335
6	(\$264,674,428)	(\$128,325,991)	(\$75,629,776)	(\$41,695,404)	-1,344
7	(\$240,520,272)	(\$122,548,633)	(\$75,152,719)	(\$40,501,233)	-1,328
8	(\$186,632,331)	(\$94,410,690)	(\$58,244,810)	(\$34,876,495)	-1,079
9	(\$174,741,458)	(\$90,409,539)	(\$57,252,949)	(\$37,552,240)	-1,125
10	(\$194,410,702)	(\$90,330,218)	(\$55,278,586)	(\$34,691,432)	-1,036
11	(\$205,217,264)	(\$100,534,090)	(\$62,822,996)	(\$34,774,194)	-1,115
12	(\$206,495,417)	(\$104,949,908)	(\$65,505,073)	(\$40,995,343)	-1,251
13	(\$214,479,290)	(\$108,582,542)	(\$67,895,902)	(\$40,151,955)	-1,261
14	(\$130,813,798)	(\$65,611,761)	(\$40,146,560)	(\$21,926,680)	-735
15	(\$249,001,308)	(\$116,752,646)	(\$71,066,121)	(\$33,649,990)	-1,184
16	(\$254,534,671)	(\$119,347,149)	(\$72,645,368)	(\$34,397,768)	-1,210
17	(\$224,637,135)	(\$111,922,599)	(\$68,078,950)	(\$41,155,210)	-1,277
18	(\$251,543,310)	(\$124,644,213)	(\$76,091,726)	(\$43,402,220)	-1,353
19	(\$176,568,436)	(\$87,314,818)	(\$54,870,303)	(\$34,151,905)	-1,004
20	(\$125,550,386)	(\$65,792,060)	(\$42,062,762)	(\$24,154,146)	-778
21	(\$187,370,119)	(\$92,910,778)	(\$60,437,497)	(\$33,257,328)	-1,065
22	(\$184,412,296)	(\$91,353,569)	(\$59,339,164)	(\$32,972,312)	-1,049
23	(\$231,335,455)	(\$105,723,798)	(\$64,557,446)	(\$35,476,956)	-1,138
24	(\$226,028,834)	(\$105,097,143)	(\$64,566,328)	(\$36,550,242)	-1,159
25	(\$167,986,456)	(\$79,852,134)	(\$49,886,065)	(\$29,174,983)	-884
26	(\$208,152,568)	(\$95,733,422)	(\$57,806,368)	(\$28,884,120)	-958
27	(\$208,152,568)	(\$95,733,422)	(\$57,806,368)	(\$28,884,120)	-958
28	(\$194,767,136)	(\$91,256,595)	(\$54,704,124)	(\$31,257,547)	-964
29	(\$179,213,870)	(\$84,030,508)	(\$52,372,054)	(\$31,442,527)	-931
30	(\$221,830,554)	(\$109,409,724)	(\$66,996,644)	(\$38,907,772)	-1,193
31	(\$93,612,840)	(\$48,431,249)	(\$29,355,565)	(\$19,443,674)	-563
32	(\$211,618,528)	(\$96,033,000)	(\$58,233,118)	(\$34,106,238)	-1,027
33	(\$207,750,507)	(\$95,572,284)	(\$58,391,600)	(\$29,863,070)	-993
34	(\$207,750,507)	(\$95,572,284)	(\$58,391,600)	(\$29,863,070)	-993
35	(\$178,044,710)	(\$87,548,202)	(\$52,693,472)	(\$32,052,448)	-951
36	(\$116,587,073)	(\$62,231,721)	(\$39,033,865)	(\$22,723,784)	-744
37	(\$130,939,103)	(\$66,335,341)	(\$41,046,240)	(\$24,280,711)	-791
38	(\$130,939,103)	(\$66,335,341)	(\$41,046,240)	(\$24,280,711)	-791
39	(\$116,587,073)	(\$62,231,721)	(\$39,033,865)	(\$22,723,784)	-744
40	(\$116,587,073)	(\$62,231,721)	(\$39,033,865)	(\$22,723,784)	-744

(continued)  
**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
of Cancer on Business Activity:  
Results by Texas House District**

House District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
41	(\$116,587,073)	(\$62,231,721)	(\$39,033,865)	(\$22,723,784)	-744
42	(\$100,970,047)	(\$51,722,052)	(\$30,800,383)	(\$19,223,980)	-572
43	(\$130,978,205)	(\$66,986,270)	(\$40,958,309)	(\$25,370,901)	-781
44	(\$178,248,256)	(\$88,497,203)	(\$54,561,442)	(\$35,463,313)	-1,055
45	(\$175,042,277)	(\$87,359,632)	(\$53,703,537)	(\$31,801,022)	-1,005
46	(\$132,123,909)	(\$68,686,425)	(\$43,177,984)	(\$21,139,819)	-754
47	(\$132,123,909)	(\$68,686,425)	(\$43,177,984)	(\$21,139,819)	-754
48	(\$124,351,915)	(\$64,646,047)	(\$40,638,103)	(\$19,896,300)	-709
49	(\$132,123,909)	(\$68,686,425)	(\$43,177,984)	(\$21,139,819)	-754
50	(\$124,351,915)	(\$64,646,047)	(\$40,638,103)	(\$19,896,300)	-709
51	(\$132,123,909)	(\$68,686,425)	(\$43,177,984)	(\$21,139,819)	-754
52	(\$114,746,205)	(\$61,243,105)	(\$39,396,106)	(\$21,982,566)	-726
53	(\$263,884,054)	(\$127,701,295)	(\$76,521,733)	(\$47,850,934)	-1,444
54	(\$192,776,385)	(\$98,581,970)	(\$61,491,523)	(\$36,819,094)	-1,165
55	(\$153,790,770)	(\$82,523,186)	(\$52,646,356)	(\$30,814,029)	-997
56	(\$203,692,219)	(\$97,628,416)	(\$59,524,164)	(\$33,472,095)	-1,113
57	(\$195,644,315)	(\$96,567,147)	(\$58,932,429)	(\$36,411,519)	-1,127
58	(\$191,266,860)	(\$95,036,555)	(\$60,291,130)	(\$35,086,019)	-1,116
59	(\$135,298,465)	(\$69,467,142)	(\$43,504,338)	(\$27,843,576)	-848
60	(\$233,167,536)	(\$113,733,053)	(\$69,501,300)	(\$44,711,923)	-1,322
61	(\$200,122,751)	(\$95,598,068)	(\$57,667,682)	(\$34,184,133)	-1,054
62	(\$207,133,737)	(\$106,659,412)	(\$67,678,037)	(\$42,905,657)	-1,312
63	(\$166,581,686)	(\$79,727,231)	(\$49,248,163)	(\$25,160,782)	-856
64	(\$171,629,616)	(\$82,143,208)	(\$50,740,532)	(\$25,923,230)	-882
65	(\$166,581,686)	(\$79,727,231)	(\$49,248,163)	(\$25,160,782)	-856
66	(\$150,670,953)	(\$77,020,349)	(\$48,113,399)	(\$25,734,803)	-856
67	(\$150,670,953)	(\$77,020,349)	(\$48,113,399)	(\$25,734,803)	-856
68	(\$218,117,393)	(\$107,842,494)	(\$65,963,417)	(\$38,730,939)	-1,184
69	(\$177,140,278)	(\$93,375,949)	(\$56,739,692)	(\$32,853,054)	-1,033
70	(\$150,670,953)	(\$77,020,349)	(\$48,113,399)	(\$25,734,803)	-856
71	(\$193,488,025)	(\$95,475,323)	(\$57,495,690)	(\$30,878,507)	-1,018
72	(\$179,334,560)	(\$87,389,455)	(\$51,332,767)	(\$30,741,172)	-955
73	(\$261,865,577)	(\$124,685,944)	(\$75,521,460)	(\$46,786,579)	-1,446
74	(\$134,324,972)	(\$69,998,908)	(\$43,238,746)	(\$27,651,722)	-828
75	(\$165,351,953)	(\$79,456,694)	(\$48,367,529)	(\$25,194,389)	-869
76	(\$165,351,953)	(\$79,456,694)	(\$48,367,529)	(\$25,194,389)	-869
77	(\$165,351,953)	(\$79,456,694)	(\$48,367,529)	(\$25,194,389)	-869
78	(\$165,351,953)	(\$79,456,694)	(\$48,367,529)	(\$25,194,389)	-869
79	(\$165,351,953)	(\$79,456,694)	(\$48,367,529)	(\$25,194,389)	-869
80	(\$125,798,168)	(\$61,788,746)	(\$36,924,498)	(\$24,638,650)	-722

(continued)  
**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
of Cancer on Business Activity:  
Results by Texas House District**

House District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
81	(\$180,400,790)	(\$88,106,424)	(\$53,976,012)	(\$29,432,117)	-923
82	(\$163,324,145)	(\$80,330,605)	(\$47,604,097)	(\$25,942,867)	-818
83	(\$165,944,549)	(\$85,253,459)	(\$52,360,544)	(\$29,255,997)	-958
84	(\$189,306,584)	(\$98,583,128)	(\$61,343,415)	(\$33,081,419)	-1,120
85	(\$159,260,481)	(\$78,637,738)	(\$47,311,659)	(\$28,952,721)	-864
86	(\$158,587,557)	(\$81,217,294)	(\$49,596,092)	(\$27,963,632)	-905
87	(\$180,090,698)	(\$90,016,470)	(\$54,317,236)	(\$29,233,307)	-961
88	(\$156,076,600)	(\$73,828,075)	(\$44,377,375)	(\$27,979,658)	-796
89	(\$163,285,259)	(\$83,116,833)	(\$51,942,858)	(\$28,716,734)	-940
90	(\$199,212,432)	(\$97,782,697)	(\$60,201,989)	(\$29,684,010)	-1,040
91	(\$199,212,432)	(\$97,782,697)	(\$60,201,989)	(\$29,684,010)	-1,040
92	(\$199,212,432)	(\$97,782,697)	(\$60,201,989)	(\$29,684,010)	-1,040
93	(\$199,212,432)	(\$97,782,697)	(\$60,201,989)	(\$29,684,010)	-1,040
94	(\$199,212,432)	(\$97,782,697)	(\$60,201,989)	(\$29,684,010)	-1,040
95	(\$199,212,432)	(\$97,782,697)	(\$60,201,989)	(\$29,684,010)	-1,040
96	(\$199,212,432)	(\$97,782,697)	(\$60,201,989)	(\$29,684,010)	-1,040
97	(\$199,212,432)	(\$97,782,697)	(\$60,201,989)	(\$29,684,010)	-1,040
98	(\$199,212,432)	(\$97,782,697)	(\$60,201,989)	(\$29,684,010)	-1,040
99	(\$199,212,432)	(\$97,782,697)	(\$60,201,989)	(\$29,684,010)	-1,040
100	(\$169,125,874)	(\$80,884,803)	(\$48,732,504)	(\$19,565,900)	-782
101	(\$169,125,874)	(\$80,884,803)	(\$48,732,504)	(\$19,565,900)	-782
102	(\$169,125,874)	(\$80,884,803)	(\$48,732,504)	(\$19,565,900)	-782
103	(\$169,125,874)	(\$80,884,803)	(\$48,732,504)	(\$19,565,900)	-782
104	(\$169,125,874)	(\$80,884,803)	(\$48,732,504)	(\$19,565,900)	-782
105	(\$169,125,874)	(\$80,884,803)	(\$48,732,504)	(\$19,565,900)	-782
106	(\$169,125,874)	(\$80,884,803)	(\$48,732,504)	(\$19,565,900)	-782
107	(\$169,125,874)	(\$80,884,803)	(\$48,732,504)	(\$19,565,900)	-782
108	(\$169,125,874)	(\$80,884,803)	(\$48,732,504)	(\$19,565,900)	-782
109	(\$169,125,874)	(\$80,884,803)	(\$48,732,504)	(\$19,565,900)	-782
110	(\$169,125,874)	(\$80,884,803)	(\$48,732,504)	(\$19,565,900)	-782
111	(\$169,125,874)	(\$80,884,803)	(\$48,732,504)	(\$19,565,900)	-782
112	(\$169,125,874)	(\$80,884,803)	(\$48,732,504)	(\$19,565,900)	-782
113	(\$169,125,874)	(\$80,884,803)	(\$48,732,504)	(\$19,565,900)	-782
114	(\$169,125,874)	(\$80,884,803)	(\$48,732,504)	(\$19,565,900)	-782
115	(\$169,125,874)	(\$80,884,803)	(\$48,732,504)	(\$19,565,900)	-782
116	(\$187,500,428)	(\$93,348,758)	(\$58,134,671)	(\$29,689,261)	-1,033
117	(\$187,500,428)	(\$93,348,758)	(\$58,134,671)	(\$29,689,261)	-1,033
118	(\$187,500,428)	(\$93,348,758)	(\$58,134,671)	(\$29,689,261)	-1,033
119	(\$187,500,428)	(\$93,348,758)	(\$58,134,671)	(\$29,689,261)	-1,033
120	(\$187,500,428)	(\$93,348,758)	(\$58,134,671)	(\$29,689,261)	-1,033

(continued)  
**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
of Cancer on Business Activity:  
Results by Texas House District**

House District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
121	(\$187,500,428)	(\$93,348,758)	(\$58,134,671)	(\$29,689,261)	-1,033
122	(\$187,500,428)	(\$93,348,758)	(\$58,134,671)	(\$29,689,261)	-1,033
123	(\$187,500,428)	(\$93,348,758)	(\$58,134,671)	(\$29,689,261)	-1,033
124	(\$187,500,428)	(\$93,348,758)	(\$58,134,671)	(\$29,689,261)	-1,033
125	(\$187,500,428)	(\$93,348,758)	(\$58,134,671)	(\$29,689,261)	-1,033
126	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
127	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
128	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
129	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
130	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
131	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
132	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
133	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
134	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
135	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
136	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
137	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
138	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
139	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
140	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
141	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
142	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
143	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
144	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
145	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
146	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
147	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
148	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
149	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
150	(\$192,958,540)	(\$86,229,913)	(\$52,108,938)	(\$18,944,090)	-789
<b>TOTAL</b>	<b>(\$27,251,222,949)</b>	<b>(\$13,191,729,014)</b>	<b>(\$8,086,068,278)</b>	<b>(\$4,131,988,245)</b>	<b>-140,629</b>

NOTE: Allocations reflect best available evidence regarding incidence and industrial structure and composition of each area. In cases in which a county was part of more than one district, allocations are based on the percentage of the population residing in a district. This convention is adopted because of a lack of subcounty data sufficient for allocation purposes. In some instances, this approach will result in districts which reflect the same proportion of a large urban county reporting identical results.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
of Cancer on Business Activity:  
Results by Texas Senate District**

Senate District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
1	(\$1,061,180,635)	(\$522,605,816)	(\$319,940,973)	(\$184,699,558)	-5,811
2	(\$922,947,062)	(\$455,100,716)	(\$278,552,165)	(\$148,076,710)	-4,951
3	(\$1,112,398,962)	(\$549,737,385)	(\$338,442,171)	(\$199,514,063)	-6,218
4	(\$981,160,306)	(\$468,414,393)	(\$292,540,022)	(\$147,998,203)	-4,977
5	(\$744,437,594)	(\$381,671,031)	(\$238,325,560)	(\$141,160,098)	-4,435
6	(\$916,553,063)	(\$409,592,085)	(\$247,517,456)	(\$89,984,426)	-3,749
7	(\$964,792,698)	(\$431,149,563)	(\$260,544,691)	(\$94,720,448)	-3,946
8	(\$796,686,901)	(\$397,004,716)	(\$244,699,870)	(\$118,924,510)	-4,196
9	(\$864,497,718)	(\$417,048,239)	(\$254,873,853)	(\$118,049,362)	-4,291
10	(\$976,140,915)	(\$479,135,213)	(\$294,989,744)	(\$145,451,649)	-5,094
11	(\$984,453,475)	(\$451,908,357)	(\$276,640,107)	(\$133,938,549)	-4,624
12	(\$888,523,894)	(\$434,275,278)	(\$267,518,415)	(\$132,704,275)	-4,625
13	(\$933,144,324)	(\$418,480,469)	(\$252,863,977)	(\$96,202,520)	-3,874
14	(\$668,391,541)	(\$347,472,504)	(\$218,429,801)	(\$106,942,613)	-3,813
15	(\$964,792,698)	(\$431,149,563)	(\$260,544,691)	(\$94,720,448)	-3,946
16	(\$811,804,197)	(\$388,247,054)	(\$233,916,020)	(\$93,916,318)	-3,753
17	(\$1,008,199,919)	(\$460,930,633)	(\$281,629,537)	(\$124,494,934)	-4,530
18	(\$988,721,052)	(\$474,092,319)	(\$288,463,005)	(\$165,994,049)	-5,148
19	(\$782,959,904)	(\$389,488,500)	(\$239,863,390)	(\$134,505,220)	-4,390
20	(\$769,942,926)	(\$376,732,553)	(\$232,219,611)	(\$126,867,242)	-4,154
21	(\$661,238,820)	(\$326,502,588)	(\$198,650,769)	(\$119,264,452)	-3,649
22	(\$945,424,295)	(\$456,087,969)	(\$281,983,573)	(\$166,175,881)	-5,279
23	(\$838,864,337)	(\$401,188,622)	(\$241,713,221)	(\$97,046,862)	-3,878
24	(\$944,550,116)	(\$478,235,019)	(\$294,949,377)	(\$178,215,048)	-5,568
25	(\$916,372,358)	(\$455,069,047)	(\$281,665,222)	(\$156,579,117)	-5,156
26	(\$862,501,970)	(\$429,404,289)	(\$267,419,485)	(\$136,570,600)	-4,752
27	(\$589,570,242)	(\$304,965,624)	(\$189,272,989)	(\$111,999,585)	-3,626
28	(\$828,427,854)	(\$416,543,423)	(\$252,706,416)	(\$147,181,526)	-4,642
29	(\$777,154,181)	(\$373,446,461)	(\$227,327,386)	(\$118,413,627)	-4,083
30	(\$965,647,493)	(\$481,287,179)	(\$295,358,292)	(\$172,940,496)	-5,396
31	(\$779,741,499)	(\$384,762,404)	(\$232,506,489)	(\$128,735,854)	-4,074
<b>TOTAL</b>	<b>(\$27,251,222,949)</b>	<b>(\$13,191,729,014)</b>	<b>(\$8,086,068,278)</b>	<b>(\$4,131,988,245)</b>	<b>-140,629</b>

**NOTE:** Allocations reflect best available evidence regarding incidence and industrial structure and composition of each area. In cases in which a county was part of more than one district, allocations are based on the percentage of the population residing in a district. This convention is adopted because of a lack of subcounty data sufficient for allocation purposes. In some instances, this approach will result in districts which reflect the same proportion of a large urban county reporting identical results.

**SOURCE:** US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Morbidity Losses Associated with the Incidence  
of Cancer on Business Activity:  
Results by US Congressional District in Texas**

US Congressional District in Texas	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
1	(\$1,027,638,873)	(\$509,084,562)	(\$311,300,091)	(\$177,373,284)	-5,632
2	(\$908,988,291)	(\$427,787,780)	(\$267,173,106)	(\$122,714,222)	-4,389
3	(\$765,573,726)	(\$380,654,656)	(\$234,342,649)	(\$112,864,655)	-4,005
4	(\$857,318,831)	(\$434,191,043)	(\$272,136,781)	(\$169,313,005)	-5,168
5	(\$917,405,022)	(\$449,749,208)	(\$274,302,824)	(\$144,032,728)	-4,859
6	(\$892,248,745)	(\$435,761,470)	(\$268,717,588)	(\$142,083,298)	-4,732
7	(\$916,553,063)	(\$409,592,085)	(\$247,517,456)	(\$89,984,426)	-3,749
8	(\$1,116,499,009)	(\$542,291,884)	(\$333,637,644)	(\$185,459,723)	-5,924
9	(\$938,283,893)	(\$420,844,257)	(\$254,291,295)	(\$96,915,708)	-3,898
10	(\$801,902,359)	(\$385,513,335)	(\$236,965,184)	(\$110,053,566)	-3,966
11	(\$915,524,582)	(\$450,706,134)	(\$271,539,710)	(\$160,963,085)	-4,953
12	(\$907,326,884)	(\$442,726,641)	(\$271,384,741)	(\$139,562,368)	-4,745
13	(\$862,167,240)	(\$431,680,182)	(\$261,637,755)	(\$151,166,470)	-4,720
14	(\$964,693,943)	(\$451,241,984)	(\$276,574,206)	(\$157,739,035)	-4,878
15	(\$618,459,523)	(\$318,507,164)	(\$196,945,774)	(\$118,601,655)	-3,726
16	(\$793,689,376)	(\$381,392,130)	(\$232,164,139)	(\$120,933,066)	-4,170
17	(\$873,480,222)	(\$424,695,592)	(\$261,660,215)	(\$153,091,335)	-4,899
18	(\$916,553,063)	(\$409,592,085)	(\$247,517,456)	(\$89,984,426)	-3,749
19	(\$782,749,510)	(\$393,440,774)	(\$239,682,360)	(\$136,717,615)	-4,361
20	(\$881,252,013)	(\$438,739,165)	(\$273,232,952)	(\$139,539,526)	-4,855
21	(\$917,401,600)	(\$452,661,487)	(\$279,138,528)	(\$152,070,549)	-5,075
22	(\$950,365,386)	(\$433,012,666)	(\$262,719,015)	(\$118,844,211)	-4,246
23	(\$771,725,532)	(\$386,367,657)	(\$238,987,613)	(\$132,572,842)	-4,370
24	(\$825,871,063)	(\$398,781,012)	(\$243,077,839)	(\$109,782,925)	-4,059
25	(\$735,263,008)	(\$376,644,887)	(\$234,139,896)	(\$126,475,902)	-4,233
26	(\$873,183,889)	(\$423,577,012)	(\$261,151,597)	(\$130,734,504)	-4,512
27	(\$809,033,632)	(\$386,513,220)	(\$237,025,077)	(\$130,978,851)	-4,248
28	(\$597,684,052)	(\$304,575,913)	(\$186,504,772)	(\$115,287,902)	-3,521
29	(\$916,553,063)	(\$409,592,085)	(\$247,517,456)	(\$89,984,426)	-3,749
30	(\$784,744,058)	(\$375,305,485)	(\$226,118,819)	(\$90,785,774)	-3,628
31	(\$626,345,441)	(\$331,199,974)	(\$210,844,922)	(\$124,591,388)	-3,984
32	(\$784,744,058)	(\$375,305,485)	(\$226,118,819)	(\$90,785,774)	-3,628
<b>TOTAL</b>	<b>(\$27,251,222,949)</b>	<b>(\$13,191,729,014)</b>	<b>(\$8,086,068,278)</b>	<b>(\$4,131,988,245)</b>	<b>-140,629</b>

