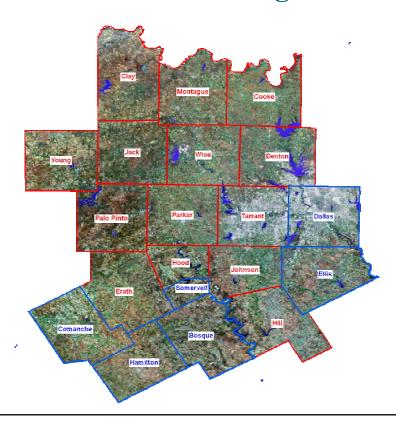


Bounty from Below:

The Impact of Developing Natural Gas Resources Associated with the Barnett Shale on Business Activity in Fort Worth and the Surrounding 14-County Area





May 2007



Contact Information

The Perryman Group

510 N. Valley Mills Drive, Suite 300

Waco, Texas 76710

Phone: 254.751.9595

Fax: 254.751.7855

www.perrymangroup.com

info@perrymangroup.com



Table of Contents

EXECUTIVE S	SUMMARY	4
INTRODUCTION	13	
REGIONAL E	16	
BARNETT SH	ALE OVERVIEW	22
FIRMS OPER	ATING IN THE BARNETT SHALE	28
THE POSITIV	E EFFECTS OF THE BARNETT SHALE ON THE REGION	33
• The Ec	onomic Impact of the Barnett Shale	35
The Fis	scal Impact of the Barnett Shale	53
Other F	Positive Effects of the Barnett Shale	57
COSTS AND	CONCERNS	66
CONCLUSION	J.	73
APPENDICES		76
	IDIX A: Methodology	70 77
ALI EN	Methodology: Impact Assessment System	78
	Methodology: Texas Econometric Model	85
APPFN	IDIX B: Detailed Sectoral Results	94
,	List of Tables	95
•	The Current and Projected Annual Impact of Exploration, Drilling, and Operations	, 0
	in the Barnett Shale on Business Activity	99
•	The Current and Projected Annual Impact of Royalty and Lease Payments Associated	
	with the Barnett Shale on Business Activity	109
•	The Current and Projected Annual Impact of Pipeline Development and Operations Associated	
	with the Barnett Shale on Business Activity	119
•	The Current and Projected Annual Impact of All Major Sources of Stimulus Associated	129
	with the Barnett Shale on Business Activity	129



EXECUTIVE SUMMARY



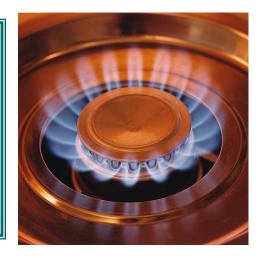
The Barnett Shale Has Transformed the Economy

- The Barnett Shale is one of the largest natural gas fields in North America.
- Exploration, drilling, and production in the Barnett Shale have
 - transformed the economy with thousands of jobs and millions of dollars in investment;
 - led to royalty and bonus payments to local residents, cities, school districts, and others totaling millions of dollars each year;
 - increased property tax receipts to counties, schools, and other entities; and
 - contributed to opportunities and prosperity for the entire region.
- One unique aspect of the Barnett Shale is that much of it is located in a highly urbanized area.

"Prior to the emergence of the Barnett Shale, Fort Worth had established itself as one of the largest cities in the state and a major contributor to overall business prosperity. It is also a central part of a dynamic urban region that recently exceeded six million in population.

The Barnett Shale is like 'icing on the cake' for an area already performing quite well."

Dr. M. Ray Perryman



Benefits Flow to Many

Both financial benefits and quality-of-life enhancements are flowing to people across the region from many different socioeconomic backgrounds.



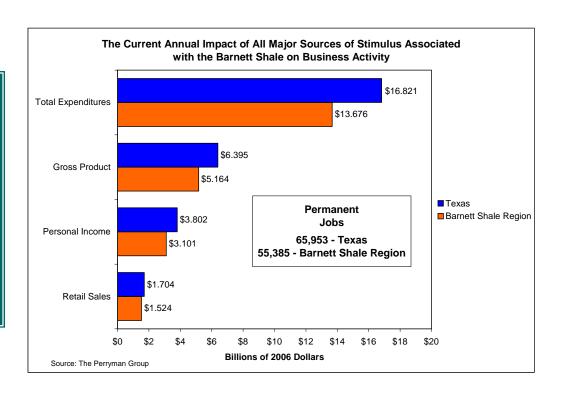
- Total gas production in the Barnett Shale has grown sharply in recent years and accounted for 12% of Texas production in 2006. The development has produced a substantial amount of business stimulus, leading to the creation of jobs and economic opportunities for thousands of area residents and companies.
- Property taxes generated by the expansion in property values associated with the natural gas reserves have reshaped the budgets of local school districts, cities, and others. Retail sales taxes, occupancy taxes, and other sources of fiscal revenue have also risen as the enhanced level of aggregate performance spans a broad spectrum of sectors. These resources afford numerous opportunities for investments in overall community well-being.
- Royalty and bonus payments have been sizable, flowing to numerous local landowners as well as cities and other governmental entities. In addition, companies operating in the Barnett Shale have donated substantial time and money to local charities.



The Current Impact is Large

When all major categories of stimulus from Barnett Shale activity are summed, the result includes \$5.2 billion in annual output and some 55,385 permanent jobs. These effects are notable even in the region's large and diverse economy.

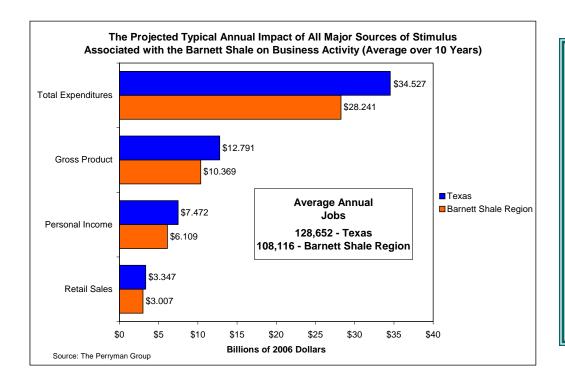
The overall effects of the Barnett Shale represent approximately **5.43% of private sector output** in the region, 5.37% of private earned income, and **5.92% of private employment**.





The Projected Impact is Even Larger

The overall effects of the activity in the Barnett Shale are likely to be responsible for an average of more than 108,000 jobs and \$10.4 billion in output per year through 2015.



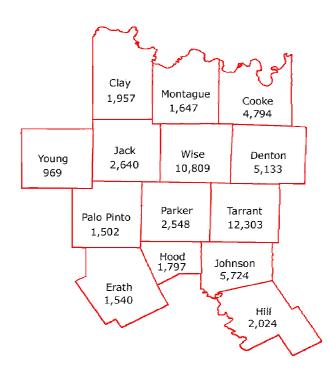
The ultimate development of the Barnett Shale will depend on factors such as the pace of technological advancement, gas prices, and geology. Industry observers expect activity to continue for the next 20-30 years, though some believe it will last much longer.



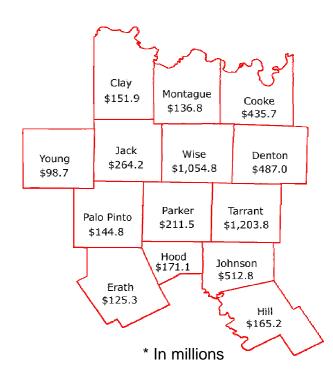
All Counties in the Region Are Gaining Jobs and Output

Current Effect of All Activity Associated with the Barnett Shale

Jobs



Output*





Local Governments and Schools are Receiving Sizable Payments

- The fiscal impact of the Barnett Shale on local taxing entities stems from two primary sources:
 - property taxes paid on oil and gas properties and
 - enhanced retail sales and real estate development due to the economic impact of the Barnett Shale.
- The total direct and indirect revenue to local governments in the region (excluding royalty and lease payments) was about \$227.7 million as of 2006, and will likely increase in the future.
- In addition to these major sources of income, the Barnett Shale leads to payments of
 - royalties and bonuses directly to cities, school districts, and others;
 - severance taxes of approximately \$165.4 million to the State of Texas in 2006;
 - various permits and fees payable to local governments;
 - other types of levies such as hotel/motel occupancy taxes; and
 - other State revenues stemming from various types of taxable activity.

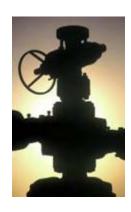
There are Challenges, but They are Manageable

- Like any major economic expansion, the development of the Barnett Shale has not come without cost. Of necessity, the process of drilling and maintaining a well involves some degree of water use, truck traffic, and noise.
 - Although a substantial volume of water is required for drilling and completing the wells, the percentage
 of total water use attributable to drilling is less than 1%.
 - While added truck traffic volume is a legitimate concern, it is being effectively addressed through maintenance agreements with drilling companies and other mechanisms that do not adversely affect local taxpayers.
 - Noise abatement techniques such as sound walls and technologically advanced rigs are being used to help reduce the noise associated with drilling activities. Noise generally lasts through the initial drilling period of 20-30 days; wells are usually silent once drilled and completed.
- Virtually all economic activity involves some cost in terms of the environment, use of infrastructure, or other trade-offs. The exploration and development of the Barnett Shale is no different; there is noise, traffic, and water use involved. However, these downside elements of the Barnett Shale are, in most instances, being dealt with so as to minimize their lasting effects.



The Barnett Shale's Positive Effects Will Endure

The Barnett Shale has bettered the economic fortunes of many residents of the region through jobs, royalties and other payments, and expanded business activity.



While some of the effects of the Barnett Shale will be transitory, the investment of the payments currently being received stands to permanently change the economy. Infrastructure improvements such as flood control will pay off indefinitely. Purchases of assets such as land for parks will also yield permanent benefits. Quality-of-life enhancements will benefit local lifestyles and enable the area to compete for desirable economic development.

Even when the Barnett Shale play has been exhausted, many of its positive effects will remain.



INTRODUCTION

Introduction

- The Barnett Shale is one of the most significant onshore natural gas fields in North America and the largest in Texas, with thousands of wells producing hundreds of billions of cubic feet of natural gas each year. Although the existence (though not the magnitude) of this field has been known for many years, activity has risen sharply over the past several years as a result of improvements in recovery techniques and relatively high gas prices. The production area encompasses a significant segment of north and central Texas. Over 99.9% of the production through 2006 has occurred in a 14-county area, but development is now extending beyond this core region.
- Exploration, drilling, and production in the field have
 - transformed the economy with thousands of jobs and millions of dollars in investment;
 - led to royalty and bonus payments to local résidents, cities, school districts, and others totaling millions of dollars each year;
 - increased property tax receipts to counties, schools, and other entities; and
 - contributed to opportunities and prosperity for the entire region.
- The development of these natural gas resources is unique in that much of it is occurring within the Fort Worth-Arlington metropolitan area. In terms of overall business activity (output, income, etc.), this large urban center represents about 80% of the core production region. As a result, there have been concerns regarding water usage, roadways, and environmental issues that are somewhat different than the norm in major energy locations.
- The Perryman Group (TPG) was recently asked to evaluate the overall economic impact of the Barnett Shale on the 14-county area.

The Perryman Perspective

- The Perryman Group (TPG) is a Texas-based economic research and analysis firm with more than 20 years of experience in assessing the economic impact of corporate expansions, regulatory changes, real estate developments, and myriad other phenomena affecting business activity.
- TPG has conducted hundreds of impact analyses for the US and Texas economies as well as all Texas metro areas and counties. 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 structures of the economies of Fort Worth and the surrounding area.
- 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 extensive experience in analyzing the Fort Worth area and its economy. The firm has been performing regular forecasts for the area and conducting economic outlook conferences for more than 20 years. In addition, studies have been completed for a number of local projects and initiatives, such as the development of Fort Worth Alliance Airport, the Joint Strike Fighter Program at Lockheed Martin, major corporate relocations and expansions, large tourism venues, and infrastructure investments.
- The firm has also conducted numerous investigations related to the oil and gas industry. These analyses include an assessment of the effects of offshore drilling for the US Department of the Interior, several studies of specific production areas, and projections of natural gas prices and output.



REGIONAL ECONOMIC OVERVIEW

Regional Economic Outlook

- From its beginnings as a major center of the cattle industry, Fort Worth has consistently shown excellent economic performance. Well prior to the emergence of the Barnett Shale, Fort Worth had established itself as one of the largest cities in the state, and a major contributor to overall business prosperity. It is also a central part of a dynamic urban region that recently exceeded six million in population. The economy of Fort Worth-Arlington and the surrounding area is diverse and driven by a number of factors including
 - a strong transportation logistics industry with Dallas/Fort Worth International Airport and Fort Worth Alliance Airport as its anchors;
 - notable aviation-related manufacturing including top-tier defense contractors with large ongoing contracts;
 - a flourishing arts community including numerous highly respected museums and performance venues;
 - major sports facilities;
 - significant educational and health care institutions;
 - headquarters for many large corporations; and
 - a multi-faceted production and distribution complex.
- The surrounding counties also generate substantial activity, including a notable concentration of agribusiness operations.
- The Perryman Group projected economic performance for the 14-county region representing the primary production area of the Barnett Shale. The following slides present projections for key indicators of economic activity.



Economic Forecast for the Barnett Shale Region

In order to provide a proper context for evaluating the importance of this emerging segment of the local economy, The Perryman Group performed a forecast for the 14-county primary area (Clay, Cooke, Denton, Erath, Hill, Hood, Jack, Johnson, Montague, Palo Pinto, Parker, Tarrant, Wise, and Young) of Barnett Shale production. Detailed projections for the area, as derived from the relevant submodel of the Texas Econometric Model, are provided for the period through 2015. These values include both aggregate and private-sector measures to gain a perspective on the magnitude of activity associated with natural gas development.

BARNETT SHALE REGION ECONOMIC INDICATORS							
Key Indicator	2006 Level	2015 Level	CAGR* 2006-2015				
Real Gross Product (2006\$)	\$106.01 billion	\$153.95 billion	4.23%				
Wage & Salary Employment	1,096,067	1,284,770	1.78%				
Real Personal Income (2006\$) (by place of residence)	\$98.38 billion	\$142.40 billion	4.19%				
Real Retail Sales (2006\$)	\$51.91 billion	\$75.18 billion	4.20%				

^{*}Compound Annual Growth Rate. Compound annual growth rates reflect changes in the size of the base from which growth is calculated.



Key Indicators of Aggregate and Private Sector Economic Activity in the Barnett Shale Region

Historical and Projected Values for Key Economic Indicators for the Barnett Shale Region*

				Private		Real		Real
		Private	Real	Real	Personal	Personal	Personal	Personal
	Gross	Gross	Gross	Gross	Income	Income	Income	Income
	Area	Area	Area	Area	(by place	(by place	(by place	(by place
Date	Product	Product	Product	Product	of residence)	of residence)	of work)	of work)
2001	\$73,082.660	\$65,783.714	\$85,048.633	\$75,969.208	\$74,941.131	\$86,986.647	\$49,533.454	\$57,495.116
2002	\$76,343.722	\$68,499.154	\$88,606.969	\$79,262.763	\$76,349.170	\$88,554.889	\$42,602.240	\$49,412.936
2003	\$80,082.608	\$71,718.384	\$89,927.581	\$80,382.536	\$78,841.470	\$88,413.448	\$43,850.862	\$49,174.704
2004	\$86,461.309	\$77,540.460	\$95,103.181	\$85,290.687	\$83,615.133	\$91,972.528	\$46,688.991	\$51,355.590
2005	\$96,878.852	\$86,884.967	\$100,357.220	\$90,004.511	\$90,121.190	\$93,356.928	\$50,278.803	\$52,084.029
2006	\$106,011.651	\$95,077.629	\$106,011.651	\$95,077.629	\$98,378.761	\$98,378.761	\$55,041.789	\$55,041.789
2007	\$113,257.264	\$101,578.056	\$110,563.640	\$99,162.201	\$105,635.625	\$103,123.268	\$59,098.496	\$57,692.943
2008	\$121,276.907	\$108,772.981	\$115,407.139	\$103,508.400	\$113,066.853	\$107,594.450	\$63,252.567	\$60,191.161
2009	\$129,734.453	\$116,360.970	\$120,380.673	\$107,971.411	\$120,879.692	\$112,164.335	\$67,619.343	\$62,744.027
2010	\$138,785.006	\$124,481.165	\$125,562.590	\$112,621.514	\$129,157.787	\$116,852.582	\$72,245.887	\$65,362.830
2011	\$148,384.419	\$133,094.002	\$130,923.817	\$117,432.645	\$137,911.498	\$121,683.260	\$77,137.942	\$68,061.013
2012	\$158,527.414	\$142,194.778	\$136,432.404	\$122,376.155	\$147,162.870	\$126,651.811	\$82,307.797	\$70,836.017
2013	\$169,251.068	\$151,816.781	\$142,104.799	\$127,466.807	\$156,930.842	\$131,760.621	\$87,766.000	\$73,689.165
2014	\$180,579.264	\$161,981.467	\$147,942.174	\$132,705.659	\$167,235.658	\$137,010.231	\$93,523.828	\$76,620.749
2015	\$192,536.093	\$172,710.480	\$153,945.429	\$138,093.531	\$178,097.652	\$142,400.933	\$99,592.603	\$79,630.919



Key Indicators of Aggregate and Private Sector Economic Activity in the Barnett Shale Region (continued)

Historical and Projected Values for Key Economic Indicators for the Barnett Shale Region*

	Private	Private Real						
	Personal	Personal			Private			
	Income	Income		Wage	Wage		Real	
	(by place	(by place	Total	and Salary	and Salary	Retail	Retail	
Date	of work)	of work)	Employment	Employment	Employment	Sales	Sales	
2001	43,376.308	50,348.314	1,293.6	1,030.4	879.6	\$34,874.840	\$40,480.379	
2002	44,605.035	51,735.912	1,299.3	1,025.4	870.4	\$36,602.212	\$42,453.701	
2003	45,902.088	51,474.965	1,308.5	1,020.8	861.9	\$38,399.959	\$43,062.018	
2004	49,054.250	53,957.259	1,340.1	1,041.2	880.3	\$42,550.506	\$46,803.461	
2005	52,869.689	54,767.938	1,373.4	1,067.0	902.1	\$47,547.785	\$49,254.955	
2006	57,712.418	57,712.418	1,410.9	1,096.1	926.7	\$51,907.701	\$51,907.701	
2007	61,967.847	60,494.051	1,438.6	1,117.6	944.9	\$55,740.124	\$54,414.444	
2008	66,325.325	63,115.198	1,466.3	1,139.1	963.1	\$59,665.036	\$56,777.265	
2009	70,906.412	65,794.100	1,494.2	1,160.7	981.4	\$63,791.824	\$59,192.470	
2010	75,760.153	68,542.282	1,522.2	1,182.4	999.8	\$68,164.672	\$61,670.442	
2011	80,892.602	71,373.857	1,550.3	1,204.3	1,018.2	\$72,789.092	\$64,223.898	
2012	86,316.667	74,286.144	1,571.6	1,220.7	1,032.2	\$77,676.768	\$66,850.445	
2013	92,043.431	77,280.536	1,599.0	1,242.0	1,050.2	\$82,837.747	\$69,551.357	
2014	98,084.743	80,357.344	1,626.6	1,263.4	1,068.2	\$88,282.767	\$72,326.933	
2015	104,452.503	83,516.732	1,654.1	1,284.8	1,086.3	\$94,022.614	\$75,177.341	

^{*} GROSS AREA PRODUCT - Millions of Dollars; REAL GROSS AREA PRODUCT - Millions of 2006 Dollars; PERSONAL INCOME (By place of residence and work) - Millions of Dollars; REAL PERSONAL INCOME (By place of residence and work) - Millions of 2006 Dollars; EMPLOYMENT - Thousands of Persons; RETAIL SALES - Millions of Dollars; REAL RETAIL SALES - Millions of 2006 Dollars



Overview of Forecast Findings

- The 14-county primary region is forecast to experience significant expansion in key measures of overall economic health from 2006 through 2015. The primary region is also projected to see higher compound annual growth rates (CAGR) than the state and the nation.
- Real gross product (in constant 2006 dollars) is likely to grow from \$106.01 billion in 2006 to \$153.95 billion in 2015, total expansion of \$47.94 billion over the period, or a yearly pace of 4.23%.
- Wage and salary employment is expected to climb from 1,096,067 to 1,284,770 over the nine-year period, a CAGR of 1.78%.
- Real personal income from 2006 to 2015 should increase by \$44.02 billion. The resulting compound annual growth rate of 4.19% is also in excess of that anticipated for Texas and the US.
- Real retail sales is predicted to rise at a rate of 4.20% per year representing a gain of \$23.27 billion through 2015.



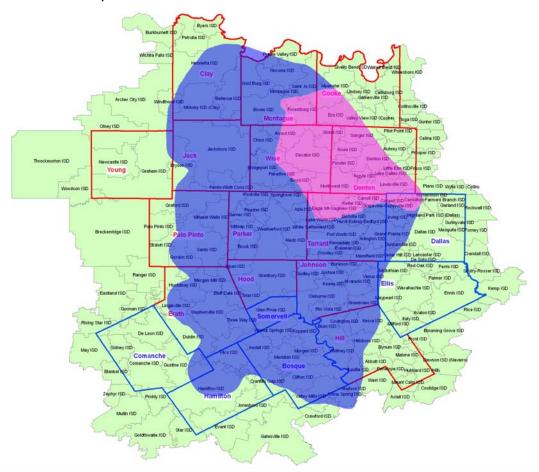
BARNETT SHALE OVERVIEW

The Barnett Shale

- As noted, the Barnett Shale is the largest active onshore natural gas field in Texas as well as one of the largest in the United States with known reserves of more than 2 trillion cubic feet (TCF) of natural gas and an estimated 30 trillion cubic feet of natural gas resources.
- The field was discovered in 1981 by Mitchell Energy, but it was only after improvements in recovery methods in the late 1990s that significant production became a possibility. When price increases in natural gas made the technology economically feasible, production in the Barnett Shale accelerated markedly. Though essentially a natural gas field, the Barnett Shale includes some oil and condensate as well.
- The Barnett Shale basin stretches west to Wichita Falls and south to Waco, with exploration continuing to expand the known boundaries of the formation. The Newark East Field, discovered in 1981, is the core area of the Barnett Shale located in Wise, Denton, and Tarrant counties. In 2006, the heaviest concentration of well development was in Tarrant, Johnson, and Parker counties.
- One unique aspect of the Barnett Shale is that much of it is located in a highly urbanized area. Fort Worth had almost 500 wells within city limits in 2006, and city officials projected there would be 1,160 wells by the end of 2010. Producers use techniques such as horizontal drilling to minimize the impact on surrounding neighborhoods.

Size of the Barnett Shale

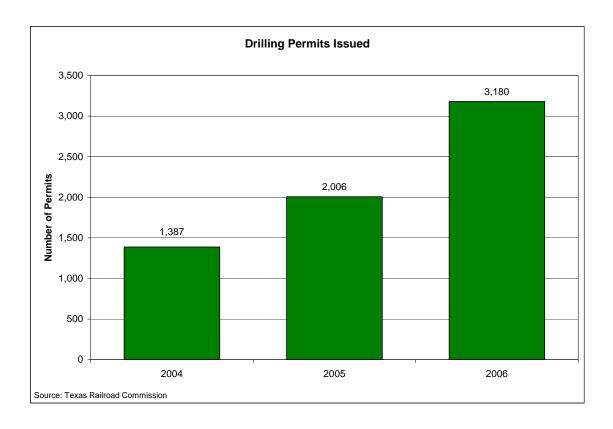
The known boundaries of the Barnett Shale cover a large segment of north and central Texas. The 14-county primary production area has to date (through 2006) accounted for virtually all (more than 99.9%) of Barnett Shale production.





Drilling Activity in the Barnett Shale

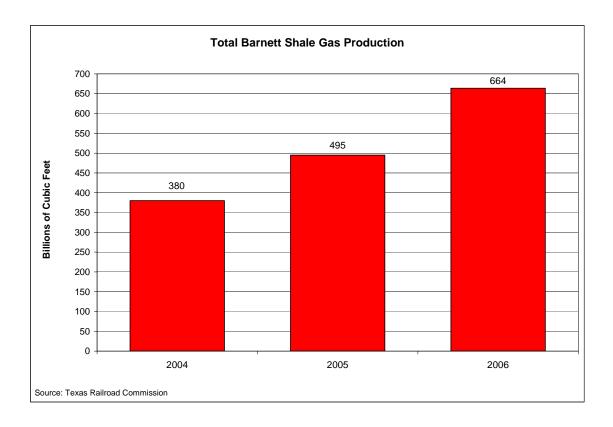
Drilling permits for 2006 were notably higher than the 2005 total. As of April 2007, the Railroad Commission listed a total of 6,083 gas wells and 3,302 permitted locations in the Barnett Shale field.





Production in the Barnett Shale

Total gas production in the Barnett Shale has grown sharply in recent years and accounted for 12% of Texas production in 2006.



Future Expectations for Barnett Shale Activity

- There is still a substantial quantity of natural gas to extract from the Barnett Shale. Exploration continues to expand the formation's known boundaries and technological developments stand to enhance the proportion of gas in the formation that can be recovered. While ultimate production patterns will be determined by numerous factors (such as the pace of technological development, natural gas prices, geology, and demand from major sectors), the field is likely to see significant activity for many years.
- As of September 2006, producers had extracted more than 2.34 TCF of gas from the Barnett Shale; estimates of remaining reserves range from 27-30 TCF.
- Current production of 1.5 billion cubic feet per day represents 2.5% of domestic natural gas output, and estimates indicate it could rise to 3-4 billion cubic feet per day in the coming years.
- Technology is an important factor in the Barnett Shale. The area is predicted to be producing for many decades to come assuming the relevant technology keeps pace. Brad Foster, Central Division Vice President and General Manager for Devon Energy, has indicated that only about 16% of the gas in the Barnett Shale is actually being recovered, leaving 84% to be obtained as processes improve.



FIRMS OPERATING IN THE BARNETT SHALE



Firms Operating in the Barnett Shale

Some 177 companies have operations in the Barnett Shale. The largest of these are noted in the table below.

Major Operators in the Barnett Shale (2006)								
Operator Name	Oil (BBL)	Casinghead (MCF)	GW Gas (MCF)	Condensate (BBL)				
Devon Energy Production Co., L.P.	8,414	503,894	236,977,466	393,878				
XTO Energy Inc.	0	0	90,661,322	1,216				
EOG Resources Inc.	0	0	61,085,218	29,414				
Chesapeake Operating Inc.	0	0	56,276,424	5,723				
EnCana Oil & Gas (USA) Inc.	106,516	615,700	48,642,290	155,352				
Burlington Resources O&G Co., L.P.	0	0	32,106,724	422,750				
Chief Oil & Gas LLC	15,482	745,598	18,441,349	12,780				
J-W Operating Co.	0	0	12,086,942	0				
Denbury Onshore LLC.	0	0	10,637,777	5,788				
Quicksilver Resources Inc.	0	0	10,582,810	82,658				

Source: Texas Railroad Commission



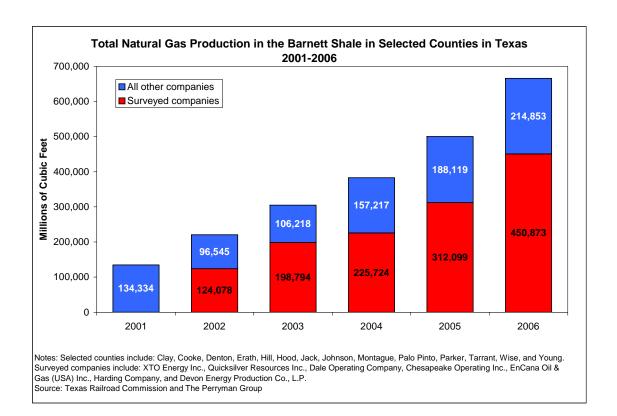
Survey of Companies Operating in the Barnett Shale

- The Perryman Group developed an extensive questionnaire designed to gather information regarding operations in the Barnett Shale.
- The survey was sent, in cooperation with the Fort Worth Chamber of Commerce, to all companies with significant Barnett Shale activity.
- Seven firms (Chesapeake Operating Inc., Dale Operating Company, Devon Energy Production Co., L.P., EnCana Oil & Gas (USA) Inc., Harding Company, Quicksilver Resources Inc., and XTO Energy Inc.) responded to the survey, providing valuable information regarding past and future production, investment, tax payments, employment, and other data.



Survey Respondents' Proportion of Total Production

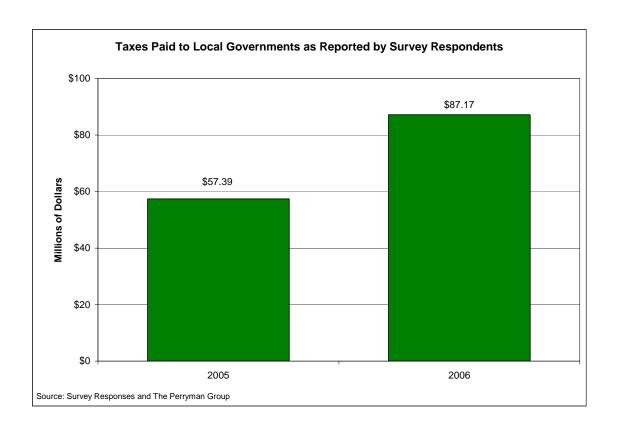
The companies responding to the survey are responsible for more than two-thirds of total production in the Barnett Shale.





Taxes Paid to Local Governments by Survey Respondents

- The seven survey respondents paid a total of \$87.17 million in direct taxes to local governmental entities in 2006, a substantial increase from the \$57.39 million observed in 2005.
- Many public entities are also receiving significant royalty and lease payments.





THE POSITIVE EFFECTS OF THE BARNETT SHALE ON THE REGION

Positive Effects of the Barnett Shale on the Region

- Activity in the Barnett Shale has had a number of positive effects. These benefits will only increase in the future.
- The development has produced a substantial amount of business stimulus, leading to the creation of jobs and economic opportunities for thousands of area residents and companies.
- Property taxes generated by the expansion in property values associated with the natural gas reserves have reshaped the budgets of local school districts, cities, and others. Retail sales taxes, occupancy taxes, and other sources of fiscal revenue have also risen as the enhanced level of aggregation performance spans a broad spectrum of sectors. These resources afford numerous opportunities for investments in overall community well-being.
- Royalty and bonus payments have been sizable, flowing to numerous local landowners as well as cities and other governmental entities. In addition, companies operating in the Barnett Shale have donated substantial time and money to local charities.
- Both financial benefits and **quality-of-life enhancements** are flowing to people across the region from many different socioeconomic backgrounds.



The Economic Impact of the Barnett Shale

Economic Impact Overview

- Any investment or other corporate activity generates multiplier effects through the economy. Evidence of the spin-off activity arising from the influx of people, investment, and business related to the Barnett Shale is readily available.
- Examples of these types of spillover effects include developments such as
 - oil field service companies raising incomes, payrolls, and purchasing due to expanded business;
 - restaurants seeing increased patronage from drilling crews and others;
 - professionals such as attorneys, accountants, and engineers expanding their client base with Barnett Shale-related transactions:
 - hotels and motels selling room-nights to business travel related to the Barnett Shale;
 - myriad other businesses enjoying higher volumes both directly and indirectly as a consequence of the Barnett Shale; and
 - residential development and real estate activity expanding in the production area.
- This stimulus is dramatically impacting local economies. For example, Cleburne, Texas saw unemployment fall from over 8% in 2004 to 5% in March 2005. In addition, the community saw a 30% increase in real estate transactions as well as additional business for hotels, restaurants, retail stores, and many types of business and professional services.
- The Perryman Group's impact assessment system is designed to quantify these multiplier effects across industrial categories and geographic areas.