NOTE: Allocations reflect best available evidence regarding incidence and industrial structure and composition of each area. In cases in which a county was part of more than one district, allocations are based on the percentage of the population residing in a district. This convention is adopted because of a lack of subcounty data sufficient for allocation purposes. In some instances, this approach will result in districts which reflect the same proportion of a large urban county reporting identical results.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Mortality Losses Associated with the Incidence  
of Cancer on Business Activity in Texas  
Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	(\$798,641,858)	(\$264,597,395)	(\$160,918,562)	-2,452
Forestry & Fishery Products	(\$80,619,904)	(\$20,070,093)	(\$6,616,717)	-118
Coal Mining	(\$83,481,323)	(\$23,440,682)	(\$25,237,880)	-222
Crude Petroleum & Natural Gas	(\$4,346,037,798)	(\$1,730,341,401)	(\$690,114,049)	-2,915
Miscellaneous Mining	(\$41,022,611)	(\$18,897,168)	(\$13,962,156)	-302
New Construction	(\$884,285,409)	(\$421,883,652)	(\$329,029,713)	-5,081
Maintenance & Repair Construction	(\$1,047,075,422)	(\$608,676,859)	(\$489,204,710)	-7,372
Food Products & Tobacco	(\$1,644,428,936)	(\$411,784,625)	(\$209,662,266)	-3,585
Textile Mill Products	(\$25,025,373)	(\$5,859,944)	(\$4,984,454)	-107
Apparel	(\$200,925,915)	(\$110,285,948)	(\$56,201,959)	-1,618
Paper & Allied Products	(\$235,601,613)	(\$99,479,996)	(\$48,224,276)	-747
Printing & Publishing	(\$473,020,068)	(\$262,620,754)	(\$160,541,110)	-2,375
Chemicals & Petroleum Refining	(\$3,982,271,208)	(\$959,090,584)	(\$569,888,236)	-1,777
Rubber & Leather Products	(\$278,053,675)	(\$121,889,376)	(\$75,848,367)	-1,249
Lumber Products & Furniture	(\$171,374,241)	(\$62,960,781)	(\$46,873,197)	-975
Stone, Clay, & Glass Products	(\$213,315,358)	(\$114,052,183)	(\$64,447,822)	-862
Primary Metal	(\$222,374,301)	(\$66,007,588)	(\$53,821,184)	-501
Fabricated Metal Products	(\$501,035,552)	(\$223,798,603)	(\$146,939,111)	-2,294
Machinery, Except Electrical	(\$808,703,176)	(\$298,039,069)	(\$234,479,572)	-1,743
Electric & Electronic Equipment	(\$568,711,032)	(\$299,099,468)	(\$215,161,070)	-1,672
Motor Vehicles & Equipment	(\$262,949,548)	(\$80,420,230)	(\$48,143,901)	-585
Transp. Equip., Exc. Motor Vehicles	(\$174,312,457)	(\$88,483,536)	(\$57,028,598)	-888
Instruments & Related Products	(\$81,275,011)	(\$27,741,410)	(\$23,948,037)	-292
Miscellaneous Manufacturing	(\$116,192,416)	(\$38,371,141)	(\$35,344,078)	-426
Transportation	(\$1,681,883,064)	(\$1,109,924,816)	(\$740,188,315)	-10,202
Communication	(\$1,497,104,741)	(\$991,569,174)	(\$436,911,643)	-3,983
Electric, Gas, Water, Sanitary Services	(\$4,587,499,156)	(\$988,995,856)	(\$447,174,620)	-1,450
Wholesale Trade	(\$2,178,229,915)	(\$1,636,412,270)	(\$954,373,028)	-11,017
Retail Trade	(\$6,143,959,108)	(\$5,152,102,038)	(\$3,086,348,360)	-84,158
Finance	(\$1,682,083,040)	(\$863,771,549)	(\$583,025,553)	-5,159
Insurance	(\$932,660,629)	(\$561,311,437)	(\$330,478,914)	-4,430
Real Estate	(\$9,165,353,825)	(\$2,014,922,756)	(\$327,994,857)	-3,358
Hotels, Lodging Places, Amusements	(\$867,141,735)	(\$454,228,758)	(\$304,605,355)	-6,832
Personal Services	(\$1,221,953,259)	(\$766,747,612)	(\$596,271,656)	-10,977
Business Services	(\$4,022,048,376)	(\$2,838,902,719)	(\$2,454,972,063)	-26,397
Eating & Drinking Places	(\$2,699,540,417)	(\$1,617,255,190)	(\$868,399,624)	-43,482
Health Services	(\$2,593,308,088)	(\$2,007,403,172)	(\$1,675,094,140)	-28,486
Miscellaneous Services	(\$1,730,639,204)	(\$791,827,278)	(\$676,398,647)	-16,805
Households	(\$80,368,213)	(\$80,368,213)	(\$57,372,698)	-4,088
<b>Total</b>	<b>(\$58,324,506,975)</b>	<b>(\$28,233,635,323)</b>	<b>(\$17,306,230,498)</b>	<b>-300,981</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Mortality Losses Associated with the Incidence  
of Cancer on Business Activity:  
Comptroller's Economic Region Results**

<b>Economic Region</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
High Plains	(\$2,007,929,827)	(\$1,015,541,580)	(\$620,241,551)	(\$352,007,793)	-11,250
Northwest Texas	(\$1,952,564,943)	(\$985,144,683)	(\$596,100,313)	(\$352,943,724)	-10,900
Metroplex	(\$14,705,472,786)	(\$7,148,704,749)	(\$4,380,575,351)	(\$2,110,498,447)	-74,879
Upper East Texas	(\$3,788,102,885)	(\$1,880,713,096)	(\$1,150,968,827)	(\$672,197,878)	-21,077
Southeast Texas	(\$2,545,033,545)	(\$1,276,712,345)	(\$810,214,249)	(\$481,624,773)	-14,843
Gulf Coast	(\$14,557,754,320)	(\$6,612,298,524)	(\$4,013,963,826)	(\$1,679,909,895)	-63,630
Capital	(\$2,671,953,162)	(\$1,364,877,767)	(\$851,368,501)	(\$451,325,434)	-15,273
Central Texas	(\$2,699,925,671)	(\$1,354,161,971)	(\$836,415,880)	(\$500,517,488)	-15,826
Alamo	(\$5,421,881,824)	(\$2,675,683,616)	(\$1,655,060,532)	(\$885,868,864)	-29,845
Coastal Bend	(\$2,323,768,095)	(\$1,101,295,005)	(\$671,065,595)	(\$376,418,235)	-11,808
South Texas Border	(\$2,271,309,579)	(\$1,185,169,474)	(\$733,710,077)	(\$442,987,735)	-14,046
West Texas	(\$1,544,686,920)	(\$750,485,412)	(\$448,971,086)	(\$257,086,303)	-7,950
Upper Rio Grande	(\$1,834,123,418)	(\$882,847,102)	(\$537,574,710)	(\$280,112,955)	-9,653
<b>TOTAL STATE IMPACT</b>	<b>(\$58,324,506,975)</b>	<b>(\$28,233,635,323)</b>	<b>(\$17,306,230,498)</b>	<b>(\$8,843,499,525)</b>	<b>-300,981</b>

NOTE: Allocations reflect best available evidence regarding mortality and industrial structure and composition of each area.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group



**The Total Annual Impact of Mortality Losses Associated with the Incidence  
of Cancer on Business Activity:  
Council of Governments (COG) Region Results**

<b>COG</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Panhandle	(\$1,069,476,900)	(\$531,609,294)	(\$321,823,815)	(\$183,202,696)	-5,769
South Plains	(\$938,452,927)	(\$483,932,286)	(\$298,417,736)	(\$168,805,097)	-5,481
North Texas	(\$794,783,403)	(\$407,344,046)	(\$247,412,142)	(\$146,068,354)	-4,512
North Central Texas	(\$14,085,655,637)	(\$6,832,821,273)	(\$4,180,820,619)	(\$1,988,228,870)	-71,105
North East Texas	(\$882,104,749)	(\$444,403,990)	(\$277,723,839)	(\$175,239,532)	-5,293
East Texas	(\$2,905,998,136)	(\$1,436,309,105)	(\$873,244,988)	(\$496,958,345)	-15,784
West Central Texas	(\$1,157,781,540)	(\$577,800,636)	(\$348,688,171)	(\$206,875,370)	-6,388
Upper Rio Grande	(\$1,834,123,418)	(\$882,847,102)	(\$537,574,710)	(\$280,112,955)	-9,653
Permian Basin	(\$1,054,268,579)	(\$514,085,360)	(\$309,435,179)	(\$174,222,525)	-5,369
Concho Valley	(\$490,418,341)	(\$236,400,052)	(\$139,535,906)	(\$82,863,778)	-2,581
Heart of Texas	(\$1,179,393,183)	(\$568,015,051)	(\$346,046,188)	(\$203,799,281)	-6,528
Capital	(\$2,671,953,162)	(\$1,364,877,767)	(\$851,368,501)	(\$451,325,434)	-15,273
Brazos Valley	(\$648,749,124)	(\$328,260,191)	(\$201,067,774)	(\$121,091,413)	-3,762
Deep East Texas	(\$1,225,981,042)	(\$626,147,141)	(\$392,033,204)	(\$243,507,770)	-7,402
South East Texas	(\$1,319,052,503)	(\$650,565,204)	(\$418,181,045)	(\$238,117,003)	-7,441
Gulf Coast	(\$14,557,754,320)	(\$6,612,298,524)	(\$4,013,963,826)	(\$1,679,909,895)	-63,630
Golden Crescent	(\$590,563,890)	(\$289,729,951)	(\$178,221,402)	(\$103,158,984)	-3,184
Alamo	(\$5,421,881,824)	(\$2,675,683,616)	(\$1,655,060,532)	(\$885,868,864)	-29,845
South Texas	(\$374,340,852)	(\$193,579,358)	(\$116,362,173)	(\$75,786,451)	-2,202
Coastal Bend	(\$1,733,204,205)	(\$811,565,054)	(\$492,844,193)	(\$273,259,251)	-8,624
Lower Rio Grande Valley	(\$1,582,292,898)	(\$827,160,429)	(\$515,744,540)	(\$301,689,618)	-9,861
Texoma	(\$619,817,149)	(\$315,883,476)	(\$199,754,732)	(\$122,269,578)	-3,773
Central Texas	(\$871,783,363)	(\$457,886,730)	(\$289,301,918)	(\$175,626,795)	-5,536
Middle Rio Grande	(\$314,675,829)	(\$164,429,687)	(\$101,603,365)	(\$65,511,665)	-1,982
Border Region	(\$4,106,387,509)	(\$2,068,567,969)	(\$1,271,638,932)	(\$723,285,407)	-23,705
<b>TOTAL STATE IMPACT</b>	<b>(\$58,324,506,975)</b>	<b>(\$28,233,635,323)</b>	<b>(\$17,306,230,498)</b>	<b>(\$8,843,499,525)</b>	<b>-300,981</b>

**NOTE:** Allocations reflect best available evidence regarding mortality and industrial structure and composition of each area.

**SOURCE:** US Multi-Regional Impact Assessment System, The Perryman Group



**The Total Annual Impact of Mortality Losses Associated with the Incidence  
of Cancer on Business Activity:  
Metropolitan Statistical Area (MSA) and Rural Texas Results**

<b>MSA</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Abilene	(\$565,159,784)	(\$276,205,136)	(\$166,004,156)	(\$89,242,850)	-2,942
Amarillo	(\$690,290,866)	(\$352,255,882)	(\$214,038,409)	(\$116,601,085)	-3,836
Austin-Round Rock	(\$2,219,790,288)	(\$1,146,190,767)	(\$720,037,475)	(\$373,638,101)	-12,835
Beaumont-Port Arthur	(\$1,319,052,503)	(\$650,565,204)	(\$418,181,045)	(\$238,117,003)	-7,441
Brownville-Harlingen	(\$644,015,514)	(\$325,890,660)	(\$201,584,024)	(\$118,610,022)	-3,875
College Station-Bryan	(\$400,944,334)	(\$201,224,099)	(\$123,356,848)	(\$71,560,441)	-2,285
Corpus Christi	(\$1,402,544,551)	(\$644,112,041)	(\$392,634,647)	(\$209,501,457)	-6,754
Dallas-Plano-Irving MD*	(\$8,572,128,478)	(\$4,136,175,851)	(\$2,518,564,224)	(\$1,131,510,255)	-41,932
Fort Worth-Arlington MD*	(\$4,952,575,593)	(\$2,425,517,665)	(\$1,494,584,221)	(\$755,892,374)	-26,025
El Paso	(\$1,792,594,081)	(\$861,131,318)	(\$524,127,295)	(\$271,309,861)	-9,394
Houston-Baytown-Sugar Land	(\$14,192,793,085)	(\$6,431,315,545)	(\$3,902,430,395)	(\$1,608,790,009)	-61,534
Killeen-Temple-Fort Hood	(\$729,816,117)	(\$385,252,367)	(\$243,782,356)	(\$145,656,488)	-4,655
Laredo	(\$279,412,500)	(\$143,017,955)	(\$85,154,876)	(\$52,965,996)	-1,579
Longview	(\$738,329,579)	(\$371,025,385)	(\$228,566,665)	(\$125,664,890)	-4,057
Lubbock	(\$687,212,277)	(\$357,770,348)	(\$222,411,063)	(\$118,854,762)	-4,048
McAllen-Edinburg-Pharr	(\$910,951,291)	(\$486,000,228)	(\$304,819,827)	(\$176,647,230)	-5,804
Midland	(\$285,669,900)	(\$140,583,104)	(\$83,643,763)	(\$44,484,889)	-1,424
Odessa	(\$396,178,092)	(\$192,967,798)	(\$118,732,529)	(\$63,953,622)	-2,023
San Angelo	(\$343,908,991)	(\$164,964,625)	(\$96,546,880)	(\$56,003,667)	-1,796
San Antonio	(\$4,998,674,179)	(\$2,471,507,890)	(\$1,531,698,416)	(\$810,830,508)	-27,527
Sherman-Denison	(\$372,418,786)	(\$193,349,525)	(\$122,748,863)	(\$78,040,323)	-2,383
Texarkana	(\$303,132,484)	(\$159,411,077)	(\$100,584,102)	(\$60,291,080)	-1,896
Tyler	(\$657,186,540)	(\$318,296,366)	(\$187,553,281)	(\$102,900,436)	-3,328
Victoria	(\$346,024,557)	(\$164,312,251)	(\$100,838,518)	(\$55,322,982)	-1,727
Waco	(\$774,806,322)	(\$370,969,632)	(\$226,082,474)	(\$126,498,575)	-4,218
Wichita Falls	(\$490,824,480)	(\$257,877,931)	(\$157,288,249)	(\$89,768,276)	-2,846
Rural Area	(\$9,258,071,804)	(\$4,605,744,673)	(\$2,820,235,895)	(\$1,750,842,341)	-52,817
<b>TOTAL STATE IMPACT</b>	<b>(\$58,324,506,975)</b>	<b>(\$28,233,635,323)</b>	<b>(\$17,306,230,498)</b>	<b>(\$8,843,499,525)</b>	<b>-300,981</b>

\*Metropolitan Division

NOTE: Allocations reflect best available evidence regarding mortality and industrial structure and composition of each area.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Mortality Losses Associated with the Incidence  
of Cancer on Business Activity:  
County Results**

<b>County</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Anderson	(\$224,425,721)	(\$119,261,251)	(\$73,529,450)	(\$42,450,505)	-1,343
Andrews	(\$31,438,749)	(\$15,663,963)	(\$9,310,870)	(\$5,070,739)	-158
Angelina	(\$236,701,510)	(\$119,705,164)	(\$75,346,782)	(\$45,922,645)	-1,424
Aransas	(\$125,721,644)	(\$56,805,111)	(\$33,390,068)	(\$19,721,381)	-588
Archer	(\$20,006,413)	(\$10,047,115)	(\$5,784,554)	(\$3,680,628)	-109
Armstrong	(\$5,730,421)	(\$2,791,505)	(\$1,701,339)	(\$715,177)	-28
Atascosa	(\$118,477,730)	(\$55,952,988)	(\$33,859,364)	(\$18,312,711)	-578
Austin	(\$96,743,428)	(\$45,954,107)	(\$28,946,265)	(\$13,219,263)	-467
Bailey	(\$13,599,708)	(\$7,015,791)	(\$4,302,387)	(\$2,931,012)	-83
Bandera	(\$70,427,617)	(\$32,753,199)	(\$19,452,903)	(\$12,678,031)	-371
Bastrop	(\$176,355,442)	(\$86,270,695)	(\$53,045,069)	(\$32,399,412)	-1,006
Baylor	(\$25,009,507)	(\$13,049,790)	(\$7,998,937)	(\$4,789,478)	-147
Bee	(\$63,806,038)	(\$33,003,204)	(\$19,891,598)	(\$12,678,031)	-378
Bell	(\$549,204,508)	(\$294,402,611)	(\$187,778,917)	(\$109,312,799)	-3,549
Bexar	(\$4,010,192,729)	(\$1,996,862,445)	(\$1,243,780,885)	(\$631,647,671)	-22,062
Blanco	(\$27,558,074)	(\$12,914,157)	(\$7,660,644)	(\$4,864,697)	-149
Borden	(\$3,684,267)	(\$1,756,763)	(\$1,010,406)	(\$480,752)	-16
Bosque	(\$63,885,639)	(\$31,594,627)	(\$19,662,715)	(\$10,955,667)	-364
Bowie	(\$303,132,484)	(\$159,411,077)	(\$100,584,102)	(\$60,291,080)	-1,896
Brazoria	(\$638,448,444)	(\$303,241,864)	(\$189,488,272)	(\$110,241,295)	-3,351
Brazos	(\$287,956,345)	(\$144,247,604)	(\$88,256,750)	(\$47,894,783)	-1,612
Brewster	(\$19,497,542)	(\$10,651,412)	(\$6,721,410)	(\$3,944,276)	-127
Briscoe	(\$4,517,326)	(\$2,138,382)	(\$1,295,526)	(\$806,703)	-24
Brooks	(\$12,782,808)	(\$6,747,038)	(\$4,203,375)	(\$2,817,340)	-80
Brown	(\$117,508,687)	(\$63,666,456)	(\$40,044,661)	(\$27,891,668)	-809
Burleson	(\$56,375,000)	(\$29,227,150)	(\$17,886,311)	(\$11,269,361)	-329
Burnet	(\$157,741,571)	(\$74,938,306)	(\$45,207,789)	(\$26,482,998)	-830
Caldwell	(\$110,662,864)	(\$54,371,515)	(\$33,316,428)	(\$19,439,647)	-610
Calhoun	(\$39,962,423)	(\$16,457,024)	(\$10,074,634)	(\$5,456,061)	-168
Callahan	(\$55,996,957)	(\$26,405,467)	(\$15,467,192)	(\$9,578,957)	-285
Cameron	(\$644,015,514)	(\$325,890,660)	(\$201,584,024)	(\$118,610,022)	-3,875
Camp	(\$33,053,515)	(\$16,092,163)	(\$9,946,398)	(\$6,078,320)	-188
Carson	(\$7,221,307)	(\$2,893,461)	(\$1,461,866)	(\$605,470)	-24
Cass	(\$96,169,547)	(\$47,840,890)	(\$29,861,809)	(\$20,709,879)	-579
Castro	(\$8,454,647)	(\$4,186,819)	(\$2,565,141)	(\$1,811,561)	-50
Chambers	(\$73,526,042)	(\$30,711,407)	(\$18,132,750)	(\$8,213,167)	-286
Cherokee	(\$125,827,297)	(\$63,200,901)	(\$40,168,838)	(\$25,059,742)	-754
Childress	(\$22,045,062)	(\$10,853,990)	(\$6,580,059)	(\$4,507,744)	-129
Clay	(\$35,591,442)	(\$17,934,519)	(\$11,394,026)	(\$5,793,453)	-196
Cochran	(\$6,630,009)	(\$3,412,127)	(\$1,950,894)	(\$960,560)	-34



(continued)  
**The Total Annual Impact of Mortality Losses Associated with the Incidence  
of Cancer on Business Activity:  
County Results**

County	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
Coke	(\$22,074,857)	(\$10,361,339)	(\$6,264,362)	(\$3,653,568)	-107
Coleman	(\$44,941,957)	(\$22,559,098)	(\$13,405,256)	(\$8,170,287)	-246
Collin	(\$916,478,494)	(\$467,999,058)	(\$292,404,932)	(\$155,102,908)	-5,185
Collingsworth	(\$12,014,824)	(\$6,477,270)	(\$4,087,178)	(\$2,564,050)	-74
Colorado	(\$66,116,483)	(\$33,273,994)	(\$20,147,317)	(\$13,594,019)	-406
Comal	(\$276,631,331)	(\$132,729,844)	(\$80,166,852)	(\$49,585,187)	-1,560
Comanche	(\$52,422,245)	(\$26,674,794)	(\$16,555,909)	(\$10,182,474)	-312
Concho	(\$7,574,095)	(\$4,015,056)	(\$2,640,902)	(\$1,412,084)	-49
Cooke	(\$131,445,579)	(\$64,543,728)	(\$40,255,959)	(\$21,693,519)	-688
Coryell	(\$119,096,424)	(\$59,799,427)	(\$36,909,714)	(\$23,665,658)	-723
Cottle	(\$5,427,531)	(\$3,089,700)	(\$1,965,836)	(\$1,015,257)	-34
Crane	(\$7,315,765)	(\$3,830,485)	(\$2,283,229)	(\$1,191,607)	-40
Crockett	(\$8,812,843)	(\$4,397,741)	(\$2,580,896)	(\$1,972,138)	-50
Crosby	(\$16,390,684)	(\$8,717,146)	(\$5,237,873)	(\$2,498,612)	-92
Culberson	(\$4,621,239)	(\$2,710,335)	(\$1,679,973)	(\$1,408,670)	-36
Dallam	(\$9,598,071)	(\$5,121,914)	(\$3,140,014)	(\$1,629,247)	-58
Dallas	(\$5,832,152,713)	(\$2,788,936,080)	(\$1,680,868,940)	(\$669,723,415)	-26,905
Dawson	(\$39,309,666)	(\$19,557,890)	(\$11,326,508)	(\$7,234,644)	-210
Deaf Smith	(\$24,406,028)	(\$11,941,222)	(\$7,235,237)	(\$3,788,145)	-132
Delta	(\$14,834,522)	(\$7,654,566)	(\$4,888,201)	(\$1,928,761)	-81
Denton	(\$898,252,340)	(\$429,732,248)	(\$265,438,064)	(\$134,668,861)	-4,603
DeWitt	(\$83,819,608)	(\$41,725,623)	(\$26,067,108)	(\$15,777,105)	-490
Dickens	(\$10,338,290)	(\$5,382,358)	(\$3,391,460)	(\$2,056,291)	-61
Dimmit	(\$18,097,310)	(\$9,125,167)	(\$5,501,559)	(\$3,944,276)	-108
Donley	(\$12,648,450)	(\$7,099,593)	(\$4,481,856)	(\$3,380,808)	-93
Duval	(\$31,760,692)	(\$14,823,868)	(\$8,630,373)	(\$4,784,295)	-154
Eastland	(\$80,456,448)	(\$38,884,644)	(\$23,283,381)	(\$15,495,371)	-441
Ector	(\$396,178,092)	(\$192,967,798)	(\$118,732,529)	(\$63,953,622)	-2,023
Edwards	(\$7,611,300)	(\$3,687,563)	(\$2,080,074)	(\$1,391,996)	-39
El Paso	(\$1,792,594,081)	(\$861,131,318)	(\$524,127,295)	(\$271,309,861)	-9,394
Ellis	(\$318,183,669)	(\$148,082,516)	(\$91,536,698)	(\$54,857,095)	-1,657
Erath	(\$84,102,037)	(\$45,093,984)	(\$28,726,219)	(\$18,876,179)	-568
Falls	(\$60,517,133)	(\$31,926,797)	(\$20,090,862)	(\$11,970,373)	-382
Fannin	(\$115,952,785)	(\$57,990,223)	(\$36,749,909)	(\$22,535,735)	-701
Fayette	(\$103,666,935)	(\$51,959,495)	(\$31,093,342)	(\$16,904,041)	-558
Fisher	(\$14,907,900)	(\$7,590,449)	(\$4,616,058)	(\$3,221,851)	-91
Floyd	(\$11,740,184)	(\$5,284,119)	(\$3,114,564)	(\$1,642,088)	-56
Foard	(\$1,021,137)	(\$570,074)	(\$365,850)	(\$218,982)	-7
Fort Bend	(\$833,048,476)	(\$383,106,590)	(\$231,465,741)	(\$114,845,747)	-3,825
Franklin	(\$36,065,399)	(\$17,478,420)	(\$10,196,210)	(\$6,584,214)	-191