Method Used to Measure Impacts

- The basic modeling technique employed in this study is known as dynamic input-output analysis, 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 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.
- This analysis incorporated a variety of public and private sources of information describing current and projected production, investment, employment, and other relevant data into a model of the economic attributes of oil and gas exploration and production activity in the Barnett Shale. In particular, extensive information was obtained from the survey of major producers, other materials from market analysts, the Texas Railroad Commission, the US Departments of Commerce and Labor, the Texas Workforce Commission, and the Texas Comptroller of Public Accounts.
- A detailed explanation of the methods, terms, and assumptions used in this study, including the pertinent input-output and econometric systems, may be found in Appendix A.

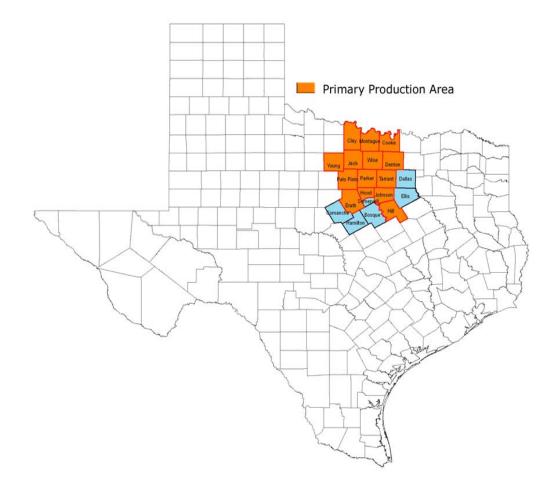
Nature of Impacts Analyzed

- The Perryman Group analyzed the economic impact of activity in the Barnett Shale at the county level for the 14-county primary region of activity. As noted previously, these counties comprise virtually all of the production through 2006, with activity now being expanded to several other counties.
- Specifically, the benefits were calculated for 2006 based on direct outlays stemming from
 - the magnitude of exploration, drilling, and production activity in the Barnett Shale;
 - the spending stimulated by royalties, bonuses, and lease payments; and
 - the expansion and operation of pipeline facilities.
- The overall effects from the various channels are quantified at the county, regional, and state levels. Fiscal effects are also estimated for various governmental entities.
- Projections of future activity are based on current patterns, plans of major operators, forecasts from relevant economic models, and expectations of market observers and others with relevant knowledge and experience. While these projections are reasonable, the ultimate pattern of development will be determined by a number of factors, such as geology, natural gas prices, leases and their negotiations, and the demand for natural gas, which cannot be anticipated with certainty. The future levels of activity and their effects on the economy are only provided at the regional and state level. Because some counties are only beginning to see development and the exact patterns in formations and yields are not known, it is not possible to provide a meaningful allocation at the county level. In particular, small areas such as individual school districts have the potential to be notably affected by even a few wells or a brief flurry of drilling activity. The anticipated gains are analyzed based on a typical or "average" annual level over the next ten years. The performance in individual periods may be higher or lower than those estimated.



The Study Area

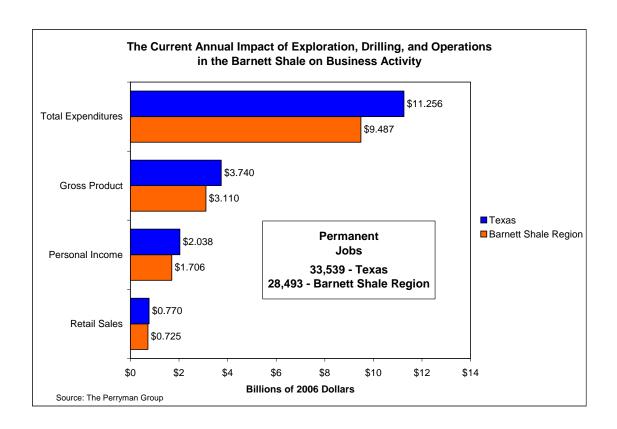
The current (2006) impact is measured for the 14-county area that experienced virtually all of the production to date. The projections, while not county-specific, anticipated expansion to a broader geographic region of north and central Texas.





Current Impact of Exploration, Drilling, and Operations

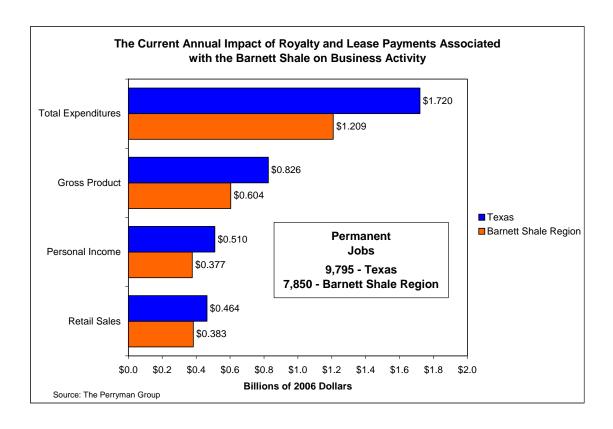
The impact of exploration and drilling in the Barnett Shale region and the state is substantial. Growing from a minimal level just a few years ago, the total effect on business activity now includes \$3.110 billion in annual output and 28,493 jobs in the 14-county area.





Current Impact of Royalty and Lease Payments

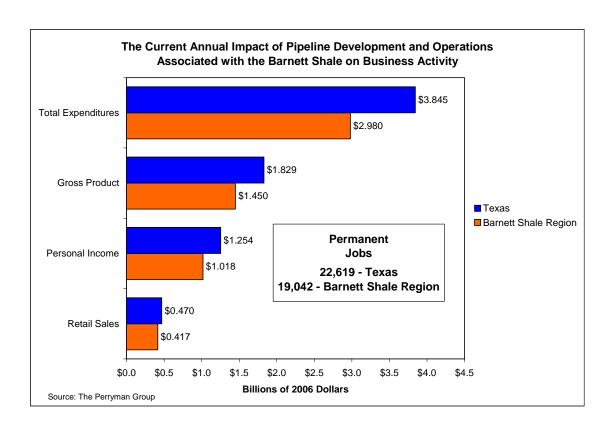
Royalties and lease payments have changed the fortunes of many Fort Worth residents, businesses, charitable organizations, and others. They are also generating substantial business activity of an estimated \$604 million in annual output and 7,850 jobs in the region.





Current Impact of Pipeline Development and Operations

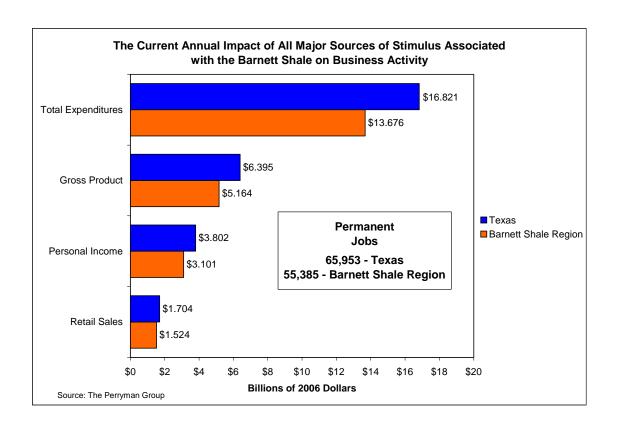
As the Barnett Shale develops, additional pipeline infrastructure is needed. The current effect of such development and operations includes \$1.450 billion in annual output and 19,042 jobs in the region.





Current Impact of All Major Sources of Stimulus Associated with the Barnett Shale

When all major categories of stimulus from Barnett Shale activity are summed, the result includes \$5.164 billion in annual output and some 55,385 permanent jobs. These effects are notable even in the region's large and diverse economy.



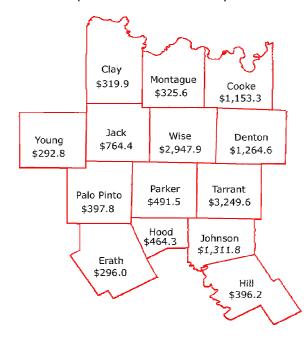


Current Impact on Expenditures: Results by County

Exploration and development in the Barnett Shale is enhancing business activity across the region, with substantial gains in total expenditures in many counties. The highest values tend to be observed in those areas with the greatest levels of current activity and those urbanized counties that capture a higher percentage of the spin-off activity.

Total Expenditure Impacts by County in the Primary Barnett Shale Region – 2006

(millions of dollars)



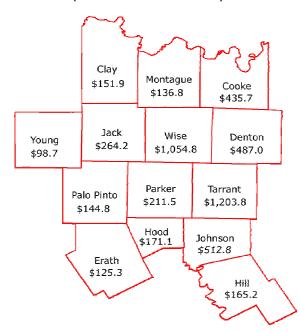


Current Impact on Real Gross Product: Results by County

The region is experiencing gains in output (real gross product or RGP) due to the Barnett Shale activity. The increment to aggregate production in Tarrant and Wise counties exceeded \$1 billion per year.

Real Gross Product Impacts by County in the Primary Barnett Shale Region – 2006

(millions of dollars)

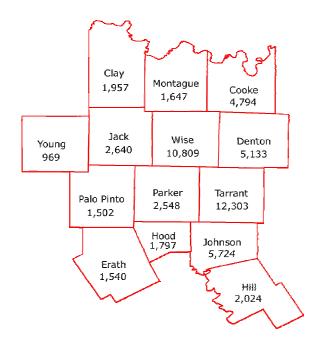




Current Impact on Employment: Results by County

Thousands of jobs in the region are linked to activity in the Barnett Shale.

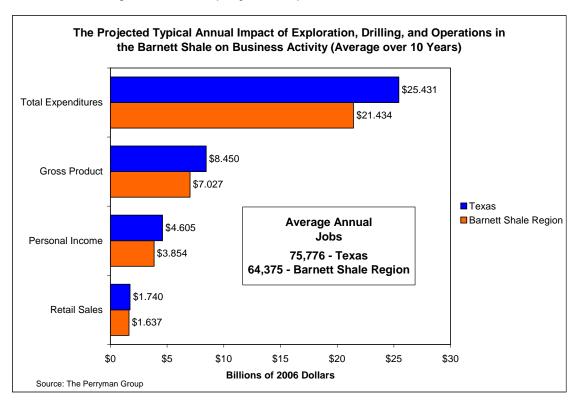
Employment Impacts by County in the Primary Barnett Shale Region – 2006





Projected Impact of Exploration, Drilling, and Operations

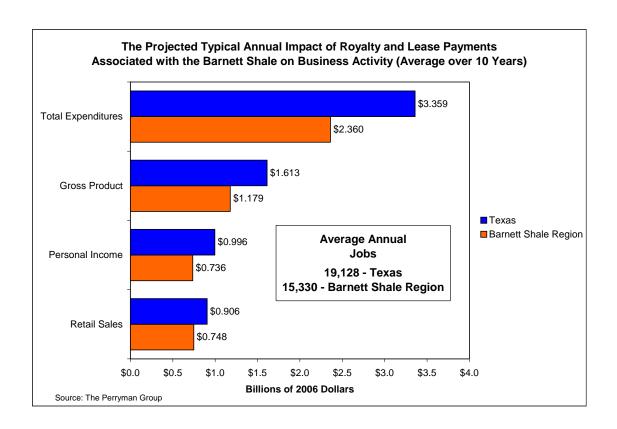
Exploration and drilling generate the majority of impacts from Barnett Shale activity. The typical annual impact of activity (over the next 10 years) is expected to include more than \$7 billion in output and 64,375 jobs in the Barnett Shale region. Although many factors can influence future patterns, the most probable pattern is for increasing levels of outlays over the next few years with modest declines in later years of the projection period.





Projected Impact of Royalty and Lease Payments

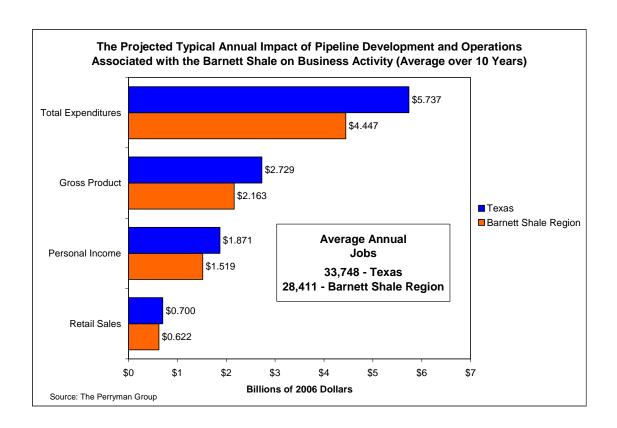
Royalty and lease payments generate additional gains in regional business activity of more than \$1 billion in output per year over the next 10 years.





Projected Impact of Pipeline Development and Operations

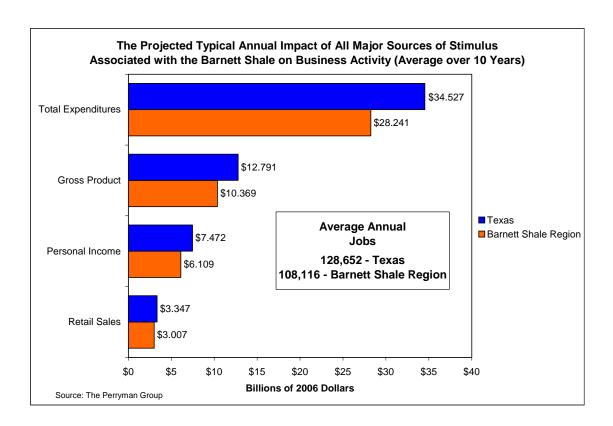
Pipeline development and operations are projected to lead to gains in business activity in a typical year of more than \$2 billion in gross product across the Barnett Shale region.





Projected Typical Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale

The overall effects of the activity in the Barnett Shale are likely to be responsible for an average of more than 108,000 jobs per year through 2015.





The Barnett Shale's Contribution to the Economy

- In analyzing the impact of the Barnett Shale as a component of the economy of Fort Worth and the surrounding area, it is relevant to consider the health of the area economy prior to the Barnett Shale activity.
- Although Texas was slower to recover from the national recession of the early-2000s than some areas of the country, once the economy did begin to grow again, it significantly outpaced the US rate. The state's metropolitan areas, including Fort Worth and the surrounding area, led the way in job gains and other healthy business activity.
- By the mid-2000s, the Fort Worth area was experiencing notable expansion in a broad spectrum of industries.
- The magnitude of the Barnett Shale activity is appropriately considered against this background of a large and growing industrial base. In other words, while the rapid emergence of natural gas activity contributes significantly to the local economy, it represents only one element of a diverse business complex.



The Barnett Shale in Perspective

- The Perryman Group compared the economic impacts quantified in this analysis to the total size of the Barnett Shale regional economy to determine the proportion of the total economy attributable to Barnett Shale activity.
- This comparison revealed that the overall effects of the Barnett Shale represent approximately 5.43% of private sector output in the region, 5.37% of private earned income, and 5.92% of private employment.
- Because the growth in this segment exceeds that of other elements of the economy, these **percentages will increase in the future**. Over the next five years, the overall contribution will be 7%-8% of business activity by most measures.
- The greatest relative effects will be observed in the less urbanized centers experiencing the highest levels of activity at any given time.



The Fiscal Impact of the Barnett Shale

Fiscal Impact of the Barnett Shale

- The fiscal impact of the Barnett Shale on local taxing entities stems from two primary sources:
 - property taxes paid on oil and gas properties and
 - enhanced retail sales and real estate development due to the economic impact of the Barnett Shale.
- In addition to these major sources of income, the Barnett Shale leads to payments of
 - royalties and bonuses directly to cities, school districts, and others (discussed in a separate section);
 - severance taxes of approximately \$165.4 million to the State of Texas in 2006;
 - various permits and fees payable to local governments;
 - other types of levies such as hotel/motel occupancy taxes; and
 - other State revenues stemming from various types of taxable activity.
- As noted, the seven companies responding to The Perryman Group's survey directly paid some \$87.2 million in taxes to local taxing entities last year; payments by these firms alone have substantially altered the fiscal situation for a number of local governments. When payments from other entities and indirect taxes are included, overall contributions increase notably.
- TPG estimated that the overall direct and indirect fiscal contribution (excluding royalty and lease payments to public entities) of Barnett Shale activity in 2006 totaled about \$718.5 million, including \$490.9 million in State revenues and \$227.7 million to local governments. This aggregate amount is expected to exceed \$1 billion per annum in the future.



Uses of Increased Funds

- The magnitude of the additional property taxes is large and growing rapidly for many areas.
 - Oil and gas property values escalated from \$1.2 million for Tarrant County in 2000 to \$741.8 million in 2005, resulting in a substantial increase in property tax receipts.
- Incremental funds are supporting general operations as well as specific quality-of-life enhancements.
 - Arlington, for example, announced plans to use the money generated from the Barnett Shale for general operations as well as improvements on the arts, parks, and other amenities making the city more appealing to businesses and residents.
- Increasing tax receipts from oil and gas properties removes some of the burden from other types of property, thereby reducing the need to raise taxes on homes and businesses. These lower aggregate tax rates are, in turn, a positive factor in attracting new economic development opportunities.



Total Direct and Indirect Fiscal Revenue (Taxes and Fees) Associated with Barnett Shale Development 2006

The table below summarizes estimated direct and indirect fiscal benefits for State and local taxing entities. Note that approximations are used in some instances to avoid revealing individual firm information and that some allocations are based on available information and activity patterns. These values are derived from actual results reported in the survey, data from taxing authorities, and simulations of a fiscal impact model that reflects the specific State and local tax structure in Texas and the relevant local areas.

State of Texas	\$490,862,064				
Clay County		Hood County		Parker County	
County	\$452,388	County	\$1,030,550	County	\$2,246,005
Cities	\$1,843,895	Cities	\$2,231,633	Cities	\$2,752,269
School Districts	\$880,629	School Districts	\$2,109,522	School Districts	\$2,712,182
Cooke County		Jack County		Tarrant County	
County	\$1,184,927	County	\$645,723	County	\$14,015,136
Cities	\$5,363,492	Cities	\$3,164,096	Cities	\$18,249,163
School Districts	\$2,227,577	School Districts	\$1,631,314	School Districts	\$15,192,849
Denton County		Johnson County		Wise County	
County	\$2,815,466	County	\$1,407,155	County	\$11,566,510
Cities	\$6,874,242	Cities	\$6,996,470	Cities	\$14,524,010
School Districts	\$53,788,014	School Districts	\$10,594,400	School Districts	\$23,870,452
Erath County		Montague County		Young County	
County	\$392,875	County	\$392,496	County	\$239,315
Cities	\$1,608,461	Cities	\$1,712,637	Cities	\$1,224,814
School Districts	\$727,555	School Districts	\$762,987	School Districts	\$436,715
Hill County		Palo Pinto County		Other Local Public Entities	\$3,519,710
County	\$477,253	County	\$375,737		
Cities School Districts	\$2,086,393 \$945,030	Cities School Districts	\$1,666,713 \$736,169	Total Local Tax and Fee Payments	\$227,674,929
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			TOTAL STATE AND LOCAL	\$718,536,993

Notes: (1) Amounts will fluctuate significantly from year-to-year based on production and development patterns.

⁽²⁾ Data for individual entities could not be reported due to confidentiality of individual firm records.

⁽³⁾ Certain assumptions were incorporated regarding distribution of fiscal effects based on available information.

⁽⁴⁾ Amounts do not include royalty and lease payments to public entities.



Other Positive Effects of the Barnett Shale



Other Positive Effects of the Barnett Shale

- In addition to the multi-billion dollar gains in business activity and the hundreds of millions of dollars flowing to local taxing entities, there are also other positive effects associated with activity in the Barnett Shale.
- Royalties, bonuses, and lease payments are flowing to businesses, charitable organizations, households, and local governments. These inflows are substantial and are changing the lives of many residents in the region.
- The companies involved in exploration and development in the Barnett Shale are also donating millions of dollars to local charities. In addition to monetary contributions, many are promoting employee volunteerism and other community involvement.



Royalties and Other Payments to Individuals and Organizations

- The magnitude of royalties and other payments is substantial.
 - In 2005, Devon paid more than \$287 million in royalties to property holders in a nine-county study area with an additional \$50 million for leases of unproven properties.
 - Tom Price of Chesapeake Operating Inc., recently gave an example of a typical producing well
 indicating that it would provide \$4 million in local royalties, \$500,000 in property taxes, and create 40
 direct jobs.
- Residents from diverse socioeconomic backgrounds are benefiting.
 - Fort Worth's, inner-city residents are reaping the positive impacts of the gas production. Apostle Michael Stevens, pastor of Greenway Church, which serves a small African-American community north of downtown Fort Worth commented, "Our people traditionally haven't gotten this kind of benefit from the oil and gas industry."
 - Residents of Fort Worth have seen lease bonuses of up to \$500 for signing with expected monthly royalty checks of \$100 or more once wells start producing.
- Charitable and non-profit organizations are also receiving payments.
 - The American Cancer Society sold mineral rights to donated land for some \$5 million.
 - Area Girl Scouts also recently leased mineral rights to drill under a summer camp.
 - A local church received a \$21,000 signing bonus to allow drilling under its property.

Royalties and Other Payments to Local Governments

- Local governments are receiving substantial sums from oil and gas companies for leases, bonuses, and royalties.
- The City of Fort Worth is a major beneficiary; in late 2006, the city government reported receiving \$10.4 million during the prior year in bonuses and royalties for wells in various stages of production.
 - City analysis indicates they may be adding lease and royalty revenues from 50 wells in the next four years, increasing city revenues to \$60 million annually (almost 12% of the city's expected general fund budget for 2006-07).
 - In 2005, the city estimated that its portion of revenue from just one successful well over a productive life of 10 to 20 years could be as much as \$2.5 million. In July 2006, there were almost 500 producing gas wells and 189 prospective wells in other stages of development in the City of Fort Worth.
- Schools have also benefited from royalties and bonuses.
 - As noted, the fiscal effects for many area school districts are significant; in some districts, oil and gas
 properties account for a large and increasing component of the tax base. Additionally, many school
 districts have been the recipients of royalty payments.
 - Similarly, higher education institutions have seen some effect. For example, the Tarrant County Junior College District received \$3.9 million from signing bonuses at three campuses and will receive royalties on any future production. Much of this money is earmarked for scholarships.

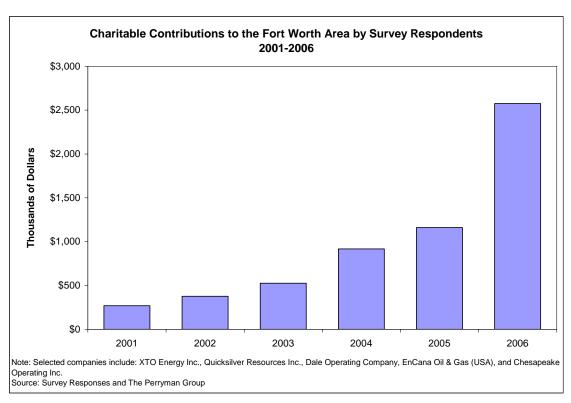
Use of Royalty Payments

- Area counties, cities, schools, and other entities are using royalty and bonus payments in a variety of ways. A few examples are noted below.
 - Johnson County has seen its mineral tax base grow from an inconsequential amount to \$571 million in about four years. While officials are being careful how they spend the money recognizing that it is not a constant flow, the county did reduce its tax rate last year in response to a 9.3% increase in tax revenue that year. Officials say they do not plan to take on long-term, costly projects with the extra money; instead they are using it to pay cash for things normally debt-financed.
 - Mansfield officials indicate they will put most of the royalties into the city's general fund; however, revenue and royalties in areas owned by Mansfield Park Facilities Development Corporation will go to the park budget.
 - Natural gas lease bonuses and royalties are being used to give many of Fort Worth's neighborhood parks a facelift this year. In particular, the Parks and Community Service Department has been able to use the money in its grant program which was started in 2002 but was quickly depleted. Payments in 2006 allowed for grants totally \$114,037 for park upgrades in eight neighborhoods. In addition, the money brought in an extra \$165,977 in matching funds.
 - Last year, royalties and bonuses to the Tarrant Regional Water District of \$26 million facilitated implementation of a \$435 million flood control/economic development project. The Water District has also committed Barnett Shale royalties to the Trinity Uptown project. Such projects offer long-term economic development benefits.
 - The Dallas/Fort Worth International Airport, which recently reached a substantial lease agreement, may use royalties and bonuses to keep landing fees down which could encourage some airlines to lower fares. The money could also be used to reduce the airport's \$2.7 billion debt or develop additional restaurants and retail outlets.



Charitable Contributions

The companies operating in the Barnett Shale are contributing millions of dollars to local charities, thus positively affecting the lives of even those persons who are not receiving royalties or bonuses directly. Five survey respondents provided information regarding such donations; this total has risen sharply over the past five years and represents only a portion of the donation by firms operating in the area.



Examples of Charitable Contributions

- As noted, many of the companies operating in the Barnett Shale are donating significant sums to local organizations. These contributions have provided for parks, education, cancer research, and many other community-enhancing endeavors. Examples include the following.
 - Chesapeake Operating Inc., provided substantial sums toward the purchase of land for a park at Eagle Mountain Lake and a memorial to Fort Worth Police and Fire Department personnel. The company also provided 20 laptop computers, complete with software, to teachers at Fort Worth's historic Nash Elementary School and is actively involved in fundraising for the United Way.
 - Dale Operating Company sponsors local events, projects, and programs such as the Hope River Run and Barnett Shale Crawfish Boil. Additionally, the company is involved in the construction of a YMCA Ballpark, a running trail in Quanah Parker Park, and a parking lot at Gateway Park.
 - Devon raised more than \$122,000 for the United Way of Wise County through donations from employees, contractors, and a corporate match. Devon also participates in Wise Eyes, the Wise County sheriff's department's program providing training to enable employees of local companies such as Devon, neighborhood watch groups, and registered individuals to become more aware of their surroundings and report suspicious vehicles and activities. The company is involved in efforts in other counties as well.



Examples of Charitable Contributions (continued)

- Quicksilver Resources Inc., supports local children's organizations and other causes.
- XTO Energy and its employees support Meals on Wheels, Big Brothers and Big Sisters, The Women's Center, Boys and Girls clubs, the Susan G. Komen Breast Cancer Foundation's Tarrant County Race for the Cure, area livestock fairs, and other community efforts. The company is also spending millions of dollars to restore historic buildings in Fort Worth and received the Spirit of Enterprise Award from the Fort Worth Chamber of Commerce in 2003.
- Most of these companies (and others) are involved in many more projects in the local area that are making a difference in the lives of the people of the region.

Impacts on Particular Industries

- The Barnett Shale is generating increased business activity in virtually all industries. In addition to the obvious types of firms (such as those directly involved in natural gas), stores and restaurants are seeing substantial gains, as are various service providers.
- Restaurants are a major beneficiary of the economic growth attributable to the Barnett Shale's development. Currently, additional sales stimulated by the developmental activity and associated payrolls are leading to employment for more than 8,000 persons at eating and drinking places in the region.
- Hotels and motels are also experiencing growth thanks to the Barnett Shale which has resulted in the addition of some 765 hospitality jobs in the region.
- Moreover, bank deposit levels have been positively affected as noted in the table below.

Bank Deposits in the Barnett Shale Region				
Current Bank Deposits Supported by Barnett Shale Activity	\$3,861,404,758			
Projected Typical Annual Bank Deposits Supported by Barnett Shale Activity through 2015 (in constant 2006 dollars)	\$7,753,942,604			

- The emergence of the Barnett Shale has further resulted in a number of firms relocating, expanding, or setting up regional operations in the area. Much of this stimulus is occurring in Fort Worth.
- The detailed tables located in Appendix B of this report provide results by county for 39 industry groups for measures including expenditures, output, income, and jobs.



COSTS AND CONCERNS



Costs and Concerns

- Like any major economic expansion, the **development of the Barnett Shale has not come without cost**. Of necessity, the process of drilling and maintaining a well involves some degree of water use, truck traffic, and noise. The location of much of the activity in a highly urbanized area also poses unique challenges.
- Natural gas drilling is by nature cleaner, quieter, and has less impact on the land than oil wells, and technology such as horizontal drilling has decreased the environmental impact of gas wells.
- In addition, companies are working to develop methods to reduce the negative aspects of the natural gas recovery process.
- The following slides highlight major areas of concern, together with progress being made toward addressing these issues.

Water Use

- Because of the Barnett Shale's low permeability or tightness, energy companies must utilize a stimulation process called hydraulic fracturing (fracing), which involves pumping large volumes of treated water, a specially mined sand, and other ingredients into the formation.
- This process requires approximately one to four million gallons of water and must be repeated three or four times over the life of the well (currently estimated to be 20-30 years).
- Even so, municipal use accounts for almost 90% of total water needs; manufacturing, irrigation, steam electric generation, and livestock are also significant water-use industries.
- Of the 131 billion gallons of water sold in 2006 by the Tarrant Regional Water District (a major provider of water in the area), only 248 million (0.19%) were used for well fracturing.
- While the percentage of total water use in the area will increase to some extent with additional well development, it appears that the incremental usage associated with the Barnett Shale will be a minor source of future demand and resource planning efforts.

Efforts to Reduce Water Use

- Sixteen energy companies last year formed the Barnett Shale Water Conservation and Management Committee to develop "best practices" for companies operating in the Barnett Shale. The Texas Railroad Commission has also sponsored research on the issue.
- Several firms have undertaken projects in the Barnett Shale to reduce the amount of fresh water used in Barnett Shale development activities.
- Mobile water purification units fueled by on-site natural gas are being utilized on drilling locations to treat a portion of the wastewater stream for reuse.
- Recycling processes could allow reuse of approximately 80% of the returned fluid used in fracing wells.
- The key determinants in future water needs are population and economic growth. Over the long term, it is likely that the pace of drilling in the Barnett Shale will slow, thereby reducing the need for water for exploration. The Texas Water Development Board projections indicate that, after 25 years (which is within the resource planning cycle), no significant amount of water is expected to be used for Barnett Shale operations.

Truck Traffic

- One concern which has been raised in relation to drilling activity is the increase in truck traffic and the effect on area roadways. Loaded trucks are much more damaging to infrastructure than cars, and higher than expected truck volumes can reduce the useful life of existing roads and increase maintenance costs.
- While it is true that drilling and fracing wells requires a substantial number of truck trips, the bulk of this traffic is limited to the initial 20-30 day drilling and completion period.
- Cities and counties have begun to negotiate road maintenance and repair agreements with drilling companies. In this way, they can ensure that any damage to roadways is repaired and that the cost is absorbed by the drilling enterprises.
- In addition, in most cases, the primary impediment to new roadway construction projects is a lack of funds, and the incremental tax receipts to local entities better positions them to undertake projects to improve transportation arteries. In other words, while added truck traffic volume is a legitimate concern, it is being effectively addressed in a manner that does not adversely affect local taxpayers.

Noise and Environmental Concerns

- The process of drilling and fracing a natural gas well generates noise, particularly during the first 20 to 30 days. After the well is drilled, the drilling rig is moved off the property; this process takes about 24 hours and produces the most noise. After the initial month-long drilling and completion process, wells are usually silent. Because drilling operations often occur virtually around the clock, lights can also be an issue in residential areas.
- City ordinances typically require drilling companies to measure ambient noise levels before drilling and then install controls that prevent noise from rising above these levels by more than five decibels during the day and three decibels at night.
- Many companies also engage in proactive efforts to reduce sound for surrounding residents.
 - Sound abatement technologies such as sound blankets which stretch from the rig floor to the ground, perimeter sound walls (up to 18 feet high, 40 feet long, and 8 feet wide), and other sound containers are used by many companies.
 - EnCana deploys a state-of-the-art drilling rig (the first of its kind to be used in Texas) to reduce noise from the braking systems associated with traditional rigs. The company indicates that this self-skidding rig greatly reduces noise, allows for quicker rig transitions between wells, shortens drilling schedules, and results in an overall smaller environmental footprint.
- Companies also reduce other environmental impacts through such measures as applying dust suppressants and maintaining and watering roads, returning land to its former condition (or improving it through landscaping) after completions, and utilizing pad drilling techniques to implement multiple wells from a single location.

Safety Concerns

- Risks of gas well explosions or accidents are a reality, though they are quite rare. Since 2000, there have been two deaths related to gas wells in the Barnett Shale though thousands have been drilled. The most recent was an explosion last year in suburban Forest Hill that killed an operator and forced an evacuation of the neighborhood.
- Safety is a priority at drilling companies, both for employees and for persons in the surrounding area. To help ensure safety in the surrounding area, companies utilize extensive policies and procedures regarding proper operation of equipment and deal with other pertinent issues. Corporate requirements may include safety meetings at the beginning of each shift and stringent security to limit access to the site. They may also post contact information for 24-hour response lines to deal with concerns or questions from area residents.
- City ordinances also address safety, requiring setbacks from any existing home, school, church, hospital, public building, or park without waivers from property owners or City Council approval. Closed-loop mud systems, which eliminate open mud pits, are required on wells within 600 feet of a home or other protected use. Fencing and landscaping providing security and blending with surrounding uses must be used.



CONCLUSION

Long-Term Effect of the Barnett Shale

- Little more than five years ago, drilling activity in the Barnett Shale was just beginning to emerge. Although the initial test well was drilled in 1981, the number of total completions stayed below 100 until 1991 and rose slowly until 2000. By 2005, completions exceeded 1,000. Denton and Wise counties have seen the greatest number of wells, followed by Tarrant County. However, activity is now expanding beyond this initial core, though the pace of development has stabilized to some degree.
- As noted, the ultimate development of the Barnett Shale will depend on factors such as the pace of technological advancement, gas prices, and geology. Industry observers expect activity to continue for the next 20-30 years.
- While some of the effects of the Barnett Shale will be transitory, the investment of the payments currently being received stands to permanently change the economy. Infrastructure improvements such as flood control will pay off indefinitely. Purchases of assets such as land for parks will also yield permanent benefits. Quality-of-life enhancements will benefit local lifestyles and enable the area to compete for desirable economic development.
- Even when the Barnett Shale play has been exhausted, many of its positive effects will remain.

Summary

- The Barnett Shale has bettered the economic fortunes of many residents of the region through jobs, royalties and other payments, and expanded business activity. The Perryman Group's analysis indicates that all major sources of stimulus currently lead to gains of about \$5.2 billion in annual output and 55,385 jobs in the region. These benefits are likely to increase in the future, totaling some \$10.4 billion in output and 108,116 jobs on an average annual basis over the next 10 years.
- Local cities, counties, schools, and other entities see substantial gains in tax receipts due to the Barnett Shale. These stem from an enhanced property tax base and growth in business activity; in addition, many local governments and schools are receiving notable royalty and bonus payments. The total direct and indirect revenue to local governments in the region (excluding royalty and lease payments) was about \$227.7 million as of 2006, and will likely increase in the future.
- Virtually all economic activity involves some cost in terms of the environment, use of infrastructure, or other trade-offs. The exploration and development of the Barnett Shale is no different; there is noise, traffic, and water use involved. However, these downside elements of the Barnett Shale are, in most instances, being dealt with so as to minimize their lasting effects.
- Development of the Barnett Shale has transformed segments of the economies of Fort Worth and the surrounding area and is exerting an extremely positive overall impact on business activity.



APPENDICES

APPENDIX A: Methodology



Methodology: Impact Assessment System

Methodology

- The basic modeling technique employed in this study is known as dynamic input-output analysis. This methodology essentially uses extensive survey data, industry information, and a variety of corroborative source materials to create a matrix describing the various goods and services (known as resources or inputs) required to produce one unit (a dollar's worth) of output for a given sector. Once the base information is compiled, it can be mathematically simulated to generate evaluations of the magnitude of successive rounds of activity involved in the overall production process.
- There are two essential steps in conducting an input-output analysis once the system is operational. The first major endeavor is to accurately define the levels of direct activity to be evaluated. The second step is the simulation of the input-output system to measure overall economic effects. In the case of a prospective evaluation, it is necessary to first calculate reasonable estimates of the direct activity.
- 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 economies of the areas analyzed.

- In this instance, The Perryman Group utilized a variety of public and private sources of data regarding current and future production in the Barnett Shale, tax rates and collections, and other information necessary to the analysis. In addition, an extensive survey of the companies with operations in the Barnett Shale was conducted. While only seven responses were obtained, the firms represent approximately 68% of total production.
- The direct inputs for assessing the value of exploration, drilling, and production activity were obtained from (1) survey responses, (2) data from the Texas Railroad Commission and various industry sources, and (3) employment information from the Texas Workforce Commission. This material was compiled on a county basis. For projections, TPG relied upon survey responses, public information regarding the various companies involved in Barnett Shale activity, patterns observed in other large fields, and economic forecasts of relevant factors. While the current effects are reported at the county level, the projections are only generated on a regional and statewide basis. The typical annual pattern over a 10-year period was used in this segment of the analysis. Although actual patterns may vary in response to a number of factors, activity is expected to rise markedly over the next few years and then begin to decline.
- The direct effects of royalties and related payments are based on current and expected production levels and typical royalty rates. The amounts were fully adjusted to reflect those amounts that are paid outside the region (and state) and are further reduced to account for out-of-area spending, savings, and taxes. The remaining amount is assumed to be spent in accordance with typical consumer patterns in the region as detailed by the US Department of Labor and ACCRA. The projections were based on the anticipated production levels discussed above.
- The direct effects of pipeline development and operations was derived from (1) survey research, (2) published reports and secondary research related to pipeline investments, and (3) standard employment data in this sector. The projections were based on a multiple regression analysis of patterns of pipeline and field development in other areas. The relevant equations exhibited excellent empirical properties and conformed to observed patterns.

- As noted earlier, as the direct effects are determined, they are simulated within the context of the relevant geographic submodels of the USMRIAS. 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.
- The impact assessment (input-output) process essentially estimates the amounts of all types of goods and services required to produce one unit (a dollar's worth) of a specific type of output. For purposes of illustrating the nature of the system, it is useful to think of inputs and outputs in dollar (rather than physical) terms. As an example, the construction of a new building will require specific dollar amounts of lumber, glass, concrete, hand tools, architectural services, interior design services, paint, plumbing, and numerous other elements. Each of these suppliers must, in turn, purchase additional dollar amounts of inputs. This process continues through multiple rounds of production, thus generating subsequent increments to business activity. The initial process of building the facility is known as the *direct effect*. The ensuing transactions in the output chain constitute the *indirect effect*.

- Another pattern that arises in response to any direct economic activity comes from the payroll dollars received by employees at each stage of the production cycle. As workers are compensated, they use some of their income for taxes, savings, and purchases from external markets. A substantial portion, however, is spent locally on food, clothing, healthcare services, utilities, housing, recreation, and other items. Typical purchasing patterns in the relevant areas are obtained from the *ACCRA Cost of Living Index*, a privately compiled inter-regional measure which has been widely used for several decades, and the *Consumer Expenditure Survey* of the US Department of Labor. These initial outlays by area residents generate further secondary activity as local providers acquire inputs to meet this consumer demand. These consumer spending impacts are known as the *induced effect*. The USMRIAS is designed to provide realistic, yet conservative, estimates of these phenomena.
- Sources for information used in this process include the Bureau of the Census, the Bureau of Labor Statistics, the Regional Economic Information System of the US Department of Commerce, and other public and private sources. The pricing data are compiled from the US Department of Labor and the US Department of Commerce. The verification and testing procedures make use of extensive public and private sources. Note that all monetary values, unless otherwise noted, are given in constant (2006) dollars to eliminate the effects of inflation.
- The fiscal impacts are determined based on (1) direct tax payments as reported in the survey with appropriate extrapolations to other producers and (2) a fiscal report system that links the industrial findings for the assessment described above to the specific tax structure of Texas and the relevant local areas.

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

- The third gauge of economic activity used in this evaluation is **Personal Income**. As the name implies, Personal Income is simply the income received by individuals, whether in the form of wages, salaries, interest, dividends, proprietors' profits, or other sources. It may thus be viewed as the segment of overall impacts which flows directly to the citizenry.
- The fourth measure, **Retail Sales**, represents the component of Total Expenditures which occurs in retail outlets (general merchandise stores, automobile dealers and service stations, building materials stores, food stores, drugstores, restaurants, and so forth). Retail Sales is a commonly used measure of consumer activity.
- The final aggregates used are Permanent Jobs and Person-Years of Employment. The Person-Years of Employment measure reveals the full-time equivalent jobs generated by an activity. It should be noted that, unlike the dollar values described above, Permanent Jobs is a "stock" rather than a "flow." In other words, if an area produces \$1 million in output in 1999 and \$1 million in 2000, it is appropriate to say that \$2 million was achieved in the 1999-2000 period. If the same area has 100 people working in 1999 and 100 in 2000, it only has 100 Permanent Jobs. When a flow of jobs is measured, such as in a construction project or a cumulative assessment over multiple years, it is appropriate to measure employment in Person-Years (a person working for a year). This concept is distinct from Permanent Jobs, which anticipates that the relevant positions will be maintained on a continuing basis.



Methodology: Texas Econometric Model

Technical Explanation

Model Logic and Structure

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

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

- The non-labor aspects of personal income are modeled at the regional level using straightforward empirical expressions relating to national performance, dynamic responses, and evolving temporal patterns. In some instances (such as dividends, rents, and others) national variables (for example, interest rates) directly enter the forecasting system. These factors have numerous other implicit linkages into the system resulting from their simultaneous interaction with other phenomena in national and international markets which are explicitly included in various expressions.
- The output or gross area product expressions are also developed at the NAICS level. Regional output for basic industries is linked to national performance in the relevant industries, local and national production in key related sectors, relative area and national labor costs in the industry, dynamic adjustment parameters, and ongoing changes in industrial interrelationships (driven by technological changes in production processes).
- Output in the non-basic sectors is modeled as a function of basic production levels, output in related local support industries (if applicable), dynamic temporal adjustments, and ongoing patterns. The interindustry linkages are obtained from the input-output (impact assessment) system which is part of the overall integrated modeling structure maintained by The Perryman Group. Note that the dominant component of the econometric system involves the simultaneous estimation and projection of output, income, and employment at a disaggregated industrial level.

- Several other components of the model are critical to the multi-regional forecasting process. The demographic module includes (1) a linkage equation between wage and salary (establishment) employment and household employment, (2) a labor force participation rate function, and (3) a complete age-cohort-survival population system with endogenous migration. Given household employment, labor force participation (which is a function of economic conditions and evolving patterns of worker preferences), and the working age population (from the age-cohort-survival model), the unemployment rate and level become identities.
- The population system uses Census information, fertility rates, and life tables to determine the "natural" changes in population by age group. Migration, the most difficult segment of population dynamics to track, is estimated in relation to relative regional and extra-regional economic conditions over time. Because evolving economic conditions determine migration in the system, population changes are allowed to interact simultaneously with overall economic conditions.
- Retail sales is related to income, interest rates, dynamic adjustments, and patterns in consumer behavior on a store group basis. Inflation at the state level relates to national patterns, indicators of relative economic conditions, and ongoing trends.

- A final significant segment of the forecasting system relates to real estate absorption and activity. The short-term demand for various types of property is determined by underlying economic and demographic factors, with short-term adjustments to reflect the current status of the pertinent building cycle. In some instances, this portion of the forecast requires integration with the Multi-Regional Industry-Occupation System which is maintained by The Perryman Group.
- The overall Texas Econometric Model contains numerous additional specifications, and individual expressions are modified to reflect alternative lag structures, empirical properties of the estimates, simulation requirements, and similar phenomena. Nonetheless, the above synopsis offers a basic understanding of the overall structure and underlying logic of the system.

Model Simulation and Multi-Regional Structure

- The initial phase of the simulation process is the execution of a standard non-linear algorithm for the state system and that of each of the individual sub-areas. The external assumptions are derived from scenarios developed through national and international models and extensive analysis by The Perryman Group.
- Once the initial simulations are completed, they are merged into a single system with additive constraints and interregional flows. Using information on minimum regional requirements, import needs, export potential, and locations, it becomes possible to balance the various forecasts into a mathematically consistent set of results. This process is, in effect, a disciplining exercise with regard to the individual regional (including metropolitan and rural) systems. By compelling equilibrium across all regions and sectors, the algorithm ensures that the patterns in state activity are reasonable in light of smaller area dynamics and, conversely, that the regional outlooks are within plausible performance levels for the state as a whole.



- The iterative simulation process has the additional property of imposing a global convergence criterion across the entire multi-regional system, with balance being achieved simultaneously on both a sectoral and a geographic basis. This approach is particularly critical on non-linear dynamic systems, as independent simulations of individual systems often yield unstable, non-convergent outcomes.
- The iterative simulation process has the additional property of imposing a global convergence criterion across the entire multi-regional system, with balance being achieved simultaneously on both a sectoral and a geographic basis. This approach is particularly critical on non-linear dynamic systems, as independent simulations of individual systems often yield unstable, non-convergent outcomes.
- It should be noted that the underlying data for the modeling and simulation process are frequently updated and revised by the various public and private entities compiling them. Whenever those modifications to the database occur, they bring corresponding changes to the structural parameter estimates of the various systems and the solutions to the simulation and forecasting system. The multi-regional version of the Texas Econometric Model is automatically re-estimated and simulated with each such data release, thus providing a constantly evolving and current assessment of state and local business activity.

The Final Forecast

- The process described above is followed to produce the preliminary forecast. Through the comprehensive multi-regional modeling and simulation process, a systematic analysis is generated which accounts for both historical patterns in economic performance and inter-relationships and best available information on the future course of pertinent external factors. While the best available techniques and data are employed in this effort, they are not capable of directly capturing "street sense," i.e., the contemporaneous and often non-quantifiable information that can materially affect economic outcomes. In order to provide a comprehensive approach to the prediction of business conditions, it is necessary to compile and assimilate extensive material regarding relevant events and patterns both across the state of Texas and elsewhere.
- The 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 forecast analysis. For example, the opening or closing of a major facility, particularly in a relatively small area, can cause a sudden change in business performance that will not be accounted for by either a modeling system based on historical relationships or expected (primarily national and international) factors.
- The final step in the forecasting process is the integration of this material into the results in a logical and mathematically consistent manner. In some instances, this task is accomplished through "constant adjustment factors" which augment relevant equations. In other cases, anticipated changes in industrial structure or regulatory parameters are initially simulated within the context of the Texas Multi-Regional Impact Assessment System to estimate their ultimate effects by sector. Those findings are then factored into the simulation as constant adjustments on a distributed temporal basis. Once this scenario is formulated, the extended system is again balanced across regions and sectors through an iterative simulation algorithm analogous to that described in the preceding section.



APPENDIX B: Detailed Sectoral Results



List of Tables

- The Current and Projected Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity
 - Table 1: The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Clay County
 - Table 2: The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Cooke County
 - Table 3: The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Denton County
 - Table 4: The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Erath County
 - Table 5: The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Hill County
 - Table 6: The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Hood County
 - Table 7: The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Jack County
 - Table 8: The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Johnson County
 - Table 9: The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Montague County
 - Table 10: The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Palo Pinto County
 - Table 11: The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Parker County
 - Table 12: The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Tarrant County
 - Table 13: The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Wise County
 - Table 14: The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Young County
 - Table 15: The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in the Barnett Shale Region
 - Table 16: The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Texas
 - Table 17: The Projected Typical Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in the Barnett Shale Region (Average over 10 Years)
 - Table 18: The Projected Typical Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Texas (Average over 10 Years)



List of Tables (continued)

- The Current and Projected Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity
 - Table 19: The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Clay County
 - Table 20: The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Cooke County
 - Table 21: The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Denton County
 - Table 22: The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Erath County
 - Table 23: The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Hill County
 - Table 24: The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Hood County
 - Table 25: The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Jack County
 - Table 26: The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Johnson County
 - Table 27: The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Montague County
 - Table 28: The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Palo Pinto County
 - Table 29: The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Parker County
 - Table 30: The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Tarrant County
 - Table 31: The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Wise County
 - Table 32: The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Young County
 - Table 33: The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in the Barnett Shale Region
 - Table 34: The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Texas
 - Table 35: The Projected Typical Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in the Barnett Shale Region (Average over 10 Years)
 - Table 36: The Projected Typical Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Texas (Average over 10 Years)



List of Tables (continued)

- The Current and Projected Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity
 - Table 37: The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Clay County
 - Table 38: The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Cooke County
 - Table 39: The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Denton County
 - Table 40: The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Erath County
 - Table 41: The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Hill County
 - Table 42: The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Hood County
 - Table 43: The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Jack County
 - Table 44: The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Johnson County
 - Table 45: The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Montague County
 - Table 46: The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Palo Pinto County
 - Table 47: The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Parker County
 - Table 48: The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Tarrant County
 - Table 49: The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Wise County
 - Table 50: The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Young County
 - Table 51: The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in the Barnett Shale Region
 - Table 52: The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Texas
 - Table 53: The Projected Typical Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in the Barnett Shale Region (Average over 10 Years)
 - Table 54: The Projected Typical Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Texas (Average over 10 Years)



List of Tables (continued)

- The Current and Projected Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity
 - Table 55: The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Clay County
 - Table 56: The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Cooke County
 - Table 57: The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Denton County
 - Table 58: The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Erath County
 - Table 59: The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Hill County
 - Table 60: The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Hood County
 - Table 61: The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Jack County
 - Table 62: The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Johnson County
 - Table 63: The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Montague County
 - Table 64: The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Palo Pinto County
 - Table 65: The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Parker County
 - Table 66: The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Tarrant County
 - Table 67: The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Wise County
 - Table 68: The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Young County
 - Table 69: The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in the Barnett Shale Region
 - Table 70: The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Texas
 - Table 71: The Projected Typical Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in the Barnett Shale Region (Average over 10 Years)
 - Table 72: The Projected Typical Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Texas (Average over 10 Years)

The Current and Projected Annual Impact of

Exploration, Drilling, and Operations in the

Barnett Shale on Business Activity



Current Impacts: Exploration, Drilling, and Operations

Table 1
The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Clay County
Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$343,061	\$95,518	\$65,053	1
Forestry & Fishery Products	\$0	\$0	\$0	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$22,548,509	\$4,941,835	\$2,279,168	13
Miscellaneous Mining	\$0	\$0	\$0	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$1,727,576	\$933,462	\$769,231	13
Food Products & Tobacco	\$663,243	\$170,646	\$87,175	2
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$85,540	\$46,998	\$23,815	1
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$26,651	\$13,402	\$8,748	0
Chemicals & Petroleum Refining	\$0	\$0	\$0	0
Rubber & Leather Products	\$0	\$0	\$0	0
Lumber Products & Furniture	\$51,074	\$16,366	\$11,668	0
Stone, Clay, & Glass Products	\$20,202	\$10,266	\$5,369	0
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$296,403	\$110,487	\$71,331	1
Machinery, Except Electrical	\$310,504	\$131,640	\$94,045	1
Electric & Electronic Equipment	\$0	\$0	\$0	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$281	\$118	\$77	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$0	\$0	\$0	0
Transportation	\$626,755	\$409,091	\$270,558	4
Communication	\$126,123	\$78,298	\$33,428	0
Electric, Gas, Water, Sanitary Services	\$1,134,235	\$253,766	\$110,736	1
Wholesale Trade	\$495,483	\$334,817	\$193,058	3
Retail Trade	\$1,849,078	\$1,533,869	\$917,205	28
Finance	\$324,713	\$180,861	\$105,316	1
Insurance	\$67,373	\$40,530	\$24,230	0
Real Estate	\$2,559,176	\$633,928	\$102,140	1
Hotels, Lodging Places, Amusements	\$100,757	\$53,116	\$34,846	1
Personal Services	\$387,048	\$238,824	\$185,809	4
Business Services	\$949,524	\$556,353	\$453,842	6
Eating & Drinking Places	\$727,898	\$426,875	\$227,120	12
Health Services	\$522,434	\$365,678	\$309,184	6
Miscellaneous Services	\$627,810	\$259,806	\$225,230	6
Households	\$32,099	\$32,099	\$31,420	3
Total	\$36,603,549	\$11,868,651	\$6,639,802	108

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 2
The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Cooke County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$5,019,414	\$1,397,678	\$951,898	17
Forestry & Fishery Products	\$148,279	\$182,648	\$67,745	1
Coal Mining	\$171,590	\$49,919	\$52,594	0
Crude Petroleum & Natural Gas	\$478,068,337	\$104,775,235	\$48,322,205	276
Miscellaneous Mining	\$426,559	\$181,606	\$106,754	1
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$23,579,802	\$12,741,609	\$10,499,879	172
Food Products & Tobacco	\$8,965,822	\$2,306,834	\$1,178,436	23
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$1,475,779	\$810,817	\$410,854	12
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$3,697,188	\$1,859,141	\$1,213,502	24
Chemicals & Petroleum Refining	\$13,011,787	\$2,296,444	\$1,078,313	9
Rubber & Leather Products	\$2,325,805	\$975,883	\$570,497	13
Lumber Products & Furniture	\$1,063,974	\$340,851	\$243,006	5
Stone, Clay, & Glass Products	\$1,381,230	\$701,788	\$367,045	7
Primary Metal	\$3,528,353	\$1,061,742	\$790,307	13
Fabricated Metal Products	\$6,184,123	\$2,305,306	\$1,488,306	29
Machinery, Except Electrical	\$6,481,502	\$2,748,014	\$1,963,184	24
Electric & Electronic Equipment	\$446,230	\$246,551	\$147,394	1
Motor Vehicles & Equipment	\$1,140,771	\$272,014	\$176,724	2
Transp. Equip., Except Motor Vehicles	\$56,122	\$23,541	\$15,396	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$1.047.138	\$387.855	\$267,506	5
Transportation	\$13,368,300	\$8,722,799	\$5,768,948	93
Communication	\$4,415,661	\$2,733,332	\$1,166,945	12
Electric, Gas, Water, Sanitary Services	\$14,378,314	\$3,218,658	\$1,404,536	7
Wholesale Trade	\$7,634,192	\$5,158,689	\$2,974,549	38
Retail Trade	\$38,330,418	\$31,796,558	\$19,013,323	580
Finance	\$6,910,553	\$3,849,600	\$2,241,634	23
Insurance	\$2,388,215	\$1,436,717	\$858,921	12
Real Estate	\$48,408,519	\$11,652,790	\$1,877,521	19
Hotels, Lodging Places, Amusements	\$2,755,675	\$1,446,477	\$948,933	27
Personal Services	\$7,630,127	\$4,712,430	\$3,666,342	72
Business Services	\$20,385,838	\$11,951,330	\$9,749,221	137
Eating & Drinking Places	\$20,941,194	\$12,287,094	\$6,537,388	344
Health Services	\$9,481,753	\$6,649,741	\$5,622,415	108
Miscellaneous Services	\$13,053,593	\$5,403,354	\$4,684,253	130
Households	\$668,536	\$668,536	\$654,393	52
Total	\$768,970,694	\$247,353,580	\$137,080,867	2,288



Table 3
The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Denton County
Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$7,471,466	\$2,079,176	\$1,416,033	26
Forestry & Fishery Products	\$9,294	\$11,402	\$4,221	0
Coal Mining	\$11,287	\$3,280	\$3,464	0
Crude Petroleum & Natural Gas	\$469,658,936	\$102,933,330	\$47,472,730	271
Miscellaneous Mining	\$45,368	\$19.307	\$11,345	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$37,083,620	\$20,031,460	\$16,507,173	271
Food Products & Tobacco	\$8,495,185	\$2,185,723	\$1,116,574	22
Textile Mill Products	\$4,552	\$1,541	\$1,312	0
Apparel	\$3,676,115	\$2.019.994	\$1,023,558	32
Paper & Allied Products	\$2,413,115	\$1,109,884	\$501,763	9
Printing & Publishing	\$3,355,360	\$1,687,521	\$1,101,484	22
Chemicals & Petroleum Refining	\$17,583,842	\$3,096,852	\$1,454,148	12
Rubber & Leather Products	\$1,813,009	\$761,100	\$444,932	10
Lumber Products & Furniture	\$1,106,387	\$355,033	\$253,116	5
Stone, Clay, & Glass Products	\$2,363,147	\$1,201,889	\$628,593	11
Primary Metal	\$77,412	\$23,285	\$17,329	0
Fabricated Metal Products	\$5,883,591	\$2,192,617	\$1,415,554	28
Machinery, Except Electrical	\$3,363,235	\$1,425,545	\$1,018,412	12
Electric & Electronic Equipment	\$2,598,597	\$1,434,956	\$857,855	8
Motor Vehicles & Equipment	\$1,277,000	\$304,162	\$197,602	3
Transp. Equip., Except Motor Vehicles	\$405,260	\$170,080	\$111,145	1
Instruments & Related Products	\$567,808	\$245,519	\$186,620	2
Miscellaneous Manufacturing	\$1,091,061	\$404,629	\$279,081	5
Transportation	\$7,910,097	\$5,192,149	\$3,433,903	55
Communication	\$9,673,043	\$5,974,783	\$2,550,831	26
Electric, Gas, Water, Sanitary Services	\$22,575,780	\$5,051,829	\$2,204,482	11
Wholesale Trade	\$19,040,534	\$12,866,700	\$7,419,052	97
Retail Trade	\$41,095,996	\$34,088,970	\$20,384,111	621
Finance	\$7,520,353	\$4,185,859	\$2,437,439	24
Insurance	\$5,148,632	\$3,097,012	\$1,851,523	26
Real Estate	\$84,159,982	\$22,819,264	\$3,676,681	37
Hotels, Lodging Places, Amusements	\$3,858,521	\$2,019,564	\$1,324,905	38
Personal Services	\$8,639,341	\$5,332,693	\$4,148,911	81
Business Services	\$16,180,887	\$9,429,208	\$7,691,827	109
Eating & Drinking Places	\$22,277,966	\$13,070,464	\$6,954,183	365
Health Services	\$14,519,641	\$10,137,786	\$8,571,591	165
Miscellaneous Services	\$13,737,290	\$5,677,253	\$4,921,704	137
Households	\$329,914	\$329,914	\$322,942	26
Total	\$847,022,624	\$282,971,729	\$153,918,129	2,569

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 4
The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Erath County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$1,184,463	\$329,964	\$224,724	4
Forestry & Fishery Products	\$950	\$1,175	\$435	0
Coal Mining	\$11,753	\$3,421	\$3,603	0
Crude Petroleum & Natural Gas	\$77,748,087	\$17,039,747	\$7,858,710	45
Miscellaneous Mining	\$0	\$0	\$0	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$4,783,112	\$2,585,224	\$2,130,385	35
Food Products & Tobacco	\$613,669	\$157,894	\$80,660	2
Textile Mill Products	\$30,848	\$10,620	\$8,986	0
Apparel	\$23,609	\$12,971	\$6,572	0
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$236,240	\$118,780	\$77,530	1
Chemicals & Petroleum Refining	\$58,424	\$10,326	\$4,848	0
Rubber & Leather Products	\$387,848	\$162,682	\$95,103	2
Lumber Products & Furniture	\$74,397	\$23,807	\$16,973	0
Stone, Clay, & Glass Products	\$383,909	\$194,929	\$101,949	2
Primary Metal	\$594,180	\$178,854	\$133,130	2
Fabricated Metal Products	\$1,039,655	\$387,638	\$250,259	5
Machinery, Except Electrical	\$41,810	\$17,730	\$12,666	0
Electric & Electronic Equipment	\$407,744	\$225,387	\$134,743	1
Motor Vehicles & Equipment	\$204,174	\$48,724	\$31,654	0
Transp. Equip., Except Motor Vehicles	\$0	\$0	\$0	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$54,516	\$20,174	\$13,915	0
Transportation	\$1,410,910	\$923,017	\$610,452	10
Communication	\$940,490	\$581,591	\$248,301	2
Electric, Gas, Water, Sanitary Services	\$2,772,162	\$620,388	\$270,721	1
Wholesale Trade	\$1,515,411	\$1,024,000	\$590,447	8
Retail Trade	\$6,265,584	\$5,197,735	\$3,108,079	95
Finance	\$1,085,233	\$604,881	\$352,224	4
Insurance	\$485,251	\$291,941	\$174,535	2
Real Estate	\$7,936,914	\$1,930,854	\$311,103	3
Hotels, Lodging Places, Amusements	\$691,629	\$361,321	\$237,039	7
Personal Services	\$1,305,499	\$805,240	\$626,489	12
Business Services	\$1,472,015	\$843,210	\$687,844	10
Eating & Drinking Places	\$3,442,308	\$2,019,860	\$1,074,673	57
Health Services	\$2,250,525	\$1,569,738	\$1,327,227	25
Miscellaneous Services	\$2,162,247	\$896,036	\$776,788	22
Households	\$111,548	\$111,548	\$109,189	9
Total	\$121,727,115	\$39,311,406	\$21,691,956	367



Table 5
The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Hill County
Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$1,302,619	\$362,768	\$247,066	5
Forestry & Fishery Products	\$27,043	\$33,341	\$12,364	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$84,323,933	\$18,480,953	\$8,523,395	49
Miscellaneous Mining	\$78,153	\$33,273	\$19,558	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$6,606,609	\$3,570,201	\$2,942,066	48
Food Products & Tobacco	\$1,665,549	\$428,533	\$218,915	4
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$575,586	\$316,229	\$160,238	5
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$361,338	\$181,694	\$118,595	2
Chemicals & Petroleum Refining	\$0	\$0	\$0	0
Rubber & Leather Products	\$0	\$0	\$0	0
Lumber Products & Furniture	\$194,563	\$62,310	\$44,423	1
Stone, Clay, & Glass Products	\$418,943	\$212,821	\$111,305	2
Primary Metal	\$646,747	\$194,634	\$144,876	2
Fabricated Metal Products	\$1,101,744	\$410,730	\$265,168	5
Machinery, Except Electrical	\$483,235	\$204,891	\$146,374	2
Electric & Electronic Equipment	\$0	\$0	\$0	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$864	\$363	\$236	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$0	\$0	\$0	0
Transportation	\$1,390,811	\$911,412	\$602,776	10
Communication	\$563,523	\$349,436	\$149,184	1
Electric, Gas, Water, Sanitary Services	\$5,277,525	\$1,180,520	\$515,149	3
Wholesale Trade	\$1,412,092	\$954,195	\$550,197	7
Retail Trade	\$6,966,154	\$5,778,754	\$3,455,511	105
Finance	\$1,160,533	\$646,592	\$376,513	4
Insurance	\$625,836	\$376,501	\$225,087	3
Real Estate	\$16,250,385	\$4,556,185	\$734,101	7
Hotels, Lodging Places, Amusements	\$689,347	\$360,520	\$236,513	7
Personal Services	\$1,455,371	\$897,878	\$698,564	14
Business Services	\$868,156	\$478,762	\$390,548	6
Eating & Drinking Places	\$3,811,912	\$2,236,646	\$1,190,015	63
Health Services	\$2,489,856	\$1,737,198	\$1,468,818	28
Miscellaneous Services	\$2,381,348	\$986,042	\$854,818	24
Households	\$122,216	\$122,216	\$119,631	10
Total	\$143,251,993	\$46,065,599	\$24,522,002	416