**(continued)**  
**The Total Annual Impact of Mortality Losses Associated with the Incidence  
of Cancer on Business Activity:  
County Results**

<b>County</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Freestone	(\$70,407,355)	(\$33,622,791)	(\$19,572,987)	(\$13,523,233)	-371
Frio	(\$36,583,597)	(\$17,190,693)	(\$10,013,201)	(\$6,013,521)	-180
Gaines	(\$31,158,542)	(\$14,540,969)	(\$8,216,924)	(\$4,940,780)	-146
Galveston	(\$982,178,711)	(\$456,390,872)	(\$280,334,486)	(\$158,052,785)	-5,025
Garza	(\$14,785,018)	(\$7,037,837)	(\$4,190,863)	(\$2,587,956)	-74
Gillespie	(\$101,391,996)	(\$49,648,052)	(\$30,696,344)	(\$18,594,445)	-585
Glasscock	(\$456,243)	(\$210,143)	(\$112,221)	(\$41,128)	-2
Goliad	(\$24,520,729)	(\$12,695,994)	(\$7,804,086)	(\$5,634,680)	-152
Gonzales	(\$40,707,253)	(\$20,569,475)	(\$12,792,398)	(\$8,070,437)	-244
Gray	(\$85,454,304)	(\$38,985,963)	(\$23,504,183)	(\$14,242,841)	-406
Grayson	(\$372,418,786)	(\$193,349,525)	(\$122,748,863)	(\$78,040,323)	-2,383
Gregg	(\$423,119,900)	(\$218,937,668)	(\$135,889,498)	(\$72,405,643)	-2,393
Grimes	(\$62,809,819)	(\$31,202,533)	(\$19,397,737)	(\$11,679,588)	-359
Guadalupe	(\$228,799,195)	(\$113,324,435)	(\$70,173,792)	(\$45,640,911)	-1,347
Hale	(\$59,391,012)	(\$32,122,413)	(\$20,059,189)	(\$14,889,516)	-408
Hall	(\$13,445,158)	(\$6,723,930)	(\$4,015,345)	(\$2,584,362)	-76
Hamilton	(\$34,251,714)	(\$16,881,675)	(\$10,499,166)	(\$7,325,085)	-208
Hansford	(\$7,084,035)	(\$3,027,348)	(\$1,623,798)	(\$754,631)	-24
Hardeman	(\$11,472,065)	(\$6,231,176)	(\$3,834,575)	(\$3,099,074)	-81
Hardin	(\$170,326,383)	(\$82,333,855)	(\$49,686,395)	(\$31,554,210)	-917
Harris	(\$10,013,388,243)	(\$4,475,274,952)	(\$2,705,402,660)	(\$977,742,590)	-40,915
Harrison	(\$237,633,297)	(\$108,646,335)	(\$66,592,782)	(\$32,568,383)	-1,099
Hartley	(\$4,158,626)	(\$2,047,223)	(\$1,219,739)	(\$772,619)	-24
Haskell	(\$26,010,719)	(\$13,062,306)	(\$8,093,695)	(\$4,649,602)	-146
Hays	(\$201,861,562)	(\$101,906,215)	(\$62,937,670)	(\$36,907,157)	-1,179
Hemphill	(\$5,017,061)	(\$2,238,254)	(\$1,246,705)	(\$668,544)	-20
Henderson	(\$363,585,941)	(\$173,280,344)	(\$104,682,193)	(\$61,136,282)	-1,946
Hidalgo	(\$910,951,291)	(\$486,000,228)	(\$304,819,827)	(\$176,647,230)	-5,804
Hill	(\$136,091,872)	(\$62,758,034)	(\$37,345,137)	(\$25,919,530)	-761
Hockley	(\$49,687,811)	(\$24,995,193)	(\$14,999,829)	(\$9,596,019)	-282
Hood	(\$188,856,693)	(\$88,738,001)	(\$54,607,132)	(\$33,526,348)	-1,023
Hopkins	(\$95,777,021)	(\$50,592,335)	(\$31,862,250)	(\$21,411,785)	-622
Houston	(\$113,351,823)	(\$55,382,674)	(\$35,434,861)	(\$15,688,188)	-573
Howard	(\$114,089,978)	(\$53,768,561)	(\$32,550,970)	(\$18,594,445)	-567
Hudspeth	(\$1,173,436)	(\$599,219)	(\$345,566)	(\$364,017)	-8
Hunt	(\$216,360,858)	(\$108,835,380)	(\$68,084,574)	(\$45,640,911)	-1,321
Hutchinson	(\$69,951,445)	(\$32,211,217)	(\$19,401,048)	(\$13,413,251)	-342
Irion	(\$1,700,159)	(\$693,805)	(\$385,740)	(\$220,331)	-6
Jack	(\$30,878,085)	(\$15,058,634)	(\$9,185,137)	(\$5,446,167)	-161
Jackson	(\$44,927,119)	(\$22,312,131)	(\$13,002,041)	(\$8,621,197)	-242

(continued)  
**The Total Annual Impact of Mortality Losses Associated with the Incidence  
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County Results**

<b>County</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Retail Sales (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Jasper	(\$118,301,244)	(\$59,600,236)	(\$37,103,230)	(\$24,794,706)	-730
Jeff Davis	(\$5,907,859)	(\$2,854,072)	(\$1,743,188)	(\$1,113,993)	-33
Jefferson	(\$875,476,880)	(\$434,143,540)	(\$282,518,338)	(\$154,671,977)	-4,970
Jim Hogg	(\$17,428,665)	(\$8,559,808)	(\$4,930,354)	(\$3,662,542)	-93
Jim Wells	(\$85,725,100)	(\$46,261,909)	(\$27,782,682)	(\$17,749,243)	-524
Johnson	(\$371,462,213)	(\$184,556,917)	(\$117,436,332)	(\$68,461,367)	-2,168
Jones	(\$63,019,230)	(\$31,068,988)	(\$18,732,757)	(\$10,357,325)	-337
Karnes	(\$55,669,503)	(\$24,926,994)	(\$14,744,029)	(\$8,452,021)	-253
Kaufman	(\$250,207,455)	(\$121,549,598)	(\$75,709,239)	(\$46,486,113)	-1,442
Kendall	(\$96,805,938)	(\$44,404,990)	(\$26,882,272)	(\$16,058,839)	-488
Kenedy	(\$1,448,087)	(\$714,984)	(\$410,104)	(\$314,086)	-9
Kent	(\$1,306,414)	(\$609,787)	(\$356,942)	(\$191,954)	-6
Kerr	(\$229,562,548)	(\$112,409,985)	(\$67,908,541)	(\$41,978,369)	-1,299
Kimble	(\$24,663,325)	(\$10,651,860)	(\$6,185,333)	(\$3,944,276)	-112
King	(\$1,305,746)	(\$694,937)	(\$431,924)	(\$172,370)	-7
Kinney	(\$12,452,309)	(\$5,642,792)	(\$3,098,805)	(\$2,017,362)	-58
Kleberg	(\$78,830,121)	(\$39,328,678)	(\$23,705,898)	(\$14,086,701)	-435
Knox	(\$14,911,864)	(\$7,695,116)	(\$4,580,354)	(\$2,288,870)	-77
La Salle	(\$9,790,016)	(\$5,135,151)	(\$3,025,705)	(\$2,253,872)	-61
Lamar	(\$162,164,301)	(\$80,158,521)	(\$50,293,796)	(\$33,154,528)	-991
Lamb	(\$28,805,712)	(\$13,235,824)	(\$8,069,756)	(\$5,017,329)	-144
Lampasas	(\$61,515,185)	(\$31,050,329)	(\$19,093,726)	(\$12,678,031)	-383
Lavaca	(\$75,085,353)	(\$40,810,471)	(\$25,521,337)	(\$15,367,262)	-481
Lee	(\$51,376,441)	(\$25,248,644)	(\$15,256,171)	(\$8,869,015)	-275
Leon	(\$44,698,876)	(\$23,672,867)	(\$14,051,463)	(\$10,115,083)	-274
Liberty	(\$256,979,167)	(\$129,833,716)	(\$80,467,493)	(\$44,182,031)	-1,426
Limestone	(\$73,684,862)	(\$37,143,169)	(\$23,292,013)	(\$14,931,903)	-432
Lipscomb	(\$6,641,349)	(\$3,084,076)	(\$1,682,821)	(\$846,406)	-28
Live Oak	(\$31,419,896)	(\$14,578,897)	(\$8,779,548)	(\$5,634,680)	-157
Llano	(\$111,819,852)	(\$53,626,399)	(\$32,113,081)	(\$20,566,583)	-626
Loving	(\$808,877)	(\$345,573)	(\$171,791)	(\$58,449)	-2
Lubbock	(\$670,821,593)	(\$349,053,202)	(\$217,173,190)	(\$116,356,150)	-3,957
Lynn	(\$10,004,933)	(\$4,825,414)	(\$2,876,862)	(\$1,173,844)	-48
Madison	(\$34,609,516)	(\$17,472,570)	(\$10,300,924)	(\$7,888,553)	-213
Marion	(\$48,380,142)	(\$24,435,022)	(\$14,945,388)	(\$9,860,691)	-295
Martin	(\$13,848,567)	(\$6,406,210)	(\$3,798,759)	(\$2,033,516)	-62
Mason	(\$18,359,718)	(\$8,811,539)	(\$5,054,044)	(\$3,099,074)	-94
Matagorda	(\$119,751,905)	(\$54,306,843)	(\$33,662,671)	(\$21,470,363)	-602
Maverick	(\$78,438,562)	(\$39,891,586)	(\$24,156,442)	(\$16,340,573)	-481
McCulloch	(\$31,061,784)	(\$16,070,869)	(\$10,172,999)	(\$6,198,148)	-188

**(continued)**  
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McLennan	(\$774,806,322)	(\$370,969,632)	(\$226,082,474)	(\$126,498,575)	-4,218
McMullen	(\$531,642)	(\$243,150)	(\$136,115)	(\$58,737)	-2
Medina	(\$99,628,987)	(\$47,210,368)	(\$28,078,356)	(\$18,030,977)	-544
Menard	(\$9,787,376)	(\$4,951,836)	(\$2,896,411)	(\$1,972,138)	-54
Midland	(\$285,669,900)	(\$140,583,104)	(\$83,643,763)	(\$44,484,889)	-1,424
Milam	(\$73,494,705)	(\$36,441,315)	(\$22,848,359)	(\$14,309,086)	-429
Mills	(\$14,330,879)	(\$8,781,121)	(\$5,715,321)	(\$3,828,392)	-113
Mitchell	(\$31,191,764)	(\$15,751,149)	(\$9,489,676)	(\$5,860,459)	-173
Montague	(\$90,653,574)	(\$43,034,010)	(\$25,072,300)	(\$15,777,105)	-474
Montgomery	(\$1,115,881,389)	(\$523,066,333)	(\$318,489,607)	(\$149,893,719)	-5,296
Moore	(\$38,716,671)	(\$16,602,308)	(\$9,815,221)	(\$5,485,746)	-164
Morris	(\$44,967,802)	(\$19,819,374)	(\$12,494,779)	(\$5,543,307)	-202
Motley	(\$5,956,742)	(\$2,735,835)	(\$1,537,469)	(\$976,288)	-28
Nacogdoches	(\$149,699,573)	(\$79,773,641)	(\$50,839,757)	(\$33,526,348)	-1,023
Navarro	(\$166,302,847)	(\$82,217,336)	(\$51,528,966)	(\$28,846,087)	-958
Newton	(\$29,312,081)	(\$18,199,873)	(\$12,346,684)	(\$8,274,559)	-233
Nolan	(\$63,484,164)	(\$32,654,559)	(\$19,608,216)	(\$11,572,540)	-356
Nueces	(\$1,077,859,105)	(\$495,698,432)	(\$302,896,789)	(\$154,108,509)	-5,140
Ochiltree	(\$15,304,320)	(\$7,073,678)	(\$4,113,569)	(\$2,221,810)	-69
Oldham	(\$601,714)	(\$338,898)	(\$214,633)	(\$196,108)	-5
Orange	(\$273,249,240)	(\$134,087,808)	(\$85,976,312)	(\$51,890,817)	-1,553
Palo Pinto	(\$123,155,745)	(\$56,688,853)	(\$33,792,290)	(\$20,003,115)	-614
Panola	(\$85,456,481)	(\$42,481,956)	(\$25,906,608)	(\$14,933,005)	-465
Parker	(\$304,866,964)	(\$141,967,081)	(\$85,766,180)	(\$49,866,921)	-1,564
Parmer	(\$6,762,188)	(\$3,075,558)	(\$1,861,450)	(\$638,337)	-31
Pecos	(\$36,308,969)	(\$17,610,924)	(\$10,389,872)	(\$7,043,350)	-198
Polk	(\$212,597,328)	(\$106,139,790)	(\$63,909,951)	(\$40,569,699)	-1,172
Potter	(\$397,029,595)	(\$202,816,453)	(\$123,054,022)	(\$65,925,761)	-2,189
Presidio	(\$10,329,262)	(\$4,900,744)	(\$2,957,279)	(\$1,972,138)	-56
Rains	(\$46,292,932)	(\$21,192,199)	(\$12,341,380)	(\$8,515,846)	-232
Randall	(\$280,309,543)	(\$143,754,463)	(\$87,821,182)	(\$49,354,678)	-1,595
Reagan	(\$6,660,727)	(\$3,323,458)	(\$1,906,673)	(\$1,330,985)	-34
Real	(\$17,801,340)	(\$7,934,326)	(\$4,612,893)	(\$2,817,340)	-82
Red River	(\$63,850,089)	(\$29,961,284)	(\$17,852,000)	(\$11,422,636)	-342
Reeves	(\$31,960,465)	(\$15,987,958)	(\$9,528,011)	(\$7,043,350)	-186
Refugio	(\$24,355,269)	(\$11,751,286)	(\$6,669,853)	(\$5,634,680)	-132
Roberts	(\$831,575)	(\$363,097)	(\$205,022)	(\$163,967)	-4
Robertson	(\$56,612,988)	(\$27,749,346)	(\$17,213,787)	(\$12,396,297)	-345
Rockwall	(\$125,658,426)	(\$63,386,405)	(\$39,633,577)	(\$23,102,190)	-738
Runnels	(\$49,593,148)	(\$21,994,616)	(\$12,845,901)	(\$7,519,304)	-225

**(continued)**  
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Rusk	(\$171,920,503)	(\$81,989,520)	(\$50,334,162)	(\$27,339,718)	-889
Sabine	(\$37,591,001)	(\$18,810,278)	(\$12,304,769)	(\$7,758,659)	-228
San Augustine	(\$40,628,640)	(\$18,927,056)	(\$11,067,724)	(\$6,863,128)	-206
San Jacinto	(\$81,784,698)	(\$39,698,920)	(\$24,290,745)	(\$15,495,371)	-464
San Patricio	(\$198,963,802)	(\$91,608,498)	(\$56,347,791)	(\$35,671,568)	-1,026
San Saba	(\$19,889,947)	(\$10,530,251)	(\$6,456,716)	(\$4,507,744)	-130
Schleicher	(\$4,522,068)	(\$2,218,708)	(\$1,340,794)	(\$532,993)	-22
Scurry	(\$41,814,276)	(\$22,359,186)	(\$13,085,150)	(\$9,142,559)	-250
Shackelford	(\$11,705,592)	(\$5,660,280)	(\$3,299,411)	(\$1,957,784)	-59
Shelby	(\$62,770,508)	(\$34,390,426)	(\$22,506,316)	(\$14,549,537)	-439
Sherman	(\$2,441,401)	(\$1,145,645)	(\$679,902)	(\$365,038)	-13
Smith	(\$657,186,540)	(\$318,296,366)	(\$187,553,281)	(\$102,900,436)	-3,328
Somervell	(\$13,368,766)	(\$6,044,149)	(\$3,905,768)	(\$1,503,272)	-67
Starr	(\$60,473,804)	(\$33,494,883)	(\$21,176,218)	(\$15,495,371)	-431
Stephens	(\$32,609,423)	(\$17,266,303)	(\$10,381,158)	(\$7,439,239)	-197
Sterling	(\$766,685)	(\$430,160)	(\$263,602)	(\$209,099)	-5
Stonewall	(\$5,481,413)	(\$3,005,557)	(\$1,822,200)	(\$1,292,296)	-35
Sutton	(\$12,225,873)	(\$6,202,861)	(\$3,683,009)	(\$2,535,606)	-69
Swisher	(\$13,015,294)	(\$5,977,559)	(\$3,582,986)	(\$2,102,340)	-67
Tarrant	(\$4,137,597,705)	(\$2,028,970,816)	(\$1,249,273,500)	(\$611,926,290)	-21,523
Taylor	(\$446,143,597)	(\$218,730,681)	(\$131,804,207)	(\$69,306,569)	-2,319
Terrell	(\$954,512)	(\$551,392)	(\$354,144)	(\$184,717)	-6
Terry	(\$27,217,562)	(\$13,663,774)	(\$7,711,614)	(\$5,680,788)	-146
Throckmorton	(\$4,275,742)	(\$2,161,200)	(\$1,216,048)	(\$756,263)	-22
Titus	(\$65,143,585)	(\$31,487,523)	(\$19,690,691)	(\$14,193,341)	-388
Tom Green	(\$342,208,832)	(\$164,270,820)	(\$96,161,140)	(\$55,783,336)	-1,790
Travis	(\$1,390,194,777)	(\$721,953,797)	(\$453,853,194)	(\$220,212,598)	-7,895
Trinity	(\$69,554,745)	(\$37,580,582)	(\$23,119,412)	(\$15,090,359)	-456
Tyler	(\$73,687,891)	(\$37,938,500)	(\$23,762,973)	(\$14,974,570)	-452
Upshur	(\$143,289,175)	(\$70,098,196)	(\$42,343,005)	(\$25,919,530)	-775
Upton	(\$7,036,603)	(\$3,401,229)	(\$1,942,076)	(\$1,092,434)	-34
Uvalde	(\$68,468,554)	(\$35,426,275)	(\$21,973,231)	(\$13,241,499)	-423
Val Verde	(\$86,670,975)	(\$48,380,025)	(\$31,108,901)	(\$18,594,445)	-595
Van Zandt	(\$154,285,402)	(\$85,978,024)	(\$53,133,347)	(\$34,935,018)	-1,046
Victoria	(\$281,541,405)	(\$135,159,233)	(\$82,959,799)	(\$44,232,241)	-1,407
Walker	(\$125,925,138)	(\$64,793,463)	(\$40,586,972)	(\$25,637,796)	-785
Waller	(\$100,814,487)	(\$44,036,784)	(\$25,412,375)	(\$16,904,041)	-479
Ward	(\$32,897,111)	(\$16,395,879)	(\$9,775,710)	(\$6,761,616)	-183
Washington	(\$105,686,579)	(\$54,688,122)	(\$33,960,802)	(\$19,847,748)	-631
Webb	(\$279,412,500)	(\$143,017,955)	(\$85,154,876)	(\$52,965,996)	-1,579

(continued)  
**The Total Annual Impact of Mortality Losses Associated with the Incidence  
of Cancer on Business Activity:  
County Results**

County	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
Wharton	(\$134,952,408)	(\$68,307,600)	(\$41,427,217)	(\$25,913,079)	-767
Wheeler	(\$16,076,486)	(\$8,639,468)	(\$5,233,972)	(\$3,657,353)	-100
Wichita	(\$435,226,625)	(\$229,896,297)	(\$140,109,670)	(\$80,294,196)	-2,540
Wilbarger	(\$53,549,044)	(\$25,727,467)	(\$16,197,423)	(\$10,142,425)	-301
Willacy	(\$27,326,094)	(\$15,269,541)	(\$9,340,690)	(\$6,432,366)	-182
Williamson	(\$340,715,643)	(\$181,688,544)	(\$116,885,113)	(\$64,679,286)	-2,146
Wilson	(\$97,710,652)	(\$48,269,621)	(\$29,303,992)	(\$18,876,179)	-577
Winkler	(\$21,152,273)	(\$10,506,520)	(\$6,287,394)	(\$4,012,486)	-113
Wise	(\$138,648,710)	(\$70,022,851)	(\$42,108,209)	(\$25,637,796)	-770
Wood	(\$191,541,291)	(\$92,419,160)	(\$55,878,659)	(\$32,855,227)	-1,032
Yoakum	(\$11,777,923)	(\$5,756,315)	(\$3,369,862)	(\$2,266,274)	-62
Young	(\$85,947,981)	(\$42,705,264)	(\$25,503,834)	(\$15,811,590)	-461
Zapata	(\$17,025,883)	(\$8,506,712)	(\$5,100,725)	(\$3,662,542)	-99
Zavala	(\$15,345,462)	(\$9,206,802)	(\$6,045,755)	(\$4,910,301)	-134
<b>TOTAL STATE IMPACT</b>	<b>(\$58,324,506,975)</b>	<b>(\$28,233,635,323)</b>	<b>(\$17,306,230,498)</b>	<b>(\$8,843,499,525)</b>	<b>-300,981</b>