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 6
The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Hood County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$3,081,471	\$858,086	\$584,404	11
Forestry & Fishery Products	\$1,226	\$1,512	\$559	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$199,196,575	\$43,657,122	\$20,134,613	115
Miscellaneous Mining	\$0	\$0	\$0	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$15,586,522	\$8,422,535	\$6,940,693	114
Food Products & Tobacco	\$0	\$0	\$0	0
Textile Mill Products	\$86,876	\$29,759	\$25,180	1
Apparel	\$114,056	\$62,663	\$31,750	1
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$1,558,206	\$783.538	\$511,433	10
Chemicals & Petroleum Refining	\$2,831,266	\$499,751	\$234,664	2
Rubber & Leather Products	\$55,721	\$23,378	\$13,669	0
Lumber Products & Furniture	\$34,808	\$11,149	\$7,949	0
Stone, Clay, & Glass Products	\$988,925	\$502,435	\$262,776	5
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$69.202	\$25,798	\$16.656	0
Machinery, Except Electrical	\$1,060,034	\$449,438	\$321,081	4
Electric & Electronic Equipment	\$9,585	\$5,298	\$3,170	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$39.755	\$16,680	\$10.901	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$86.841	\$32,161	\$22.182	0
Transportation	\$2,788,840	\$1,831,339	\$1,211,180	20
Communication	\$1,539,484	\$953,892	\$407,247	4
Electric, Gas, Water, Sanitary Services	\$12,487,435	\$2,793,333	\$1,218,934	6
Wholesale Trade	\$2,298,071	\$1,552,887	\$895,406	12
Retail Trade	\$16,528,238	\$13,710,857	\$8,198,652	250
Finance	\$3,964,338	\$2,208,492	\$1,286,011	13
Insurance	\$2,524,547	\$1,518,736	\$907,961	13
Real Estate	\$38,405,399	\$10,749,309	\$1,731,947	18
Hotels, Lodging Places, Amusements	\$1,810,731	\$946,140	\$620,699	18
Personal Services	\$3,455,598	\$2,132,028	\$1,658,750	32
Business Services	\$6,152,437	\$3,578,608	\$2,919,228	41
Eating & Drinking Places	\$9,034,486	\$5,300,947	\$2,820,385	148
Health Services	\$5,899,637	\$4,116,579	\$3,480,606	67
Miscellaneous Services	\$5,635,519	\$2,332,980	\$2,022,502	56
Households	\$195,775	\$195,775	\$191,631	15
Total	\$337,521,603	\$109,303,208	\$58,692,817	976



Table 7
The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Jack County
Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$5,990,596	\$1,669,096	\$1,136,745	21
Forestry & Fishery Products	\$0	\$0	\$0	C
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$411,194,751	\$90,119,036	\$41,562,795	237
Miscellaneous Mining	\$364,385	\$155,118	\$91,188	1
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$20,089,806	\$10,859,216	\$8,948,675	147
Food Products & Tobacco	\$259,138	\$66,675	\$34,060	0
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$0	\$0	\$0	0
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$0	\$0	\$0	0
Chemicals & Petroleum Refining	\$2,626,840	\$464,506	\$218.111	2
Rubber & Leather Products	\$0	\$0	\$0	0
Lumber Products & Furniture	\$0	\$0	\$0	0
Stone, Clay, & Glass Products	\$261,594	\$132,785	\$69,450	1
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$5,281,494	\$1,969,358	\$1,271,422	25
Machinery, Except Electrical	\$2,037,840	\$864,212	\$617,397	7
Electric & Electronic Equipment	\$0	\$0	\$0	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$0	\$0	\$0	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$0	\$0	\$0	0
Transportation	\$11,282,770	\$7,354,365	\$4,863,912	78
Communication	\$2,069,659	\$1,284,940	\$548,580	5
Electric, Gas, Water, Sanitary Services	\$21,364,695	\$4,779,131	\$2,085,491	10
Wholesale Trade	\$5,194,471	\$3,510,009	\$2,023,899	26
Retail Trade	\$29,833,926	\$24,748,187	\$14,798,618	451
Finance	\$7,779,987	\$4,337,200	\$2,525,558	26
Insurance	\$1,754,643	\$1,055,672	\$631,121	9
Real Estate	\$44,605,721	\$11,276,058	\$1,816,817	19
Hotels, Lodging Places, Amusements	\$1,822,468	\$959,291	\$629,327	18
Personal Services	\$6,164,070	\$3,806,255	\$2,961,328	58
Business Services	\$15,867,436	\$9,288,076	\$7,576,693	108
Eating & Drinking Places	\$17,055,284	\$10,007,575	\$5,324,567	280
Health Services	\$5,773,066	\$4,069,107	\$3,440,471	66
Miscellaneous Services	\$10,928,225	\$4,530,435	\$3,927,507	109
Households	\$565,212	\$565,212	\$553,249	45
Total	\$630,168,079	\$197,871,517	\$107,656,981	1.749

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 8
The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Johnson County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$7,758,398	\$2,159,816	\$1,470,956	27
Forestry & Fishery Products	\$27,499	\$33,803	\$12,542	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$494,036,897	\$108,276,181	\$49,936,845	285
Miscellaneous Mining	\$460,178	\$195,914	\$115,163	1
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$38,876,061	\$21,004,094	\$17,308,680	284
Food Products & Tobacco	\$1,953,384	\$502,592	\$256,746	5
Textile Mill Products	\$34,813	\$11,882	\$10,046	0
Apparel	\$3,822,612	\$2,100,327	\$1,064,265	33
Paper & Allied Products	\$2,500,920	\$1,150,941	\$520,329	9
Printing & Publishing	\$3,788,954	\$1,905,417	\$1,243,707	25
Chemicals & Petroleum Refining	\$17,794,842	\$3,137,914	\$1,473,428	12
Rubber & Leather Products	\$2,521,544	\$1,058,227	\$618,633	14
Lumber Products & Furniture	\$1,152,424	\$369,442	\$263,387	6
Stone, Clay, & Glass Products	\$2,471,343	\$1,256,182	\$656,973	12
Primary Metal	\$234,774	\$70,642	\$52,578	1
Fabricated Metal Products	\$6,672,149	\$2,486,926	\$1,605,569	32
Machinery, Except Electrical	\$6,984,210	\$2,960,811	\$2,115,212	26
Electric & Electronic Equipment	\$834,718	\$461,100	\$275,657	2
Motor Vehicles & Equipment	\$1,327,993	\$316,515	\$205,624	3
Transp. Equip., Except Motor Vehicles	\$443,387	\$186,062	\$121,571	1
Instruments & Related Products	\$313,803	\$135,764	\$103,183	1
Miscellaneous Manufacturing	\$1,135,108	\$420,662	\$290,124	5
Transportation	\$14,499,248	\$9,465,055	\$6,259,847	101
Communication	\$4,057,920	\$2,514,023	\$1,073,318	11
Electric, Gas, Water, Sanitary Services	\$18,203,463	\$4,074,303	\$1,777,914	9
Wholesale Trade	\$14,846,178	\$10,032,196	\$5,784,651	76
Retail Trade	\$42,043,270	\$34,875,772	\$20,854,598	636
Finance	\$7,383,570	\$4,111,722	\$2,394,268	24
Insurance	\$3,411,731	\$2,052,356	\$1,226,979	16
Real Estate	\$55,809,258	\$13,594,310	\$2,190,336	22
Hotels, Lodging Places, Amusements	\$2,375,753	\$1,251,767	\$821,204	23
Personal Services	\$8,811,936	\$5,437,883	\$4,230,757	83
Business Services	\$10,242,747	\$5,874,896	\$4,792,399	67
Eating & Drinking Places	\$22,895,567	\$13,433,398	\$7,147,295	376
Health Services	\$14,742,029	\$10,291,043	\$8,701,165	167
Miscellaneous Services	\$14,208,221	\$5,877,423	\$5,095,226	142
Households	\$616,419	\$616,419	\$603,380	48
Total	\$829,293,321	\$273,703,779	\$152,674,555	2,584



Table 9
The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Montague County
Detailed Industrial Category

			<u> </u>	Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$1,178,063	\$328,078	\$223,440	4
Forestry & Fishery Products	\$24,459	\$30,153	\$11,182	0
Coal Mining	\$162,779	\$47,356	\$49,902	0
Crude Petroleum & Natural Gas	\$79,317,536	\$17,383,528	\$8,017,261	46
Miscellaneous Mining	\$70,670	\$30.086	\$17,686	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$5,256,224	\$2,840,447	\$2,340,706	38
Food Products & Tobacco	\$0	\$0	\$0	0
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$582.621	\$320.094	\$162,196	5
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$610,734	\$307,100	\$200,451	4
Chemicals & Petroleum Refining	\$0	\$0	\$0	0
Rubber & Leather Products	\$384,444	\$161,294	\$94,290	2
Lumber Products & Furniture	\$175,868	\$56,323	\$40,156	1
Stone, Clay, & Glass Products	\$150,453	\$76,430	\$39,973	1
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$114,226	\$42,584	\$27,492	0
Machinery, Except Electrical	\$646,249	\$274,009	\$195,752	2
Electric & Electronic Equipment	\$86,714	\$47,918	\$28.647	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$16,377	\$6,870	\$4,489	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$173,097	\$64,098	\$44,209	1
Transportation	\$2,209,284	\$1,441,248	\$953,189	15
Communication	\$527,274	\$326,893	\$139,562	1
Electric, Gas, Water, Sanitary Services	\$2,999,180	\$671,165	\$292,879	1
Wholesale Trade	\$758,362	\$512,449	\$295,483	4
Retail Trade	\$6,301,101	\$5,227,058	\$3,125,614	95
Finance	\$1,517,704	\$845,585	\$492,387	5
Insurance	\$620,151	\$373,081	\$223,043	3
Real Estate	\$14,695,734	\$4,119,905	\$663,807	7
Hotels, Lodging Places, Amusements	\$450,695	\$236,574	\$155,201	4
Personal Services	\$1,316,482	\$812,195	\$631,902	12
Business Services	\$988,894	\$554,575	\$452,391	6
Eating & Drinking Places	\$3,447,780	\$2,022,991	\$1,076,339	57
Health Services	\$2,251,982	\$1,571,237	\$1,328,497	25
Miscellaneous Services	\$2,153,689	\$891,766	\$773,086	22
Households	\$110,524	\$110,524	\$108,185	9
Total	\$129,299,349	\$41,733,613	\$22,209,398	373

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 10
The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Palo Pinto County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$994,259	\$276,884	\$188,571	4
Forestry & Fishery Products	\$30,115	\$37,113	\$13,766	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$170.925.473	\$37.460.827	\$17.276.890	98
Miscellaneous Mining	\$154,745	\$65,879	\$38,723	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$9,745,982	\$5,266,618	\$4.340.020	71
Food Products & Tobacco	\$4,106,719	\$1,056,627	\$539,777	11
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$575,263	\$316,053	\$160,147	5
Paper & Allied Products	\$832,490	\$383,336	\$173,301	3
Printing & Publishing	\$729,936	\$367,044	\$239,575	5
Chemicals & Petroleum Refining	\$1,151,478	\$203,287	\$95,455	1
Rubber & Leather Products	\$842,252	\$353,374	\$206,580	5
Lumber Products & Furniture	\$385,434	\$123,446	\$88,014	2
Stone, Clay, & Glass Products	\$829,630	\$421,470	\$220,432	4
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$2,243,332	\$836.304	\$539.915	11
Machinery, Except Electrical	\$1,376,543	\$583,643	\$416,959	5
Electric & Electronic Equipment	\$242,051	\$133,756	\$79,964	1
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$28,889	\$12,120	\$7,921	0
Instruments & Related Products	\$198,149	\$85,761	\$65,189	1
Miscellaneous Manufacturing	\$379,221	\$140,433	\$96,859	2
Transportation	\$3,291,760	\$2,153,590	\$1,424,304	23
Communication	\$1,386,604	\$858,838	\$366,667	4
Electric, Gas, Water, Sanitary Services	\$10,460,788	\$2,339,970	\$1,021,102	5
Wholesale Trade	\$2,652,849	\$1,792,617	\$1,033,641	13
Retail Trade	\$13,822,678	\$11,466,533	\$6,856,620	209
Finance	\$2,760,238	\$1,537,801	\$895,469	9
Insurance	\$550,570	\$331,221	\$198,017	3
Real Estate	\$32,195,653	\$9,020,757	\$1,453,440	15
Hotels, Lodging Places, Amusements	\$1,048,247	\$549,831	\$360,707	10
Personal Services	\$2,888,658	\$1,782,174	\$1,386,560	27
Business Services	\$5,532,810	\$3,224,002	\$2,629,960	37
Eating & Drinking Places	\$7,560,614	\$4,436,188	\$2,360,289	124
Health Services	\$3,948,369	\$2,762,755	\$2,335,936	45
Miscellaneous Services	\$4,720,452	\$1,954,428	\$1,694,324	47
Households	\$242,128	\$242,128	\$237,004	19
Total	\$288,834,378	\$92,576,809	\$49,042,098	817



Table 11

The Current Annual Impact of Exploration, Drilling, and Operations in the
Barnett Shale on Business Activity in Parker County
Detailed Industrial Category

	·	·	·	Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	. Jobs)
Agricultural Products & Services	\$1,471,183	\$409,502	\$278,893	5
Forestry & Fishery Products	\$242	\$296	\$109	0
Coal Mining	\$10,431	\$3,035	\$3,198	0
Crude Petroleum & Natural Gas	\$94,370,269	\$20,682,692	\$9,538,833	54
Miscellaneous Mining	\$86,926	\$37,010	\$21,757	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$7,341,996	\$3,966,476	\$3,268,623	54
Food Products & Tobacco	\$1,034,533	\$266,176	\$135,976	3
Textile Mill Products	\$732	\$248	\$212	0
Apparel	\$539.060	\$296,193	\$150,086	5
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$447,005	\$224,799	\$146,731	3
Chemicals & Petroleum Refining	\$1,957,250	\$344,991	\$161,992	1
Rubber and Leather Products	\$477,486	\$200,410	\$117,157	3
Lumber Products & Furniture	\$84,006	\$26,940	\$19,207	0
Stone, Clay, & Glass Products	\$467,117	\$237,483	\$124,205	2
Primary Metal	\$173,733	\$52,265	\$38,904	1
Fabricated Metal Products	\$1,260,410	\$469,768	\$303,282	6
Machinery, Except Electrical	\$1,318,523	\$558,930	\$399,302	5
Electric & Electronic Equipment	\$10,812	\$5,973	\$3,570	0
Motor Vehicles & Equipment	\$70,837	\$16,880	\$10,967	0
Transp Equip, Except Motor Vehicles	\$53,564	\$22,480	\$14,688	0
Instruments & Related Products	\$4,467	\$1,931	\$1,467	0
Miscellaneous Manufacturing	\$214,933	\$79,673	\$54,951	1
Transportation	\$2,621,107	\$1,711,948	\$1,132,221	18
Communication	\$658,302	\$408,214	\$174,278	2
Electric, Gas, Water, Sanitary Serv	\$4,417,838	\$988,550	\$431,378	2
Wholesale Trade	\$2,369,976	\$1,601,503	\$923,441	12
Retail Trade	\$8,007,349	\$6,642,194	\$3,971,821	121
Finance	\$1,878,822	\$1,046,092	\$609,143	6
Insurance	\$1,157,408	\$696,235	\$416,236	6
Real Estate	\$18,249,666	\$5,063,935	\$815,908	8
Hotels, Lodging Places, Amusements	\$870,317	\$454,846	\$298,393	8
Personal Services	\$1,680,034	\$1,036,846	\$806,683	16
Business Services	\$2,638,574	\$1,529,762	\$1,247,894	18
Eating & Drinking Places	\$4,353,677	\$2,554,370	\$1,359,061	71
Health Services	\$1,982,354	\$1,390,761	\$1,175,902	23
Miscellaneous Services	\$2,695,801	\$1,114,791	\$966,431	27
Households	\$137,179	\$137,179	\$134,276	11
Total	\$165,113,918	\$54,281,378	\$29,257,175	492

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 12
The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Tarrant County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$7,944,320	\$2,210,363	\$1,505,380	29
Forestry & Fishery Products	\$76,121	\$93,239	\$34,584	0
Coal Mining	\$60,054	\$17,475	\$18,404	0
Crude Petroleum & Natural Gas	\$1,423,922,212	\$312,073,355	\$143,927,842	820
Miscellaneous Mining	\$466,420	\$198,571	\$116,737	2
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$106,658,664	\$57,607,804	\$47,472,421	780
Food Products & Tobacco	\$54,204,432	\$13,946,259	\$7,124,397	138
Textile Mill Products	\$80,392	\$27,212	\$23,017	1
Apparel	\$7,841,801	\$4,309,154	\$2,183,530	70
Paper & Allied Products	\$7,209,786	\$3,315,099	\$1,498,720	26
Printing & Publishing	\$11,542,374	\$5,805,348	\$3,789,264	75
Chemicals & Petroleum Refining	\$39,342,582	\$6,924,743	\$3,251,566	27
Rubber and Leather Products	\$7,229,741	\$3,035,450	\$1,774,516	40
Lumber Products & Furniture	\$3,297,446	\$1,058,636	\$754,755	16
Stone, Clay, & Glass Products	\$6,483,860	\$3,298,619	\$1,725,207	31
Primary Metal	\$10,765,602	\$3,237,629	\$2,409,940	41
Fabricated Metal Products	\$18,680,681	\$6,961,048	\$4,494,061	89
Machinery, Except Electrical	\$12,759,240	\$5,407,700	\$3,863,285	47
Electric & Electronic Equipment	\$6,680,668	\$3,688,450	\$2,205,038	19
Motor Vehicles & Equipment	\$3,808,970	\$906,929	\$589,200	9
Transp Equip, Except Motor Vehicles	\$2,031,377	\$852,652	\$557,157	6
Instruments & Related Products	\$1,111,181	\$480,354	\$365,114	4
Miscellaneous Manufacturing	\$3,023,074	\$1,121,547	\$773,543	13
Transportation	\$41,608,832	\$27,188,753	\$17,981,678	289
Communication				289 59
Electric, Gas, Water, Sanitary Serv	\$21,681,903	\$13,402,122 \$8,283,759	\$5,721,802 \$3,614.821	15
Wholesale Trade	\$36,987,062	, ,	* - / - / -	
Retail Trade	\$51,177,549	\$34,583,647	\$19,941,240	262
Finance	\$123,555,347	\$102,487,230	\$61,284,090	1,870 83
Insurance	\$24,879,607	\$13,844,763	\$8,061,846	124
Real Estate	\$24,486,797	\$14,728,831	\$8,805,501	124
	\$236,794,033	\$63,161,853	\$10,176,750	
Hotels, Lodging Places, Amusements	\$13,326,162	\$6,965,841	\$4,569,832	129
Personal Services	\$25,627,369	\$15,825,348	\$12,312,344	242
Business Services	\$49,758,756	\$29,016,645	\$23,670,146	336
Eating & Drinking Places	\$66,832,431	\$39,209,708	\$20,861,656	1,097
Health Services	\$43,535,597	\$30,402,215	\$25,705,372	493
Miscellaneous Services	\$38,362,960	\$15,805,146	\$13,701,723	382
Households	\$1,414,682	\$1,414,682	\$1,384,735	111
Total	\$2,535,250,083	\$852,898,181	\$468,251,220	7,877



Table 13

The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Wise County

Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$22,627,449	\$6,300,949	\$4,291,309	78
Forestry & Fishery Products	\$470,062	\$579,101	\$214,809	3
Coal Mining	\$3,126,767	\$909,628	\$958,510	7
Crude Petroleum & Natural Gas	\$1,518,076,756	\$332,707,340	\$153,444,222	876
Miscellaneous Mining	\$1,353,938	\$576,436	\$338,850	4
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$114,437,055	\$61,838,529	\$50,958,808	836
Food Products & Tobacco	\$0	\$0	\$0	0.00
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$3,875,865	\$2,129,456	\$1,079,031	32
Paper & Allied Products	\$3,073,003	\$2,129,430	\$1,079,031	0
Printing & Publishing	\$4.308.576	\$2,166,575	\$1,414,157	25
Chemicals & Petroleum Refining	\$1,145,931	\$202,277	\$94,986	1
Rubber and Leather Products	\$2,325,957	\$975,926	\$570,523	12
Lumber Products & Furniture	\$2,377,481	\$761,583	\$542,989	13
Stone, Clay, & Glass Products	\$7,260,948	\$3,689,037	\$1,929,358	35
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$19,628,764	\$7,317,290	\$4,724,054	93
Machinery, Except Electrical	\$7,911,289	\$3,354,250	\$2,396,303	28
Electric & Electronic Equipment	\$8,272,399	\$4,570,953	\$2,732,681	25
Motor Vehicles & Equipment	\$3,884,615	\$926,383	\$601,812	8
Transp Equip, Except Motor Vehicles	\$1,609,441	\$675,222	\$441,231	5
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$311,300	\$115,285	\$79,541	1
Transportation	\$42,401,239	\$27,665,037	\$18,296,650	295
Communication	\$15,650,981	\$9,683,722	\$4,134,268	42
Electric, Gas, Water, Sanitary Serv	\$61,605,487	\$13,785,457	\$6,015,603	29
Wholesale Trade	\$34,029,520	\$22,994,931	\$13,259,087	174
Retail Trade	\$121,386,500	\$100,695,093	\$60,212,466	1,837
Finance	\$21,969,652	\$12,238,994	\$7,126,801	72
Insurance	\$10,370,186	\$6,238,556	\$3,729,664	49
Real Estate	\$161,826,954	\$39,712,347	\$6,398,536	66
Hotels, Lodging Places, Amusements	\$13,087,318	\$6,839,311	\$4,486,840	127
Personal Services	\$25,379,485	\$15,658,618	\$12,182,661	238
Business Services	\$26,345,274	\$15,036,516	\$12,265,950	172
Eating & Drinking Places	\$66,347,302	\$38,928,965	\$20,712,308	1,090
Health Services	\$30,359,964	\$21,287,482	\$17,998,765	346
Miscellaneous Services	\$41,382,791	\$17,131,418	\$14,851,498	414
Households	\$1,451,531	\$1,451,531	\$1,420,806	114
Total	\$2,396,598,776	\$779,144,199	\$429,905,079	7,146

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 14

The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Young County

Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$1,506,007	\$419,593	\$285,767	5
Forestry & Fishery Products	\$2,991	\$3,701	\$1,371	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$168,922,777	\$37,021,771	\$17,074,398	97
Miscellaneous Mining	\$149,729	\$63,740	\$37,467	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$8,999,416	\$4,864,431	\$4,008,593	66
Food Products & Tobacco	\$267,972	\$68,947	\$35,222	1
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$27,029	\$14,847	\$7,524	0
Paper & Allied Products	\$230,464	\$106,200	\$48,015	1
Printing & Publishing	\$867,596	\$436,212	\$284,724	5
Chemicals & Petroleum Refining	\$530,776	\$93,851	\$44,070	0
Rubber and Leather Products	\$639,786	\$268,331	\$156,866	4
Lumber Products & Furniture	\$370,267	\$118,442	\$84,443	2
Stone, Clay, & Glass Products	\$399,256	\$202,682	\$106,006	2
Primary Metal	\$1,240,958	\$373,569	\$278,070	5
Fabricated Metal Products	\$2,170,274	\$809,239	\$522,448	10
Machinery, Except Electrical	\$1,210,496	\$513,343	\$366,734	4
Electric & Electronic Equipment	\$911,026	\$503,644	\$301,096	3
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp Equip, Except Motor Vehicles	\$228,741	\$95,946	\$62,695	1
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$14,011	\$5.182	\$3.576	0
Transportation	\$2,597,621	\$1,700,937	\$1,124,939	18
Communication	\$2,737,979	\$1,691,620	\$722,207	7
Electric, Gas, Water, Sanitary Serv	\$9,967,799	\$2,229,528	\$972,909	5
Wholesale Trade	\$2,592,681	\$1,751,927	\$1,010,175	13
Retail Trade	\$12,655,009	\$10,498,052	\$6,277,500	192
Finance	\$2,723,118	\$1,518,045	\$883,960	9
Insurance	\$1,054,784	\$634,601	\$379,390	5
Real Estate	\$12,710,773	\$2,791,827	\$449,823	5
Hotels, Lodging Places, Amusements	\$835,753	\$439,205	\$288,134	8
Personal Services	\$2,699,614	\$1,664,980	\$1,295,382	25
Business Services	\$2,244,422	\$1,266,900	\$1,033,468	15
Eating & Drinking Places	\$7,138,322	\$4,188,651	\$2,228,584	117
Health Services	\$3,647,945	\$2,551,996	\$2,157,739	41
Miscellaneous Services	\$4,458,232	\$1,847,610	\$1,601,726	44
Households	\$232,347	\$232,347	\$227,429	18
Total	\$256,985,967	\$80,991,897	\$44,362,452	729



Table 15
The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in the Barnett Shale Region
Detailed Industrial Category

			<u> </u>	Employment
Category	Total Expenditures	Gross	Personal	(Permanent
		Product	Income	Jobs)
Agricultural Products & Services	\$67,872,769	\$18,897,472	\$12,870,240	237
Forestry & Fishery Products	\$818,281	\$1,007,486	\$373,688	5
Coal Mining	\$3,554,662	\$1,034,114	\$1,089,676	7
Crude Petroleum & Natural Gas	\$5,692,311,048	\$1,247,552,952	\$575,369,908	3.284
Miscellaneous Mining	\$3,657,073	\$1,556,939	\$915,229	11
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$400,772,445	\$216,532,106	\$178,435,952	2,927
Food Products & Tobacco	\$82,229,645	\$21,156,907	\$10,807,936	208
Textile Mill Products	\$238,213	\$81,263	\$68,752	2
Apparel	\$23,214,936	\$12,755,797	\$6,463,567	202
Paper & Allied Products	\$13,186,775	\$6,065,460	\$2,742,128	48
Printing & Publishing	\$31,530,157	\$15,856,571	\$10,349,900	201
Chemicals & Petroleum Refining	\$98,035,018	\$17,274,942	\$8,111,581	67
Rubber and Leather Products	\$19,003,593	\$7,976,056	\$4,662,768	104
Lumber Products & Furniture	\$10,368,127	\$3,324,327	\$2,370,085	52
Stone, Clay, & Glass Products	\$23,880,556	\$12,138,815	\$6,348,641	113
Primary Metal	\$17,261,759	\$5,192,620	\$3,865,134	65
Fabricated Metal Products	\$70,626,049	\$26,325,092	\$16,995,515	334
Machinery, Except Electrical	\$45,984,710	\$19,494,157	\$13,926,707	167
Electric & Electronic Equipment	\$20,500,543	\$11,323,983	\$6,769,815	61
Motor Vehicles & Equipment	\$11,714,360	\$2,791,607	\$1,813,584	26
Transp Equip, Except Motor Vehicles	\$4,914,059	\$2,062,134	\$1,347,509	15
Instruments & Related Products	\$2,195,407	\$949,329	\$721,573	8
Miscellaneous Manufacturing	\$7,530,302	\$2,791,699	\$1,925,488	32
Transportation	\$148,007,573	\$96,670,741	\$63,934,557	1,028
Communication	\$66,028,948	\$40,841,704	\$17,436,619	176
Electric, Gas, Water, Sanitary Serv	\$224,631,762	\$50,270,358	\$21,936,656	104
Wholesale Trade	\$146,017,366	\$98,670,565	\$56,894,328	744
Retail Trade	\$468,640,647	\$388,746,862	\$232,458,208	7,091
Finance	\$91,858,420	\$51,156,487	\$29,788,568	303
Insurance	\$54,646,124	\$32,871,992	\$19,652,208	270
Real Estate	\$774,608,168	\$201,083,322	\$32,398,911	330
Hotels, Lodging Places, Amusements	\$43,723,375	\$22,883,802	\$15,012,572	424
Personal Services	\$97,440,633	\$60,143,390	\$46,792,481	916
Business Services	\$159,627,769	\$92,628,843	\$75,561,410	1,069
Eating & Drinking Places	\$255,866,739	\$150,123,731	\$79,873,862	4,202
Health Services	\$141,405,150	\$98,903,316	\$83,623,688	1,605
Miscellaneous Services	\$156,508,180	\$64,708,489	\$56,096,816	1,562
Households	\$6,230,112	\$6,230,112	\$6,098,270	491
Total	\$9,486,641,451	\$3,110,075,545	\$1,705,904,531	28,493

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 16
The Current Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Texas
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$88,860,620	\$24,708,114	\$16,827,609	313
Forestry & Fishery Products	\$1,863,719	\$2,271,630	\$842,510	12
Coal Mining	\$12,293,888	\$3,574,888	\$3,767,072	25
Crude Petroleum & Natural Gas	\$6,080,191,637	\$1,332,562,638	\$614,576,272	3,508
Miscellaneous Mining	\$5,081,782	\$2,163,864	\$1,271,984	15
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$428,416,309	\$231,305,195	\$190,609,815	3,126
Food Products & Tobacco	\$215,047,586	\$55,328,961	\$28,264,719	545
Textile Mill Products	\$2,493,032	\$837,345	\$708,397	15
Apparel	\$43,263,581	\$23,777,046	\$12,048,179	378
Paper & Allied Products	\$28,612,795	\$13,142,695	\$5,941,712	102
Printing & Publishing	\$45,673,106	\$22,975,447	\$14,996,572	297
Chemicals & Petroleum Refining	\$267,378,779	\$46,956,986	\$22,048,998	189
Rubber and Leather Products	\$28,508,680	\$11,975,745	\$7,000,937	155
Lumber Products & Furniture	\$12,971,047	\$4,171,541	\$2,974,066	65
Stone, Clay, & Glass Products	\$27,454,372	\$13,981,967	\$7,312,607	130
Primary Metal	\$41,807,450	\$12,566,931	\$9,354,250	161
Fabricated Metal Products	\$73,713,423	\$27,459,338	\$17,727,744	356
Machinery, Except Electrical	\$76,691,266	\$32,493,891	\$23,213,816	282
Electric & Electronic Equipment	\$31,431,287	\$17,342,056	\$10,367,706	93
Motor Vehicles & Equipment	\$15,026,104	\$3,573,590	\$2,321,629	34
Transp Equip, Except Motor Vehicles	\$7,979,933	\$3,350,792	\$2,189,475	22
Instruments & Related Products	\$6,643,474	\$2,869,420	\$2,181,090	25
Miscellaneous Manufacturing	\$12,825,663	\$4,764,538	\$3,286,217	56
Transportation	\$164,245,099	\$107,448,066	\$71,062,304	1,146
Communication	\$115,778,146	\$71,514,044	\$30,531,645	313
Electric, Gas, Water, Sanitary Serv	\$361,582,205	\$80,901,701	\$35,303,431	174
Wholesale Trade	\$223,305,049	\$150,904,225	\$87,012,686	1,125
Retail Trade	\$501,244,051	\$415,753,501	\$248,607,291	7,588
Finance	\$111,384,564	\$61,928,568	\$36,061,098	375
Insurance	\$109,408,575	\$65,802,428	\$39,339,297	545
Real Estate	\$1,089,258,564	\$295,564,251	\$47,621,770	480
Hotels, Lodging Places, Amusements	\$53,448,834	\$27,946,924	\$18,334,085	517
Personal Services	\$106,049,684	\$65,493,904	\$50,955,369	998
Business Services	\$250,066,287	\$146,631,181	\$119,613,472	1,695
Eating & Drinking Places	\$269,070,159	\$157,848,387	\$83,983,720	4,415
Health Services	\$174,960,550	\$122,252,720	\$103,365,746	1,989
Miscellaneous Services	\$163,621,799	\$67,479,152	\$58,498,720	1,630
Households	\$8,178,505	\$8,178,505	\$8,005,414	641
Total	\$11,255,831,603	\$3,739,802,174	\$2,038,129,421	33,539