NOTE: Allocations reflect best available evidence regarding mortality and industrial structure and composition of each area.  
SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Mortality Losses Associated with the Incidence  
of Cancer on Business Activity:  
Results by Texas House District**

House District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
1	(\$492,649,974)	(\$251,506,363)	(\$157,886,079)	(\$96,404,957)	-2,972
2	(\$416,939,192)	(\$216,005,602)	(\$133,559,302)	(\$89,091,776)	-2,599
3	(\$437,834,917)	(\$217,332,649)	(\$134,783,148)	(\$88,695,266)	-2,616
4	(\$613,793,396)	(\$294,829,942)	(\$180,391,433)	(\$107,622,395)	-3,388
5	(\$605,517,278)	(\$287,255,854)	(\$174,760,843)	(\$97,421,460)	-3,094
6	(\$538,892,963)	(\$261,003,020)	(\$153,793,690)	(\$84,378,358)	-2,729
7	(\$541,413,477)	(\$276,231,014)	(\$169,649,088)	(\$90,927,721)	-2,992
8	(\$534,820,785)	(\$272,244,548)	(\$167,923,416)	(\$99,751,728)	-3,104
9	(\$408,990,967)	(\$211,501,637)	(\$133,821,796)	(\$87,492,378)	-2,627
10	(\$454,275,542)	(\$210,840,550)	(\$128,881,835)	(\$80,776,625)	-2,418
11	(\$496,556,104)	(\$243,055,052)	(\$151,844,468)	(\$83,020,652)	-2,682
12	(\$461,728,843)	(\$234,923,167)	(\$146,519,912)	(\$91,482,945)	-2,796
13	(\$391,164,964)	(\$196,638,225)	(\$122,891,776)	(\$70,384,395)	-2,242
14	(\$267,799,401)	(\$134,150,271)	(\$82,078,777)	(\$44,542,148)	-1,499
15	(\$502,146,625)	(\$235,379,850)	(\$143,320,323)	(\$67,452,174)	-2,383
16	(\$513,305,439)	(\$240,610,513)	(\$146,505,219)	(\$68,951,111)	-2,436
17	(\$474,047,246)	(\$236,077,309)	(\$143,606,181)	(\$86,388,483)	-2,687
18	(\$570,005,820)	(\$283,049,476)	(\$173,041,509)	(\$98,242,164)	-3,075
19	(\$429,167,825)	(\$213,167,487)	(\$134,253,181)	(\$83,417,055)	-2,455
20	(\$226,816,744)	(\$118,201,160)	(\$75,446,660)	(\$43,414,764)	-1,394
21	(\$464,002,746)	(\$230,096,076)	(\$149,734,719)	(\$81,976,148)	-2,634
22	(\$455,194,012)	(\$225,501,513)	(\$146,539,829)	(\$80,998,360)	-2,585
23	(\$525,328,249)	(\$240,651,208)	(\$147,086,614)	(\$80,917,448)	-2,598
24	(\$530,376,504)	(\$246,451,071)	(\$151,380,623)	(\$85,348,504)	-2,713
25	(\$363,915,613)	(\$172,847,863)	(\$108,008,315)	(\$62,837,538)	-1,910
26	(\$337,384,633)	(\$155,158,169)	(\$93,743,625)	(\$46,512,528)	-1,549
27	(\$337,384,633)	(\$155,158,169)	(\$93,743,625)	(\$46,512,528)	-1,549
28	(\$394,046,105)	(\$185,134,636)	(\$110,818,082)	(\$64,637,812)	-1,973
29	(\$394,284,735)	(\$184,700,844)	(\$115,142,628)	(\$68,874,120)	-2,042
30	(\$509,728,754)	(\$251,758,744)	(\$154,220,137)	(\$89,632,486)	-2,753
31	(\$193,084,129)	(\$99,730,849)	(\$60,453,778)	(\$39,832,007)	-1,158
32	(\$483,212,371)	(\$219,397,460)	(\$133,131,140)	(\$77,800,946)	-2,347
33	(\$479,647,302)	(\$220,585,802)	(\$134,789,071)	(\$68,578,286)	-2,287
34	(\$479,647,302)	(\$220,585,802)	(\$134,789,071)	(\$68,578,286)	-2,287
35	(\$380,150,638)	(\$187,663,136)	(\$112,997,422)	(\$68,520,104)	-2,043
36	(\$227,737,823)	(\$121,500,057)	(\$76,204,957)	(\$44,161,808)	-1,451
37	(\$257,606,205)	(\$130,356,264)	(\$80,633,609)	(\$47,444,009)	-1,550
38	(\$257,606,205)	(\$130,356,264)	(\$80,633,609)	(\$47,444,009)	-1,550
39	(\$227,737,823)	(\$121,500,057)	(\$76,204,957)	(\$44,161,808)	-1,451
40	(\$227,737,823)	(\$121,500,057)	(\$76,204,957)	(\$44,161,808)	-1,451

(continued)  
**The Total Annual Impact of Mortality Losses Associated with the Incidence  
of Cancer on Business Activity:  
Results by Texas House District**

House District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
41	(\$227,737,823)	(\$121,500,057)	(\$76,204,957)	(\$44,161,808)	-1,451
42	(\$195,588,750)	(\$100,112,569)	(\$59,608,413)	(\$37,076,197)	-1,106
43	(\$266,618,877)	(\$135,798,181)	(\$82,907,225)	(\$51,035,039)	-1,574
44	(\$367,217,100)	(\$182,163,530)	(\$112,270,182)	(\$72,587,528)	-2,168
45	(\$340,082,500)	(\$169,191,887)	(\$103,914,743)	(\$61,211,501)	-1,937
46	(\$236,333,112)	(\$122,732,146)	(\$77,155,043)	(\$37,436,142)	-1,342
47	(\$236,333,112)	(\$122,732,146)	(\$77,155,043)	(\$37,436,142)	-1,342
48	(\$222,431,164)	(\$115,512,608)	(\$72,616,511)	(\$35,234,016)	-1,263
49	(\$236,333,112)	(\$122,732,146)	(\$77,155,043)	(\$37,436,142)	-1,342
50	(\$222,431,164)	(\$115,512,608)	(\$72,616,511)	(\$35,234,016)	-1,263
51	(\$236,333,112)	(\$122,732,146)	(\$77,155,043)	(\$37,436,142)	-1,342
52	(\$187,393,604)	(\$99,928,699)	(\$64,286,812)	(\$35,573,607)	-1,180
53	(\$646,612,832)	(\$312,780,613)	(\$187,363,968)	(\$116,805,043)	-3,532
54	(\$433,446,514)	(\$220,805,654)	(\$137,535,292)	(\$81,793,020)	-2,597
55	(\$335,014,750)	(\$179,585,592)	(\$114,545,139)	(\$66,680,808)	-2,165
56	(\$495,876,046)	(\$237,420,564)	(\$144,692,783)	(\$80,959,088)	-2,700
57	(\$475,368,790)	(\$234,370,647)	(\$143,046,727)	(\$87,909,793)	-2,733
58	(\$435,347,852)	(\$216,151,545)	(\$137,099,047)	(\$79,417,034)	-2,532
59	(\$317,572,066)	(\$163,275,151)	(\$102,312,097)	(\$65,381,059)	-1,992
60	(\$554,292,586)	(\$270,904,537)	(\$165,408,031)	(\$106,313,525)	-3,143
61	(\$443,515,674)	(\$211,989,931)	(\$127,874,389)	(\$75,504,717)	-2,333
62	(\$488,371,571)	(\$251,339,748)	(\$159,498,773)	(\$100,576,058)	-3,085
63	(\$296,423,272)	(\$141,811,642)	(\$87,594,561)	(\$44,440,724)	-1,519
64	(\$305,405,795)	(\$146,108,964)	(\$90,248,942)	(\$45,787,413)	-1,565
65	(\$296,423,272)	(\$141,811,642)	(\$87,594,561)	(\$44,440,724)	-1,519
66	(\$247,449,193)	(\$126,359,746)	(\$78,949,332)	(\$41,877,785)	-1,400
67	(\$247,449,193)	(\$126,359,746)	(\$78,949,332)	(\$41,877,785)	-1,400
68	(\$533,795,046)	(\$263,676,115)	(\$161,024,827)	(\$94,686,733)	-2,892
69	(\$455,233,038)	(\$239,943,412)	(\$145,894,224)	(\$83,974,824)	-2,649
70	(\$247,449,193)	(\$126,359,746)	(\$78,949,332)	(\$41,877,785)	-1,400
71	(\$509,627,761)	(\$251,385,240)	(\$151,412,423)	(\$80,879,109)	-2,675
72	(\$437,289,728)	(\$212,742,494)	(\$125,000,328)	(\$74,439,922)	-2,321
73	(\$545,256,882)	(\$259,536,086)	(\$157,198,372)	(\$96,916,503)	-3,005
74	(\$307,210,102)	(\$160,101,372)	(\$98,829,150)	(\$63,122,518)	-1,892
75	(\$358,518,816)	(\$172,226,264)	(\$104,825,459)	(\$54,261,972)	-1,879
76	(\$358,518,816)	(\$172,226,264)	(\$104,825,459)	(\$54,261,972)	-1,879
77	(\$358,518,816)	(\$172,226,264)	(\$104,825,459)	(\$54,261,972)	-1,879
78	(\$358,518,816)	(\$172,226,264)	(\$104,825,459)	(\$54,261,972)	-1,879
79	(\$358,518,816)	(\$172,226,264)	(\$104,825,459)	(\$54,261,972)	-1,879
80	(\$270,336,243)	(\$133,402,559)	(\$79,919,824)	(\$53,510,883)	-1,567

(continued)  
**The Total Annual Impact of Mortality Losses Associated with the Incidence  
of Cancer on Business Activity:  
Results by Texas House District**

House District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
81	(\$448,769,115)	(\$219,138,281)	(\$134,330,794)	(\$73,036,847)	-2,294
82	(\$353,180,502)	(\$173,778,918)	(\$102,994,336)	(\$56,037,090)	-1,769
83	(\$367,582,922)	(\$188,325,884)	(\$115,406,785)	(\$64,306,093)	-2,107
84	(\$402,492,956)	(\$209,431,921)	(\$130,303,914)	(\$69,813,690)	-2,374
85	(\$351,602,407)	(\$174,108,372)	(\$104,948,536)	(\$64,412,970)	-1,924
86	(\$319,073,982)	(\$163,203,721)	(\$99,630,805)	(\$55,740,796)	-1,814
87	(\$445,408,973)	(\$223,457,867)	(\$135,011,012)	(\$72,382,015)	-2,389
88	(\$347,399,366)	(\$165,199,322)	(\$99,554,142)	(\$63,028,225)	-1,792
89	(\$299,789,340)	(\$152,306,226)	(\$95,190,514)	(\$52,571,742)	-1,723
90	(\$413,759,771)	(\$202,897,082)	(\$124,927,350)	(\$61,192,629)	-2,152
91	(\$413,759,771)	(\$202,897,082)	(\$124,927,350)	(\$61,192,629)	-2,152
92	(\$413,759,771)	(\$202,897,082)	(\$124,927,350)	(\$61,192,629)	-2,152
93	(\$413,759,771)	(\$202,897,082)	(\$124,927,350)	(\$61,192,629)	-2,152
94	(\$413,759,771)	(\$202,897,082)	(\$124,927,350)	(\$61,192,629)	-2,152
95	(\$413,759,771)	(\$202,897,082)	(\$124,927,350)	(\$61,192,629)	-2,152
96	(\$413,759,771)	(\$202,897,082)	(\$124,927,350)	(\$61,192,629)	-2,152
97	(\$413,759,771)	(\$202,897,082)	(\$124,927,350)	(\$61,192,629)	-2,152
98	(\$413,759,771)	(\$202,897,082)	(\$124,927,350)	(\$61,192,629)	-2,152
99	(\$413,759,771)	(\$202,897,082)	(\$124,927,350)	(\$61,192,629)	-2,152
100	(\$364,509,545)	(\$174,308,505)	(\$105,054,309)	(\$41,857,713)	-1,682
101	(\$364,509,545)	(\$174,308,505)	(\$105,054,309)	(\$41,857,713)	-1,682
102	(\$364,509,545)	(\$174,308,505)	(\$105,054,309)	(\$41,857,713)	-1,682
103	(\$364,509,545)	(\$174,308,505)	(\$105,054,309)	(\$41,857,713)	-1,682
104	(\$364,509,545)	(\$174,308,505)	(\$105,054,309)	(\$41,857,713)	-1,682
105	(\$364,509,545)	(\$174,308,505)	(\$105,054,309)	(\$41,857,713)	-1,682
106	(\$364,509,545)	(\$174,308,505)	(\$105,054,309)	(\$41,857,713)	-1,682
107	(\$364,509,545)	(\$174,308,505)	(\$105,054,309)	(\$41,857,713)	-1,682
108	(\$364,509,545)	(\$174,308,505)	(\$105,054,309)	(\$41,857,713)	-1,682
109	(\$364,509,545)	(\$174,308,505)	(\$105,054,309)	(\$41,857,713)	-1,682
110	(\$364,509,545)	(\$174,308,505)	(\$105,054,309)	(\$41,857,713)	-1,682
111	(\$364,509,545)	(\$174,308,505)	(\$105,054,309)	(\$41,857,713)	-1,682
112	(\$364,509,545)	(\$174,308,505)	(\$105,054,309)	(\$41,857,713)	-1,682
113	(\$364,509,545)	(\$174,308,505)	(\$105,054,309)	(\$41,857,713)	-1,682
114	(\$364,509,545)	(\$174,308,505)	(\$105,054,309)	(\$41,857,713)	-1,682
115	(\$364,509,545)	(\$174,308,505)	(\$105,054,309)	(\$41,857,713)	-1,682
116	(\$401,019,273)	(\$199,686,244)	(\$124,378,088)	(\$63,164,767)	-2,206
117	(\$401,019,273)	(\$199,686,244)	(\$124,378,088)	(\$63,164,767)	-2,206
118	(\$401,019,273)	(\$199,686,244)	(\$124,378,088)	(\$63,164,767)	-2,206
119	(\$401,019,273)	(\$199,686,244)	(\$124,378,088)	(\$63,164,767)	-2,206
120	(\$401,019,273)	(\$199,686,244)	(\$124,378,088)	(\$63,164,767)	-2,206

(continued)  
**The Total Annual Impact of Mortality Losses Associated with the Incidence  
of Cancer on Business Activity:  
Results by Texas House District**

House District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
121	(\$401,019,273)	(\$199,686,244)	(\$124,378,088)	(\$63,164,767)	-2,206
122	(\$401,019,273)	(\$199,686,244)	(\$124,378,088)	(\$63,164,767)	-2,206
123	(\$401,019,273)	(\$199,686,244)	(\$124,378,088)	(\$63,164,767)	-2,206
124	(\$401,019,273)	(\$199,686,244)	(\$124,378,088)	(\$63,164,767)	-2,206
125	(\$401,019,273)	(\$199,686,244)	(\$124,378,088)	(\$63,164,767)	-2,206
126	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
127	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
128	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
129	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
130	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
131	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
132	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
133	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
134	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
135	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
136	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
137	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
138	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
139	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
140	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
141	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
142	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
143	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
144	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
145	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
146	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
147	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
148	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
149	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
150	(\$400,535,530)	(\$179,010,998)	(\$108,216,106)	(\$39,109,704)	-1,637
<b>TOTAL</b>	<b>(\$58,324,506,975)</b>	<b>(\$28,233,635,323)</b>	<b>(\$17,306,230,498)</b>	<b>(\$8,843,499,525)</b>	<b>-300,981</b>

NOTE: Allocations reflect best available evidence regarding mortality and industrial structure and composition of each area. In cases in which a county was part of more than one district, allocations are based on the percentage of the population residing in a district. This convention is adopted because of a lack of subcounty data sufficient for allocation purposes. In some instances, this approach will result in districts which reflect the same proportion of a large urban county reporting identical results.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Mortality Losses Associated with the Incidence  
of Cancer on Business Activity:  
Results by Texas Senate District**

Senate District	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
1	(\$2,500,199,435)	(\$1,232,234,930)	(\$755,341,855)	(\$435,599,763)	-13,722
2	(\$2,042,059,278)	(\$1,007,135,824)	(\$616,732,308)	(\$328,167,471)	-10,968
3	(\$2,533,235,271)	(\$1,257,111,286)	(\$774,503,059)	(\$456,890,775)	-14,245
4	(\$2,203,166,872)	(\$1,056,098,851)	(\$661,631,935)	(\$336,656,197)	-11,286
5	(\$1,461,573,258)	(\$745,473,252)	(\$464,102,861)	(\$273,972,530)	-8,598
6	(\$1,902,543,766)	(\$850,302,241)	(\$514,026,505)	(\$185,771,092)	-7,774
7	(\$2,002,677,649)	(\$895,054,990)	(\$541,080,532)	(\$195,548,518)	-8,183
8	(\$1,468,033,852)	(\$727,886,829)	(\$447,692,219)	(\$211,957,723)	-7,605
9	(\$1,748,426,414)	(\$843,241,726)	(\$515,071,559)	(\$235,372,850)	-8,632
10	(\$2,027,422,876)	(\$994,195,700)	(\$612,144,015)	(\$299,843,882)	-10,546
11	(\$2,157,432,819)	(\$990,846,618)	(\$606,832,812)	(\$295,100,955)	-10,165
12	(\$1,800,386,853)	(\$879,638,876)	(\$541,862,614)	(\$266,813,386)	-9,344
13	(\$1,885,546,666)	(\$845,080,192)	(\$510,840,915)	(\$191,482,305)	-7,797
14	(\$1,195,567,508)	(\$620,880,266)	(\$390,313,747)	(\$189,382,835)	-6,790
15	(\$2,002,677,649)	(\$895,054,990)	(\$541,080,532)	(\$195,548,518)	-8,183
16	(\$1,749,645,814)	(\$836,680,824)	(\$504,260,682)	(\$200,917,025)	-8,071
17	(\$2,067,263,000)	(\$946,365,246)	(\$579,431,389)	(\$255,438,092)	-9,323
18	(\$2,105,271,693)	(\$1,012,360,269)	(\$616,508,419)	(\$356,441,874)	-11,037
19	(\$1,698,151,806)	(\$845,555,631)	(\$520,734,899)	(\$291,401,064)	-9,520
20	(\$1,677,390,224)	(\$816,007,504)	(\$502,533,751)	(\$271,831,069)	-8,936
21	(\$1,413,414,538)	(\$697,362,011)	(\$424,581,482)	(\$254,224,935)	-7,796
22	(\$2,212,571,579)	(\$1,066,687,437)	(\$659,105,798)	(\$386,203,972)	-12,321
23	(\$1,807,967,341)	(\$864,570,185)	(\$521,069,371)	(\$207,614,259)	-8,340
24	(\$2,272,710,407)	(\$1,147,684,115)	(\$706,725,856)	(\$424,854,285)	-13,302
25	(\$1,840,865,768)	(\$912,780,130)	(\$564,894,020)	(\$311,667,869)	-10,312
26	(\$1,844,688,655)	(\$918,556,725)	(\$572,139,207)	(\$290,557,929)	-10,149
27	(\$1,161,547,896)	(\$599,903,965)	(\$372,209,637)	(\$218,934,428)	-7,113
28	(\$1,872,248,148)	(\$940,227,883)	(\$569,943,459)	(\$332,005,960)	-10,465
29	(\$1,685,038,436)	(\$809,463,439)	(\$492,679,657)	(\$255,031,269)	-8,830
30	(\$2,203,764,406)	(\$1,100,196,566)	(\$674,568,633)	(\$395,573,841)	-12,328
31	(\$1,781,017,097)	(\$878,996,821)	(\$531,586,772)	(\$292,692,859)	-9,298
<b>TOTAL</b>	<b>(\$58,324,506,975)</b>	<b>(\$28,233,635,323)</b>	<b>(\$17,306,230,498)</b>	<b>(\$8,843,499,525)</b>	<b>-300,981</b>

NOTE: Allocations reflect best available evidence regarding mortality and industrial structure and composition of each area. In cases in which a county was part of more than one district, allocations are based on the percentage of the population residing in a district. This convention is adopted because of a lack of subcounty data sufficient for allocation purposes. In some instances, this approach will result in districts which reflect the same proportion of a large urban county reporting identical results.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Total Annual Impact of Mortality Losses Associated with the Incidence  
of Cancer on Business Activity:  
Results by US Congressional District in Texas**

US Congressional District in Texas	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Retail Sales (2010 Dollars)	Employment (Permanent Jobs)
1	(\$2,303,994,225)	(\$1,141,275,718)	(\$698,616,252)	(\$396,618,711)	-12,623
2	(\$2,061,840,704)	(\$975,151,311)	(\$610,995,199)	(\$284,257,298)	-10,089
3	(\$1,423,876,336)	(\$704,391,585)	(\$432,704,169)	(\$202,898,108)	-7,325
4	(\$1,974,685,581)	(\$998,745,598)	(\$625,647,395)	(\$389,653,480)	-11,888
5	(\$2,126,374,486)	(\$1,046,140,329)	(\$638,423,378)	(\$336,684,166)	-11,329
6	(\$1,958,380,546)	(\$955,572,800)	(\$589,530,986)	(\$311,226,243)	-10,374
7	(\$1,902,543,766)	(\$850,302,241)	(\$514,026,505)	(\$185,771,092)	-7,774
8	(\$2,316,143,500)	(\$1,125,512,180)	(\$693,017,803)	(\$384,812,438)	-12,285
9	(\$1,893,877,151)	(\$848,911,258)	(\$513,155,572)	(\$192,630,762)	-7,835
10	(\$1,641,435,965)	(\$785,555,155)	(\$482,229,111)	(\$223,497,984)	-8,052
11	(\$2,169,309,063)	(\$1,067,906,901)	(\$643,763,345)	(\$380,685,982)	-11,730
12	(\$1,912,362,860)	(\$932,274,571)	(\$571,366,481)	(\$292,738,550)	-9,974
13	(\$2,036,223,119)	(\$1,021,262,850)	(\$619,230,269)	(\$356,510,222)	-11,163
14	(\$2,141,784,338)	(\$1,002,688,064)	(\$614,746,887)	(\$350,357,821)	-10,849
15	(\$1,277,195,476)	(\$656,258,190)	(\$405,443,332)	(\$243,693,100)	-7,657
16	(\$1,720,890,317)	(\$826,686,065)	(\$503,162,203)	(\$260,457,466)	-9,018
17	(\$2,019,776,193)	(\$980,509,662)	(\$603,687,210)	(\$352,364,294)	-11,296
18	(\$1,902,543,766)	(\$850,302,241)	(\$514,026,505)	(\$185,771,092)	-7,774
19	(\$1,838,512,347)	(\$921,864,053)	(\$560,869,511)	(\$319,367,051)	-10,187
20	(\$1,884,790,583)	(\$938,525,349)	(\$584,577,016)	(\$296,874,406)	-10,369
21	(\$1,943,766,194)	(\$957,874,721)	(\$590,245,837)	(\$321,128,397)	-10,729
22	(\$1,841,878,031)	(\$838,770,842)	(\$509,439,910)	(\$227,991,807)	-8,215
23	(\$1,669,171,240)	(\$836,712,464)	(\$517,670,669)	(\$286,664,915)	-9,463
24	(\$1,711,043,124)	(\$825,821,774)	(\$503,226,501)	(\$224,567,982)	-8,369
25	(\$1,400,877,902)	(\$716,334,245)	(\$444,945,118)	(\$240,347,417)	-8,040
26	(\$1,705,844,096)	(\$827,686,662)	(\$510,275,903)	(\$253,386,359)	-8,790
27	(\$1,775,444,254)	(\$844,387,567)	(\$517,643,898)	(\$283,045,871)	-9,218
28	(\$1,206,949,538)	(\$614,044,096)	(\$375,902,693)	(\$231,552,446)	-7,083
29	(\$1,902,543,766)	(\$850,302,241)	(\$514,026,505)	(\$185,771,092)	-7,774
30	(\$1,691,324,287)	(\$808,791,463)	(\$487,451,993)	(\$194,219,790)	-7,802
31	(\$1,277,799,932)	(\$674,281,665)	(\$428,730,348)	(\$253,733,392)	-8,106
32	(\$1,691,324,287)	(\$808,791,463)	(\$487,451,993)	(\$194,219,790)	-7,802
<b>TOTAL</b>	<b>(\$58,324,506,975)</b>	<b>(\$28,233,635,323)</b>	<b>(\$17,306,230,498)</b>	<b>(\$8,843,499,525)</b>	<b>-300,981</b>