Table 17

The Projected Typical Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in the Barnett Shale Region (Average over 10 Years)—Detailed Industrial Category

	<u> </u>			Employment
Category	Total Expenditures	Gross	Personal	(Permanent
		Product	Income	Jobs)
Agricultural Products & Services	\$153,349,085	\$42,696,210	\$29,078,519	536
Forestry & Fishery Products	\$1,848,792	\$2,276,274	\$844,297	11
Coal Mining	\$8,031,264	\$2,336,438	\$2,461,971	17
Crude Petroleum & Natural Gas	\$12,860,985,433	\$2,818,672,452	\$1,299,968,315	7,419
Miscellaneous Mining	\$8,262,649	\$3,517,686	\$2,067,833	26
New Construction	\$0	\$0	\$0	(
Maintenance & Repair Construction	\$905,489,622	\$489,224,191	\$403,151,226	6,613
Food Products & Tobacco	\$185,786,450	\$47,801,091	\$24,419,028	471
Textile Mill Products	\$538,209	\$183,603	\$155,335	4
Apparel	\$52,450,920	\$28,819,950	\$14,603,531	456
Paper & Allied Products	\$29,793,685	\$13,704,065	\$6,195,457	108
Printing & Publishing	\$71,238,007	\$35,825,717	\$23,384,161	455
Chemicals & Petroleum Refining	\$221,496,494	\$39,030,330	\$18,326,990	152
Rubber and Leather Products	\$42,935,976	\$18,020,789	\$10,534,876	235
Lumber Products & Furniture	\$23,425,342	\$7,510,855	\$5,354,877	117
Stone, Clay, & Glass Products	\$53,954,797	\$27,425,964	\$14,343,872	256
Primary Metal	\$39,000,544	\$11,732,004	\$8,732,733	147
Fabricated Metal Products	\$159,569,740	\$59,477,887	\$38,399,002	756
Machinery, Except Electrical	\$103,896,059	\$44,044,337	\$31,465,458	378
Electric & Electronic Equipment	\$46,318,126	\$25,584,966	\$15,295,456	137
Motor Vehicles & Equipment	\$26,466,968	\$6,307,248	\$4,097,540	59
Transp Equip, Except Motor Vehicles	\$11,102,632	\$4,659,106	\$3,044,509	33
Instruments & Related Products	\$4,960,218	\$2,144,876	\$1,630,293	18
Miscellaneous Manufacturing	\$17,013,670	\$6,307,457	\$4,350,373	71
Transportation	\$334,402,535	\$218,414,099	\$144,451,244	2,323
Communication	\$149,183,228	\$92,276,153	\$39,395,617	398
Electric, Gas, Water, Sanitary Serv	\$507,524,237	\$113,578,885	\$49,562,825	234
Wholesale Trade	\$329,905,937	\$222,932,425	\$128,544,825	1,682
Retail Trade	\$1,058,828,389	\$878,319,489	\$525,207,003	16,022
Finance	\$207,541,330	\$115,580,971	\$67,303,128	685
Insurance	\$123,465,320	\$74,269,696	\$44,401,433	609
Real Estate	\$1,750,119,464	\$454,319,810	\$73,200,834	746
Hotels, Lodging Places, Amusements	\$98,786,887	\$51,702,770	\$33,918,820	959
Personal Services	\$220,153,564	\$135,885,629	\$105,721,106	2,070
Business Services	\$360,656,751	\$209,281,993	\$170,720,501	2,415
Eating & Drinking Places	\$578,095,325	\$339,183,700	\$180,463,887	9,493
Health Services	\$319,485,278	\$223,458,293	\$188,936,096	3,626
Miscellaneous Services	\$353,608,473	\$146,199,835	\$126,742,957	3,530
Households	\$14,076,071	\$14,076,071	\$13,778,194	1,109
Total	\$21,433,747,468	\$7,026,783,312	\$3,854,254,122	64,375

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 18

The Projected Typical Annual Impact of Exploration, Drilling, and Operations in the Barnett Shale on Business Activity in Texas (Average over 10 Years)

Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$200,768,216	\$55,824,550	\$38,019,642	707
Forestry & Fishery Products	\$4,210,814	\$5,132,432	\$1,903,534	28
Coal Mining	\$27,776,330	\$8,076,962	\$8,511,175	56
Crude Petroleum & Natural Gas	\$13,737,347,698	\$3,010,740,019	\$1,388,549,643	7,925
Miscellaneous Mining	\$11,481,580	\$4,888,951	\$2,873,870	35
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$967,947,090	\$522,601,930	\$430,656,376	7,064
Food Products & Tobacco	\$485,870,124	\$125,008,095	\$63,860,203	1,232
Textile Mill Products	\$5,632,659	\$1,891,864	\$1,600,525	35
Apparel	\$97,748,046	\$53,720,931	\$27,221,185	854
Paper & Allied Products	\$64,646,632	\$29,694,091	\$13,424,473	231
Printing & Publishing	\$103,192,034	\$51,909,827	\$33,882,669	672
Chemicals & Petroleum Refining	\$604,105,178	\$106,092,781	\$49,816,645	427
Rubber and Leather Products	\$64,411,398	\$27,057,531	\$15,817,644	350
Lumber Products & Furniture	\$29,306,278	\$9,425,017	\$6,719,489	147
Stone, Clay, & Glass Products	\$62,029,336	\$31,590,311	\$16,521,819	294
Primary Metal	\$94,458,121	\$28,393,234	\$21,134,628	364
Fabricated Metal Products	\$166,545,232	\$62,040,557	\$40,053,372	805
Machinery, Except Electrical	\$173,273,253	\$73,415,428	\$52,448,390	637
Electric & Electronic Equipment	\$71,014,624	\$39,181,964	\$23,424,389	210
Motor Vehicles & Equipment	\$33,949,394	\$8,074,031	\$5,245,398	77
Transp Equip, Except Motor Vehicles	\$18,029,550	\$7,570,650	\$4,946,815	49
Instruments & Related Products	\$15,010,005	\$6,483,056	\$4,927,869	56
Miscellaneous Manufacturing	\$28,977,803	\$10,764,810	\$7,424,751	126
Transportation	\$371,088,967	\$242,763,968	\$160,555,397	2,590
Communication	\$261,584,624	\$161,576,041	\$68,982,007	707
Electric, Gas, Water, Sanitary Serv	\$816,944,724	\$182,786,145	\$79,763,194	392
Wholesale Trade	\$504,526,712	\$340,947,117	\$196,593,066	2,541
Retail Trade	\$1,132,491,247	\$939,337,235	\$561,693,610	17,145
Finance	\$251,657,936	\$139,918,989	\$81,475,037	847
Insurance	\$247,193,466	\$148,671,439	\$88,881,673	1,232
Real Estate	\$2,461,028,290	\$667,786,333	\$107,594,768	1,085
Hotels, Lodging Places, Amusements	\$120,760,209	\$63,142,189	\$41,423,316	1,169
Personal Services	\$239,604,518	\$147,974,371	\$115,126,572	2,254
Business Services	\$564,990,009	\$331,292,767	\$270,250,010	3,829
Eating & Drinking Places	\$607,926,616	\$356,636,484	\$189,749,539	9,976
Health Services	\$395,299,040	\$276,213,024	\$233,540,532	4,495
Miscellaneous Services	\$369,680,707	\$152,459,762	\$132,169,725	3,682
Households	\$18,478,196	\$18,478,196	\$18,087,119	1,449
Total	\$25,430,986,652	\$8,449,563,081	\$4,604,870,073	75,776

The Current and Projected Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity



Current Impacts: Royalty and Lease Payments

Table 19
The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Clay County
Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$53,815	\$14,635	\$9.965	0
Forestry & Fishery Products	\$0	\$0	\$0	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$24,556	\$5,364	\$2,475	0
Miscellaneous Mining	\$0	\$0	\$0	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$70,361	\$36,056	\$29,716	0
Food Products & Tobacco	\$87,736	\$22,564	\$11,530	0
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$10.136	\$5,608	\$2.837	0
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$3,665	\$1,856	\$1,213	0
Chemicals & Petroleum Refining	\$0	\$0	\$0	0
Rubber & Leather Products	\$0	\$0	\$0	0
Lumber Products & Furniture	\$5,481	\$1,922	\$1,369	0
Stone, Clay, & Glass Products	\$1,313	\$726	\$377	0
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$14,497	\$5,210	\$3,360	0
Machinery, Except Electrical	\$8,964	\$3,589	\$2,566	0
Electric & Electronic Equipment	\$0	\$0	\$0	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$22	\$11	\$2	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$0	\$0	\$0	0
Transportation	\$80,621	\$55,433	\$36,663	0
Communication	\$46,663	\$29,006	\$12,385	0
Electric, Gas, Water, Sanitary Services	\$187,112	\$42,000	\$18,328	0
Wholesale Trade	\$49,824	\$33,718	\$19,443	0
Retail Trade	\$547,384	\$453,581	\$271,227	8
Finance	\$27,460	\$14,500	\$8,446	0
Insurance	\$8,055	\$4,819	\$2,880	0
Real Estate	\$416,509	\$29,355	\$4,729	0
Hotels, Lodging Places, Amusements	\$32,554	\$17,274	\$11,332	0
Personal Services	\$121,101	\$75,325	\$58,605	1
Business Services	\$111,452	\$65,466	\$53,401	0
Eating & Drinking Places	\$212,744	\$124,590	\$66,289	3
Health Services	\$135,647	\$96,321	\$81,443	1
Miscellaneous Services	\$108,448	\$42,431	\$36,786	1
Households	\$3,455	\$3,455	\$3,383	0
Total	\$2.369.573	\$1.184.813	\$750.751	16

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 20
The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Cooke County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$668,997	\$181,916	\$123,895	0
Forestry & Fishery Products	\$24,039	\$25,140	\$9,354	0
Coal Mining	\$22,350	\$6,413	\$6,754	0
Crude Petroleum & Natural Gas	\$688,141	\$150,287	\$69,347	0
Miscellaneous Mining	\$16,545	\$7,077	\$4,212	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$813,383	\$416,842	\$343,473	2
Food Products & Tobacco	\$1,007,613	\$259,213	\$132,433	1
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$148,371	\$82,097	\$41,551	0
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$431,698	\$218,648	\$142,679	0
Chemicals & Petroleum Refining	\$950,750	\$143,988	\$67,640	0
Rubber & Leather Products	\$234,320	\$100,767	\$58,912	0
Lumber Products & Furniture	\$96,858	\$33,924	\$24,210	0
Stone, Clay, & Glass Products	\$75,969	\$42,083	\$21,971	0
Primary Metal	\$101,241	\$28,023	\$20,833	0
Fabricated Metal Products	\$256,272	\$92,058	\$59,424	0
Machinery, Except Electrical	\$158,370	\$63,503	\$45,403	0
Electric & Electronic Equipment	\$26,259	\$13,832	\$8,291	0
Motor Vehicles & Equipment	\$115,206	\$25,974	\$16,810	0
Transp. Equip., Except Motor Vehicles	\$4,573	\$1,954	\$1,290	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$99,116	\$39.085	\$26,999	0
Transportation	\$1,454,983	\$1,000,194	\$661,503	5
Communication	\$1,015,847	\$629,893	\$268,965	2
Electric, Gas, Water, Sanitary Services	\$2,638,781	\$592,212	\$258,454	0
Wholesale Trade	\$651,352	\$440,730	\$254,128	0
Retail Trade	\$9,674,539	\$8,016,713	\$4,793,726	142
Finance	\$495,695	\$261,812	\$152,488	0
Insurance	\$242,269	\$144,975	\$86,708	0
Real Estate	\$7,136,524	\$469,095	\$75,589	0
Hotels, Lodging Places, Amusements	\$636,401	\$336,718	\$220,906	5
Personal Services	\$2,098,138	\$1,305,853	\$1,016,037	15
Business Services	\$2,018,622	\$1,188,295	\$969,325	6
Eating & Drinking Places	\$4,197,586	\$2,458,327	\$1,307,959	67
Health Services	\$2,262,105	\$1,608,040	\$1,359,529	23
Miscellaneous Services	\$1,916,735	\$749,975	\$650,138	12
Households	\$61,075	\$61,075	\$59,785	1
Total	\$42,440,725	\$21,196,731	\$13,360,720	281



Table 21
The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Denton County
Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$4,183,399	\$1,137,470	\$774,536	7
Forestry & Fishery Products	\$6,104	\$6,599	\$2,227	0
Coal Mining	\$6,021	\$1,485	\$1,732	0
Crude Petroleum & Natural Gas	\$109,540	\$24,086	\$10,971	0
Miscellaneous Mining	\$7,424	\$3,052	\$1,815	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$5,482,128	\$2,809,362	\$2,315,193	20
Food Products & Tobacco	\$4,014,057	\$1,032,302	\$527,410	6
Textile Mill Products	\$2,227	\$412	\$247	0
Apparel	\$1,562,929	\$864.362	\$437.831	0
Paper & Allied Products	\$1,352,014	\$598,265	\$270,386	0
Printing & Publishing	\$1,651,600	\$836,069	\$545,722	0
Chemicals & Petroleum Refining	\$5,462,497	\$827,161	\$388,505	0
Rubber & Leather Products	\$772,308	\$332,168	\$194,417	0
Lumber Products & Furniture	\$426,943	\$149,546	\$106,653	0
Stone, Clay, & Glass Products	\$554,548	\$307,670	\$160,681	0
Primary Metal	\$9,403	\$2,557	\$1,815	0
Fabricated Metal Products	\$1,043,437	\$374,648	\$242,011	0
Machinery, Except Electrical	\$353,036	\$141,545	\$101,127	0
Electric & Electronic Equipment	\$651,880	\$343,386	\$205,223	0
Motor Vehicles & Equipment	\$544,897	\$122,490	\$79,516	0
Transp. Equip., Except Motor Vehicles	\$140,802	\$60,297	\$39,098	0
Instruments & Related Products	\$190,293	\$78,196	\$59,472	0
Miscellaneous Manufacturing	\$437,006	\$172,559	\$118,861	0
Transportation	\$3,999,540	\$2,773,316	\$1,834,140	7
Communication	\$6,688,968	\$4,132,918	\$1,764,357	7
Electric, Gas, Water, Sanitary Services	\$13,876,477	\$3,114,557	\$1,359,108	0
Wholesale Trade	\$6,885,283	\$4,659,009	\$2,686,541	13
Retail Trade	\$42,648,865	\$35,340,433	\$21,132,696	619
Finance	\$2,290,943	\$1,209,892	\$704,506	0
Insurance	\$2,207,880	\$1,321,330	\$790,043	0
Real Estate	\$38,089,580	\$3,533,746	\$569,477	0
Hotels, Lodging Places, Amusements	\$3,157,037	\$1,665,540	\$1,092,598	20
Personal Services	\$9,435,724	\$5,868,818	\$4,566,130	73
Business Services	\$7,186,766	\$4,139,765	\$3,377,107	20
Eating & Drinking Places	\$18,504,636	\$10,836,817	\$5,765,959	291
Health Services	\$11,815,338	\$8,374,470	\$7,080,855	122
Miscellaneous Services	\$8,449,614	\$3,305,922	\$2,866,194	53
Households	\$127,605	\$127,605	\$124,800	0
Total	\$204,328,750	\$100,629,821	\$62,299,962	1.257

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 22
The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Erath County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$208,663	\$56,736	\$38,635	0
Forestry & Fishery Products	\$193	\$197	\$63	0
Coal Mining	\$2,017	\$567	\$605	0
Crude Petroleum & Natural Gas	\$7,143	\$1,567	\$723	0
Miscellaneous Mining	\$0	\$0	\$0	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$215,129	\$110,254	\$90,837	0
Food Products & Tobacco	\$91,094	\$23,433	\$11,992	0
Textile Mill Products	\$5,177	\$1,181	\$1,008	0
Apparel	\$3,113	\$1,714	\$878	0
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$36,374	\$18,429	\$12.021	0
Chemicals & Petroleum Refining	\$5.593	\$857	\$391	0
Rubber & Leather Products	\$51,408	\$22,110	\$12.933	0
Lumber Products & Furniture	\$8,891	\$3,118	\$2,219	0
Stone, Clay, & Glass Products	\$27,601	\$15,299	\$7,996	0
Primary Metal	\$22,227	\$6,143	\$4,580	0
Fabricated Metal Products	\$56.223	\$20,194	\$13.034	0
Machinery, Except Electrical	\$1,332	\$538	\$366	0
Electric & Electronic Equipment	\$31,450	\$16,563	\$9.908	0
Motor Vehicles & Equipment	\$27,118	\$6,109	\$3,971	0
Transp. Equip., Except Motor Vehicles	\$0	\$0	\$0	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$6.794	\$2.681	\$1.840	0
Transportation	\$217,898	\$150,805	\$99,724	1
Communication	\$253,163	\$156,788	\$66,934	0
Electric, Gas, Water, Sanitary Services	\$617,899	\$138,678	\$60,513	0
Wholesale Trade	\$169,843	\$114,922	\$66,274	0
Retail Trade	\$2,122,449	\$1,758,751	\$1,051,687	31
Finance	\$102,132	\$53,946	\$31,395	0
Insurance	\$64,795	\$38,782	\$23,202	0
Real Estate	\$1,560,349	\$101,741	\$16,391	0
Hotels, Lodging Places, Amusements	\$168,435	\$88,716	\$58,202	1
Personal Services	\$469,557	\$292,067	\$227,226	3
Business Services	\$241,881	\$131,741	\$107,447	1
Eating & Drinking Places	\$920,895	\$539,314	\$286,937	15
Health Services	\$587,996	\$416,754	\$352,370	6
Miscellaneous Services	\$420,497	\$164,532	\$142,636	3
Households	\$13,387	\$13,387	\$13,118	0
Total	\$8,738,717	\$4,468,612	\$2,818,056	62



Table 23
The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Hill County
Detailed Industrial Category

	Total	Gross	Personal	Employment (Permanent
Category	Expenditures	Product	Income	(Permanent Jobs)
Agricultural Products & Services	\$266,466	\$72.454	\$49,336	0
Forestry & Fishery Products	\$6.730	\$72,434	\$2,622	0
Coal Mining	\$0,730	\$0	\$0	0
Crude Petroleum & Natural Gas	\$4.928	\$1.073	\$493	0
Miscellaneous Mining	\$4,633	\$1,984	\$1.174	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$348,396	\$178,547	\$147,117	1
Food Products & Tobacco	\$287,230	\$73,875	\$37,736	0
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$88.734	\$49.078	\$24.866	0
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$64.716	\$32,781	\$21.391	0
Chemicals & Petroleum Refining	\$0	\$0	\$0	0
Rubber & Leather Products	\$0	\$0	\$0	0
Lumber Products & Furniture	\$27,135	\$9,502	\$6.789	0
Stone, Clay, & Glass Products	\$35,243	\$19,541	\$10,205	0
Primary Metal	\$28,389	\$7,851	\$5,845	0
Fabricated Metal Products	\$69,810	\$25,059	\$16,179	0
Machinery, Except Electrical	\$18,050	\$7.218	\$5,175	0
Electric & Electronic Equipment	\$0	\$0	\$0	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$80	\$16	\$11	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$0	\$0	\$0	0
Transportation	\$255,446	\$177,131	\$117,129	0
Communication	\$245,783	\$152,678	\$65,182	0
Electric, Gas, Water, Sanitary Services	\$1,035,293	\$232,398	\$101,417	0
Wholesale Trade	\$184,590	\$124,900	\$72,030	0
Retail Trade	\$2,710,400	\$2,245,926	\$1,342,997	40
Finance	\$127,495	\$67,354	\$39,216	0
Insurance	\$97,325	\$58,243	\$34,819	0
Real Estate	\$2,528,115	\$248,325	\$39,999	0
Hotels, Lodging Places, Amusements	\$204,604	\$107,884	\$70,786	1
Personal Services	\$599,648	\$372,978	\$290,174	4
Business Services	\$217,640	\$109,675	\$89,469	0
Eating & Drinking Places	\$1,176,001	\$688,699	\$366,430	19
Health Services	\$750,878	\$532,209	\$450,000	8
Miscellaneous Services	\$536,981	\$210,111	\$182,134	3
Households	\$17,101	\$17,101	\$16,742	0
Total	\$11,937,843	\$5,831,631	\$3,607,467	79

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 24
The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Hood County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$771.442	\$209.780	\$142.828	1
Forestry & Fishery Products	\$356	\$371	\$124	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$43.985	\$9.635	\$4,439	0
Miscellaneous Mining	\$0	\$0	\$0	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$1,008,644	\$516,872	\$425,933	3
Food Products & Tobacco	\$0	\$0	\$0	0
Textile Mill Products	\$20,740	\$4,717	\$4,052	0
Apparel	\$21,498	\$11,878	\$6,063	0
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$341,705	\$173,018	\$112,948	0
Chemicals & Petroleum Refining	\$388,350	\$58,817	\$27,622	0
Rubber & Leather Products	\$10,532	\$4,547	\$2,660	0
Lumber Products & Furniture	\$5,970	\$2,072	\$1,469	0
Stone, Clay, & Glass Products	\$102,044	\$56,574	\$29,586	0
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$5,398	\$1,933	\$1,222	0
Machinery, Except Electrical	\$48,563	\$19,487	\$13,904	0
Electric & Electronic Equipment	\$1,036	\$541	\$294	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$6,155	\$2,629	\$1,701	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$15,420	\$6,078	\$4,176	0
Transportation	\$651,009	\$452,751	\$299,483	1
Communication	\$751,491	\$466,453	\$199,140	1
Electric, Gas, Water, Sanitary Services	\$2,997,226	\$672,816	\$293,590	0
Wholesale Trade	\$368,105	\$249,095	\$143,617	0
Retail Trade	\$7,846,795	\$6,502,107	\$3,888,096	116
Finance	\$533,746	\$281,898	\$164,171	0
Insurance	\$480,914	\$287,852	\$172,074	0
Real Estate	\$7,318,972	\$718,889	\$115,809	0
Hotels, Lodging Places, Amusements	\$622,691	\$327,987	\$215,147	4
Personal Services	\$1,735,961	\$1,079,772	\$840,142	12
Business Services	\$1,241,344	\$709,718	\$578,906	4
Eating & Drinking Places	\$3,404,553	\$1,993,825	\$1,060,841	55
Health Services	\$2,173,834	\$1,540,765	\$1,302,698	23
Miscellaneous Services	\$1,554,577	\$608,276	\$527,312	10
Households	\$33,577	\$33,577	\$32,865	0
Total	\$34,506,632	\$17,004,732	\$10,612,913	230



Table 25
The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Jack County
Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$840,794	\$228,623	\$155,691	1
Forestry & Fishery Products	\$0	\$0	\$0	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$608,305	\$132,868	\$61,282	0
Miscellaneous Mining	\$14,631	\$6,268	\$3,713	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$716,442	\$367,163	\$302,594	1
Food Products & Tobacco	\$30,607	\$7,903	\$4,020	0
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$0	\$0	\$0	0
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$0	\$0	\$0	0
Chemicals & Petroleum Refining	\$199,839	\$30,266	\$14,171	0
Rubber & Leather Products	\$0	\$0	\$0	0
Lumber Products & Furniture	\$0	\$0	\$0	0
Stone, Clay, & Glass Products	\$14,937	\$8,278	\$4,377	0
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$226,545	\$81,363	\$52,493	0
Machinery, Except Electrical	\$51,403	\$20,575	\$14,716	0
Electric & Electronic Equipment	\$0	\$0	\$0	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$0	\$0	\$0	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$0	\$0	\$0	0
Transportation	\$1,286,186	\$884,175	\$584,715	4
Communication	\$724,141	\$450,178	\$192,174	1
Electric, Gas, Water, Sanitary Services	\$3,048,899	\$684,422	\$298,625	0
Wholesale Trade	\$462,850	\$313,273	\$180,643	0
Retail Trade	\$8,379,073	\$6,943,191	\$4,151,785	125
Finance	\$581,769	\$307,227	\$178,906	0
Insurance	\$186,451	\$111,544	\$66,698	0
Real Estate	\$6,503,777	\$457,774	\$73,783	0
Hotels, Lodging Places, Amusements	\$519,771	\$275,683	\$180,848	4
Personal Services	\$1,846,818	\$1,149,673	\$894,429	14
Business Services	\$1,672,544	\$978,670	\$798,299	5
Eating & Drinking Places	\$3,687,640	\$2,159,614	\$1,149,060	59
Health Services	\$1,787,392	\$1,273,429	\$1,076,656	18
Miscellaneous Services	\$1,694,363	\$662,944	\$574,734	11
Households	\$53,992	\$53,992	\$52,834	1
Total	\$35,139,170	\$17,589,095	\$11,067,247	246

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 26
The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Johnson County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$4,220,007	\$1,147,380	\$781.473	7
Forestry & Fishery Products	\$18,119	\$19,126	\$7,046	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$59.810	\$13.254	\$6.040	0
Miscellaneous Mining	\$73,567	\$31,373	\$18,706	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$5,517,458	\$2.827.431	\$2,329,992	21
Food Products & Tobacco	\$896,060	\$230,516	\$117,775	0
Textile Mill Products	\$18,371	\$3,943	\$3,272	0
Apparel	\$1,572,845	\$870,140	\$440,732	0
Paper & Allied Products	\$1,360,700	\$602,211	\$272,291	0
Printing & Publishing	\$1,808,143	\$915,606	\$597,346	0
Chemicals & Petroleum Refining	\$5,332,491	\$807,646	\$379,161	0
Rubber & Leather Products	\$1,039,672	\$447,191	\$261,386	0
Lumber Products & Furniture	\$429,492	\$150,406	\$107,289	0
Stone, Clay, & Glass Products	\$558,255	\$309,704	\$161,898	0
Primary Metal	\$27,766	\$7,717	\$5,369	0
Fabricated Metal Products	\$1,137,062	\$408,269	\$263,735	0
Machinery, Except Electrical	\$702,621	\$281,602	\$201,324	0
Electric & Electronic Equipment	\$201,744	\$106,199	\$63,669	0
Motor Vehicles & Equipment	\$548,608	\$123,311	\$80,362	0
Transp. Equip., Except Motor Vehicles	\$148,812	\$63,669	\$41,523	0
Instruments & Related Products	\$101,669	\$41,607	\$31,792	0
Miscellaneous Manufacturing	\$439,726	\$173,474	\$119.704	0
Transportation	\$6,455,209	\$4,437,605	\$2,934,720	21
Communication	\$4,169,424	\$2,587,603	\$1,104,850	7
Electric, Gas, Water, Sanitary Services	\$12,446,617	\$2,793,373	\$1,219,018	0
Wholesale Trade	\$5,187,957	\$3,510,591	\$2,024,231	13
Retail Trade	\$42,924,334	\$35,568,451	\$21,268,896	629
Finance	\$2,171,449	\$1,146,793	\$667,893	0
Insurance	\$1,416,064	\$847,575	\$506,414	0
Real Estate	\$32,264,721	\$2,214,231	\$356,763	0
Hotels, Lodging Places, Amusements	\$2,582,906	\$1,370,347	\$898,996	20
Personal Services	\$9,496,295	\$5,906,684	\$4,595,644	67
Business Services	\$5,091,992	\$2,792,870	\$2,278,151	13
Eating & Drinking Places	\$18,624,167	\$10,907,074	\$5,803,086	296
Health Services	\$11,811,859	\$8,372,487	\$7,079,062	124
Miscellaneous Services	\$8,504,102	\$3,327,470	\$2,884,640	54
Households	\$230,600	\$230,600	\$225,735	0
Total	\$189,590,695	\$95,595,528	\$60,139,986	1,273



Table 27
The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Montague County
Detailed Industrial Category

	<u> </u>			Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$174,150	\$47,356	\$32,249	O
Forestry & Fishery Products	\$4,400	\$4,606	\$1,716	C
Coal Mining	\$23,533	\$6,804	\$7,157	o o
Crude Petroleum & Natural Gas	\$125,997	\$27,521	\$12,693	0
Miscellaneous Mining	\$3,026	\$1,293	\$765	O
New Construction	\$0	\$0	\$0	O
Maintenance & Repair Construction	\$200,343	\$102,670	\$84,606	C
Food Products & Tobacco	\$0	\$0	\$0	0
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$64.914	\$35,894	\$18.179	0
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$79,050	\$40,021	\$26,130	0
Chemicals & Petroleum Refining	\$0	\$0	\$0	0
Rubber & Leather Products	\$42,908	\$18,452	\$10,785	0
Lumber Products & Furniture	\$17,729	\$6,203	\$4,435	0
Stone, Clay, & Glass Products	\$9,149	\$5,071	\$2,652	0
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$5,235	\$1,887	\$1,220	0
Machinery, Except Electrical	\$17,442	\$6,993	\$4,997	0
Electric & Electronic Equipment	\$5,640	\$2,967	\$1,775	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$1,485	\$636	\$409	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$18,151	\$7,161	\$4,938	0
Transportation	\$266,399	\$183,132	\$121,122	1
Communication	\$162,698	\$101,045	\$43,135	0
Electric, Gas, Water, Sanitary Services	\$533,987	\$119,843	\$52,298	0
Wholesale Trade	\$71,644	\$48,478	\$27,954	0
Retail Trade	\$1,771,397	\$1,467,846	\$877,731	26
Finance	\$120,497	\$63,635	\$37,051	0
Insurance	\$69,712	\$41,723	\$24,952	0
Real Estate	\$1,652,256	\$162,293	\$26,147	0
Hotels, Lodging Places, Amusements	\$116,261	\$61,527	\$40,364	1
Personal Services	\$391,893	\$243,754	\$189,653	3
Business Services	\$160,147	\$83,173	\$67,853	0
Eating & Drinking Places	\$768,578	\$450,104	\$239,480	12
Health Services	\$490,740	\$347,825	\$294,098	5
Miscellaneous Services	\$350,957	\$137,313	\$119,043	2
Households	\$11,179	\$11,179	\$10,938	0
Total	\$7,731,499	\$3.838.405	\$2,386,523	52