NOTE: Allocations reflect best available evidence regarding mortality and industrial structure and composition of each area. In cases in which a county was part of more than one district, allocations are based on the percentage of the population residing in a district. This convention is adopted because of a lack of subcounty data sufficient for allocation purposes. In some instances, this approach will result in districts which reflect the same proportion of a large urban county reporting identical results.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

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# The Economic Impact of the Cancer Prevention and Research Institute of Texas (CPRIT) and Its Programs



**The Annual Impact of All Direct Outlays for Operations and Programs  
Associated with the Cancer Prevention and Research Institute of Texas (CPRIT)  
on Business Activity in Texas  
(Based on Actual Operations and Awards in Fiscal Year 2010)  
Detailed Industrial Category**

<b>Category</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Agricultural Products & Services	\$13,893,672	\$3,954,357	\$2,693,137	46
Forestry & Fishery Products	\$292,583	\$259,572	\$96,267	1
Coal Mining	\$1,393,808	\$394,236	\$415,430	3
Crude Petroleum & Natural Gas	\$10,491,612	\$2,310,595	\$1,065,646	6
Miscellaneous Mining	\$304,476	\$120,729	\$70,972	1
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$21,748,984	\$11,668,680	\$9,615,721	146
Food Products & Tobacco	\$28,541,436	\$7,394,671	\$3,777,550	68
Textile Mill Products	\$423,906	\$88,381	\$74,776	2
Apparel	\$6,681,740	\$3,692,451	\$1,871,025	55
Paper & Allied Products	\$4,935,358	\$2,181,945	\$986,441	16
Printing & Publishing	\$9,235,937	\$4,345,862	\$2,836,642	52
Chemicals & Petroleum Refining	\$27,878,799	\$4,288,213	\$2,013,566	16
Rubber & Leather Products	\$4,042,213	\$1,752,763	\$1,024,657	22
Lumber Products & Furniture	\$1,735,784	\$608,282	\$433,673	10
Stone, Clay, & Glass Products	\$2,368,441	\$1,338,992	\$700,297	12
Primary Metal	\$1,612,935	\$432,081	\$321,619	5
Fabricated Metal Products	\$4,054,452	\$1,457,705	\$941,098	17
Machinery, Except Electrical	\$2,413,418	\$954,106	\$681,618	8
Electric & Electronic Equipment	\$2,958,261	\$1,535,672	\$918,079	8
Motor Vehicles & Equipment	\$2,254,636	\$476,726	\$309,710	5
Transp. Equip., Exc. Motor Vehicles	\$1,089,851	\$449,879	\$293,976	4
Instruments & Related Products	\$908,446	\$364,654	\$277,169	4
Miscellaneous Manufacturing	\$1,857,389	\$723,772	\$499,195	9
Transportation	\$26,209,411	\$17,301,087	\$11,442,320	171
Communication	\$18,183,167	\$11,212,199	\$4,786,846	46
Electric, Gas, Water, Sanitary Services	\$40,406,021	\$9,150,572	\$3,993,063	18
Wholesale Trade	\$25,902,080	\$17,529,472	\$10,107,650	122
Retail Trade	\$78,001,551	\$64,646,810	\$38,656,726	1,131
Finance	\$11,365,065	\$6,152,964	\$3,582,887	34
Insurance	\$15,098,593	\$9,057,668	\$5,415,031	70
Real Estate	\$110,067,717	\$22,101,342	\$3,561,006	34
Hotels, Lodging Places, Amusements	\$7,887,729	\$4,095,717	\$2,686,930	72
Personal Services	\$16,388,972	\$10,017,081	\$7,793,452	147
Business Services	\$35,839,190	\$21,885,786	\$17,853,192	234
Eating & Drinking Places	\$37,216,434	\$21,799,739	\$11,598,626	582
Health Services	\$49,571,387	\$35,200,344	\$29,762,217	530
Miscellaneous Services	\$241,391,282	\$150,317,701	\$130,312,924	3,269
Households	\$1,255,680	\$1,255,680	\$1,229,112	91
<b>Total</b>	<b>\$865,902,418</b>	<b>\$452,518,485</b>	<b>\$314,700,245</b>	<b>7,066</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Cumulative Ten-Year Impact of All Direct Outlays for Operations and Programs Associated with the Cancer Prevention and Research Institute of Texas (CPRIT) on Business Activity in Texas (Based Upon Attaining Planned Levels of Funding for all Grant and Research Programs by Year 3)  
Detailed Industrial Category**

<b>Category</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Agricultural Products & Services	\$164,973,264	\$46,940,175	\$31,968,866	554
Forestry & Fishery Products	\$3,473,138	\$3,078,130	\$1,141,592	16
Coal Mining	\$16,525,316	\$4,674,673	\$4,925,989	36
Crude Petroleum & Natural Gas	\$124,525,934	\$27,424,751	\$12,648,281	67
Miscellaneous Mining	\$3,618,265	\$1,435,655	\$843,961	10
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$257,907,625	\$138,376,052	\$114,030,506	1,736
Food Products & Tobacco	\$338,864,822	\$87,794,464	\$44,849,592	814
Textile Mill Products	\$5,039,376	\$1,050,718	\$888,976	21
Apparel	\$79,424,081	\$43,891,131	\$22,240,341	653
Paper & Allied Products	\$58,610,320	\$25,910,693	\$11,714,029	193
Printing & Publishing	\$109,519,088	\$51,528,824	\$33,634,026	614
Chemicals & Petroleum Refining	\$331,327,652	\$51,026,386	\$23,959,854	191
Rubber & Leather Products	\$48,090,541	\$20,854,340	\$12,191,352	262
Lumber Products & Furniture	\$20,615,002	\$7,223,376	\$5,149,883	116
Stone, Clay, & Glass Products	\$28,097,284	\$15,885,505	\$8,308,173	146
Primary Metal	\$19,143,137	\$5,127,831	\$3,816,895	63
Fabricated Metal Products	\$48,119,377	\$17,297,996	\$11,167,625	206
Machinery, Except Electrical	\$28,615,680	\$11,312,141	\$8,081,448	93
Electric & Electronic Equipment	\$35,040,712	\$18,184,674	\$10,871,436	96
Motor Vehicles & Equipment	\$26,788,477	\$5,662,018	\$3,678,397	57
Transp. Equip., Exc. Motor Vehicles	\$12,944,441	\$5,344,973	\$3,492,710	44
Instruments & Related Products	\$10,927,769	\$4,384,846	\$3,332,875	45
Miscellaneous Manufacturing	\$22,055,852	\$8,594,450	\$5,927,697	101
Transportation	\$310,882,057	\$205,235,231	\$135,735,248	2,029
Communication	\$215,597,022	\$132,942,075	\$56,757,222	549
Electric, Gas, Water, Sanitary Services	\$478,883,405	\$108,447,748	\$47,323,676	220
Wholesale Trade	\$307,678,664	\$208,224,028	\$120,063,833	1,453
Retail Trade	\$924,081,966	\$765,870,218	\$457,965,913	13,479
Finance	\$134,918,611	\$73,044,099	\$42,533,778	408
Insurance	\$179,494,895	\$107,678,736	\$64,374,595	837
Real Estate	\$1,305,454,873	\$262,409,425	\$42,279,856	401
Hotels, Lodging Places, Amusements	\$93,486,306	\$48,541,633	\$31,844,969	857
Personal Services	\$194,047,692	\$118,597,181	\$92,270,532	1,752
Business Services	\$417,156,432	\$255,045,865	\$208,052,061	2,735
Eating & Drinking Places	\$440,866,414	\$258,240,536	\$137,397,756	6,930
Health Services	\$612,313,110	\$435,098,131	\$367,879,499	6,554
Miscellaneous Services	\$2,858,338,089	\$1,779,857,813	\$1,542,988,448	38,714
Households	\$14,925,497	\$14,925,497	\$14,609,697	1,086
<b>Total</b>	<b>\$10,282,372,185</b>	<b>\$5,377,162,016</b>	<b>\$3,740,941,587</b>	<b>84,137</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

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## CPRIT Operations



**The Annual Impact of Operations Associated with the Cancer Prevention and  
Research Institute of Texas (CPRIT) on Business Activity in Texas  
(Based on Actual Levels in Fiscal Year 2010)  
Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$221,208	\$58,442	\$39,802	1
Forestry & Fishery Products	\$4,377	\$4,237	\$1,568	0
Coal Mining	\$19,976	\$5,862	\$6,175	0
Crude Petroleum & Natural Gas	\$141,464	\$31,030	\$14,313	0
Miscellaneous Mining	\$5,274	\$2,068	\$1,217	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$227,960	\$120,558	\$99,349	1
Food Products & Tobacco	\$542,431	\$138,946	\$70,979	1
Textile Mill Products	\$6,236	\$1,458	\$1,231	0
Apparel	\$104,958	\$57,871	\$29,327	1
Paper & Allied Products	\$74,003	\$32,560	\$14,720	0
Printing & Publishing	\$146,984	\$71,679	\$46,787	1
Chemicals & Petroleum Refining	\$443,739	\$73,884	\$34,693	0
Rubber & Leather Products	\$68,382	\$29,290	\$17,122	0
Lumber Products & Furniture	\$23,974	\$8,548	\$6,096	0
Stone, Clay, & Glass Products	\$30,724	\$17,893	\$9,356	0
Primary Metal	\$24,045	\$6,749	\$5,023	0
Fabricated Metal Products	\$54,738	\$19,795	\$12,782	0
Machinery, Except Electrical	\$39,359	\$16,439	\$11,745	0
Electric & Electronic Equipment	\$99,284	\$55,423	\$33,136	0
Motor Vehicles & Equipment	\$35,804	\$7,652	\$4,969	0
Transp. Equip., Exc. Motor Vehicles	\$17,224	\$7,125	\$4,652	0
Instruments & Related Products	\$13,667	\$5,506	\$4,185	0
Miscellaneous Manufacturing	\$32,435	\$12,357	\$8,523	0
Transportation	\$446,442	\$289,061	\$191,174	3
Communication	\$350,502	\$216,508	\$92,433	1
Electric, Gas, Water, Sanitary Services	\$639,198	\$150,962	\$65,873	0
Wholesale Trade	\$426,805	\$288,938	\$166,605	2
Retail Trade	\$1,214,901	\$1,006,734	\$601,996	17
Finance	\$224,414	\$120,103	\$69,934	1
Insurance	\$245,164	\$146,651	\$87,674	1
Real Estate	\$1,410,860	\$216,897	\$34,948	0
Hotels, Lodging Places, Amusements	\$140,382	\$73,213	\$48,028	1
Personal Services	\$265,371	\$162,292	\$126,267	2
Business Services	\$5,027,012	\$2,915,901	\$2,378,626	30
Eating & Drinking Places	\$671,111	\$393,097	\$209,149	10
Health Services	\$429,128	\$300,177	\$253,803	4
Miscellaneous Services	\$422,171	\$173,450	\$150,367	4
Households	\$20,350	\$20,350	\$19,922	1
<b>Total</b>	<b>\$14,312,057</b>	<b>\$7,259,707</b>	<b>\$4,974,550</b>	<b>81</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Cumulative Ten-Year Impact of Operations Associated with the Cancer  
Prevention and Research Institute of Texas (CPRIT) on Business Activity  
in Texas (Based on Anticipated Levels Over the Funding Period)  
Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$2,212,076	\$584,423	\$398,021	5
Forestry & Fishery Products	\$43,773	\$42,369	\$15,679	0
Coal Mining	\$199,764	\$58,618	\$61,746	0
Crude Petroleum & Natural Gas	\$1,414,642	\$310,304	\$143,133	0
Miscellaneous Mining	\$52,737	\$20,681	\$12,174	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$2,279,604	\$1,205,577	\$993,492	13
Food Products & Tobacco	\$5,424,313	\$1,389,461	\$709,790	11
Textile Mill Products	\$62,360	\$14,579	\$12,313	0
Apparel	\$1,049,578	\$578,708	\$293,273	7
Paper & Allied Products	\$740,026	\$325,603	\$147,198	2
Printing & Publishing	\$1,469,840	\$716,789	\$467,870	7
Chemicals & Petroleum Refining	\$4,437,388	\$738,836	\$346,931	2
Rubber & Leather Products	\$683,815	\$292,900	\$171,224	3
Lumber Products & Furniture	\$239,735	\$85,481	\$60,960	1
Stone, Clay, & Glass Products	\$307,238	\$178,925	\$93,563	1
Primary Metal	\$240,451	\$67,490	\$50,230	1
Fabricated Metal Products	\$547,379	\$197,953	\$127,815	1
Machinery, Except Electrical	\$393,592	\$164,388	\$117,446	1
Electric & Electronic Equipment	\$992,838	\$554,232	\$331,364	2
Motor Vehicles & Equipment	\$358,040	\$76,524	\$49,691	1
Transp. Equip., Exc. Motor Vehicles	\$172,240	\$71,250	\$46,516	0
Instruments & Related Products	\$136,669	\$55,062	\$41,846	0
Miscellaneous Manufacturing	\$324,352	\$123,574	\$85,234	1
Transportation	\$4,464,424	\$2,890,609	\$1,911,739	26
Communication	\$3,505,025	\$2,165,080	\$924,327	7
Electric, Gas, Water, Sanitary Services	\$6,391,981	\$1,509,616	\$658,729	2
Wholesale Trade	\$4,268,047	\$2,889,385	\$1,666,047	17
Retail Trade	\$12,149,012	\$10,067,345	\$6,019,958	165
Finance	\$2,244,138	\$1,201,026	\$699,342	5
Insurance	\$2,451,639	\$1,466,509	\$876,744	9
Real Estate	\$14,108,602	\$2,168,967	\$349,478	2
Hotels, Lodging Places, Amusements	\$1,403,820	\$732,133	\$480,285	10
Personal Services	\$2,653,709	\$1,622,922	\$1,262,670	20
Business Services	\$50,270,125	\$29,159,009	\$23,786,264	302
Eating & Drinking Places	\$6,711,108	\$3,930,969	\$2,091,489	97
Health Services	\$4,291,279	\$3,001,771	\$2,538,026	43
Miscellaneous Services	\$4,221,712	\$1,734,503	\$1,503,674	37
Households	\$203,496	\$203,496	\$199,218	13
<b>Total</b>	<b>\$143,120,567</b>	<b>\$72,597,068</b>	<b>\$49,745,498</b>	<b>814</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

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## CPRIT Prevention and Screening



**The Annual Impact of Outlays for Prevention and Screening Associated with  
the Cancer Prevention and Research Institute of Texas (CPRIT) on Business  
Activity in Texas (Based on Actual Awards in Fiscal Year 2010)  
Detailed Industrial Category**

<b>Category</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Agricultural Products & Services	\$812,154	\$211,096	\$143,768	4
Forestry & Fishery Products	\$15,733	\$11,702	\$4,340	0
Coal Mining	\$55,337	\$16,475	\$17,361	0
Crude Petroleum & Natural Gas	\$524,075	\$115,280	\$53,167	0
Miscellaneous Mining	\$21,158	\$9,229	\$5,425	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$766,040	\$412,127	\$339,618	9
Food Products & Tobacco	\$1,782,725	\$458,785	\$234,369	6
Textile Mill Products	\$29,296	\$6,412	\$5,425	0
Apparel	\$465,483	\$256,959	\$130,205	5
Paper & Allied Products	\$288,079	\$126,002	\$56,965	1
Printing & Publishing	\$405,263	\$191,168	\$124,780	4
Chemicals & Petroleum Refining	\$1,897,197	\$358,170	\$168,182	2
Rubber & Leather Products	\$327,683	\$142,916	\$83,548	2
Lumber Products & Furniture	\$99,281	\$34,243	\$24,413	1
Stone, Clay, & Glass Products	\$103,622	\$60,164	\$31,466	1
Primary Metal	\$83,548	\$22,594	\$16,818	0
Fabricated Metal Products	\$199,648	\$69,748	\$45,029	1
Machinery, Except Electrical	\$105,249	\$42,527	\$30,381	1
Electric & Electronic Equipment	\$182,287	\$96,193	\$57,507	1
Motor Vehicles & Equipment	\$147,023	\$29,228	\$18,988	0
Transp. Equip., Exc. Motor Vehicles	\$66,730	\$29,058	\$18,988	0
Instruments & Related Products	\$179,575	\$70,662	\$53,710	1
Miscellaneous Manufacturing	\$114,472	\$44,049	\$30,381	1
Transportation	\$1,283,063	\$854,759	\$565,307	13
Communication	\$883,767	\$545,149	\$232,742	4
Electric, Gas, Water, Sanitary Services	\$1,541,303	\$356,813	\$155,704	2
Wholesale Trade	\$1,644,924	\$1,113,064	\$641,803	11
Retail Trade	\$2,603,017	\$2,158,406	\$1,290,658	105
Finance	\$709,618	\$381,990	\$222,434	3
Insurance	\$1,085,042	\$649,748	\$388,445	7
Real Estate	\$4,514,861	\$1,047,184	\$168,724	2
Hotels, Lodging Places, Amusements	\$329,310	\$170,356	\$111,759	6
Personal Services	\$462,228	\$276,833	\$215,381	13
Business Services	\$1,910,760	\$1,184,478	\$966,230	19
Eating & Drinking Places	\$1,362,271	\$798,405	\$424,794	53
Health Services	\$23,797,692	\$17,161,577	\$14,510,272	266
Miscellaneous Services	\$1,203,312	\$537,567	\$466,026	20
Households	\$88,126	\$88,126	\$86,261	9
<b>Total</b>	<b>\$52,090,953</b>	<b>\$30,139,242</b>	<b>\$22,141,375</b>	<b>576</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Cumulative Ten-Year Impact of Outlays for Prevention and Screening  
Associated with the Cancer Prevention and Research Institute of Texas  
(CPRIT) on Business Activity in Texas  
(Based Upon Attaining Planned Levels of Funding by Year 3)  
Detailed Industrial Category**

<b>Category</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Agricultural Products & Services	\$10,510,297	\$2,731,847	\$1,860,540	51
Forestry & Fishery Products	\$203,606	\$151,442	\$56,167	2
Coal Mining	\$716,132	\$213,206	\$224,669	3
Crude Petroleum & Natural Gas	\$6,782,196	\$1,491,871	\$688,049	6
Miscellaneous Mining	\$273,815	\$119,435	\$70,209	1
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$9,913,520	\$5,333,441	\$4,395,088	118
Food Products & Tobacco	\$23,070,700	\$5,937,251	\$3,033,032	84
Textile Mill Products	\$379,129	\$82,980	\$70,209	3
Apparel	\$6,023,938	\$3,325,374	\$1,685,018	67
Paper & Allied Products	\$3,728,102	\$1,630,629	\$737,195	18
Printing & Publishing	\$5,244,617	\$2,473,959	\$1,614,809	46
Chemicals & Petroleum Refining	\$24,552,111	\$4,635,169	\$2,176,481	23
Rubber & Leather Products	\$4,240,628	\$1,849,518	\$1,081,220	31
Lumber Products & Furniture	\$1,284,826	\$443,149	\$315,941	11
Stone, Clay, & Glass Products	\$1,340,993	\$778,603	\$407,213	11
Primary Metal	\$1,081,220	\$292,400	\$217,648	6
Fabricated Metal Products	\$2,583,694	\$902,624	\$582,735	18
Machinery, Except Electrical	\$1,362,056	\$550,348	\$393,171	8
Electric & Electronic Equipment	\$2,359,025	\$1,244,854	\$744,216	9
Motor Vehicles & Equipment	\$1,902,666	\$378,243	\$245,732	5
Transp. Equip., Exc. Motor Vehicles	\$863,572	\$376,045	\$245,732	4
Instruments & Related Products	\$2,323,920	\$914,456	\$695,070	11
Miscellaneous Manufacturing	\$1,481,411	\$570,051	\$393,171	10
Transportation	\$16,604,445	\$11,061,657	\$7,315,785	172
Communication	\$11,437,057	\$7,054,914	\$3,011,969	53
Electric, Gas, Water, Sanitary Services	\$19,946,396	\$4,617,606	\$2,015,000	20
Wholesale Trade	\$21,287,389	\$14,404,447	\$8,305,733	146
Retail Trade	\$33,686,311	\$27,932,492	\$16,702,737	1,362
Finance	\$9,183,346	\$4,943,427	\$2,878,572	40
Insurance	\$14,041,814	\$8,408,562	\$5,026,969	91
Real Estate	\$58,427,986	\$13,551,882	\$2,183,502	29
Hotels, Lodging Places, Amusements	\$4,261,690	\$2,204,620	\$1,446,307	83
Personal Services	\$5,981,813	\$3,582,574	\$2,787,300	175
Business Services	\$24,727,634	\$15,328,631	\$12,504,235	244
Eating & Drinking Places	\$17,629,497	\$10,332,366	\$5,497,370	685
Health Services	\$307,972,077	\$222,092,390	\$187,781,173	3,440
Miscellaneous Services	\$15,572,371	\$6,956,792	\$6,030,959	263
Households	\$1,140,456	\$1,140,456	\$1,116,324	111
<b>Total</b>	<b>\$674,122,457</b>	<b>\$390,039,708</b>	<b>\$286,537,248</b>	<b>7,461</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

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## CPRIT Research



**The Annual Impact of Outlays for Research Associated with the Cancer  
Prevention and Research Institute of Texas (CPRIT) on Business Activity  
in Texas (Based on Actual Awards in Fiscal Year 2010)  
Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$12,860,310	\$3,684,819	\$2,509,566	42
Forestry & Fishery Products	\$272,473	\$243,632	\$90,359	1
Coal Mining	\$1,318,495	\$371,899	\$391,895	3
Crude Petroleum & Natural Gas	\$9,826,072	\$2,164,285	\$998,165	5
Miscellaneous Mining	\$278,044	\$109,431	\$64,329	1
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$20,754,983	\$11,135,995	\$9,176,753	136
Food Products & Tobacco	\$26,216,280	\$6,796,941	\$3,472,202	61
Textile Mill Products	\$388,374	\$80,511	\$68,119	2
Apparel	\$6,111,299	\$3,377,621	\$1,711,492	49
Paper & Allied Products	\$4,573,276	\$2,023,383	\$914,756	15
Printing & Publishing	\$8,683,689	\$4,083,015	\$2,665,076	47
Chemicals & Petroleum Refining	\$25,537,863	\$3,856,160	\$1,810,691	14
Rubber & Leather Products	\$3,646,149	\$1,580,556	\$923,986	19
Lumber Products & Furniture	\$1,612,529	\$565,491	\$403,164	9
Stone, Clay, & Glass Products	\$2,234,095	\$1,260,935	\$659,474	11
Primary Metal	\$1,505,342	\$402,738	\$299,778	5
Fabricated Metal Products	\$3,800,067	\$1,368,162	\$883,287	16
Machinery, Except Electrical	\$2,268,810	\$895,140	\$639,492	7
Electric & Electronic Equipment	\$2,676,690	\$1,384,056	\$827,435	7
Motor Vehicles & Equipment	\$2,071,809	\$439,845	\$285,753	4
Transp. Equip., Exc. Motor Vehicles	\$1,005,897	\$413,697	\$270,336	3
Instruments & Related Products	\$715,205	\$288,485	\$219,275	3
Miscellaneous Manufacturing	\$1,710,482	\$667,366	\$460,290	8
Transportation	\$24,479,906	\$16,157,267	\$10,685,839	155
Communication	\$16,948,898	\$10,450,542	\$4,461,672	41
Electric, Gas, Water, Sanitary Services	\$38,225,520	\$8,642,798	\$3,771,486	17
Wholesale Trade	\$23,830,351	\$16,127,469	\$9,299,242	109
Retail Trade	\$74,183,633	\$61,481,669	\$36,764,073	1,010
Finance	\$10,431,034	\$5,650,871	\$3,290,519	31
Insurance	\$13,768,387	\$8,261,268	\$4,938,911	62
Real Estate	\$104,141,996	\$20,837,261	\$3,357,334	31
Hotels, Lodging Places, Amusements	\$7,418,037	\$3,852,148	\$2,527,142	65
Personal Services	\$15,661,373	\$9,577,955	\$7,451,804	132
Business Services	\$28,901,418	\$17,785,407	\$14,508,335	185
Eating & Drinking Places	\$35,183,053	\$20,608,237	\$10,964,683	519
Health Services	\$25,344,567	\$17,738,590	\$14,998,142	259
Miscellaneous Services	\$239,765,799	\$149,606,684	\$129,696,531	3,245
Households	\$1,147,204	\$1,147,204	\$1,122,929	81
<b>Total</b>	<b>\$799,499,408</b>	<b>\$415,119,536</b>	<b>\$287,584,320</b>	<b>6,408</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Cumulative Ten-Year Impact of Outlays for Research Associated with  
the Cancer Prevention and Research Institute of Texas (CPRIT) on  
Business Activity in Texas  
(Based Upon Attaining Planned Levels of Funding by Year 3)  
Detailed Industrial Category**

<b>Category</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Agricultural Products & Services	\$152,250,890	\$43,623,905	\$29,710,304	497
Forestry & Fishery Products	\$3,225,759	\$2,884,319	\$1,069,746	14
Coal Mining	\$15,609,420	\$4,402,849	\$4,639,574	33
Crude Petroleum & Natural Gas	\$116,329,097	\$25,622,577	\$11,817,099	61
Miscellaneous Mining	\$3,291,713	\$1,295,539	\$761,578	9
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$245,714,501	\$131,837,033	\$108,641,927	1,605
Food Products & Tobacco	\$310,369,810	\$80,467,752	\$41,106,770	720
Textile Mill Products	\$4,597,886	\$953,158	\$806,454	19
Apparel	\$72,350,565	\$39,987,050	\$20,262,051	578
Paper & Allied Products	\$54,142,193	\$23,954,461	\$10,829,636	172
Printing & Publishing	\$102,804,631	\$48,338,076	\$31,551,348	561
Chemicals & Petroleum Refining	\$302,338,153	\$45,652,381	\$21,436,442	166
Rubber & Leather Products	\$43,166,098	\$18,711,922	\$10,938,908	229
Lumber Products & Furniture	\$19,090,441	\$6,694,746	\$4,772,982	104
Stone, Clay, & Glass Products	\$26,449,053	\$14,927,977	\$7,807,397	133
Primary Metal	\$17,821,467	\$4,767,942	\$3,549,018	56
Fabricated Metal Products	\$44,988,305	\$16,197,419	\$10,457,075	187
Machinery, Except Electrical	\$26,860,031	\$10,597,405	\$7,570,831	84
Electric & Electronic Equipment	\$31,688,849	\$16,385,588	\$9,795,856	85
Motor Vehicles & Equipment	\$24,527,771	\$5,207,251	\$3,382,974	50
Transp. Equip., Exc. Motor Vehicles	\$11,908,629	\$4,897,679	\$3,200,463	40
Instruments & Related Products	\$8,467,179	\$3,415,327	\$2,595,959	35
Miscellaneous Manufacturing	\$20,250,088	\$7,900,825	\$5,449,292	91
Transportation	\$289,813,189	\$191,282,965	\$126,507,724	1,832
Communication	\$200,654,939	\$123,722,081	\$52,820,926	489
Electric, Gas, Water, Sanitary Services	\$452,545,028	\$102,320,525	\$44,649,946	198
Wholesale Trade	\$282,123,227	\$190,930,196	\$110,092,053	1,289
Retail Trade	\$878,246,643	\$727,870,381	\$435,243,218	11,952
Finance	\$123,491,127	\$66,899,646	\$38,955,865	363
Insurance	\$163,001,443	\$97,803,665	\$58,470,881	737
Real Estate	\$1,232,918,284	\$246,688,577	\$39,746,876	370
Hotels, Lodging Places, Amusements	\$87,820,796	\$45,604,880	\$29,918,378	764
Personal Services	\$185,412,170	\$113,391,686	\$88,220,562	1,558
Business Services	\$342,158,673	\$210,558,226	\$171,761,562	2,189
Eating & Drinking Places	\$416,525,809	\$243,977,201	\$129,808,897	6,147
Health Services	\$300,049,755	\$210,003,969	\$177,560,300	3,072
Miscellaneous Services	\$2,838,544,005	\$1,771,166,517	\$1,535,453,816	38,414
Households	\$13,581,545	\$13,581,545	\$13,294,154	962
<b>Total</b>	<b>\$9,465,129,161</b>	<b>\$4,914,525,240</b>	<b>\$3,404,658,841</b>	<b>75,862</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

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# Potential Economic Development and Social Benefits Associated with the Cancer Prevention and Research Institute of Texas



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## Economic Benefits of All Prevention and Research Activity



**The Anticipated Gross Annual Benefits of All Prevention and Research Programs Associated with the Cancer Prevention and Research Institute of Texas (CPRIT) on Business Activity in Texas  
(Based on Actual Operations and Awards in Fiscal Year 2010)  
Detailed Industrial Category**

<b>Category</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Agricultural Products & Services	\$24,911,463	\$7,625,842	\$5,028,532	83
Forestry & Fishery Products	\$1,111,069	\$551,593	\$197,494	3
Coal Mining	\$2,637,129	\$747,236	\$792,006	6
Crude Petroleum & Natural Gas	\$54,856,460	\$18,690,066	\$7,696,106	34
Miscellaneous Mining	\$871,257	\$373,081	\$243,740	4
New Construction	\$8,426,126	\$3,986,195	\$3,125,419	48
Maintenance & Repair Construction	\$36,470,301	\$19,971,848	\$16,352,055	247
Food Products & Tobacco	\$53,492,001	\$13,677,578	\$6,981,193	124
Textile Mill Products	\$786,875	\$174,875	\$148,183	3
Apparel	\$10,421,275	\$5,757,882	\$2,920,336	85
Paper & Allied Products	\$9,632,912	\$4,234,256	\$1,942,095	31
Printing & Publishing	\$17,043,016	\$8,510,971	\$5,462,197	94
Chemicals & Petroleum Refining	\$98,891,602	\$26,507,310	\$13,469,935	82
Rubber & Leather Products	\$8,678,450	\$3,746,033	\$2,229,223	44
Lumber Products & Furniture	\$3,980,936	\$1,422,812	\$1,031,384	22
Stone, Clay, & Glass Products	\$5,587,838	\$3,102,243	\$1,663,555	27
Primary Metal	\$4,613,208	\$1,276,198	\$990,067	13
Fabricated Metal Products	\$10,430,860	\$4,146,715	\$2,698,136	46
Machinery, Except Electrical	\$10,750,436	\$4,089,958	\$3,106,423	27
Electric & Electronic Equipment	\$9,466,823	\$5,008,350	\$3,305,300	27
Motor Vehicles & Equipment	\$5,282,740	\$1,330,297	\$829,132	11
Transp. Equip., Exc. Motor Vehicles	\$2,998,648	\$1,394,536	\$904,494	13
Instruments & Related Products	\$11,087,622	\$4,589,265	\$3,512,757	47
Miscellaneous Manufacturing	\$3,622,075	\$1,359,674	\$1,013,785	16
Transportation	\$49,172,880	\$32,597,812	\$21,611,444	313
Communication	\$40,707,560	\$25,641,242	\$11,063,298	104
Electric, Gas, Water, Sanitary Services	\$95,005,847	\$21,093,731	\$9,338,297	37
Wholesale Trade	\$58,396,489	\$40,906,594	\$23,679,577	279
Retail Trade	\$188,108,393	\$156,406,664	\$93,573,742	2,634
Finance	\$30,320,871	\$16,035,134	\$10,022,491	92
Insurance	\$31,557,717	\$19,686,186	\$11,725,564	152
Real Estate	\$219,355,503	\$44,862,790	\$7,257,020	71
Hotels, Lodging Places, Amusements	\$19,873,824	\$10,286,130	\$6,804,682	169
Personal Services	\$32,590,255	\$20,096,061	\$15,632,747	289
Business Services	\$85,122,363	\$55,577,292	\$46,527,942	557
Eating & Drinking Places	\$76,938,517	\$45,375,371	\$24,210,029	1,199
Health Services	\$80,613,787	\$58,561,046	\$49,324,023	864
Miscellaneous Services	\$264,288,465	\$160,556,576	\$139,103,155	3,488
Households	\$2,325,345	\$2,325,345	\$2,093,868	153
<b>Total</b>	<b>\$1,670,428,937</b>	<b>\$852,282,791</b>	<b>\$557,611,424</b>	<b>11,537</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Anticipated Gross Annual Benefits of All Prevention and Research Programs Associated with the Cancer Prevention and Research Institute of Texas (CPRIT) on Business Activity in Texas (Impact in Year 10 Based Upon Attaining Planned Levels of Funding for all Grant and Research Programs by Year 3)  
Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$106,160,160	\$35,007,270	\$22,515,556	361
Forestry & Fishery Products	\$6,993,734	\$2,716,072	\$950,470	14
Coal Mining	\$11,928,173	\$3,385,285	\$3,604,219	28
Crude Petroleum & Natural Gas	\$371,013,233	\$134,802,546	\$54,749,463	237
Miscellaneous Mining	\$5,067,047	\$2,232,468	\$1,508,569	26
New Construction	\$67,695,971	\$32,025,320	\$25,109,791	386
Maintenance & Repair Construction	\$147,164,938	\$82,203,556	\$66,889,296	1,003
Food Products & Tobacco	\$241,028,684	\$60,908,109	\$31,066,838	541
Textile Mill Products	\$3,505,411	\$821,786	\$697,111	15
Apparel	\$39,174,812	\$21,642,126	\$10,988,296	316
Paper & Allied Products	\$45,925,732	\$20,127,966	\$9,323,209	146
Printing & Publishing	\$76,069,389	\$39,827,765	\$25,248,463	417
Chemicals & Petroleum Refining	\$654,563,000	\$205,399,489	\$104,667,543	628
Rubber & Leather Products	\$44,268,004	\$19,015,077	\$11,431,936	215
Lumber Products & Furniture	\$20,462,079	\$7,392,009	\$5,406,642	114
Stone, Clay, & Glass Products	\$29,549,841	\$16,305,723	\$8,857,915	134
Primary Metal	\$26,861,573	\$7,483,821	\$5,892,990	68
Fabricated Metal Products	\$57,449,491	\$23,853,646	\$15,568,739	256
Machinery, Except Electrical	\$70,424,624	\$26,577,378	\$20,469,588	167
Electric & Electronic Equipment	\$56,496,968	\$30,090,472	\$20,488,790	164
Motor Vehicles & Equipment	\$27,404,216	\$7,506,842	\$4,594,825	59
Transp. Equip., Exc. Motor Vehicles	\$16,831,200	\$8,209,744	\$5,310,285	78
Instruments & Related Products	\$98,482,822	\$40,940,022	\$31,314,965	418
Miscellaneous Manufacturing	\$16,771,861	\$6,125,145	\$4,835,184	69
Transportation	\$220,727,811	\$146,859,692	\$97,548,870	1,383
Communication	\$206,499,792	\$131,646,550	\$57,137,940	526
Electric, Gas, Water, Sanitary Services	\$494,423,333	\$108,582,012	\$48,455,304	179
Wholesale Trade	\$299,168,329	\$213,598,389	\$123,905,642	1,444
Retail Trade	\$990,624,237	\$825,068,496	\$493,746,658	13,610
Finance	\$168,387,230	\$88,113,979	\$56,813,859	510
Insurance	\$152,923,938	\$97,795,317	\$58,115,500	752
Real Estate	\$1,025,804,009	\$212,131,239	\$34,409,126	341
Hotels, Lodging Places, Amusements	\$107,144,613	\$55,361,492	\$36,773,992	878
Personal Services	\$152,599,555	\$94,690,062	\$73,651,811	1,343
Business Services	\$445,440,894	\$300,886,816	\$255,016,017	2,922
Eating & Drinking Places	\$370,706,590	\$219,619,058	\$117,394,648	5,764
Health Services	\$316,588,071	\$235,386,679	\$197,496,074	3,402
Miscellaneous Services	\$481,365,815	\$266,742,426	\$230,552,367	5,770
Households	\$10,312,799	\$10,312,799	\$8,630,173	622
<b>Total</b>	<b>\$7,684,009,980</b>	<b>\$3,841,394,644</b>	<b>\$2,381,138,664</b>	<b>45,306</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Anticipated Gross Cumulative Ten-Year Benefits of All Prevention and Research Programs Associated with the Cancer Prevention and Research Institute of Texas (CPRIT) on Business Activity in Texas (Based Upon Attaining Planned Levels of Funding for all Grant and Research Programs By Year 3)  
Detailed Industrial Category**