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 28
The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Palo Pinto County Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$140,565	\$38,211	\$26,020	0
Forestry & Fishery Products	\$5,170	\$5,434	\$2,011	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$161,078	\$35,191	\$16,228	0
Miscellaneous Mining	\$6,355	\$2,713	\$1,624	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$355,577	\$182,235	\$150,174	1
Food Products & Tobacco	\$489,494	\$125,902	\$64,341	1
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$61,306	\$33,903	\$17,164	0
Paper & Allied Products	\$117,697	\$52,084	\$23,548	0
Printing & Publishing	\$90,360	\$45,758	\$29,852	0
Chemicals & Petroleum Refining	\$89,095	\$13,500	\$6,348	0
Rubber & Leather Products	\$89,929	\$38,694	\$22,605	0
Lumber Products & Furniture	\$37,172	\$13,010	\$9,295	0
Stone, Clay, & Glass Products	\$48,281	\$26,766	\$13,997	0
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$98,361	\$35,330	\$22,795	0
Machinery, Except Electrical	\$35,593	\$14,261	\$10,173	0
Electric & Electronic Equipment	\$15,080	\$7,949	\$4,754	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$2,501	\$1,060	\$717	0
Instruments & Related Products	\$16,579	\$6,787	\$5,178	0
Miscellaneous Manufacturing	\$38,043	\$15,006	\$10,348	0
Transportation	\$403,492	\$278,928	\$184,443	1
Communication	\$366,715	\$227,539	\$97,169	1
Electric, Gas, Water, Sanitary Services	\$1,418,132	\$318,353	\$138,927	0
Wholesale Trade	\$239,781	\$162,255	\$93,556	0
Retail Trade	\$3,712,685	\$3,076,462	\$1,839,636	55
Finance	\$209,681	\$110,749	\$64,494	0
Insurance	\$59,207	\$35,432	\$21,193	0
Real Estate	\$3,462,973	\$340,146	\$54,790	0
Hotels, Lodging Places, Amusements	\$249,449	\$131,913	\$86,543	2
Personal Services	\$821,384	\$510,892	\$397,488	6
Business Services	\$618,965	\$356,133	\$290,505	2
Eating & Drinking Places	\$1,610,868	\$943,388	\$501,941	26
Health Services	\$923,965	\$656,042	\$554,676	10
Miscellaneous Services	\$735,565	\$287,785	\$249,493	5
Households	\$23,446	\$23,446	\$22,927	1
Total	\$16,754,543	\$8,153,257	\$5,034,950	108



Table 29
The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Parker County
Detailed Industrial Category

				Employment
2-1	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$920,048	\$250,165	\$170,377	1
Forestry & Fishery Products	\$146	\$146	\$55	0
Coal Mining	\$6,352	\$1,776	\$1,885	0
Crude Petroleum & Natural Gas	\$218,956	\$47,811	\$22,002	0
Miscellaneous Mining	\$16,053	\$6,846	\$4,082	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$1,202,905	\$616,435	\$507,981	5
Food Products & Tobacco	\$545,780	\$140,431	\$71,753	0
Textile Mill Products	\$366	\$55	\$37	0
Apparel	\$255,345	\$141,181	\$71,552	0
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$245,461	\$124,268	\$81,106	0
Chemicals & Petroleum Refining	\$675,979	\$102,394	\$48,049	0
Rubber & Leather Products	\$226,699	\$97,489	\$56,981	0
Lumber Products & Furniture	\$36,078	\$12,648	\$8,951	0
Stone, Clay, & Glass Products	\$121,687	\$67,488	\$35,254	0
Primary Metal	\$23,759	\$6,608	\$4,851	0
Fabricated Metal Products	\$247,877	\$89,014	\$57,494	0
Machinery, Except Electrical	\$153,171	\$61,393	\$43,894	0
Electric & Electronic Equipment	\$2,965	\$1,592	\$952	0
Motor Vehicles & Equipment	\$33,625	\$7,651	\$4,924	0
Transp. Equip., Except Motor Vehicles	\$20,684	\$8,841	\$5,784	0
Instruments & Related Products	\$1,702	\$677	\$458	0
Miscellaneous Manufacturing	\$95,915	\$37,817	\$26,102	0
Transportation	\$1,351,719	\$929,768	\$614,879	5
Communication	\$851,755	\$529,050	\$225,802	1
Electric, Gas, Water, Sanitary Services	\$3,042,434	\$682,861	\$297,994	0
Wholesale Trade	\$953,875	\$645,520	\$372,182	1
Retail Trade	\$9,358,138	\$7,754,460	\$4,636,942	137
Finance	\$636,569	\$336,177	\$195,765	0
Insurance	\$553,047	\$330,979	\$197,851	0
Real Estate	\$8,728,653	\$857,356	\$138,143	0
Hotels, Lodging Places, Amusements	\$742,661	\$391,145	\$256,608	4
Personal Services	\$2,070,328	\$1,287,745	\$1,001,887	15
Business Services	\$1,371,799	\$776,725	\$633,622	3
Eating & Drinking Places	\$4,060,319	\$2,377,859	\$1,265,176	65
Health Services	\$2,189,691	\$1,556,544	\$1,316,081	23
Miscellaneous Services	\$1,854,026	\$725,364	\$628,881	12
Households	\$59,068	\$59,068	\$57,823	1
Total	\$42,875,635	\$21,063,348	\$13,064,159	273

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 30
The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Tarrant County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$2,401,783	\$653,297	\$444,809	0
Forestry & Fishery Products	\$28,099	\$29,159	\$10,868	0
Coal Mining	\$17,628	\$4,771	\$5,037	0
Crude Petroleum & Natural Gas	\$2,821,277	\$615,920	\$283,904	0
Miscellaneous Mining	\$41,883	\$18,158	\$10,338	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$8,563,767	\$4,388,447	\$3,616,128	33
Food Products & Tobacco	\$13,833,217	\$3,558,340	\$1,817,408	9
Textile Mill Products	\$23,327	\$4,904	\$4,109	0
Apparel	\$1,803,359	\$997,242	\$504,850	0
Paper & Allied Products	\$2,181,499	\$965,299	\$436,459	0
Printing & Publishing	\$3,070,852	\$1,554,976	\$1,014,870	0
Chemicals & Petroleum Refining	\$6,622,300	\$1,002,808	\$470,920	0
Rubber & Leather Products	\$1,666,708	\$716,652	\$419,096	0
Lumber Products & Furniture	\$688,950	\$241,623	\$172,304	0
Stone, Clay, & Glass Products	\$825,070	\$457,135	\$239,105	0
Primary Metal	\$720,628	\$199,210	\$148,579	0
Fabricated Metal Products	\$1,798,720	\$645,874	\$417,240	0
Machinery, Except Electrical	\$727,122	\$291,724	\$207,958	0
Electric & Electronic Equipment	\$908,969	\$478,475	\$286,289	0
Motor Vehicles & Equipment	\$879,412	\$197,752	\$128,565	0
Transp. Equip., Except Motor Vehicles	\$382,249	\$163,424	\$106,563	0
Instruments & Related Products	\$201,861	\$82,706	\$62,957	0
Miscellaneous Manufacturing	\$655,020	\$258,058	\$178,401	0
Transportation	\$10,349,232	\$7,114,161	\$4,705,353	34
Communication	\$9,034,819	\$5,589,935	\$2,386,806	11
Electric, Gas, Water, Sanitary Services	\$17,280,752	\$3,877,897	\$1,692,024	0
Wholesale Trade	\$10,018,277	\$6,779,229	\$3,909,044	21
Retail Trade	\$68,815,113	\$57,022,637	\$34,097,873	1,006
Finance	\$4,105,736	\$2,168,510	\$1,262,722	0
Insurance	\$5,679,400	\$3,399,423	\$2,031,860	0
Real Estate	\$59,914,956	\$5,359,843	\$863,507	0
Hotels, Lodging Places, Amusements	\$5,461,105	\$2,876,149	\$1,886,860	32
Personal Services	\$15,128,544	\$9,411,899	\$7,322,384	117
Business Services	\$11,866,434	\$6,852,790	\$5,590,332	32
Eating & Drinking Places	\$29,857,873	\$17,485,528	\$9,303,216	478
Health Services	\$19,064,229	\$13,512,069	\$11,424,806	196
Miscellaneous Services	\$13,089,792	\$5,099,797	\$4,420,787	85
Households	\$295,965	\$295,965	\$289,736	0
Total	\$330,825,928	\$164,371,785	\$102,174,068	2,053



Table 31
The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Wise County
Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$6,222,691	\$1,691,987	\$1,152,600	10
Forestry & Fishery Products	\$157,019	\$164,639	\$61,334	0
Coal Mining	\$840,935	\$243,211	\$255,703	0
Crude Petroleum & Natural Gas	\$4,501,973	\$983,464	\$453,570	0
Miscellaneous Mining	\$107,927	\$46,219	\$27,357	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$8,136,029	\$4,169,446	\$3,435,815	21
Food Products & Tobacco	\$0	\$0	\$0	0
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$803,710	\$444,826	\$225,348	0
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$1,037,427	\$525,272	\$343,144	0
Chemicals & Petroleum Refining	\$172,509	\$26,357	\$11,867	0
Rubber & Leather Products	\$483,550	\$208,235	\$121,293	0
Lumber Products & Furniture	\$446,325	\$156,395	\$111,550	0
Stone, Clay, & Glass Products	\$823,196	\$456,318	\$238,215	0
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$1,676,623	\$602,220	\$388,739	0
Machinery, Except Electrical	\$398,357	\$159,643	\$114,048	0
Electric & Electronic Equipment	\$1,004,450	\$529,144	\$316,162	0
Motor Vehicles & Equipment	\$808,831	\$182,252	\$118,171	0
Transp. Equip., Except Motor Vehicles	\$271,442	\$116,547	\$75,699	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$60,959	\$23,984	\$16,614	0
Transportation	\$9,518,849	\$6,543,975	\$4,327,965	32
Communication	\$7,009,786	\$4,343,329	\$1,854,503	10
Electric, Gas, Water, Sanitary Services	\$19,668,649	\$4,414,157	\$1,926,330	0
Wholesale Trade	\$5,987,474	\$4,052,400	\$2,336,054	10
Retail Trade	\$63,294,688	\$52,447,982	\$31,362,661	927
Finance	\$3,249,815	\$1,715,971	\$999,203	0
Insurance	\$2,170,166	\$1,298,877	\$776,853	0
Real Estate	\$47,492,564	\$3,245,817	\$523,023	0
Hotels, Lodging Places, Amusements	\$4,983,399	\$2,625,609	\$1,722,342	30
Personal Services	\$14,003,084	\$8,709,643	\$6,776,443	100
Business Services	\$6,926,093	\$3,744,107	\$3,054,446	20
Eating & Drinking Places	\$27,462,533	\$16,083,060	\$8,557,496	440
Health Services	\$14,867,752	\$10,567,394	\$8,935,117	144
Miscellaneous Services	\$12,539,693	\$4,906,701	\$4,253,265	80
Households	\$273,191	\$273,191	\$267,570	0
Total	\$267,401,690	\$135,702,374	\$85,140,499	1,824

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 32
The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Young County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$205,834	\$55,969	\$38,124	0
Forestry & Fishery Products	\$484	\$518	\$184	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$243,611	\$53,213	\$24,543	0
Miscellaneous Mining	\$5,860	\$2,510	\$1,487	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$312,820	\$160,302	\$132,089	1
Food Products & Tobacco	\$30,867	\$7,940	\$4,059	0
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$2,776	\$1,535	\$764	0
Paper & Allied Products	\$31,481	\$13,922	\$6,310	0
Printing & Publishing	\$103,589	\$52,456	\$34,236	0
Chemicals & Petroleum Refining	\$39,359	\$5,969	\$2,817	0
Rubber & Leather Products	\$65,710	\$28,268	\$16,542	0
Lumber Products & Furniture	\$34,291	\$12,019	\$8,574	0
Stone, Clay, & Glass Products	\$22,210	\$12,299	\$6,446	0
Primary Metal	\$35,867	\$9,911	\$7,388	0
Fabricated Metal Products	\$90,731	\$32,586	\$21,023	0
Machinery, Except Electrical	\$29,775	\$11,910	\$8,513	0
Electric & Electronic Equipment	\$54,359	\$28,622	\$17,115	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$19,018	\$8,131	\$5,334	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$1,357	\$525	\$348	0
Transportation	\$319,034	\$221,257	\$146,331	1
Communication	\$493,579	\$305,167	\$130,274	1
Electric, Gas, Water, Sanitary Services	\$1,308,252	\$293,673	\$128,146	0
Wholesale Trade	\$225,057	\$152,300	\$87,832	0
Retail Trade	\$3,393,319	\$2,811,833	\$1,681,400	50
Finance	\$198,406	\$104,762	\$61,017	0
Insurance	\$109,162	\$65,335	\$39,086	0
Real Estate	\$2,339,653	\$124,762	\$20,116	0
Hotels, Lodging Places, Amusements	\$216,134	\$114,503	\$75,103	2
Personal Services	\$757,729	\$471,300	\$366,681	5
Business Services	\$324,294	\$170,199	\$138,835	1
Eating & Drinking Places	\$1,486,050	\$870,281	\$463,040	24
Health Services	\$845,062	\$600,135	\$507,413	8
Miscellaneous Services	\$675,388	\$264,122	\$228,972	4
Households	\$21,624	\$21,624	\$21,160	1
Total	\$14,042,742	\$7,089,861	\$4,431,303	96



Table 33
The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in the Barnett Shale Region Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$21,278,655	\$5,785,979	\$3,940,538	29
Forestry & Fishery Products	\$250,860	\$262,977	\$97,605	0
Coal Mining	\$918,836	\$265,028	\$278,874	0
Crude Petroleum & Natural Gas	\$9,619,301	\$2,101,252	\$968,709	0
Miscellaneous Mining	\$297,904	\$127,493	\$75,273	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$32,943,382	\$16,882,061	\$13,911,647	108
Food Products & Tobacco	\$21,313,754	\$5,482,418	\$2,800,456	18
Textile Mill Products	\$70,208	\$15,212	\$12,725	0
Apparel	\$6,399,035	\$3,539,458	\$1,792,616	0
Paper & Allied Products	\$5,043,391	\$2,231,781	\$1,008,994	0
Printing & Publishing	\$8,964,641	\$4,539,158	\$2,962,658	0
Chemicals & Petroleum Refining	\$19,938,761	\$3,019,764	\$1,417,490	0
Rubber & Leather Products	\$4,683,745	\$2,014,571	\$1,177,610	0
Lumber Products & Furniture	\$2,261,314	\$792,388	\$565,107	0
Stone, Clay, & Glass Products	\$3,219,505	\$1,784,951	\$932,762	0
Primary Metal	\$969,281	\$268,021	\$199,258	0
Fabricated Metal Products	\$6,726,791	\$2,415,644	\$1,559,969	0
Machinery, Except Electrical	\$2,703,800	\$1,083,980	\$774,162	0
Electric & Electronic Equipment	\$2,903,832	\$1,529,270	\$914,432	0
Motor Vehicles & Equipment	\$2,957,698	\$665,541	\$432,318	0
Transp. Equip., Except Motor Vehicles	\$997,824	\$427,214	\$278,132	0
Instruments & Related Products	\$512,104	\$209,973	\$159,857	0
Miscellaneous Manufacturing	\$1,867,507	\$736,428	\$508,331	0
Transportation	\$36,609,618	\$25,202,630	\$16,668,170	113
Communication	\$31,814,833	\$19,701,583	\$8,411,677	42
Electric, Gas, Water, Sanitary Services	\$80,100,510	\$17,977,239	\$7,844,772	0
Wholesale Trade	\$31,455,912	\$21,286,419	\$12,273,530	58
Retail Trade	\$267,199,179	\$221,410,372	\$132,397,351	3,911
Finance	\$14,851,391	\$7,843,227	\$4,567,274	0
Insurance	\$13,344,448	\$7,986,887	\$4,774,634	0
Real Estate	\$219,409,603	\$17,863,374	\$2,878,269	0
Hotels, Lodging Places, Amusements	\$19,693,408	\$10,390,997	\$6,816,636	127
Personal Services	\$58,976,204	\$36,686,405	\$28,542,924	437
Business Services	\$39,049,974	\$22,099,327	\$18,027,698	107
Eating & Drinking Places	\$115,974,445	\$67,918,481	\$36,136,910	1,848
Health Services	\$69,706,489	\$49,454,484	\$41,814,804	711
Miscellaneous Services	\$52,430,737	\$20,492,741	\$17,765,016	336
Households	\$1,225,264	\$1,225,264	\$1,199,415	6
Total	\$1,208,684,141	\$603,719,993	\$376,888,602	7,850

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 34

The Current Annual Impact of Royalty and Lease Payments Associated with the Barnett Shale on Business Activity in Texas

Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$31,798,698	\$8,646,729	\$5,887,944	50
Forestry & Fishery Products	\$802,678	\$841,923	\$311,505	0
Coal Mining	\$4,298,530	\$1,243,569	\$1,307,955	0
Crude Petroleum & Natural Gas	\$23,006,640	\$5,023,945	\$2,317,895	0
Miscellaneous Mining	\$554,333	\$236,695	\$139,810	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$41,576,168	\$21,306,238	\$17,557,134	152
Food Products & Tobacco	\$65,020,020	\$16,724,409	\$8,543,712	43
Textile Mill Products	\$856,027	\$193,771	\$165,564	0
Apparel	\$11,853,764	\$6,555,105	\$3,320,477	0
Paper & Allied Products	\$10,254,539	\$4,537,678	\$2,051,153	0
Printing & Publishing	\$14,434,108	\$7,309,341	\$4,769,467	0
Chemicals & Petroleum Refining	\$53,935,208	\$8,166,594	\$3,835,564	0
Rubber & Leather Products	\$7,834,240	\$3,370,759	\$1,969,598	0
Lumber Products & Furniture	\$3,238,921	\$1,134,419	\$810,650	0
Stone, Clay, & Glass Products	\$4,206,550	\$2,333,838	\$1,219,041	0
Primary Metal	\$3,388,542	\$937,582	\$697,208	0
Fabricated Metal Products	\$8.567.627	\$3.077.036	\$1,986,154	0
Machinery, Except Electrical	\$5,296,206	\$2,121,058	\$1,515,830	0
Electric & Electronic Equipment	\$5,133,708	\$2,704,211	\$1,615,168	0
Motor Vehicles & Equipment	\$4,132,966	\$930,224	\$604,002	0
Transp. Equip., Except Motor Vehicles	\$1,796,675	\$766,500	\$500,984	0
Instruments & Related Products	\$1,445,312	\$592,351	\$450,089	0
Miscellaneous Manufacturing	\$3,313,731	\$1,307,955	\$902,630	0
Transportation	\$48,643,294	\$33,438,394	\$22,115,048	156
Communication	\$50,726,947	\$31,344,317	\$13,381,858	49
Electric, Gas, Water, Sanitary Services	\$123,547,480	\$27,733,184	\$12,101,497	0
Wholesale Trade	\$52,215,183	\$35,334,408	\$20,374,174	95
Retail Trade	\$323,448,137	\$268,019,175	\$160,267,106	4,704
Finance	\$22,002,219	\$11,619,522	\$6,766,046	0
Insurance	\$30,224,001	\$18,090,618	\$10,813,777	0
Real Estate	\$301,690,585	\$29,632,877	\$4,774,373	0
Hotels, Lodging Places, Amusements	\$25,669,154	\$13,519,214	\$8,868,708	149
Personal Services	\$71,557,955	\$44,508,489	\$34,628,002	591
Business Services	\$67,488,148	\$39,726,757	\$32,407,605	195
Eating & Drinking Places	\$140,337,502	\$82,187,159	\$43,727,885	2,211
Health Services	\$89,606,876	\$63,509,709	\$53,699,739	906
Miscellaneous Services	\$64,079,984	\$25,073,124	\$21,736,704	445
Households	\$2,041,342	\$2,041,342	\$1,997,805	48
Total	\$1,720,023,999	\$825,840,218	\$510,139,859	9,795



Table 35

The Projected Typical Annual Impact of Royalty and Lease Payments
Associated with the Barnett Shale on Business Activity in the
Barnett Shale Region (Average over 10 Years)
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$41,553,302	\$11,298,954	\$7,695,147	56
Forestry & Fishery Products	\$489,884	\$513,545	\$190,604	0
Coal Mining	\$1,794,318	\$517,550	\$544,589	0
Crude Petroleum & Natural Gas	\$18,784,726	\$4,103,360	\$1,891,710	0
Miscellaneous Mining	\$581,752	\$248,971	\$146,995	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$64,332,370	\$32,967,563	\$27,166,890	210
Food Products & Tobacco	\$41,621,844	\$10,706,154	\$5,468,777	34
Textile Mill Products	\$137,103	\$29,706	\$24,849	0
Apparel	\$12,496,140	\$6,911,911	\$3,500,650	0
Paper & Allied Products	\$9,848,815	\$4,358,259	\$1,970,380	0
Printing & Publishing	\$17,506,296	\$8,864,141	\$5,785,527	0
Chemicals & Petroleum Refining	\$38,936,736	\$5,897,044	\$2,768,097	0
Rubber & Leather Products	\$9,146,492	\$3,934,087	\$2,299,657	0
Lumber Products & Furniture	\$4,415,931	\$1,547,389	\$1,103,549	0
Stone, Clay, & Glass Products	\$6,287,101	\$3,485,681	\$1,821,512	0
Primary Metal	\$1,892,827	\$523,395	\$389,115	0
Fabricated Metal Products	\$13,136,186	\$4,717,308	\$3,046,333	0
Machinery, Except Electrical	\$5,280,024	\$2,116,813	\$1,511,797	0
Electric & Electronic Equipment	\$5,670,651	\$2,986,384	\$1,785,718	0
Motor Vehicles & Equipment	\$5,775,840	\$1,299,679	\$844,238	0
Transp. Equip., Except Motor Vehicles	\$1,948,567	\$834,271	\$543,140	0
Instruments & Related Products	\$1,000,044	\$410,038	\$312,171	0
Miscellaneous Manufacturing	\$3,646,898	\$1,438,109	\$992,676	0
Transportation	\$71,491,856	\$49,216,105	\$32,549,873	220
Communication	\$62,128,521	\$38,473,570	\$16,426,458	82
Electric, Gas, Water, Sanitary Services	\$156,421,574	\$35,106,244	\$15,319,398	0
Wholesale Trade	\$61,427,615	\$41,568,465	\$23,967,948	113
Retail Trade	\$521,790,886	\$432,373,761	\$258,547,693	7,638
Finance	\$29,002,037	\$15,316,381	\$8,919,047	0
Insurance	\$26,059,254	\$15,596,923	\$9,323,982	0
Real Estate	\$428,466,628	\$34,883,885	\$5,620,730	0
Hotels, Lodging Places, Amusements	\$38,457,605	\$20,291,706	\$13,311,636	247
Personal Services	\$115,169,687	\$71,641,806	\$55,739,084	853
Business Services	\$76,257,423	\$43,155,924	\$35,204,782	208
Eating & Drinking Places	\$226,476,775	\$132,632,310	\$70,568,744	3,609
Health Services	\$136,123,961	\$96,575,518	\$81,656,627	1,389
Miscellaneous Services	\$102,387,593	\$40,018,557	\$34,691,811	657
Households	\$2,392,716	\$2,392,716	\$2,342,237	13
Total	\$2,360,337,975	\$1,178,954,185	\$735,994,168	15,330

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 36
The Projected Typical Annual Impact of Royalty and Lease Payments
Associated with the Barnett Shale on Business Activity in Texas
(Average over 10 Years)
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$62,097,013	\$16,885,473	\$11,498,072	97
Forestry & Fishery Products	\$1,567,483	\$1,644,121	\$608,313	0
Coal Mining	\$8,394,239	\$2,428,462	\$2,554,196	0
Crude Petroleum & Natural Gas	\$44,927,740	\$9,810,842	\$4,526,423	0
Miscellaneous Mining	\$1,082,510	\$462,222	\$273,022	0
New Construction	\$0	\$0	\$0	0
Maintenance & Repair Construction	\$81,190,614	\$41,607,166	\$34,285,857	297
Food Products & Tobacco	\$126,972,148	\$32,659,697	\$16,684,299	85
Textile Mill Products	\$1,671,663	\$378,399	\$323,316	0
Apparel	\$23,148,222	\$12,800,915	\$6,484,280	0
Paper & Allied Products	\$20,025,230	\$8,861,251	\$4,005,525	0
Printing & Publishing	\$28,187,161	\$14,273,799	\$9,313,893	0
Chemicals & Petroleum Refining	\$105,325,548	\$15,947,857	\$7,490,152	0
Rubber & Leather Products	\$15,298,830	\$6,582,473	\$3,846,262	0
Lumber Products & Furniture	\$6,325,017	\$2,215,313	\$1,583,051	0
Stone, Clay, & Glass Products	\$8,214,619	\$4,557,557	\$2,380,563	0
Primary Metal	\$6,617,199	\$1,830,926	\$1,361,519	0
Fabricated Metal Products	\$16,731,000	\$6,008,886	\$3,878,594	0
Machinery, Except Electrical	\$10,342,517	\$4,142,036	\$2,960,137	0
Electric & Electronic Equipment	\$10,025,188	\$5,280,827	\$3,154,126	0
Motor Vehicles & Equipment	\$8,070,923	\$1,816,556	\$1,179,504	0
Transp. Equip., Except Motor Vehicles	\$3,508,576	\$1,496,833	\$978,330	0
Instruments & Related Products	\$2,822,428	\$1,156,752	\$878,940	0
Miscellaneous Manufacturing	\$6,471,108	\$2,554,196	\$1,762,670	0
Transportation	\$94,991,414	\$65,299,038	\$43,186,624	304
Communication	\$99,060,404	\$61,209,690	\$26,132,308	96
Electric, Gas, Water, Sanitary Services	\$241,265,521	\$54,157,811	\$23,631,999	0
Wholesale Trade	\$101,966,655	\$69,001,604	\$39,787,017	186
Retail Trade	\$631,634,763	\$523,392,187	\$312,972,202	9.187
Finance	\$42,966,290	\$22,690,790	\$13,212,844	0,
Insurance	\$59,021,919	\$35,327,652	\$21,117,319	0
Real Estate	\$589,146,262	\$57,867,562	\$9,323,473	0
Hotels, Lodging Places, Amusements	\$50,127,139	\$26,400,541	\$17,318,956	291
Personal Services	\$139,739,534	\$86,916,898	\$67,622,123	1.155
Business Services	\$131,791,950	\$77,579,055	\$63,286,097	381
Eating & Drinking Places	\$274,053,348	\$160,496,416	\$85,392,523	4,318
Health Services	\$174,985,759	\$124,022,788	\$104,865,721	1,770
Miscellaneous Services	\$125,136,432	\$48,963,202	\$42,447,787	868
Households	\$3,986,365	\$3,986,365	\$3,901,345	93
Total	\$3,358,890,733	\$1,612,714,159	\$996,209,383	19,128

The Current and Projected Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity



Current Impacts: Pipeline Development and Operations

Table 37

The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Clay County

Detailed Industrial Category

-				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs
Agricultural Products & Services	\$4,739,936	\$1,305,304	\$889,107	8
Forestry & Fishery Products	\$0	\$0	\$0	C
Coal Mining	\$0	\$0	\$0	C
Crude Petroleum & Natural Gas	\$2,410,534	\$521,354	\$240,443	C
Miscellaneous Mining	\$0	\$0	\$0	C
New Construction	\$98,461,486	\$44,758,327	\$36,883,673	602
Maintenance & Repair Construction	\$5,071,062	\$2,679,826	\$2,208,590	33
Food Products & Tobacco	\$8,043,713	\$2,087,876	\$1,066,436	14
Textile Mill Products	\$0	\$0	\$0	C
Apparel	\$1,218,855	\$679,581	\$344,221	8
Paper & Allied Products	\$0	\$0	\$0	C
Printing & Publishing	\$343,040	\$169,846	\$110,966	0
Chemicals & Petroleum Refining	\$0	\$0	\$0	0
Rubber & Leather Products	\$0	\$0	\$0	0
Lumber Products & Furniture	\$736,000	\$254,818	\$181,661	0
Stone, Clay, & Glass Products	\$485,907	\$245,169	\$128,000	C
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$13,676,399	\$5,336,514	\$3,445,167	66
Machinery, Except Electrical	\$1,447,778	\$596,972	\$426,634	8
Electric & Electronic Equipment	\$0	\$0	\$0	0
Motor Vehicles & Equipment	\$0	\$0	\$0	C
Transp. Equip., Except Motor Vehicles	\$3,840	\$1,378	\$788	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$0	\$0	\$0	0
Transportation	\$9,945,201	\$6,544,637	\$4,328,465	50
Communication	\$1,806,571	\$1,122,067	\$478,917	0
Electric, Gas, Water, Sanitary Services	\$10,347,711	\$2,331,174	\$1,017,206	0
Wholesale Trade	\$7,235,836	\$4,897,967	\$2,824,171	31
Retail Trade	\$27,962,077	\$23,166,905	\$13,852,940	407
Finance	\$3,294,226	\$1,784,614	\$1,039,163	7
Insurance	\$900,430	\$537,403	\$321,280	0
Real Estate	\$20,962,746	\$2,417,820	\$389,612	0
Hotels, Lodging Places, Amusements	\$1,492,085	\$785,624	\$515,446	16
Personal Services	\$5,665,769	\$3,479,235	\$2,706,903	47
Business Services	\$27,971,333	\$18,046,415	\$14,721,272	204
Eating & Drinking Places	\$9,508,130	\$5,570,360	\$2,964,085	142
Health Services	\$7,722,039	\$5,412,526	\$4,576,293	81
Miscellaneous Services	\$8,974,174	\$3,704,909	\$3,211,814	79
Households	\$452,234	\$452,234	\$442,781	31
Total	\$280,879,113	\$138,890,856	\$99,316,034	1.833

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 38
The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Cooke County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$3,889,772	\$1,071,116	\$729,162	9
Forestry & Fishery Products	\$119,882	\$115,573	\$42,985	0
Coal Mining	\$113,191	\$32,778	\$34,366	0
Crude Petroleum & Natural Gas	\$4,453,118	\$963.029	\$444,030	0
Miscellaneous Mining	\$341,954	\$150,505	\$88,466	0
New Construction	\$113,417,661	\$51,557,060	\$42,486,256	694
Maintenance & Repair Construction	\$3,880,699	\$2,049,684	\$1,689,243	19
Food Products & Tobacco	\$6,094,611	\$1,581,950	\$807,987	8
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$1,174,326	\$654,533	\$331,633	9
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$2,665,088	\$1,321,996	\$862.882	9
Chemicals & Petroleum Refining	\$7,581,630	\$1,178,296	\$553,251	0
Rubber & Leather Products	\$1,831,695	\$799,027	\$467,167	9
Lumber Products & Furniture	\$854,829	\$296,020	\$211,184	0
Stone, Clay, & Glass Products	\$1,840,995	\$928,550	\$485,881	9
Primary Metal	\$6,841,807	\$2,117,281	\$1,576,392	29
Fabricated Metal Products	\$15,772,541	\$6,153,702	\$3,972,794	76
Machinery, Except Electrical	\$1,679,375	\$692,415	\$494,501	9
Electric & Electronic Equipment	\$272,089	\$146,762	\$87,785	0
Motor Vehicles & Equipment	\$902,918	\$186,005	\$121,017	0
Transp. Equip., Except Motor Vehicles	\$42,758	\$17,693	\$11,682	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$769.312	\$298.062	\$205,399	0
Transportation	\$11,843,299	\$7,795,876	\$5,155,740	58
Communication	\$3,507,328	\$2,172,969	\$927,643	0
Electric, Gas, Water, Sanitary Services	\$8,138,851	\$1,831,355	\$799,027	0
Wholesale Trade	\$6,212,679	\$4,205,867	\$2,425,210	26
Retail Trade	\$32,922,085	\$27,276,721	\$16,310,367	497
Finance	\$3,912,002	\$2,118,755	\$1,233,984	8
Insurance	\$1,783,266	\$1,064,878	\$636,613	9
Real Estate	\$23,131,305	\$2,508,912	\$404,221	0
Hotels, Lodging Places, Amusements	\$2,320,525	\$1,216,631	\$798,234	18
Personal Services	\$6,366,814	\$3,915,858	\$3,046,852	55
Business Services	\$33,404,110	\$21,551,057	\$17,580,078	235
Eating & Drinking Places	\$14,890,605	\$8,725,334	\$4,642,298	227
Health Services	\$7,959,311	\$5,590,697	\$4,727,135	84
Miscellaneous Services	\$10,478,658	\$4,323,141	\$3,747,773	91
Households	\$525,464	\$525,464	\$514,463	35
Total	\$341,936,556	\$167,135,555	\$118,653,701	2,224