<b>Category</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Agricultural Products & Services	\$657,120,078	\$213,088,676	\$137,799,242	2,225
Forestry & Fishery Products	\$40,080,816	\$16,288,885	\$5,727,106	86
Coal Mining	\$72,831,769	\$20,663,048	\$21,977,934	170
Crude Petroleum & Natural Gas	\$2,101,641,279	\$756,111,346	\$307,726,330	1,339
Miscellaneous Mining	\$29,434,928	\$12,904,061	\$8,669,432	150
New Construction	\$373,916,173	\$176,890,660	\$138,692,993	2,132
Maintenance & Repair Construction	\$922,406,746	\$512,828,900	\$417,899,436	6,275
Food Products & Tobacco	\$1,473,067,248	\$373,216,924	\$190,392,268	3,328
Textile Mill Products	\$21,481,241	\$4,977,656	\$4,221,513	93
Apparel	\$249,910,703	\$138,066,905	\$70,081,590	2,018
Paper & Allied Products	\$277,224,742	\$121,572,469	\$56,196,531	884
Printing & Publishing	\$465,797,910	\$241,386,857	\$153,426,999	2,556
Chemicals & Petroleum Refining	\$3,717,500,956	\$1,138,744,686	\$580,112,689	3,488
Rubber & Leather Products	\$263,584,006	\$113,334,817	\$67,999,376	1,293
Lumber Products & Furniture	\$121,680,968	\$43,864,972	\$32,027,527	678
Stone, Clay, & Glass Products	\$174,708,621	\$96,514,519	\$52,299,980	802
Primary Metal	\$155,994,436	\$43,409,256	\$34,092,482	403
Fabricated Metal Products	\$337,072,466	\$138,844,265	\$90,570,371	1,496
Machinery, Except Electrical	\$400,945,999	\$151,508,245	\$116,427,201	963
Electric & Electronic Equipment	\$326,713,696	\$173,802,942	\$117,712,218	945
Motor Vehicles & Equipment	\$162,679,067	\$43,855,836	\$26,933,380	348
Transp. Equip., Exc. Motor Vehicles	\$98,425,637	\$47,598,069	\$30,802,653	448
Instruments & Related Products	\$535,852,874	\$222,630,603	\$170,306,656	2,272
Miscellaneous Manufacturing	\$101,903,302	\$37,437,689	\$29,193,841	423
Transportation	\$1,350,062,689	\$897,542,106	\$595,928,305	8,492
Communication	\$1,231,030,996	\$782,930,385	\$339,415,926	3,136
Electric, Gas, Water, Sanitary Services	\$2,932,611,356	\$645,420,667	\$287,571,081	1,079
Wholesale Trade	\$1,780,100,664	\$1,266,197,620	\$734,204,257	8,579
Retail Trade	\$5,862,188,618	\$4,880,890,849	\$2,920,727,065	80,874
Finance	\$986,569,933	\$517,272,134	\$331,614,800	2,989
Insurance	\$920,399,904	\$585,605,000	\$348,162,360	4,510
Real Estate	\$6,219,207,375	\$1,283,244,632	\$208,029,950	2,054
Hotels, Lodging Places, Amusements	\$631,212,851	\$326,251,299	\$216,544,960	5,210
Personal Services	\$924,745,735	\$573,051,654	\$445,740,784	8,157
Business Services	\$2,635,836,913	\$1,769,235,832	\$1,496,099,717	17,290
Eating & Drinking Places	\$2,233,073,942	\$1,321,710,097	\$706,233,851	34,757
Health Services	\$2,008,188,125	\$1,484,576,247	\$1,246,796,684	21,571
Miscellaneous Services	\$3,891,959,779	\$2,241,803,808	\$1,939,639,910	48,586
Households	\$63,260,865	\$63,260,865	\$53,833,673	3,892
<b>Total</b>	<b>\$46,752,425,408</b>	<b>\$23,478,535,479</b>	<b>\$14,731,833,073</b>	<b>285,989</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Anticipated Net Annual Benefits of the All Prevention and Research Programs Associated with the Cancer Prevention and Research Institute of Texas (CPRIT) on Business Activity in Texas  
(Based on Actual Operations and Awards in Fiscal Year 2010)  
Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$11,017,791	\$3,671,485	\$2,335,396	37
Forestry & Fishery Products	\$818,485	\$292,022	\$101,227	2
Coal Mining	\$1,243,321	\$353,000	\$376,575	3
Crude Petroleum & Natural Gas	\$44,364,848	\$16,379,470	\$6,630,461	29
Miscellaneous Mining	\$566,781	\$252,353	\$172,768	3
New Construction	\$8,426,126	\$3,986,195	\$3,125,419	48
Maintenance & Repair Construction	\$14,721,317	\$8,303,168	\$6,736,334	101
Food Products & Tobacco	\$24,950,565	\$6,282,907	\$3,203,643	55
Textile Mill Products	\$362,969	\$86,494	\$73,407	2
Apparel	\$3,739,535	\$2,065,431	\$1,049,311	30
Paper & Allied Products	\$4,697,555	\$2,052,311	\$955,654	15
Printing & Publishing	\$7,807,079	\$4,165,109	\$2,625,555	42
Chemicals & Petroleum Refining	\$71,012,804	\$22,219,097	\$11,456,370	66
Rubber & Leather Products	\$4,636,237	\$1,993,270	\$1,204,566	22
Lumber Products & Furniture	\$2,245,153	\$814,530	\$597,711	13
Stone, Clay, & Glass Products	\$3,219,398	\$1,763,252	\$963,258	14
Primary Metal	\$3,000,274	\$844,116	\$668,448	7
Fabricated Metal Products	\$6,376,408	\$2,689,010	\$1,757,038	28
Machinery, Except Electrical	\$8,337,018	\$3,135,852	\$2,424,805	19
Electric & Electronic Equipment	\$6,508,562	\$3,472,678	\$2,387,221	19
Motor Vehicles & Equipment	\$3,028,104	\$853,572	\$519,422	6
Transp. Equip., Exc. Motor Vehicles	\$1,908,797	\$944,657	\$610,518	9
Instruments & Related Products	\$10,179,176	\$4,224,611	\$3,235,587	43
Miscellaneous Manufacturing	\$1,764,685	\$635,901	\$514,590	7
Transportation	\$22,963,469	\$15,296,725	\$10,169,124	143
Communication	\$22,524,393	\$14,429,042	\$6,276,452	57
Electric, Gas, Water, Sanitary Services	\$54,599,826	\$11,943,159	\$5,345,234	19
Wholesale Trade	\$32,494,408	\$23,377,122	\$13,571,927	157
Retail Trade	\$110,106,842	\$91,759,854	\$54,917,016	1,503
Finance	\$18,955,806	\$9,882,171	\$6,439,604	57
Insurance	\$16,459,124	\$10,628,518	\$6,310,533	82
Real Estate	\$109,287,785	\$22,761,447	\$3,696,014	37
Hotels, Lodging Places, Amusements	\$11,986,095	\$6,190,414	\$4,117,752	97
Personal Services	\$16,201,283	\$10,078,980	\$7,839,295	142
Business Services	\$49,283,172	\$33,691,507	\$28,674,750	324
Eating & Drinking Places	\$39,722,083	\$23,575,631	\$12,611,403	617
Health Services	\$31,042,399	\$23,360,702	\$19,561,806	334
Miscellaneous Services	\$22,897,183	\$10,238,875	\$8,790,231	219
Households	\$1,069,665	\$1,069,665	\$864,756	62
<b>Total</b>	<b>\$804,526,519</b>	<b>\$399,764,306</b>	<b>\$242,911,180</b>	<b>4,471</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Anticipated Net Annual Benefits of the All Prevention and Research Programs Associated with the Cancer Prevention and Research Institute of Texas (CPRIT) on Business Activity in Texas (Impact in Year 10 Based Upon Attaining Planned Levels of Funding for all Grant and Research Programs by Year 3)  
Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$89,203,365	\$30,182,724	\$19,229,773	304
Forestry & Fishery Products	\$6,636,762	\$2,399,746	\$833,153	13
Coal Mining	\$10,229,984	\$2,904,895	\$3,098,002	24
Crude Petroleum & Natural Gas	\$358,214,584	\$131,983,857	\$53,449,485	231
Miscellaneous Mining	\$4,695,100	\$2,084,872	\$1,421,804	25
New Construction	\$67,695,971	\$32,025,320	\$25,109,791	386
Maintenance & Repair Construction	\$120,660,920	\$67,983,199	\$55,170,834	824
Food Products & Tobacco	\$206,198,959	\$51,884,291	\$26,457,042	457
Textile Mill Products	\$2,987,350	\$713,769	\$605,722	13
Apparel	\$31,009,933	\$17,130,073	\$8,701,966	248
Paper & Allied Products	\$39,901,346	\$17,464,699	\$8,119,166	126
Printing & Publishing	\$64,814,661	\$34,532,468	\$21,792,103	353
Chemicals & Petroleum Refining	\$620,503,064	\$200,153,128	\$102,204,072	609
Rubber & Leather Products	\$39,323,625	\$16,870,936	\$10,178,481	188
Lumber Products & Furniture	\$18,343,100	\$6,649,544	\$4,877,304	102
Stone, Clay, & Glass Products	\$26,662,238	\$14,673,133	\$8,004,065	119
Primary Metal	\$24,894,075	\$6,956,797	\$5,500,699	62
Fabricated Metal Products	\$52,503,879	\$22,075,830	\$14,420,977	234
Machinery, Except Electrical	\$67,483,971	\$25,414,909	\$19,639,115	158
Electric & Electronic Equipment	\$52,896,577	\$28,222,100	\$19,371,811	154
Motor Vehicles & Equipment	\$24,650,507	\$6,924,850	\$4,216,727	53
Transp. Equip., Exc. Motor Vehicles	\$15,500,651	\$7,660,314	\$4,951,256	73
Instruments & Related Products	\$97,357,516	\$40,488,508	\$30,971,774	413
Miscellaneous Manufacturing	\$14,504,829	\$5,241,757	\$4,225,901	58
Transportation	\$188,778,641	\$125,767,504	\$83,599,251	1,174
Communication	\$184,344,231	\$117,984,930	\$51,305,357	469
Electric, Gas, Water, Sanitary Services	\$445,214,583	\$97,438,261	\$43,592,471	156
Wholesale Trade	\$267,541,795	\$192,194,880	\$111,564,188	1,295
Retail Trade	\$895,673,692	\$746,374,378	\$446,690,091	12,224
Finance	\$154,520,052	\$80,606,372	\$52,442,159	468
Insurance	\$134,471,349	\$86,725,642	\$51,497,612	666
Real Estate	\$891,644,798	\$185,159,779	\$30,063,438	300
Hotels, Lodging Places, Amusements	\$97,538,176	\$50,373,485	\$33,501,689	790
Personal Services	\$132,662,587	\$82,505,173	\$64,171,769	1,163
Business Services	\$402,688,230	\$274,743,617	\$233,689,867	2,641
Eating & Drinking Places	\$325,407,559	\$193,084,832	\$103,277,023	5,052
Health Services	\$253,299,126	\$190,410,489	\$159,468,289	2,725
Miscellaneous Services	\$187,689,207	\$83,874,042	\$72,020,713	1,793
Households	\$8,778,449	\$8,778,449	\$7,128,287	510
<b>Total</b>	<b>\$6,627,125,444</b>	<b>\$3,288,643,551</b>	<b>\$1,996,563,226</b>	<b>36,654</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Anticipated Net Cumulative Ten-Year Benefits of the All Prevention and Research Programs Associated with the Cancer Prevention and Research Institute of Texas (CPRIT) on Business Activity in Texas (Based Upon Attaining Planned Levels of Funding for all Grant and Research Programs By Year 3)  
Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$492,146,814	\$166,148,501	\$105,830,376	1,671
Forestry & Fishery Products	\$36,607,678	\$13,210,754	\$4,585,515	70
Coal Mining	\$56,306,452	\$15,988,375	\$17,051,946	134
Crude Petroleum & Natural Gas	\$1,977,115,344	\$728,686,595	\$295,078,049	1,272
Miscellaneous Mining	\$25,816,663	\$11,468,407	\$7,825,470	140
New Construction	\$373,916,173	\$176,890,660	\$138,692,993	2,132
Maintenance & Repair Construction	\$664,499,121	\$374,452,848	\$303,868,930	4,539
Food Products & Tobacco	\$1,134,202,426	\$285,422,460	\$145,542,676	2,514
Textile Mill Products	\$16,441,865	\$3,926,939	\$3,332,537	71
Apparel	\$170,486,621	\$94,175,774	\$47,841,249	1,366
Paper & Allied Products	\$218,614,422	\$95,661,776	\$44,482,501	692
Printing & Publishing	\$356,278,822	\$189,858,033	\$119,792,972	1,942
Chemicals & Petroleum Refining	\$3,386,173,305	\$1,087,718,300	\$556,152,835	3,297
Rubber & Leather Products	\$215,493,465	\$92,480,476	\$55,808,024	1,030
Lumber Products & Furniture	\$101,065,967	\$36,641,596	\$26,877,644	563
Stone, Clay, & Glass Products	\$146,611,337	\$80,629,013	\$43,991,808	656
Primary Metal	\$136,851,298	\$38,281,425	\$30,275,586	340
Fabricated Metal Products	\$288,953,088	\$121,546,269	\$79,402,746	1,290
Machinery, Except Electrical	\$372,330,320	\$140,196,104	\$108,345,753	869
Electric & Electronic Equipment	\$291,672,985	\$155,618,268	\$106,840,782	849
Motor Vehicles & Equipment	\$135,890,590	\$38,193,818	\$23,254,983	291
Transp. Equip., Exc. Motor Vehicles	\$85,481,196	\$42,253,096	\$27,309,943	404
Instruments & Related Products	\$524,925,105	\$218,245,757	\$166,973,781	2,226
Miscellaneous Manufacturing	\$79,847,450	\$28,843,238	\$23,266,144	321
Transportation	\$1,039,180,632	\$692,306,875	\$460,193,056	6,463
Communication	\$1,015,433,974	\$649,988,310	\$282,658,704	2,586
Electric, Gas, Water, Sanitary Services	\$2,453,727,951	\$536,972,919	\$240,247,405	859
Wholesale Trade	\$1,472,422,000	\$1,057,973,592	\$614,140,424	7,127
Retail Trade	\$4,938,106,652	\$4,115,020,631	\$2,462,761,152	67,395
Finance	\$851,651,323	\$444,228,035	\$289,081,022	2,582
Insurance	\$740,905,009	\$477,926,264	\$283,787,765	3,672
Real Estate	\$4,913,752,502	\$1,020,835,207	\$165,750,094	1,652
Hotels, Lodging Places, Amusements	\$537,726,545	\$277,709,666	\$184,699,991	4,353
Personal Services	\$730,698,044	\$454,454,473	\$353,470,251	6,405
Business Services	\$2,218,680,482	\$1,514,189,966	\$1,288,047,656	14,555
Eating & Drinking Places	\$1,792,207,528	\$1,063,469,561	\$568,836,095	27,828
Health Services	\$1,395,875,015	\$1,049,478,117	\$878,917,185	15,016
Miscellaneous Services	\$1,033,621,690	\$461,945,996	\$396,651,462	9,873
Households	\$48,335,368	\$48,335,368	\$39,223,977	2,806
<b>Total</b>	<b>\$36,470,053,223</b>	<b>\$18,101,373,463</b>	<b>\$10,990,891,486</b>	<b>201,852</b>

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

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## Enhanced Cancer Prevention



**The Anticipated Total Annual Benefits of Enhanced Cancer Prevention and Screening Services (Net Reduction in Treatment Cost, Morbidity, and Mortality) Associated with the Efforts of the Cancer Prevention and Research Institute of Texas (CPRIT) on Business Activity in Texas (Based on Actual Funding Levels in Fiscal Year 2010) Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$2,137,744	\$657,768	\$414,718	6
Forestry & Fishery Products	\$157,607	\$52,428	\$18,018	0
Coal Mining	\$221,694	\$62,892	\$67,199	1
Crude Petroleum & Natural Gas	\$8,724,567	\$3,253,188	\$1,314,273	6
Miscellaneous Mining	\$97,282	\$43,978	\$30,773	1
New Construction	\$1,697,515	\$803,053	\$629,642	10
Maintenance & Repair Construction	\$2,680,490	\$1,520,502	\$1,231,635	18
Food Products & Tobacco	\$4,340,595	\$1,097,745	\$559,578	10
Textile Mill Products	\$64,617	\$15,172	\$12,882	0
Apparel	\$637,987	\$352,067	\$178,947	5
Paper & Allied Products	\$688,351	\$296,885	\$139,824	2
Printing & Publishing	\$1,323,004	\$711,370	\$445,571	7
Chemicals & Petroleum Refining	\$8,338,334	\$1,892,006	\$1,094,542	4
Rubber & Leather Products	\$686,158	\$299,250	\$182,859	3
Lumber Products & Furniture	\$415,839	\$151,490	\$111,428	2
Stone, Clay, & Glass Products	\$553,365	\$294,679	\$162,392	2
Primary Metal	\$510,141	\$149,146	\$119,101	1
Fabricated Metal Products	\$1,132,294	\$485,348	\$317,574	5
Machinery, Except Electrical	\$1,619,399	\$605,322	\$469,622	4
Electric & Electronic Equipment	\$1,238,800	\$661,106	\$457,913	4
Motor Vehicles & Equipment	\$571,525	\$163,935	\$99,429	1
Transp. Equip., Exc. Motor Vehicles	\$364,811	\$181,846	\$117,463	2
Instruments & Related Products	\$190,757	\$69,292	\$57,604	1
Miscellaneous Manufacturing	\$316,438	\$112,241	\$92,725	1
Transportation	\$4,114,107	\$2,738,654	\$1,821,808	25
Communication	\$4,133,929	\$2,660,752	\$1,159,376	11
Electric, Gas, Water, Sanitary Services	\$10,216,768	\$2,228,596	\$999,406	3
Wholesale Trade	\$5,772,589	\$4,186,346	\$2,432,513	28
Retail Trade	\$20,860,335	\$17,390,864	\$10,408,762	285
Finance	\$3,552,786	\$1,846,083	\$1,213,016	11
Insurance	\$3,048,640	\$1,981,746	\$1,175,980	15
Real Estate	\$20,390,689	\$4,311,705	\$700,481	7
Hotels, Lodging Places, Amusements	\$2,266,503	\$1,170,774	\$779,476	18
Personal Services	\$2,965,324	\$1,847,807	\$1,437,158	26
Business Services	\$9,123,243	\$6,302,190	\$5,380,932	60
Eating & Drinking Places	\$7,252,758	\$4,310,500	\$2,307,097	113
Health Services	\$5,787,777	\$4,380,341	\$3,665,365	63
Miscellaneous Services	\$4,167,245	\$1,869,959	\$1,603,769	40
Households	\$193,441	\$193,441	\$152,627	11
<b>Total</b>	<b>\$142,555,448</b>	<b>\$71,352,469</b>	<b>\$43,563,479</b>	<b>813</b>

NOTE: Based on typical results of screening and prevention measures determined in various studies.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Anticipated Total Cumulative Ten-Year Benefits of Enhanced Cancer Prevention and Screening Services (Net Reduction in Treatment Cost, Morbidity, and Mortality) Associated with the Anticipated Efforts of the Cancer Prevention and Research Institute of Texas (CPRIT) on Business Activity in Texas  
(Based Upon Attaining Planned Levels of Funding by Year 3)  
Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$27,665,101	\$8,512,345	\$5,366,971	84
Forestry & Fishery Products	\$2,039,631	\$678,478	\$233,181	4
Coal Mining	\$2,869,002	\$813,900	\$869,641	7
Crude Petroleum & Natural Gas	\$112,906,870	\$42,100,345	\$17,008,343	73
Miscellaneous Mining	\$1,258,949	\$569,135	\$398,239	8
New Construction	\$21,967,982	\$10,392,519	\$8,148,364	125
Maintenance & Repair Construction	\$34,688,908	\$19,677,213	\$15,938,911	238
Food Products & Tobacco	\$56,172,764	\$14,206,197	\$7,241,650	125
Textile Mill Products	\$836,230	\$196,344	\$166,713	4
Apparel	\$8,256,359	\$4,556,192	\$2,315,798	66
Paper & Allied Products	\$8,908,131	\$3,842,067	\$1,809,499	28
Printing & Publishing	\$17,121,331	\$9,206,028	\$5,766,243	91
Chemicals & Petroleum Refining	\$107,908,536	\$24,484,931	\$14,164,745	50
Rubber & Leather Products	\$8,879,748	\$3,872,671	\$2,366,429	41
Lumber Products & Furniture	\$5,381,478	\$1,960,470	\$1,442,018	30
Stone, Clay, & Glass Products	\$7,161,237	\$3,813,519	\$2,101,559	30
Primary Metal	\$6,601,864	\$1,930,132	\$1,541,318	16
Fabricated Metal Products	\$14,653,313	\$6,281,010	\$4,109,803	66
Machinery, Except Electrical	\$20,957,059	\$7,833,632	\$6,077,495	48
Electric & Electronic Equipment	\$16,031,631	\$8,555,545	\$5,925,966	47
Motor Vehicles & Equipment	\$7,396,259	\$2,121,523	\$1,286,733	16
Transp. Equip., Exc. Motor Vehicles	\$4,721,110	\$2,353,312	\$1,520,125	23
Instruments & Related Products	\$2,468,631	\$896,729	\$745,465	9
Miscellaneous Manufacturing	\$4,095,108	\$1,452,540	\$1,199,979	16
Transportation	\$53,241,726	\$35,441,631	\$23,576,484	330
Communication	\$53,498,236	\$34,433,475	\$15,003,784	137
Electric, Gas, Water, Sanitary Services	\$132,217,830	\$28,840,838	\$12,933,576	45
Wholesale Trade	\$74,704,563	\$54,176,588	\$31,479,785	365
Retail Trade	\$269,958,972	\$225,059,661	\$134,702,470	3,685
Finance	\$45,977,514	\$23,890,636	\$15,697,957	140
Insurance	\$39,453,243	\$25,646,292	\$15,218,658	197
Real Estate	\$263,881,169	\$55,798,889	\$9,065,108	91
Hotels, Lodging Places, Amusements	\$29,331,399	\$15,151,293	\$10,087,405	236
Personal Services	\$38,375,020	\$23,912,953	\$18,598,632	338
Business Services	\$118,066,235	\$81,558,268	\$69,636,032	778
Eating & Drinking Places	\$93,859,817	\$55,783,288	\$29,856,734	1,466
Health Services	\$74,901,117	\$56,687,128	\$47,434,438	809
Miscellaneous Services	\$53,929,395	\$24,199,624	\$20,754,790	516
Households	\$2,503,365	\$2,503,365	\$1,975,180	141
<b>Total</b>	<b>\$1,844,846,833</b>	<b>\$923,390,708</b>	<b>\$563,766,220</b>	<b>10,521</b>

NOTE: Based on typical results of screening and prevention measures determined in various studies.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group



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## Returns on Research



**The Anticipated Annual Benefits of the Research and Related Programs  
Associated with the Cancer Prevention and Research Institute  
of Texas (CPRIT) on Business Activity in Texas  
(Based on Actual Funding Levels in Fiscal Year 2010)  
Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$8,880,047	\$3,013,717	\$1,920,678	30
Forestry & Fishery Products	\$660,878	\$239,594	\$83,209	1
Coal Mining	\$1,021,627	\$290,108	\$309,376	2
Crude Petroleum & Natural Gas	\$35,640,281	\$13,126,282	\$5,316,188	23
Miscellaneous Mining	\$469,499	\$208,374	\$141,995	3
New Construction	\$6,728,610	\$3,183,142	\$2,495,776	38
Maintenance & Repair Construction	\$12,040,828	\$6,782,666	\$5,504,699	82
Food Products & Tobacco	\$20,609,970	\$5,185,162	\$2,644,064	46
Textile Mill Products	\$298,351	\$71,322	\$60,525	1
Apparel	\$3,101,548	\$1,713,364	\$870,364	25
Paper & Allied Products	\$4,009,203	\$1,755,426	\$815,830	13
Printing & Publishing	\$6,484,075	\$3,453,738	\$2,179,984	35
Chemicals & Petroleum Refining	\$62,674,469	\$20,327,091	\$10,361,828	62
Rubber & Leather Products	\$3,950,079	\$1,694,020	\$1,021,706	19
Lumber Products & Furniture	\$1,829,314	\$663,040	\$486,283	10
Stone, Clay, & Glass Products	\$2,666,033	\$1,468,573	\$800,865	12
Primary Metal	\$2,490,133	\$694,971	\$549,347	6
Fabricated Metal Products	\$5,244,114	\$2,203,662	\$1,439,464	23
Machinery, Except Electrical	\$6,717,619	\$2,530,530	\$1,955,183	16
Electric & Electronic Equipment	\$5,269,762	\$2,811,572	\$1,929,308	15
Motor Vehicles & Equipment	\$2,456,578	\$689,637	\$419,993	5
Transp. Equip., Exc. Motor Vehicles	\$1,543,986	\$762,811	\$493,054	7
Instruments & Related Products	\$9,988,419	\$4,155,319	\$3,177,984	42
Miscellaneous Manufacturing	\$1,448,247	\$523,660	\$421,865	6
Transportation	\$18,849,362	\$12,558,071	\$8,347,316	117
Communication	\$18,390,465	\$11,768,291	\$5,117,076	47
Electric, Gas, Water, Sanitary Services	\$44,383,058	\$9,714,563	\$4,345,828	16
Wholesale Trade	\$26,721,819	\$19,190,776	\$11,139,413	129
Retail Trade	\$89,246,507	\$74,368,990	\$44,508,255	1,218
Finance	\$15,403,020	\$8,036,088	\$5,226,588	47
Insurance	\$13,410,484	\$8,646,772	\$5,134,554	66
Real Estate	\$88,897,096	\$18,449,742	\$2,995,532	30
Hotels, Lodging Places, Amusements	\$9,719,592	\$5,019,639	\$3,338,276	79
Personal Services	\$13,235,959	\$8,231,172	\$6,402,137	116
Business Services	\$40,159,930	\$27,389,317	\$23,293,818	263
Eating & Drinking Places	\$32,469,324	\$19,265,132	\$10,304,307	504
Health Services	\$25,254,622	\$18,980,361	\$15,896,440	272
Miscellaneous Services	\$18,729,938	\$8,368,916	\$7,186,462	179
Households	\$876,225	\$876,225	\$712,129	51
<b>Total</b>	<b>\$661,971,071</b>	<b>\$328,411,837</b>	<b>\$199,347,701</b>	<b>3,658</b>

NOTE: Based on typical annual rate of return to health-related research, addition of four additional researchers per year, and standard patterns in spinoff companies from research outlays (fully adjusted for attrition).

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Anticipated Annual Benefits of the Research and Related Programs  
Associated with the Cancer Prevention and Research Institute  
of Texas (CPRIT) on Business Activity in Texas (Impact in Year 10 Based  
Upon Attaining Planned Levels of Funding for all Grant and Research  
Programs by Year 3)  
Detailed Industrial Category**

<b>Category</b>	<b>Total Expenditures (2010 Dollars)</b>	<b>Gross Product (2010 Dollars)</b>	<b>Personal Income (2010 Dollars)</b>	<b>Employment (Permanent Jobs)</b>
Agricultural Products & Services	\$86,325,897	\$29,297,348	\$18,671,550	295
Forestry & Fishery Products	\$6,424,618	\$2,329,177	\$808,900	12
Coal Mining	\$9,931,577	\$2,820,240	\$3,007,550	24
Crude Petroleum & Natural Gas	\$346,471,053	\$127,604,967	\$51,680,434	223
Miscellaneous Mining	\$4,564,155	\$2,025,676	\$1,380,382	25
New Construction	\$65,411,064	\$30,944,386	\$24,262,273	373
Maintenance & Repair Construction	\$117,052,900	\$65,936,557	\$53,513,015	799
Food Products & Tobacco	\$200,356,386	\$50,406,693	\$25,703,832	444
Textile Mill Products	\$2,900,374	\$693,347	\$588,382	13
Apparel	\$30,151,182	\$16,656,179	\$8,461,098	242
Paper & Allied Products	\$38,974,804	\$17,065,082	\$7,930,959	123
Printing & Publishing	\$63,033,858	\$33,574,941	\$21,192,351	344
Chemicals & Petroleum Refining	\$609,279,413	\$197,606,432	\$100,730,786	603
Rubber & Leather Products	\$38,400,036	\$16,468,136	\$9,932,347	184
Lumber Products & Furniture	\$17,783,368	\$6,445,634	\$4,727,319	99
Stone, Clay, & Glass Products	\$25,917,393	\$14,276,486	\$7,785,480	116
Primary Metal	\$24,207,410	\$6,756,042	\$5,340,386	60
Fabricated Metal Products	\$50,979,777	\$21,422,537	\$13,993,513	228
Machinery, Except Electrical	\$65,304,211	\$24,600,127	\$19,006,990	153
Electric & Electronic Equipment	\$51,229,115	\$27,332,231	\$18,755,447	149
Motor Vehicles & Equipment	\$23,881,217	\$6,704,189	\$4,082,893	51
Transp. Equip., Exc. Motor Vehicles	\$15,009,605	\$7,415,544	\$4,793,147	71
Instruments & Related Products	\$97,100,752	\$40,395,239	\$30,894,238	412
Miscellaneous Manufacturing	\$14,078,894	\$5,090,677	\$4,101,090	57
Transportation	\$183,240,928	\$122,081,192	\$81,147,042	1,140
Communication	\$178,779,837	\$114,403,477	\$49,744,802	455
Electric, Gas, Water, Sanitary Services	\$431,462,504	\$94,438,503	\$42,247,239	151
Wholesale Trade	\$259,771,715	\$186,559,931	\$108,289,951	1,257
Retail Trade	\$867,595,048	\$722,965,747	\$432,679,581	11,841
Finance	\$149,737,895	\$78,121,489	\$50,809,402	454
Insurance	\$130,367,786	\$84,058,151	\$49,914,708	646
Real Estate	\$864,198,311	\$179,356,093	\$29,120,569	290
Hotels, Lodging Places, Amusements	\$94,487,395	\$48,797,587	\$32,452,490	765
Personal Services	\$128,671,171	\$80,017,968	\$62,237,311	1,128
Business Services	\$390,408,068	\$266,260,678	\$226,446,969	2,560
Eating & Drinking Places	\$315,645,126	\$187,282,768	\$100,171,600	4,899
Health Services	\$245,508,602	\$184,514,417	\$154,534,596	2,640
Miscellaneous Services	\$182,079,969	\$81,357,020	\$69,861,991	1,739
Households	\$8,518,072	\$8,518,072	\$6,922,847	495
<b>Total</b>	<b>\$6,435,241,484</b>	<b>\$3,192,600,962</b>	<b>\$1,937,925,461</b>	<b>35,560</b>

**NOTE:** Based on typical annual rate of return to health-related research, addition of four additional researchers per year, and standard patterns in spinoff companies from research outlays (fully adjusted for attrition).

**SOURCE:** US Multi-Regional Impact Assessment System, The Perryman Group

**The Anticipated Cumulative Ten-Year Benefits of the Research and Related Programs Associated with the Cancer Prevention and Research Institute of Texas (CPRIT) on Business Activity in Texas (Based Upon Attaining Planned Levels of Funding for all Grant and Research Programs By Year 3)  
Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$464,481,713	\$157,636,155	\$100,463,406	1,587
Forestry & Fishery Products	\$34,568,048	\$12,532,276	\$4,352,334	67
Coal Mining	\$53,437,450	\$15,174,475	\$16,182,305	127
Crude Petroleum & Natural Gas	\$1,864,208,474	\$686,586,249	\$278,069,706	1,199
Miscellaneous Mining	\$24,557,714	\$10,899,272	\$7,427,231	132
New Construction	\$351,948,191	\$166,498,141	\$130,544,629	2,007
Maintenance & Repair Construction	\$629,810,213	\$354,775,635	\$287,930,019	4,301
Food Products & Tobacco	\$1,078,029,662	\$271,216,263	\$138,301,027	2,389
Textile Mill Products	\$15,605,636	\$3,730,594	\$3,165,824	68
Apparel	\$162,230,262	\$89,619,582	\$45,525,451	1,299
Paper & Allied Products	\$209,706,292	\$91,819,709	\$42,673,003	664
Printing & Publishing	\$339,157,491	\$180,652,005	\$114,026,730	1,850
Chemicals & Petroleum Refining	\$3,278,264,769	\$1,063,233,368	\$541,988,090	3,247
Rubber & Leather Products	\$206,613,717	\$88,607,805	\$53,441,595	989
Lumber Products & Furniture	\$95,684,489	\$34,681,126	\$25,435,626	533
Stone, Clay, & Glass Products	\$139,450,100	\$76,815,495	\$41,890,249	626
Primary Metal	\$130,249,434	\$36,351,293	\$28,734,269	324
Fabricated Metal Products	\$274,299,775	\$115,265,259	\$75,292,943	1,225
Machinery, Except Electrical	\$351,373,260	\$132,362,472	\$102,268,258	821
Electric & Electronic Equipment	\$275,641,354	\$147,062,723	\$100,914,816	802
Motor Vehicles & Equipment	\$128,494,331	\$36,072,295	\$21,968,251	275
Transp. Equip., Exc. Motor Vehicles	\$80,760,086	\$39,899,783	\$25,789,818	381
Instruments & Related Products	\$522,456,475	\$217,349,028	\$166,228,316	2,217
Miscellaneous Manufacturing	\$75,752,342	\$27,390,698	\$22,066,165	305
Transportation	\$985,938,906	\$656,865,244	\$436,616,573	6,133
Communication	\$961,935,738	\$615,554,835	\$267,654,920	2,449
Electric, Gas, Water, Sanitary Services	\$2,321,510,121	\$508,132,081	\$227,313,829	814
Wholesale Trade	\$1,397,717,437	\$1,003,797,004	\$582,660,640	6,762
Retail Trade	\$4,668,147,680	\$3,889,960,969	\$2,328,058,682	63,710
Finance	\$805,673,809	\$420,337,399	\$273,383,065	2,442
Insurance	\$701,451,766	\$452,279,973	\$268,569,108	3,475
Real Estate	\$4,649,871,333	\$965,036,318	\$156,684,986	1,561
Hotels, Lodging Places, Amusements	\$508,395,146	\$262,558,373	\$174,612,586	4,117
Personal Services	\$692,323,024	\$430,541,520	\$334,871,620	6,067
Business Services	\$2,100,614,247	\$1,432,631,698	\$1,218,411,624	13,777
Eating & Drinking Places	\$1,698,347,711	\$1,007,686,274	\$538,979,361	26,362
Health Services	\$1,320,973,897	\$992,790,989	\$831,482,747	14,207
Miscellaneous Services	\$979,692,295	\$437,746,372	\$375,896,672	9,356
Households	\$45,832,002	\$45,832,002	\$37,248,797	2,665
<b>Total</b>	<b>\$34,625,206,391</b>	<b>\$17,177,982,755</b>	<b>\$10,427,125,265</b>	<b>191,331</b>

NOTE: Based on typical annual rate of return to health-related research, addition of four additional researchers per year, and standard patterns in spinoff companies from research outlays (fully adjusted for attrition).

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

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## Reduction in Cancer Incidence



**The Potential Annual Impact of a Substantial Reduction in Cancer Incidence as a Consequence of the Catalytic Effect Resulting from the Initiatives of the Cancer Prevention and Research Institute of Texas (CPRIT) on Business Activity in Texas (as of 2035)**  
**Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$259,785,338	\$79,934,012	\$50,397,801	788
Forestry & Fishery Products	\$19,152,873	\$6,371,156	\$2,189,654	35
Coal Mining	\$26,940,971	\$7,642,817	\$8,166,245	65
Crude Petroleum & Natural Gas	\$1,060,236,485	\$395,337,521	\$159,714,516	686
Miscellaneous Mining	\$11,821,985	\$5,344,380	\$3,739,610	71
New Construction	\$206,287,324	\$97,589,523	\$76,516,098	1,176
Maintenance & Repair Construction	\$325,741,433	\$184,776,168	\$149,672,155	2,239
Food Products & Tobacco	\$527,482,636	\$133,401,349	\$68,001,717	1,171
Textile Mill Products	\$7,852,499	\$1,843,745	\$1,565,496	33
Apparel	\$77,530,210	\$42,784,300	\$21,746,187	621
Paper & Allied Products	\$83,650,578	\$36,078,403	\$16,991,850	262
Printing & Publishing	\$160,775,512	\$86,447,943	\$54,147,114	859
Chemicals & Petroleum Refining	\$1,013,300,308	\$229,922,391	\$133,012,099	473
Rubber & Leather Products	\$83,384,055	\$36,365,790	\$22,221,631	390
Lumber Products & Furniture	\$50,534,030	\$18,409,529	\$13,541,071	282
Stone, Clay, & Glass Products	\$67,246,614	\$35,810,324	\$19,734,405	284
Primary Metal	\$61,993,902	\$18,124,640	\$14,473,532	153
Fabricated Metal Products	\$137,599,926	\$58,980,960	\$38,592,538	618
Machinery, Except Electrical	\$196,794,393	\$73,560,644	\$57,069,887	450
Electric & Electronic Equipment	\$150,542,831	\$80,339,673	\$55,646,969	439
Motor Vehicles & Equipment	\$69,453,552	\$19,921,874	\$12,082,888	150
Transp. Equip., Exc. Motor Vehicles	\$44,332,938	\$22,098,455	\$14,274,521	213
Instruments & Related Products	\$23,181,339	\$8,420,610	\$7,000,189	86
Miscellaneous Manufacturing	\$38,454,554	\$13,639,877	\$11,268,240	151
Transportation	\$499,959,129	\$332,809,773	\$221,391,738	3,095
Communication	\$502,367,850	\$323,342,826	\$140,890,978	1,287
Electric, Gas, Water, Sanitary Services	\$1,241,573,407	\$270,825,936	\$121,450,969	425
Wholesale Trade	\$701,502,955	\$508,737,819	\$295,606,602	3,426
Retail Trade	\$2,535,012,715	\$2,113,391,891	\$1,264,905,075	34,606
Finance	\$431,745,540	\$224,341,743	\$147,409,515	1,312
Insurance	\$370,480,267	\$240,827,984	\$142,908,719	1,854
Real Estate	\$2,477,939,932	\$523,971,820	\$85,124,650	853
Hotels, Lodging Places, Amusements	\$275,432,478	\$142,276,137	\$94,724,397	2,218
Personal Services	\$360,355,363	\$224,551,310	\$174,647,901	3,175
Business Services	\$1,108,684,791	\$765,861,732	\$653,907,612	7,307
Eating & Drinking Places	\$881,377,739	\$523,825,314	\$280,365,567	13,768
Health Services	\$703,348,673	\$532,312,703	\$445,426,587	7,601
Miscellaneous Services	\$506,416,589	\$227,243,247	\$194,895,012	4,848
Households	\$23,507,510	\$23,507,510	\$18,547,653	1,325
<b>Total</b>	<b>\$17,323,781,223</b>	<b>\$8,670,973,829</b>	<b>\$5,293,969,388</b>	<b>98,796</b>

**NOTE:** This scenario assumes that the incidence of cancer in Texas over time is reduced to the average of current levels observed in the five states with the lowest incidence.

**SOURCE:** US Multi-Regional Impact Assessment System, The Perryman Group

**The Potential Annual Impact of a Substantial Reduction in Cancer Incidence as a Consequence of the Catalytic Effect Resulting from the Initiatives of the Cancer Prevention and Research Institute of Texas (CPRIT) on Business Activity in the United States (as of 2035)**  
**Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$5,223,072,412	\$1,607,100,448	\$1,013,264,902	15,850
Forestry & Fishery Products	\$545,858,038	\$181,578,346	\$62,405,278	986
Coal Mining	\$597,341,573	\$169,458,341	\$181,063,909	1,451
Crude Petroleum & Natural Gas	\$18,640,557,303	\$6,950,630,176	\$2,808,022,192	12,068
Miscellaneous Mining	\$227,227,960	\$102,723,226	\$71,878,282	1,366
New Construction	\$3,677,107,358	\$1,739,550,184	\$1,363,912,724	20,964
Maintenance & Repair Construction	\$6,028,656,332	\$3,419,743,098	\$2,770,055,909	41,433
Food Products & Tobacco	\$26,254,788,250	\$6,639,885,242	\$3,384,700,405	58,291
Textile Mill Products	\$210,823,295	\$49,500,731	\$42,030,327	891
Apparel	\$1,928,614,391	\$1,064,287,294	\$540,950,539	15,440
Paper & Allied Products	\$1,668,067,975	\$719,435,890	\$338,832,807	5,221
Printing & Publishing	\$3,155,095,659	\$1,696,474,331	\$1,062,595,422	16,848
Chemicals & Petroleum Refining	\$28,359,361,333	\$6,434,866,463	\$3,722,626,097	13,245
Rubber & Leather Products	\$1,633,562,377	\$712,435,798	\$435,340,066	7,633
Lumber Products & Furniture	\$1,106,899,591	\$403,243,119	\$296,604,214	6,181
Stone, Clay, & Glass Products	\$1,256,532,000	\$669,131,370	\$368,745,873	5,310
Primary Metal	\$1,418,533,118	\$414,724,697	\$331,180,710	3,497
Fabricated Metal Products	\$3,190,287,740	\$1,367,487,890	\$894,777,384	14,336
Machinery, Except Electrical	\$4,377,215,550	\$1,636,178,697	\$1,269,381,675	10,004
Electric & Electronic Equipment	\$2,943,915,107	\$1,571,069,025	\$1,088,194,983	8,594
Motor Vehicles & Equipment	\$2,326,856,634	\$667,429,442	\$404,805,028	5,028
Transp. Equip., Exc. Motor Vehicles	\$946,899,203	\$471,996,916	\$304,886,921	4,543
Instruments & Related Products	\$434,226,505	\$157,732,560	\$131,125,629	1,619
Miscellaneous Manufacturing	\$778,272,571	\$276,054,219	\$228,055,229	3,062
Transportation	\$9,811,741,465	\$6,531,420,788	\$4,344,832,156	60,741
Communication	\$9,265,014,419	\$5,963,311,442	\$2,598,408,607	23,741
Electric, Gas, Water, Sanitary Services	\$28,511,871,056	\$6,219,329,530	\$2,789,037,160	9,753
Wholesale Trade	\$12,702,364,490	\$9,211,897,350	\$5,352,654,290	62,029
Retail Trade	\$45,966,404,480	\$38,321,317,251	\$22,936,034,191	627,504
Finance	\$8,359,114,581	\$4,343,526,816	\$2,854,026,072	25,406
Insurance	\$6,904,671,601	\$4,488,331,205	\$2,663,401,710	34,546
Real Estate	\$43,565,923,205	\$9,212,215,263	\$1,496,619,808	15,001
Hotels, Lodging Places, Amusements	\$4,879,725,530	\$2,520,648,638	\$1,678,193,729	39,290
Personal Services	\$6,584,297,296	\$4,102,929,314	\$3,191,110,287	58,004
Business Services	\$20,193,763,521	\$13,949,529,069	\$11,910,378,667	133,099
Eating & Drinking Places	\$16,200,944,519	\$9,628,635,349	\$5,153,507,730	253,072
Health Services	\$12,596,480,102	\$9,533,346,156	\$7,977,276,932	136,133
Miscellaneous Services	\$9,875,175,264	\$4,431,266,549	\$3,800,472,659	94,540
Households	\$438,955,590	\$438,955,590	\$346,340,199	24,736
<b>Total</b>	<b>\$352,786,219,392</b>	<b>\$168,019,377,814</b>	<b>\$102,207,730,704</b>	<b>1,871,458</b>

**NOTE:** This scenario assumes that the incidence of cancer in the US over time is reduced to the average of current levels observed in the five states with the lowest incidence.

**SOURCE:** US Multi-Regional Impact Assessment System, The Perryman Group

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## Texas as a Center of Biomedical Production



**The Potential Annual Incremental Impact Associated with Becoming a Major Center of Biomedical Production as a Partial Consequence of the Catalytic Effect Resulting from the Initiatives of the Cancer Prevention and Research Institute of Texas (CPRIT) and Other Initiatives on Business Activity in Texas (Scenario I\* as of 2035)—Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$453,596,391	\$121,529,590	\$82,768,416	1,385
Forestry & Fishery Products	\$10,894,149	\$9,065,461	\$3,362,222	46
Coal Mining	\$45,050,771	\$12,991,628	\$13,690,131	97
Crude Petroleum & Natural Gas	\$329,070,360	\$71,668,935	\$33,053,623	170
Miscellaneous Mining	\$24,248,305	\$10,058,851	\$5,913,035	69
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$447,843,247	\$238,995,210	\$196,946,940	2,909
Food Products & Tobacco	\$1,042,928,529	\$259,217,553	\$132,420,716	2,318
Textile Mill Products	\$14,547,668	\$3,770,847	\$3,190,482	77
Apparel	\$187,104,211	\$104,001,917	\$52,699,363	1,505
Paper & Allied Products	\$417,437,026	\$188,291,734	\$85,125,308	1,355
Printing & Publishing	\$344,401,650	\$174,999,049	\$114,225,827	2,031
Chemicals & Petroleum Refining	\$7,213,351,187	\$3,043,289,281	\$1,429,001,030	11,068
Rubber & Leather Products	\$459,790,771	\$191,384,921	\$111,882,747	2,334
Lumber Products & Furniture	\$62,547,706	\$21,443,266	\$15,287,862	333
Stone, Clay, & Glass Products	\$141,324,159	\$88,431,629	\$46,250,110	790
Primary Metal	\$199,961,436	\$41,646,494	\$30,999,614	488
Fabricated Metal Products	\$256,400,477	\$97,468,670	\$62,925,900	1,129
Machinery, Except Electrical	\$101,144,396	\$45,242,829	\$32,321,659	361
Electric & Electronic Equipment	\$134,965,471	\$72,545,200	\$43,369,986	377
Motor Vehicles & Equipment	\$61,642,716	\$12,951,983	\$8,414,459	125
Transp. Equip., Exc. Motor Vehicles	\$32,027,470	\$13,614,340	\$8,896,492	112
Instruments & Related Products	\$4,943,899,712	\$2,077,854,715	\$1,579,358,874	21,189
Miscellaneous Manufacturing	\$59,980,907	\$24,040,597	\$16,581,072	276
Transportation	\$804,533,905	\$537,753,615	\$355,651,046	5,149
Communication	\$608,487,964	\$371,923,682	\$158,786,162	1,471
Electric, Gas, Water, Sanitary Services	\$1,240,806,342	\$282,214,774	\$123,150,996	546
Wholesale Trade	\$1,231,281,556	\$832,457,410	\$480,002,359	5,622
Retail Trade	\$2,116,544,472	\$1,753,811,906	\$1,048,723,443	28,797
Finance	\$407,095,998	\$220,794,208	\$128,569,109	1,197
Insurance	\$424,755,907	\$253,575,403	\$151,597,364	1,910
Real Estate	\$2,547,651,478	\$415,270,537	\$66,909,087	622
Hotels, Lodging Places, Amusements	\$235,408,196	\$121,694,060	\$79,835,515	2,038
Personal Services	\$471,832,247	\$289,361,513	\$225,127,932	3,974
Business Services	\$1,183,836,592	\$714,800,018	\$583,093,651	7,432
Eating & Drinking Places	\$1,167,821,772	\$684,065,265	\$363,959,238	17,235
Health Services	\$746,188,373	\$521,725,476	\$441,123,721	7,632
Miscellaneous Services	\$699,929,927	\$300,001,535	\$260,076,335	6,507
Households	\$35,333,517	\$35,333,517	\$34,585,855	2,504
<b>Total</b>	<b>\$30,905,666,957</b>	<b>\$14,259,287,618</b>	<b>\$8,609,877,684</b>	<b>143,173</b>

\*This scenario assumes that Texas achieves a concentration in the biomedical industry (pharmaceuticals and medical equipment) by 2035 equivalent to that of the US. Only incremental gains above baseline projections are included.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

**The Potential Annual Incremental Impact Associated with Becoming a Major Center of Biomedical Production as a Partial Consequence of the Catalytic Effect Resulting from the Initiatives of the Cancer Prevention and Research Institute of Texas (CPRIT) and Other Initiatives on Business Activity in Texas (Scenario II\* as of 2035)—Detailed Industrial Category**

Category	Total Expenditures (2010 Dollars)	Gross Product (2010 Dollars)	Personal Income (2010 Dollars)	Employment (Permanent Jobs)
Agricultural Products & Services	\$570,230,225	\$152,969,013	\$104,180,413	1,743
Forestry & Fishery Products	\$13,672,318	\$11,620,856	\$4,309,981	59
Coal Mining	\$55,585,098	\$15,974,283	\$16,833,153	119
Crude Petroleum & Natural Gas	\$408,060,635	\$89,002,577	\$41,047,881	211
Miscellaneous Mining	\$30,922,814	\$12,720,145	\$7,477,461	87
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$551,930,996	\$294,555,560	\$242,732,127	3,585
Food Products & Tobacco	\$1,300,755,176	\$321,530,748	\$164,253,273	2,875
Textile Mill Products	\$17,386,816	\$4,541,155	\$3,842,240	92
Apparel	\$227,881,938	\$126,597,478	\$64,148,876	1,831
Paper & Allied Products	\$508,846,776	\$229,659,340	\$103,827,299	1,652
Printing & Publishing	\$446,155,255	\$227,271,131	\$148,344,993	2,637
Chemicals & Petroleum Refining	\$9,869,324,632	\$4,211,207,624	\$1,977,406,502	15,315
Rubber & Leather Products	\$534,560,285	\$221,897,296	\$129,720,140	2,706
Lumber Products & Furniture	\$74,680,062	\$25,675,576	\$18,305,265	399
Stone, Clay, & Glass Products	\$177,876,619	\$111,993,102	\$58,572,864	1,000
Primary Metal	\$222,850,816	\$47,320,044	\$35,222,726	555
Fabricated Metal Products	\$308,132,572	\$116,054,104	\$74,924,678	1,344
Machinery, Except Electrical	\$121,616,143	\$54,050,467	\$38,613,879	431
Electric & Electronic Equipment	\$156,664,909	\$83,906,476	\$50,162,145	436
Motor Vehicles & Equipment	\$75,434,630	\$15,801,770	\$10,265,872	152
Transp. Equip., Exc. Motor Vehicles	\$38,995,906	\$16,630,398	\$10,867,370	136
Instruments & Related Products	\$5,173,693,157	\$2,174,498,073	\$1,652,816,632	22,174
Miscellaneous Manufacturing	\$74,541,401	\$30,023,578	\$20,707,607	344
Transportation	\$991,271,541	\$663,087,356	\$438,542,310	6,349
Communication	\$761,492,905	\$464,935,999	\$198,496,104	1,839
Electric, Gas, Water, Sanitary Services	\$1,523,863,825	\$346,169,559	\$151,059,159	670
Wholesale Trade	\$1,509,928,628	\$1,020,913,820	\$588,668,003	6,895
Retail Trade	\$2,589,599,078	\$2,145,661,431	\$1,283,036,930	35,230
Finance	\$506,513,825	\$275,059,437	\$160,167,909	1,491
Insurance	\$521,088,887	\$311,048,919	\$185,957,296	2,343
Real Estate	\$3,142,337,023	\$518,408,801	\$83,526,902	777
Hotels, Lodging Places, Amusements	\$288,880,573	\$149,141,386	\$97,841,905	2,497
Personal Services	\$580,096,460	\$355,463,589	\$276,556,420	4,881
Business Services	\$1,495,534,175	\$902,309,734	\$736,053,531	9,381
Eating & Drinking Places	\$1,443,363,423	\$845,416,326	\$449,806,615	21,300
Health Services	\$912,991,302	\$638,398,189	\$539,771,582	9,339
Miscellaneous Services	\$862,451,116	\$370,918,362	\$321,555,320	8,045
Households	\$43,223,027	\$43,223,027	\$42,308,425	3,063
<b>Total</b>	<b>\$38,132,434,967</b>	<b>\$17,645,656,727</b>	<b>\$10,531,931,785</b>	<b>173,983</b>

\*This scenario assumes that Texas achieves a concentration in the biomedical industry (pharmaceuticals and medical equipment) by 2035 equivalent to that of California. Only incremental gains above baseline projections are included.

SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group