Table 39

The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Denton County

Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs
Agricultural Products & Services	\$3,282,354	\$903,779	\$615,602	
Forestry & Fishery Products	\$4,121	\$3,986	\$1,351	(
Coal Mining	\$4,121	\$1,081	\$1,148	(
Crude Petroleum & Natural Gas	\$95,519	\$20,671	\$9,525	(
Miscellaneous Mining	\$20,874	\$9,187	\$5,269	(
New Construction	\$67,552,058	\$30,707,612	\$25,305,001	413
Maintenance & Repair Construction	\$3,528,582	\$1,864,167	\$1,536,066	22
Food Products & Tobacco	\$3,277,085	\$850,345	\$434,495	5
Textile Mill Products	\$2,094	\$405	\$338	(
Apparel	\$1,669,279	\$930,394	\$471,513	11
Paper & Allied Products	\$1,108,124	\$487,321	\$220,220	0
Printing & Publishing	\$1,375,900	\$682,749	\$445,438	é
Chemicals & Petroleum Refining	\$5,880,272	\$913,979	\$429,023	5
Rubber & Leather Products	\$815,083	\$355,662	\$207,993	é
Lumber Products & Furniture	\$508,802	\$176,176	\$125,579	(
Stone, Clay, & Glass Products	\$1,815,867	\$915,736	\$478,944	
Primary Metal	\$87,075	\$26,886	\$19,928	(
Fabricated Metal Products	\$8,676,724	\$3,385,169	\$2,185,512	40
Machinery, Except Electrical	\$505,087	\$208,128	\$148,952	Ċ
Electric & Electronic Equipment	\$911,345	\$491,306	\$293,716	Ċ
Motor Vehicles & Equipment	\$576,827	\$118,824	\$77,212	Ċ
Transp. Equip., Except Motor Vehicles	\$177,324	\$72,686	\$47,759	(
Instruments & Related Products	\$257,981	\$111,596	\$84,710	(
Miscellaneous Manufacturing	\$457,733	\$177,257	\$122,337	(
Transportation	\$3,988,881	\$2,636,759	\$1,743,789	17
Communication	\$4,216,532	\$2,606,901	\$1,113,055	5
Electric, Gas, Water, Sanitary Services	\$6,660,565	\$1,499,993	\$654,579	Ċ
Wholesale Trade	\$8,866,748	\$6,002,203	\$3,460,962	37
Retail Trade	\$19,570,169	\$16,214,250	\$9,695,612	290
Finance	\$2,440,791	\$1,321,994	\$769,823	5
Insurance	\$2,193,348	\$1,309,699	\$783,063	5
Real Estate	\$19,947,177	\$2,742,816	\$441,790	
Hotels, Lodging Places, Amusements	\$1,814,718	\$948,161	\$622,019	16
Personal Services	\$3,972,669	\$2,439,980	\$1,898,483	33
Business Services	\$14,962,983	\$9,618,130	\$7,846,171	102
Eating & Drinking Places	\$8,852,224	\$5,187,052	\$2,759,772	135
Health Services	\$6,777,430	\$4,737,764	\$4,005,905	72
Miscellaneous Services	\$6,233,569	\$2,571,842	\$2,229,488	54
Households	\$148,277	\$148,277	\$144,967	11
Total	\$213,236,311	\$103,400,921	\$71,437,112	1,308

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 40
The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Erath County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$2,920,006	\$804,331	\$547,770	5
Forestry & Fishery Products	\$2,306	\$2,368	\$810	0
Coal Mining	\$24,678	\$6,980	\$7,353	0
Crude Petroleum & Natural Gas	\$111,797	\$24,117	\$11,155	0
Miscellaneous Mining	\$0	\$0	\$0	0
New Construction	\$62,317,396	\$28,328,055	\$23,344,097	381
Maintenance & Repair Construction	\$2,448,139	\$1,295,142	\$1,067,310	15
Food Products & Tobacco	\$1,328,358	\$344,927	\$176,171	4
Textile Mill Products	\$82,446	\$19,381	\$16,327	0
Apparel	\$60,012	\$33,589	\$17,013	0
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$541,663	\$268,526	\$175,423	0
Chemicals & Petroleum Refining	\$108,619	\$16,888	\$7,914	0
Rubber & Leather Products	\$977,261	\$426,500	\$249,394	5
Lumber Products & Furniture	\$191,688	\$66,056	\$47,237	0
Stone, Clay, & Glass Products	\$1,659,886	\$836,486	\$437,468	5
Primary Metal	\$3,746,647	\$1,159,851	\$863,532	16
Fabricated Metal Products	\$8,634,200	\$3,369,751	\$2,175,438	42
Machinery, Except Electrical	\$34,648	\$14,208	\$10,158	0
Electric & Electronic Equipment	\$797,413	\$430,239	\$257,246	0
Motor Vehicles & Equipment	\$517,110	\$106,189	\$68,985	0
Transp. Equip., Except Motor Vehicles	\$0	\$0	\$0	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$128,062	\$49,480	\$34,150	0
Transportation	\$4,002,335	\$2,638,955	\$1,745,448	21
Communication	\$2,325,374	\$1,439,283	\$614,450	5
Electric, Gas, Water, Sanitary Services	\$4,708,952	\$1,060,206	\$462,707	0
Wholesale Trade	\$3,961,018	\$2,681,580	\$1,546,095	15
Retail Trade	\$16,883,341	\$13,988,137	\$8,364,490	242
Finance	\$1,960,692	\$1,062,512	\$618,687	5
Insurance	\$1,157,546	\$691,225	\$413,289	5
Real Estate	\$11,731,001	\$1,302,309	\$209,885	0
Hotels, Lodging Places, Amusements	\$1,840,856	\$959,999	\$629,842	15
Personal Services	\$3,405,957	\$2,089,876	\$1,625,986	30
Business Services	\$7,496,160	\$4,772,391	\$3,892,968	55
Eating & Drinking Places	\$7,658,683	\$4,487,725	\$2,387,753	120
Health Services	\$5,927,818	\$4,140,866	\$3,501,054	61
Miscellaneous Services	\$5,518,517	\$2,281,814	\$1,978,079	45
Households	\$281,176	\$281,176	\$275,194	19
Total	\$165,491,760	\$81,481,117	\$57,780,877	1,111



Table 41

The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Hill County

Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$4,090,571	\$1,127,018	\$767,657	7
Forestry & Fishery Products	\$87.783	\$83,889	\$31,326	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$84,509	\$18,229	\$8,318	0
Miscellaneous Mining	\$262,817	\$115,657	\$67,872	0
New Construction	\$88,490,703	\$40,225,838	\$33,148,617	541
Maintenance & Repair Construction	\$4,335,779	\$2,295,006	\$1,891,400	29
Food Products & Tobacco	\$4,597,004	\$1,193,651	\$609,789	6
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$1,880,604	\$1,048,615	\$531,387	14
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$1,058,083	\$524,484	\$342,105	7
Chemicals & Petroleum Refining	\$0	\$0	\$0	0
Rubber & Leather Products	\$0	\$0	\$0	0
Lumber Products & Furniture	\$644,478	\$222,820	\$158,841	0
Stone, Clay, & Glass Products	\$2,349,694	\$1,183,652	\$618,992	7
Primary Metal	\$5,314,221	\$1,645,485	\$1,224,800	22
Fabricated Metal Products	\$11,907,751	\$4,647,620	\$3,000,631	59
Machinery, Except Electrical	\$517,582	\$213,528	\$152,646	0
Electric & Electronic Equipment	\$0	\$0	\$0	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$2,389	\$973	\$531	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$0	\$0	\$0	0
Transportation	\$5,048,483	\$3,329,994	\$2,202,445	22
Communication	\$1,757,779	\$1,090,471	\$465,638	0
Electric, Gas, Water, Sanitary Services	\$10,443,407	\$2,353,853	\$1,027,289	0
Wholesale Trade	\$4,748,146	\$3,214,159	\$1,853,261	21
Retail Trade	\$23,407,207	\$19,393,180	\$11,596,441	336
Finance	\$2,694,984	\$1,460,893	\$850,927	7
Insurance	\$1,913,081	\$1,142,238	\$682,971	7
Real Estate	\$26,121,925	\$3,806,782	\$613,152	7
Hotels, Lodging Places, Amusements	\$2,310,050	\$1,205,420	\$790,841	21
Personal Services	\$4,710,980	\$2,889,664	\$2,248,195	43
Business Services	\$5,243,074	\$3,259,113	\$2,658,438	35
Eating & Drinking Places	\$10,629,415	\$6,228,507	\$3,313,800	163
Health Services	\$8,260,430	\$5,768,532	\$4,877,342	80
Miscellaneous Services	\$7,723,999	\$3,196,284	\$2,770,821	64
Households	\$395,553	\$395,553	\$387,058	28
Total	\$241,032,481	\$113,281,108	\$78,893,532	1,528

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 42
The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Hood County Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$1,613,718	\$444,609	\$302,758	3
Forestry & Fishery Products	\$589	\$589	\$208	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$102,802	\$22,244	\$10,256	0
Miscellaneous Mining	\$0	\$0	\$0	0
New Construction	\$34,648,472	\$15,750,399	\$12,979,318	212
Maintenance & Repair Construction	\$1,713,609	\$906,716	\$747,194	11
Food Products & Tobacco	\$0	\$0	\$0	0
Textile Mill Products	\$49,409	\$11,573	\$9,806	0
Apparel	\$62,090	\$34,579	\$17,601	0
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$760,984	\$377,149	\$246,177	3
Chemicals & Petroleum Refining	\$1,128,154	\$175,495	\$82,394	0
Rubber & Leather Products	\$29,936	\$13,132	\$7,657	0
Lumber Products & Furniture	\$19,161	\$6,687	\$4,747	0
Stone, Clay, & Glass Products	\$921,684	\$464,290	\$242,851	3
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$124,180	\$48,508	\$31,253	0
Machinery, Except Electrical	\$189,354	\$78,098	\$55,715	0
Electric & Electronic Equipment	\$3,985	\$2,183	\$1,213	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$20,893	\$8,593	\$5,509	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$43,622	\$16,874	\$11.711	0
Transportation	\$1,684,089	\$1,112,978	\$736,141	9
Communication	\$802,805	\$497,725	\$212,568	0
Electric, Gas, Water, Sanitary Services	\$4,136,161	\$932,286	\$406,808	0
Wholesale Trade	\$1,286,325	\$870,785	\$502,056	5
Retail Trade	\$9,288,147	\$7,695,356	\$4,601,560	134
Finance	\$1,534,408	\$831,667	\$484,316	3
Insurance	\$1,286,013	\$767,775	\$458,988	6
Real Estate	\$10,342,812	\$1,501,769	\$241,950	3
Hotels, Lodging Places, Amusements	\$1,015,685	\$529,602	\$347,490	8
Personal Services	\$1,871,780	\$1,148,389	\$893,515	17
Business Services	\$6,906,688	\$4,441,830	\$3,623,364	47
Eating & Drinking Places	\$4,215,229	\$2,470,090	\$1,314,217	67
Health Services	\$3,268,529	\$2,282,849	\$1,930,197	31
Miscellaneous Services	\$3,048,754	\$1,261,031	\$1,093,159	25
Households	\$105,470	\$105,470	\$103,252	5
Total	\$92,225,537	\$44,811,320	\$31,705,951	592



Table 43

The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Jack County Detailed Industrial Category

	Total	Gross	Personal	Employment (Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$1,743,991	\$480,369	\$327,194	3
Forestry & Fishery Products	\$0	\$0	\$0	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$1,408,902	\$304.580	\$140,484	0
Miscellaneous Mining	\$110,159	\$48,439	\$28,407	0
New Construction	\$36,891,899	\$16,770,209	\$13,819,705	226
Maintenance & Repair Construction	\$1,211,087	\$640,517	\$527,739	6
Food Products & Tobacco	\$66,221	\$17,155	\$8,780	0
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$0	\$0	\$0	0
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$0	\$0	\$0	0
Chemicals & Petroleum Refining	\$573,448	\$89,168	\$41,909	0
Rubber & Leather Products	\$0	\$0	\$0	0
Lumber Products & Furniture	\$0	\$0	\$0	0
Stone, Clay, & Glass Products	\$132,147	\$66,590	\$34,789	0
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$5,115,652	\$1,996,294	\$1,288,855	25
Machinery, Except Electrical	\$197,261	\$81,310	\$58,068	0
Electric & Electronic Equipment	\$0	\$0	\$0	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$0	\$0	\$0	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$0	\$0	\$0	0
Transportation	\$3,768,581	\$2,478,103	\$1,638,959	19
Communication	\$636,680	\$395,407	\$168,817	0
Electric, Gas, Water, Sanitary Services	\$4,035,752	\$909,312	\$396,772	0
Wholesale Trade	\$1,594,431	\$1,079,309	\$622,366	6
Retail Trade	\$9,622,440	\$7,972,450	\$4,767,319	137
Finance	\$1,651,577	\$894,997	\$521,098	3
Insurance	\$492,691	\$294,139	\$175,901	3
Real Estate	\$7,598,034	\$886,660	\$142,845	0
Hotels, Lodging Places, Amusements	\$576,731	\$303,288	\$198,995	6
Personal Services	\$1,928,856	\$1,185,853	\$922,593	18
Business Services	\$9,880,241	\$6,374,477	\$5,199,950	70
Eating & Drinking Places	\$4,532,576	\$2,655,958	\$1,413,144	68
Health Services	\$1,830,170	\$1,291,512	\$1,091,963	18
Miscellaneous Services	\$3,298,025	\$1,362,971	\$1,181,684	27
Households	\$167,342	\$167,342	\$163,800	11
Total	\$99,064,893	\$48,746,409	\$34,882,139	645

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 44

The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Johnson County Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$4,900,338	\$1,349,928	\$919,387	8
Forestry & Fishery Products	\$17,853	\$17,131	\$6,295	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$77,605	\$16,924	\$7,740	0
Miscellaneous Mining	\$308,767	\$136,221	\$79,875	0
New Construction	\$103,197,608	\$46,911,259	\$38,657,824	631
Maintenance & Repair Construction	\$5,226,752	\$2,763,735	\$2,277,468	34
Food Products & Tobacco	\$1,083,781	\$281,317	\$143,548	0
Textile Mill Products	\$23,839	\$5,469	\$4,644	0
Apparel	\$2,503,264	\$1,395,644	\$707,110	16
Paper & Allied Products	\$1,652,710	\$726,718	\$328,478	0
Printing & Publishing	\$2,232,680	\$1,107,001	\$722,590	8
Chemicals & Petroleum Refining	\$8,554,875	\$1,330,114	\$624,758	0
Rubber & Leather Products	\$1,634,134	\$712,992	\$416,918	8
Lumber Products & Furniture	\$764,591	\$264,495	\$188,542	0
Stone, Clay, & Glass Products	\$2,757,543	\$1,389,865	\$727,130	8
Primary Metal	\$383,379	\$118,884	\$88,337	0
Fabricated Metal Products	\$14,315,985	\$5,586,499	\$3,606,653	69
Machinery, Except Electrical	\$1,506,272	\$621,146	\$443,853	8
Electric & Electronic Equipment	\$422,285	\$228,067	\$135,911	0
Motor Vehicles & Equipment	\$865,002	\$177,809	\$115,685	0
Transp. Equip., Except Motor Vehicles	\$279,872	\$114,962	\$75,025	0
Instruments & Related Products	\$205,776	\$88,956	\$67,594	0
Miscellaneous Manufacturing	\$686,264	\$265,837	\$183,176	0
Transportation	\$10,575,794	\$6,955,312	\$4,600,240	52
Communication	\$2,566,731	\$1,591,410	\$679,247	0
Electric, Gas, Water, Sanitary Services	\$7,931,459	\$1,785,422	\$779,142	0
Wholesale Trade	\$9,987,155	\$6,760,682	\$3,898,290	40
Retail Trade	\$28,622,785	\$23,714,294	\$14,180,280	409
Finance	\$3,446,491	\$1,867,670	\$1,087,393	8
Insurance	\$2,093,260	\$1,250,033	\$747,151	8
Real Estate	\$20,899,580	\$2,386,238	\$384,411	0
Hotels, Lodging Places, Amusements	\$1,578,820	\$830,638	\$545,193	17
Personal Services	\$5,787,115	\$3,552,371	\$2,763,735	50
Business Services	\$13,357,692	\$8,510,810	\$6,942,826	90
Eating & Drinking Places	\$12,970,598	\$7,600,504	\$4,043,798	198
Health Services	\$9,868,271	\$6,895,974	\$5,830,562	102
Miscellaneous Services	\$9,270,344	\$3,830,179	\$3,320,589	75
Households	\$399,788	\$399,788	\$391,016	24
Total	\$292,957,061	\$143,542,301	\$100,722,414	1,866



Table 45
The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Montague County
Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$3,392,400	\$935,066	\$636,674	6
Forestry & Fishery Products	\$72,797	\$69,380	\$25,850	0
Coal Mining	\$395,256	\$113,726	\$120,115	0
Crude Petroleum & Natural Gas	\$2,750,749	\$594,407	\$274,250	0
Miscellaneous Mining	\$219,950	\$96,641	\$56,826	0
New Construction	\$74,282,336	\$33,767,042	\$27,826,163	454
Maintenance & Repair Construction	\$3,154,845	\$1,670,758	\$1,376,749	18
Food Products & Tobacco	\$0	\$0	\$0	0
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$1,751,577	\$976,738	\$494,869	12
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$1,641,194	\$813,094	\$530,822	6
Chemicals & Petroleum Refining	\$0	\$0	\$0	0
Rubber & Leather Products	\$1,143,057	\$499,177	\$291,632	6
Lumber Products & Furniture	\$536,467	\$185,483	\$132,297	0
Stone, Clay, & Glass Products	\$781,302	\$393,251	\$205,688	6
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$1,144,839	\$446,734	\$288,438	6
Machinery, Except Electrical	\$638,531	\$263,628	\$188,380	0
Electric & Electronic Equipment	\$201,825	\$108,898	\$64,997	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$47,689	\$19,536	\$12,554	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$479,864	\$185,780	\$128,063	0
Transportation	\$7,405,875	\$4,864,527	\$3,217,168	38
Communication	\$1,487,207	\$922,438	\$393,845	0
Electric, Gas, Water, Sanitary Services	\$5,721,523	\$1,288,724	\$562,317	0
Wholesale Trade	\$2,350,070	\$1,590,608	\$917,313	12
Retail Trade	\$19,228,577	\$15,930,961	\$9,526,190	276
Finance	\$3,242,944	\$1,758,709	\$1,023,908	5
Insurance	\$1,743,035	\$1,040,770	\$622,040	6
Real Estate	\$21,535,712	\$3,157,074	\$508,537	6
Hotels, Lodging Places, Amusements	\$1,358,104	\$711,476	\$466,716	12
Personal Services	\$3,861,567	\$2,367,824	\$1,842,276	36
Business Services	\$5,709,415	\$3,594,448	\$2,932,072	35
Eating & Drinking Places	\$8,740,134	\$5,121,767	\$2,724,825	137
Health Services	\$6,817,633	\$4,759,789	\$4,024,394	67
Miscellaneous Services	\$6,400,538	\$2,650,394	\$2,297,627	54
Households	\$329,442	\$329,442	\$322,311	23
Total	\$188,566,454	\$91,228,292	\$64,035,905	1,222

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 46

The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Palo Pinto County Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$579,771	\$159,711	\$108,774	3
Forestry & Fishery Products	\$18,140	\$17,538	\$6,395	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$741,223	\$160,249	\$73,920	0
Miscellaneous Mining	\$94,813	\$41,788	\$24,566	0
New Construction	\$31,657,237	\$14,390,652	\$11,858,801	194
Maintenance & Repair Construction	\$1,196,707	\$632,638	\$521,395	8
Food Products & Tobacco	\$2,102,262	\$545,707	\$278,774	4
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$346,393	\$193,109	\$97,789	3
Paper & Allied Products	\$507,529	\$223,184	\$100,860	0
Printing & Publishing	\$396,190	\$196,496	\$128,275	3
Chemicals & Petroleum Refining	\$507,371	\$78,953	\$37,102	0
Rubber & Leather Products	\$501,767	\$219,005	\$128,054	3
Lumber Products & Furniture	\$234,802	\$81,201	\$57,933	0
Stone, Clay, & Glass Products	\$846,103	\$426,486	\$223,057	3
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$4,392,188	\$1,713,891	\$1,106,515	21
Machinery, Except Electrical	\$270,543	\$111,560	\$79,681	0
Electric & Electronic Equipment	\$112,098	\$60,465	\$36,153	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$16,715	\$6,838	\$4,400	0
Instruments & Related Products	\$119,253	\$51,696	\$39,255	0
Miscellaneous Manufacturing	\$210,711	\$81,612	\$56,318	0
Transportation	\$2,206,351	\$1,454,872	\$962,127	11
Communication	\$820,397	\$508,574	\$217,074	0
Electric, Gas, Water, Sanitary Services	\$3,899,064	\$878,710	\$383,464	0
Wholesale Trade	\$1,638,357	\$1,109,143	\$639,476	7
Retail Trade	\$8,800,427	\$7,291,327	\$4,359,930	125
Finance	\$1,181,701	\$640,268	\$372,827	2
Insurance	\$310,779	\$185,511	\$110,895	0
Real Estate	\$9,742,958	\$1,400,864	\$225,779	3
Hotels, Lodging Places, Amusements	\$656,413	\$343,798	\$225,463	5
Personal Services	\$1,779,707	\$1,092,491	\$849,965	15
Business Services	\$6,847,302	\$4,404,598	\$3,593,033	48
Eating & Drinking Places	\$3,987,609	\$2,336,589	\$1,243,180	61
Health Services	\$2,458,754	\$1,722,660	\$1,456,518	26
Miscellaneous Services	\$2,847,727	\$1,176,510	\$1,019,901	23
Households	\$144,230	\$144,230	\$141,191	10
Total	\$92,173,592	\$44,082,925	\$30,768,840	577



Table 47

The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Parker County

Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$4,552,991	\$1,254,060	\$854,037	8
Forestry & Fishery Products	\$667	\$571	\$286	0
Coal Mining	\$27,328	\$7,618	\$7,999	0
Crude Petroleum & Natural Gas	\$1,208,545	\$261,286	\$120,455	0
Miscellaneous Mining	\$285,663	\$125,787	\$73,987	0
New Construction	\$95,220,982	\$43,285,268	\$35,669,780	583
Maintenance & Repair Construction	\$4,863,793	\$2,571,157	\$2,118,762	31
Food Products & Tobacco	\$2,812,256	\$730,059	\$372,885	7
Textile Mill Products	\$2,190	\$476	\$381	0
Apparel	\$1,728,546	\$963,732	\$488,198	15
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$1,291,006	\$640,266	\$417,734	8
Chemicals & Petroleum Refining	\$4,612,790	\$717,204	\$336,797	0
Rubber & Leather Products	\$1,515,442	\$661,500	\$386,788	8
Lumber Products & Furniture	\$272,999	\$94,269	\$67,416	0
Stone, Clay, & Glass Products	\$2,548,590	\$1,284,817	\$671,879	8
Primary Metal	\$1,387,560	\$429,447	\$319,752	8
Fabricated Metal Products	\$13,217,815	\$5,157,549	\$3,329,783	64
Machinery, Except Electrical	\$1,394,987	\$575,325	\$410,974	8
Electric & Electronic Equipment	\$26,662	\$14,378	\$8,475	0
Motor Vehicles & Equipment	\$225,864	\$46,468	\$30,280	0
Transp. Equip., Except Motor Vehicles	\$165,589	\$68,083	\$44,563	0
Instruments & Related Products	\$14,188	\$6,094	\$4,761	0
Miscellaneous Manufacturing	\$636,457	\$246,718	\$170,160	0
Transportation	\$9,357,747	\$6,157,465	\$4,072,506	48
Communication	\$2,050,108	\$1,271,867	\$543,045	0
Electric, Gas, Water, Sanitary Services	\$9,097,413	\$2,048,870	\$894,125	0
Wholesale Trade	\$7,804,502	\$5,283,146	\$3,046,214	30
Retail Trade	\$26,728,339	\$22,145,068	\$13,242,001	377
Finance	\$4,298,656	\$2,328,915	\$1,356,137	7
Insurance	\$3,478,708	\$2,077,246	\$1,241,872	15
Real Estate	\$29,545,833	\$4,237,429	\$682,639	8
Hotels, Lodging Places, Amusements	\$2,886,434	\$1,505,920	\$987,822	23
Personal Services	\$5,410,171	\$3,321,594	\$2,584,393	46
Business Services	\$17,174,056	\$11,012,687	\$8,983,528	121
Eating & Drinking Places	\$12,106,110	\$7,093,677	\$3,774,369	183
Health Services	\$6,479,693	\$4,549,659	\$3,847,023	70
Miscellaneous Services	\$8,616,642	\$3,558,694	\$3,085,160	77
Households	\$435,350	\$435,350	\$426,114	30
Total	\$283,482,670	\$136,169,717	\$94,673,080	1,782

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 48
The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Tarrant County Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$2,054,577	\$565,633	\$385,328	0
Forestry & Fishery Products	\$20,268	\$19,565	\$7,147	0
Coal Mining	\$13,122	\$3,632	\$3,866	0
Crude Petroleum & Natural Gas	\$2,682,654	\$580,394	\$267,469	0
Miscellaneous Mining	\$126,529	\$55,767	\$32,570	0
New Construction	\$117,156,705	\$53,256,744	\$43,886,902	717
Maintenance & Repair Construction	\$6,026,775	\$3,182,093	\$2,622,201	29
Food Products & Tobacco	\$12,303,680	\$3,192,989	\$1,631,173	25
Textile Mill Products	\$22,728	\$5,155	\$4,569	0
Apparel	\$2,091,950	\$1,165,944	\$590,704	9
Paper & Allied Products	\$1,948,082	\$856,650	\$387,437	0
Printing & Publishing	\$2,786,221	\$1,382,683	\$902,575	10
Chemicals & Petroleum Refining	\$7,741,364	\$1,202,965	\$564,695	0
Rubber & Leather Products	\$1,910,357	\$833,336	\$486,903	10
Lumber Products & Furniture	\$890,860	\$308,239	\$220,020	0
Stone, Clay, & Glass Products	\$2,914,859	\$1,470,434	\$769,251	10
Primary Metal	\$7,075,093	\$2,189,542	\$1,629,767	29
Fabricated Metal Products	\$16,097,331	\$6,279,717	\$4,054,208	78
Machinery, Except Electrical	\$1,128,336	\$464,761	\$332,139	0
Electric & Electronic Equipment	\$1,375,888	\$742,071	\$443,438	0
Motor Vehicles & Equipment	\$1,010,711	\$208,305	\$135,433	0
Transp. Equip., Except Motor Vehicles	\$522,050	\$214,631	\$140,237	0
Instruments & Related Products	\$296,055	\$128,287	\$97,474	0
Miscellaneous Manufacturing	\$745.468	\$288.791	\$199,166	0
Transportation	\$12,347,379	\$8,130,792	\$5,377,610	59
Communication	\$5,598,333	\$3,463,621	\$1,478,518	19
Electric, Gas, Water, Sanitary Services	\$7,294,762	\$1,640,311	\$715,710	0
Wholesale Trade	\$13,987,105	\$9,467,902	\$5,459,385	55
Retail Trade	\$34,763,089	\$28,802,156	\$17,222,739	523
Finance	\$4,750,470	\$2,572,410	\$1,497,848	9
Insurance	\$6,132,568	\$3,662,201	\$2,189,307	19
Real Estate	\$33,759,290	\$4,508,073	\$726,254	0
Hotels, Lodging Places, Amusements	\$3,700,629	\$1,931,445	\$1,266,933	28
Personal Services	\$6,966,255	\$4,282,195	\$3,331,234	66
Business Services	\$26,928,117	\$17,308,029	\$14,118,906	196
Eating & Drinking Places	\$15,709,777	\$9,205,002	\$4,897,502	244
Health Services	\$11,981,968	\$8,378,227	\$7,083,997	125
Miscellaneous Services	\$10,249,103	\$4,214,127	\$3,653,180	94
Households	\$373,144	\$373,144	\$365,177	18
Total	\$383,483,654	\$186,537,960	\$129,178,975	2,372



Table 49

The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Wise County Detailed Industrial Category

	Total	Gross	Personal	Employment (Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$4,992,017	\$1,375,312	\$936,444	9
Forestry & Fishery Products	\$107,578	\$1,375,312	\$38,283	9
Coal Mining	\$584,088	\$168,104	\$177,194	0
Crude Petroleum & Natural Gas	\$4,038,142	\$872,710	\$402,616	0
Miscellaneous Mining			\$82,341	0
New Construction	\$318,564 \$106,936,652	\$140,194 \$48,610,943	\$40,058,470	654
Maintenance & Repair Construction	\$5,303,844			35
Food Products & Tobacco	\$5,303,844 \$0	\$2,806,018 \$0	\$2,312,505 \$0	35 0
Textile Mill Products		* -	* *	
	\$0	\$0	\$0	9
Apparel	\$888,002	\$495,117	\$250,873	-
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$886,398	\$439,403	\$286,911	0
Chemicals & Petroleum Refining	\$192,165	\$29,942	\$14,009	0
Rubber & Leather Products	\$527,198	\$230,021	\$134,526	0
Lumber Products & Furniture	\$551,793	\$190,775	\$136,130	0
Stone, Clay, & Glass Products	\$2,846,012	\$1,433,807	\$749,840	9
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$14,811,368	\$5,780,568	\$3,731,875	72
Machinery, Except Electrical	\$594,568	\$245,313	\$175,483	0
Electric & Electronic Equipment	\$1,462,786	\$788,979	\$471,805	0
Motor Vehicles & Equipment	\$885,115	\$181,578	\$118,058	0
Transp. Equip., Except Motor Vehicles	\$355,564	\$145,541	\$95,387	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$65,873	\$25,558	\$17,538	0
Transportation	\$10,827,015	\$7,117,062	\$4,707,031	54
Communication	\$3,430,849	\$2,124,297	\$906,930	0
Electric, Gas, Water, Sanitary Services	\$9,059,032	\$2,040,244	\$890,248	0
Wholesale Trade	\$8,017,682	\$5,427,142	\$3,129,501	33
Retail Trade	\$28,783,818	\$23,847,729	\$14,260,110	415
Finance	\$3,580,025	\$1,940,259	\$1,129,893	8
Insurance	\$2,224,496	\$1,328,153	\$794,005	9
Real Estate	\$20,917,237	\$2,411,315	\$388,608	0
Hotels, Lodging Places, Amusements	\$3,093,143	\$1,613,246	\$1,058,031	26
Personal Services	\$5,803,131	\$3,560,777	\$2,770,194	52
Business Services	\$11,970,703	\$7,609,077	\$6,207,138	85
Eating & Drinking Places	\$13,060,922	\$7,653,242	\$4,071,827	206
Health Services	\$7,054,825	\$4,950,098	\$4,185,394	70
Miscellaneous Services	\$9,432,668	\$3,900,835	\$3,381,979	78
Households	\$329,258	\$329,258	\$322,414	17
Total	\$283.932.531	\$139.915.595	\$98.393.590	1.839

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 50
The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Young County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$239,017	\$65,852	\$44,851	1
Forestry & Fishery Products	\$483	\$466	\$161	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$316,641	\$68,437	\$31,578	0
Miscellaneous Mining	\$25,163	\$11,069	\$6,500	0
New Construction	\$8,475,166	\$3,852,615	\$3,174,797	52
Maintenance & Repair Construction	\$294,283	\$155,774	\$128,365	1
Food Products & Tobacco	\$37,359	\$9,696	\$4,958	0
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$4,449	\$2,483	\$1,254	0
Paper & Allied Products	\$38,274	\$16,832	\$7,594	0
Printing & Publishing	\$128,094	\$63,479	\$41,427	1
Chemicals & Petroleum Refining	\$63,648	\$9,907	\$4,636	0
Rubber & Leather Products	\$104,067	\$45,418	\$26,553	1
Lumber Products & Furniture	\$61,614	\$21,315	\$15,179	0
Stone, Clay, & Glass Products	\$112,126	\$56,479	\$29,536	1
Primary Metal	\$508,866	\$157,570	\$117,279	2
Fabricated Metal Products	\$1,172,590	\$457,676	\$295,470	6
Machinery, Except Electrical	\$64,640	\$26,671	\$19,052	0
Electric & Electronic Equipment	\$115,186	\$62,148	\$37,172	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp. Equip., Except Motor Vehicles	\$36,189	\$14,840	\$9,696	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$2,119	\$839	\$559	0
Transportation	\$475,491	\$313,674	\$207,447	2
Communication	\$431,361	\$266,773	\$113,889	1
Electric, Gas, Water, Sanitary Services	\$997,010	\$224,744	\$98,058	0
Wholesale Trade	\$438,242	\$296,682	\$171,080	2
Retail Trade	\$2,178,762	\$1,805,143	\$1,079,406	31
Finance	\$317,378	\$172,046	\$100,210	1
Insurance	\$162,350	\$96,930	\$57,945	1
Real Estate	\$1,300,421	\$124,102	\$19,976	0
Hotels, Lodging Places, Amusements	\$141,349	\$74,200	\$48,656	1
Personal Services	\$449,319	\$275,604	\$214,405	4
Business Services	\$719,804	\$454,260	\$370,568	5
Eating & Drinking Places	\$1,014,342	\$594,389	\$316,234	16
Health Services	\$615,568	\$431,123	\$364,517	6
Miscellaneous Services	\$732,187	\$302,919	\$262,637	6
Households	\$37,842	\$37,842	\$37,028	3
Total	\$21,811,399	\$10,569,998	\$7,458,671	143



Table 51

The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in the Barnett Shale Region Detailed Industrial Category

	Total	Gross	Personal	Employment
Category	Expenditures	Product	Income	(Permanent Jobs)
outogo.y	Exponentario			0020)
Agricultural Products & Services	\$42,991,460	\$11,842,088	\$8,064,747	75
Forestry & Fishery Products	\$452,466	\$434,036	\$161,097	0
Coal Mining	\$1,161,783	\$333,918	\$352,041	0
Crude Petroleum & Natural Gas	\$20,482,738	\$4,428,632	\$2,042,239	0
Miscellaneous Mining	\$2,115,254	\$931,254	\$546,679	0
New Construction	\$1,038,706,363	\$472,172,022	\$389,099,404	6,355
Maintenance & Repair Construction	\$48,255,956	\$25,513,232	\$21,024,987	294
Food Products & Tobacco	\$41,746,330	\$10,835,671	\$5,534,997	73
Textile Mill Products	\$182,706	\$42,459	\$36,064	0
Apparel	\$15,379,350	\$8,574,059	\$4,344,167	106
Paper & Allied Products	\$5,254,718	\$2,310,703	\$1,044,589	0
Printing & Publishing	\$16,106,542	\$7,987,172	\$5,213,326	60
Chemicals & Petroleum Refining	\$36,944,336	\$5,742,912	\$2,696,489	5
Rubber & Leather Products	\$10,989,997	\$4,795,770	\$2,803,586	55
Lumber Products & Furniture	\$6,268,083	\$2,168,355	\$1,546,766	0
Stone, Clay, & Glass Products	\$22,012,715	\$11,095,611	\$5,803,307	74
Primary Metal	\$25,344,647	\$7,844,945	\$5,839,787	106
Fabricated Metal Products	\$129,059,564	\$50,360,192	\$32,512,593	623
Machinery, Except Electrical	\$10,168,963	\$4,193,063	\$2,996,236	33
Electric & Electronic Equipment	\$5,701,562	\$3,075,497	\$1,837,911	0
Motor Vehicles & Equipment	\$4,983,547	\$1,025,178	\$666,670	0
Transp. Equip., Except Motor Vehicles	\$1,670,874	\$685,755	\$448,131	0
Instruments & Related Products	\$893,253	\$386,629	\$293,795	0
Miscellaneous Manufacturing	\$4,225,485	\$1,636,807	\$1,128,577	0
Transportation	\$93,476,522	\$61,531,007	\$40,695,116	461
Communication	\$31,438,054	\$19,473,802	\$8,313,635	30
Electric, Gas, Water, Sanitary Services	\$92,471,662	\$20,825,205	\$9,087,452	0
Wholesale Trade	\$78,128,297	\$52,887,174	\$30,495,380	319
Retail Trade	\$288,761,263	\$239,243,676	\$143,059,383	4,200
Finance	\$38,306,345	\$20,755,708	\$12,086,215	77
Insurance	\$25,871,571	\$15,448,202	\$9,235,321	92
Real Estate	\$257,536,030	\$33,392,162	\$5,379,661	33
Hotels, Lodging Places, Amusements	\$24,785,542	\$12,959,449	\$8,501,680	214
Personal Services	\$57,980,090	\$35,601,711	\$27,698,728	510
Business Services	\$188,571,678	\$120,957,323	\$98,670,312	1,329
Eating & Drinking Places	\$127,876,354	\$74,930,197	\$39,866,803	1,967
Health Services	\$87,022,439	\$60,912,276	\$51,502,293	894
Miscellaneous Services	\$92,824,904	\$38,335,650	\$33,233,892	793
Households	\$4,124,570	\$4,124,570	\$4,036,766	265
Total	\$2.980.274.012	\$1,449,794,074	\$1,017,900,821	19.042

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 52
The Current Annual Impact of Pipeline Development and Operations Associated with the Barnett Shale on Business Activity in Texas
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$52,811,986	\$14,535,657	\$9,898,872	84
Forestry & Fishery Products	\$1,150,887	\$1,115,571	\$411,328	0
Coal Mining	\$6,257,167	\$1,801,117	\$1,897,717	0
Crude Petroleum & Natural Gas	\$42,352,213	\$9,161,390	\$4,226,496	0
Miscellaneous Mining	\$3,167,016	\$1,392,905	\$817,462	0
New Construction	\$1,038,706,363	\$472,172,022	\$389,099,404	6,355
Maintenance & Repair Construction	\$57,168,321	\$30,152,607	\$24,850,011	344
Food Products & Tobacco	\$112,170,939	\$29,101,436	\$14,869,082	220
Textile Mill Products	\$1,600,647	\$372,896	\$314,728	0
Apparel	\$26,496,361	\$14,766,250	\$7,483,879	166
Paper & Allied Products	\$17,758,763	\$7,810,033	\$3,530,563	0
Printing & Publishing	\$25,388,061	\$12,607,818	\$8,229,671	85
Chemicals & Petroleum Refining	\$121,496,445	\$18,867,062	\$8,859,127	84
Rubber & Leather Products	\$17,309,003	\$7,550,357	\$4,411,386	85
Lumber Products & Furniture	\$8,051,013	\$2,786,849	\$1,986,007	0
Stone, Clay, & Glass Products	\$28,216,458	\$14,243,780	\$7,450,641	86
Primary Metal	\$62,889,515	\$19,453,931	\$14,480,605	261
Fabricated Metal Products	\$145,029,376	\$56,566,910	\$36,517,800	695
Machinery, Except Electrical	\$15,739,518	\$6,483,605	\$4,630,553	83
Electric & Electronic Equipment	\$14,908,552	\$8,035,432	\$4,798,823	0
Motor Vehicles & Equipment	\$9,159,313	\$1,891,484	\$1,226,712	0
Transp. Equip., Except Motor Vehicles	\$4,714,688	\$1,936,149	\$1,264,106	0
Instruments & Related Products	\$4,067,574	\$1,755,414	\$1,336,815	0
Miscellaneous Manufacturing	\$7,270,945	\$2,819,049	\$1,944,458	0
Transportation	\$111,780,385	\$73,674,404	\$48,726,754	615
Communication	\$68,383,233	\$42,278,465	\$18,049,600	167
Electric, Gas, Water, Sanitary Services	\$141,228,749	\$31,815,576	\$13,882,311	0
Wholesale Trade	\$139,995,805	\$94,768,452	\$54,645,303	646
Retail Trade	\$323,558,071	\$268,077,648	\$160,304,592	4,729
Finance	\$49,068,489	\$26,556,606	\$15,463,222	77
Insurance	\$62,995,463	\$37,618,828	\$22,489,031	249
Real Estate	\$352,146,386	\$49,156,779	\$7,920,136	87
Hotels, Lodging Places, Amusements	\$34,029,059	\$17,760,840	\$11,653,247	252
Personal Services	\$66,094,963	\$40,635,232	\$31,615,106	584
Business Services	\$310,526,461	\$200,077,697	\$163,210,892	2,149
Eating & Drinking Places	\$145,943,438	\$85,513,579	\$45,498,455	2,247
Health Services	\$110,484,080	\$77,295,334	\$65,352,288	1,109
Miscellaneous Services	\$100,332,802	\$41,301,042	\$35,804,208	837
Households	\$4,951,513	\$4,951,513	\$4,847,643	324
Total	\$3,845,400,019	\$1,828,861,719	\$1,253,999,031	22,619



Table 53

The Projected Typical Annual Impact of Pipeline Development and Operations
Associated with the Barnett Shale on Business Activity in the
Barnett Shale Region (Average over 10 Years)—Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanen
Category	Expenditures	Product	Income	Jobs
Agricultural Products & Services	\$64,142,697	\$17,668,241	\$12,032,497	111
Forestry & Fishery Products	\$675,074	\$647,576	\$240,354	(
Coal Mining	\$1,733,366	\$498,202	\$525,240	(
Crude Petroleum & Natural Gas	\$30,559,978	\$6,607,461	\$3,046,994	(
Miscellaneous Mining	\$3,155,932	\$1,389,420	\$815,638	(
New Construction	\$1,549,736,348	\$704,474,500	\$580,531,236	9,482
Maintenance & Repair Construction	\$71,997,258	\$38,065,409	\$31,369,006	43
Food Products & Tobacco	\$62,284,980	\$16,166,680	\$8,258,144	110
Textile Mill Products	\$272,595	\$63,348	\$53,808	
Apparel	\$22,945,789	\$12,792,384	\$6,481,440	15
Paper & Allied Products	\$7,839,971	\$3,447,539	\$1,558,513	
Printing & Publishing	\$24,030,750	\$11,916,757	\$7,778,214	8
Chemicals & Petroleum Refining	\$55,120,468	\$8,568,350	\$4,023,127	
Rubber & Leather Products	\$16,396,933	\$7,155,227	\$4,182,914	8:
Lumber Products & Furniture	\$9,351,898	\$3,235,157	\$2,307,755	
Stone, Clay, & Glass Products	\$32,842,684	\$16,554,506	\$8,658,458	11
Primary Metal	\$37,813,883	\$11,704,555	\$8,712,887	15
Fabricated Metal Products	\$192,555,186	\$75,136,750	\$48,508,364	92
Machinery, Except Electrical	\$15,171,960	\$6,255,995	\$4,470,345	4
Electric & Electronic Equipment	\$8,506,657	\$4,588,601	\$2,742,139	
Motor Vehicles & Equipment	\$7,435,387	\$1,529,553	\$994,663	
Transp. Equip., Except Motor Vehicles	\$2,492,922	\$1,023,138	\$668,605	
Instruments & Related Products	\$1,332,722	\$576,846	\$438,338	
Miscellaneous Manufacturing	\$6,304,368	\$2,442,095	\$1,683,823	
Transportation	\$139,465,751	\$91,803,460	\$60,716,583	68
Communication	\$46,905,167	\$29,054,659	\$12,403,836	4
Electric, Gas, Water, Sanitary Services	\$137,966,514	\$31,070,934	\$13,558,360	
Wholesale Trade	\$116,566,400	\$78,906,975	\$45,498,709	47
Retail Trade	\$430,828,039	\$356,948,445	\$213,442,734	6.26
Finance	\$57,152,567	\$30,967,246	\$18,032,475	11
Insurance	\$38,600,046	\$23,048,517	\$13,778,978	13
Real Estate	\$384,240,398	\$49,820,670	\$8,026,384	4
Hotels, Lodging Places, Amusements	\$36,979,706	\$19,335,329	\$12,684,396	32
Personal Services	\$86,505,538	\$53,117,288	\$41,326,140	76
Business Services	\$281,346,484	\$180,466,748	\$147,214,819	1,98
Eating & Drinking Places	\$190,789,852	\$111,794,877	\$59,480,750	2,93
Health Services	\$129,836,345	\$90,880,321	\$76,840,749	1,33
Miscellaneous Services	\$138,493,546	\$57,196,289	\$49,584,533	1,18
Households	\$6,153,804	\$6,153,804	\$6,022,803	39
Total	\$4,446,529,963	\$2,163,073,853	\$1,518,694,751	28,41

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group Table 54

The Projected Typical Annual Impact of Pipeline Development and Operations
Associated with the Barnett Shale on Business Activity in Texas
(Average over 10 Years)—Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$78,794,795	\$21,687,010	\$14,768,987	126
Forestry & Fishery Products	\$1,717,108	\$1,664,417	\$613,696	0
Coal Mining	\$9,335,612	\$2,687,243	\$2,831,368	0
Crude Petroleum & Natural Gas	\$63,188,950	\$13,668,675	\$6,305,877	0
Miscellaneous Mining	\$4,725,146	\$2,078,196	\$1,219,643	0
New Construction	\$1,549,736,348	\$704,474,500	\$580,531,236	9,482
Maintenance & Repair Construction	\$85,294,389	\$44,987,296	\$37,075,892	513
Food Products & Tobacco	\$167,357,578	\$43,418,963	\$22,184,476	329
Textile Mill Products	\$2,388,144	\$556,355	\$469,570	0
Apparel	\$39,532,225	\$22,031,052	\$11,165,850	248
Paper & Allied Products	\$26,495,842	\$11,652,468	\$5,267,554	0
Printing & Publishing	\$37,878,656	\$18,810,700	\$12,278,561	126
Chemicals & Petroleum Refining	\$181,271,111	\$28,149,411	\$13,217,701	125
Rubber & Leather Products	\$25,824,807	\$11,265,034	\$6,581,730	127
Lumber Products & Furniture	\$12,012,006	\$4,157,943	\$2,963,096	0
Stone, Clay, & Glass Products	\$42,098,588	\$21,251,535	\$11,116,259	128
Primary Metal	\$93,830,337	\$29,025,012	\$21,604,874	390
Fabricated Metal Products	\$216,381,938	\$84,397,092	\$54,484,081	1,037
Machinery, Except Electrical	\$23,483,155	\$9,673,454	\$6,908,725	123
Electric & Electronic Equipment	\$22,243,366	\$11,988,760	\$7,159,782	0
Motor Vehicles & Equipment	\$13,665,575	\$2,822,070	\$1,830,239	0
Transp. Equip., Except Motor Vehicles	\$7,034,253	\$2,888,709	\$1,886,029	0
Instruments & Related Products	\$6,068,768	\$2,619,054	\$1,994,511	0
Miscellaneous Manufacturing	\$10,848,154	\$4,205,984	\$2,901,106	0
Transportation	\$166,774,877	\$109,921,249	\$72,699,682	918
Communication	\$102,026,892	\$63,078,919	\$26,929,769	250
Electric, Gas, Water, Sanitary Services	\$210,711,452	\$47,468,424	\$20,712,226	0
Wholesale Trade	\$208,871,915	\$141,393,295	\$81,530,080	964
Retail Trade	\$482,744,422	\$399,968,355	\$239,172,360	7,055
Finance	\$73,209,545	\$39,622,109	\$23,070,925	114
Insurance	\$93,988,410	\$56,126,801	\$33,553,342	371
Real Estate	\$525,397,816	\$73,341,273	\$11,816,740	130
Hotels, Lodging Places, Amusements	\$50,770,913	\$26,498,942	\$17,386,492	376
Personal Services	\$98,612,823	\$60,627,236	\$47,169,325	872
Business Services	\$463,301,430	\$298,513,315	\$243,508,523	3,206
Eating & Drinking Places	\$217,745,706	\$127,585,144	\$67,883,101	3,353
Health Services	\$164,840,806	\$115,323,630	\$97,504,762	1,654
Miscellaneous Services	\$149,695,233	\$61,620,617	\$53,419,412	1,248
Households	\$7,387,593	\$7,387,593	\$7,232,620	483
Total	\$5,737,286,684	\$2,728,637,836	\$1,870,950,201	33,748

The Current and Projected Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity



Current Impacts: All Major Sources of Stimulus

Table 55
The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Clay County
Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$5,136,812	\$1,415,457	\$964,125	g
Forestry & Fishery Products	\$0	\$0	\$0	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$24,983,599	\$5,468,552	\$2,522,087	13
Miscellaneous Mining	\$0	\$0	\$0	0
New Construction	\$98,461,486	\$44,758,327	\$36,883,673	602
Maintenance & Repair Construction	\$6,868,999	\$3,649,345	\$3,007,536	45
Food Products & Tobacco	\$8,794,691	\$2,281,086	\$1,165,141	16
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$1,314,531	\$732,187	\$370,873	9
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$373,356	\$185,104	\$120,927	0
Chemicals & Petroleum Refining	\$0	\$0	\$0	0
Rubber and Leather Products	\$0	\$0	\$0	0
Lumber Products & Furniture	\$792,554	\$273,106	\$194,698	0
Stone, Clay, & Glass Products	\$507,422	\$256,161	\$133,746	0
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$13,987,299	\$5,452,211	\$3,519,858	67
Machinery, Except Electrical	\$1,767,245	\$732,202	\$523,244	9
Electric & Electronic Equipment	\$0	\$0	\$0	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp Equip, Except Motor Vehicles	\$4,143	\$1,507	\$867	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$0	\$0	\$0	0
Transportation	\$10,652,576	\$7,009,161	\$4,635,686	55
Communication	\$1,979,358	\$1,229,371	\$524,730	0
Electric, Gas, Water, Sanitary Serv	\$11,669,058	\$2,626,940	\$1,146,270	1
Wholesale Trade	\$7,781,143	\$5,266,501	\$3,036,673	33
Retail Trade	\$30,358,540	\$25,154,355	\$15,041,372	443
Finance	\$3,646,398	\$1,979,976	\$1,152,925	8
Insurance	\$975,858	\$582,753	\$348,390	0
Real Estate	\$23,938,431	\$3,081,103	\$496,481	1
Hotels, Lodging Places, Amusements	\$1,625,397	\$856,014	\$561,624	17
Personal Services	\$6,173,918	\$3,793,384	\$2,951,317	52
Business Services	\$29,032,309	\$18,668,234	\$15,228,515	210
Eating & Drinking Places	\$10,448,772	\$6,121,825	\$3,257,494	157
Health Services	\$8,380,120	\$5,874,526	\$4,966,921	88
Miscellaneous Services	\$9,710,431	\$4,007,145	\$3,473,829	86
Households	\$487,788	\$487,788	\$477,584	33
Total	\$319.852.235	\$151.944.320	\$106,706,586	1.957

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 56
The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Cooke County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$9,578,183	\$2,650,710	\$1,804,956	26
Forestry & Fishery Products	\$292,201	\$323,360	\$120,084	1
Coal Mining	\$307,132	\$89,109	\$93,714	0
Crude Petroleum & Natural Gas	\$483,209,596	\$105,888,551	\$48,835,583	276
Miscellaneous Mining	\$785,058	\$339,188	\$199,432	1
New Construction	\$113,417,661	\$51,557,060	\$42,486,256	694
Maintenance & Repair Construction	\$28,273,885	\$15,208,136	\$12,532,594	192
Food Products & Tobacco	\$16,068,046	\$4,147,997	\$2,118,856	32
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$2,798,476	\$1,547,447	\$784,039	22
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$6,793,974	\$3,399,785	\$2,219,063	33
Chemicals & Petroleum Refining	\$21,544,168	\$3,618,728	\$1,699,204	9
Rubber and Leather Products	\$4,391,820	\$1,875,678	\$1,096,576	22
Lumber Products & Furniture	\$2,015,661	\$670,795	\$478,399	5
Stone, Clay, & Glass Products	\$3,298,194	\$1,672,421	\$874,897	16
Primary Metal	\$10,471,402	\$3,207,046	\$2,387,532	42
Fabricated Metal Products	\$22,212,936	\$8,551,066	\$5,520,524	105
Machinery, Except Electrical	\$8,319,247	\$3,503,932	\$2,503,088	33
Electric & Electronic Equipment	\$744,578	\$407,145	\$243,471	1
Motor Vehicles & Equipment	\$2,158,894	\$483,994	\$314,551	2
Transp Equip, Except Motor Vehicles	\$103,453	\$43,188	\$28,368	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$1,915,567	\$725.001	\$499,905	5
Transportation	\$26,666,582	\$17,518,870	\$11,586,190	155
Communication	\$8,938,836	\$5,536,194	\$2,363,553	13
Electric, Gas, Water, Sanitary Serv	\$25,155,947	\$5,642,225	\$2,462,017	7
Wholesale Trade	\$14,498,223	\$9,805,285	\$5,653,887	65
Retail Trade	\$80,927,042	\$67,089,991	\$40,117,416	1,219
Finance	\$11,318,250	\$6,230,168	\$3,628,106	31
Insurance	\$4,413,750	\$2,646,570	\$1,582,242	21
Real Estate	\$78,676,349	\$14,630,797	\$2,357,331	19
Hotels, Lodging Places, Amusements	\$5,712,602	\$2,999,826	\$1,968,072	49
Personal Services	\$16,095,080	\$9,934,142	\$7,729,230	142
Business Services	\$55,808,569	\$34,690,682	\$28,298,624	378
Eating & Drinking Places	\$40,029,385	\$23,470,755	\$12,487,645	638
Health Services	\$19,703,169	\$13,848,478	\$11,709,078	215
Miscellaneous Services	\$25,448,986	\$10,476,469	\$9,082,164	234
Households	\$1,255,075	\$1,255,075	\$1,228,640	89
Total	\$1,153,347,975	\$435,685,866	\$269,095,288	4,794



Table 57
The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Denton County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$14,937,220	\$4,120,425	\$2,806,170	38
Forestry & Fishery Products	\$19,519	\$21,986	\$7,799	0
Coal Mining	\$21,429	\$5,845	\$6,345	0
Crude Petroleum & Natural Gas	\$469,863,995	\$102,978,086	\$47,493,226	271
Miscellaneous Mining	\$73,666	\$31,546	\$18,429	0
New Construction	\$67,552,058	\$30,707,612	\$25,305,001	413
Maintenance & Repair Construction	\$46,094,329	\$24,704,988	\$20,358,432	314
Food Products & Tobacco	\$15,786,328	\$4,068,370	\$2,078,479	32
Textile Mill Products	\$8,873	\$2,359	\$1,897	0
Apparel	\$6,908,323	\$3,814,750	\$1,932,902	43
Paper & Allied Products	\$4,873,253	\$2,195,470	\$992,369	9
Printing & Publishing	\$6,382,860	\$3,206,340	\$2,092,644	27
Chemicals & Petroleum Refining	\$28,926,610	\$4,837,992	\$2,271,676	18
Rubber and Leather Products	\$3,400,401	\$1,448,929	\$847,342	16
Lumber Products & Furniture	\$2,042,132	\$680,754	\$485,349	5
Stone, Clay, & Glass Products	\$4,733,562	\$2,425,294	\$1,268,218	17
Primary Metal	\$173,890	\$52,727	\$39,072	0
Fabricated Metal Products	\$15,603,752	\$5,952,433	\$3,843,077	67
Machinery, Except Electrical	\$4,221,359	\$1,775,217	\$1,268,491	12
Electric & Electronic Equipment	\$4,161,822	\$2,269,647	\$1,356,795	8
Motor Vehicles & Equipment	\$2,398,724	\$545,477	\$354,330	3
Transp Equip, Except Motor Vehicles	\$723,386	\$303,063	\$198,002	1
Instruments & Related Products	\$1,016,083	\$435,311	\$330,802	2
Miscellaneous Manufacturing	\$1,985,800	\$754,445	\$520,279	5
Transportation	\$15,898,518	\$10,602,224	\$7,011,832	79
Communication	\$20,578,544	\$12,714,603	\$5,428,244	38
Electric, Gas, Water, Sanitary Serv	\$43,112,823	\$9,666,379	\$4,218,169	11
Wholesale Trade	\$34,792,565	\$23,527,911	\$13,566,556	146
Retail Trade	\$103,315,029	\$85,643,653	\$51,212,418	1,531
Finance	\$12,252,086	\$6,717,745	\$3,911,768	29
Insurance	\$9,549,860	\$5,728,041	\$3,424,630	31
Real Estate	\$142,196,739	\$29,095,827	\$4,687,949	43
Hotels, Lodging Places, Amusements	\$8,830,276	\$4,633,265	\$3,039,523	74
Personal Services	\$22,047,734	\$13,641,492	\$10,613,524	187
Business Services	\$38,330,636	\$23,187,102	\$18,915,105	231
Eating & Drinking Places	\$49,634,826	\$29,094,332	\$15,479,915	791
Health Services	\$33,112,410	\$23,250,019	\$19,658,351	359
Miscellaneous Services	\$28,420,473	\$11,555,017	\$10,017,386	244
Households	\$605,795	\$605,795	\$592,708	37
Total	\$1,264,587,686	\$487,002,472	\$287,655,203	5,133

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 58
The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Erath County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$4,313,132	\$1,191,031	\$811,129	10
Forestry & Fishery Products	\$3,449	\$3,741	\$1,308	0
Coal Mining	\$38,447	\$10,967	\$11,562	0
Crude Petroleum & Natural Gas	\$77,867,028	\$17,065,431	\$7,870,588	45
Miscellaneous Mining	\$0	\$0	\$0	0
New Construction	\$62,317,396	\$28,328,055	\$23,344,097	381
Maintenance & Repair Construction	\$7,446,380	\$3,990,620	\$3,288,532	51
Food Products & Tobacco	\$2,033,120	\$526,254	\$268,823	6
Textile Mill Products	\$118,471	\$31,182	\$26,322	0
Apparel	\$86,734	\$48,274	\$24,462	0
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$814,278	\$405,735	\$264,975	1
Chemicals & Petroleum Refining	\$172,636	\$28,071	\$13,153	0
Rubber and Leather Products	\$1,416,518	\$611,291	\$357,431	7
Lumber Products & Furniture	\$274,976	\$92,981	\$66,428	0
Stone, Clay, & Glass Products	\$2,071,397	\$1,046,714	\$547,413	7
Primary Metal	\$4,363,054	\$1,344,848	\$1,001,242	18
Fabricated Metal Products	\$9,730,078	\$3,777,583	\$2,438,730	47
Machinery, Except Electrical	\$77,790	\$32,476	\$23,189	0
Electric & Electronic Equipment	\$1,236,607	\$672,189	\$401,897	1
Motor Vehicles & Equipment	\$748,402	\$161,022	\$104,610	0
Transp Equip, Except Motor Vehicles	\$0	\$0	\$0	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$189,372	\$72,335	\$49.906	0
Transportation	\$5,631,143	\$3,712,777	\$2,455,624	32
Communication	\$3,519,027	\$2,177,662	\$929,684	8
Electric, Gas, Water, Sanitary Serv	\$8,099,013	\$1,819,272	\$793,942	1
Wholesale Trade	\$5,646,272	\$3,820,501	\$2,202,816	23
Retail Trade	\$25,271,374	\$20,944,623	\$12,524,256	368
Finance	\$3,148,057	\$1,721,339	\$1,002,306	8
Insurance	\$1,707,592	\$1,021,948	\$611,026	7
Real Estate	\$21,228,264	\$3,334,904	\$537,379	3
Hotels, Lodging Places, Amusements	\$2,700,920	\$1,410,036	\$925,083	23
Personal Services	\$5,181,013	\$3,187,183	\$2,479,700	46
Business Services	\$9,210,056	\$5,747,342	\$4,688,259	65
Eating & Drinking Places	\$12,021,886	\$7,046,899	\$3,749,363	191
Health Services	\$8,766,339	\$6,127,358	\$5,180,651	93
Miscellaneous Services	\$8,101,261	\$3,342,381	\$2,897,503	70
Households	\$406,111	\$406,111	\$397,500	29
Total	\$295,957,593	\$125,261,135	\$82,290,888	1,540



Table 59

The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Hill County

Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$5,659,656	\$1,562,239	\$1,064,058	12
Forestry & Fishery Products	\$121,556	\$124,272	\$46,312	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$84,413,370	\$18,500,255	\$8,532,206	49
Miscellaneous Mining	\$345,604	\$150,914	\$88,605	0
New Construction	\$88,490,703	\$40,225,838	\$33,148,617	541
Maintenance & Repair Construction	\$11,290,784	\$6,043,754	\$4,980,583	78
Food Products & Tobacco	\$6,549,783	\$1,696,059	\$866,441	11
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$2,544,925	\$1,413,922	\$716,491	19
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$1,484,137	\$738,959	\$482,092	9
Chemicals & Petroleum Refining	\$0	\$0	\$0	0
Rubber and Leather Products	\$0	\$0	\$0	0
Lumber Products & Furniture	\$866,175	\$294,632	\$210,053	1
Stone, Clay, & Glass Products	\$2,803,880	\$1,416,014	\$740,502	9
Primary Metal	\$5,989,357	\$1,847,970	\$1,375,521	25
Fabricated Metal Products	\$13,079,306	\$5,083,409	\$3,281,978	64
Machinery, Except Electrical	\$1,018,868	\$425,637	\$304,195	2
Electric & Electronic Equipment	\$0	\$0	\$0	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp Equip, Except Motor Vehicles	\$3,333	\$1,352	\$778	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$0	\$0	\$0	0
Transportation	\$6,694,741	\$4,418,537	\$2,922,351	32
Communication	\$2,567,085	\$1,592,584	\$680,004	2
Electric, Gas, Water, Sanitary Serv	\$16,756,225	\$3,766,771	\$1,643,854	3
Wholesale Trade	\$6,344,828	\$4,293,254	\$2,475,488	28
Retail Trade	\$33,083,760	\$27,417,859	\$16,394,949	481
Finance	\$3,983,013	\$2,174,839	\$1,266,656	10
Insurance	\$2,636,242	\$1,576,982	\$942,877	10
Real Estate	\$44,900,425	\$8,611,292	\$1,387,252	15
Hotels, Lodging Places, Amusements	\$3,204,001	\$1,673,824	\$1,098,140	30
Personal Services	\$6,765,999	\$4,160,520	\$3,236,933	61
Business Services	\$6,328,871	\$3,847,550	\$3,138,455	41
Eating & Drinking Places	\$15,617,328	\$9,153,852	\$4,870,244	245
Health Services	\$11,501,164	\$8,037,938	\$6,796,160	116
Miscellaneous Services	\$10,642,329	\$4,392,437	\$3,807,773	91
Households	\$534,871	\$534,871	\$523,431	38
Total	\$396,222,317	\$165,178,338	\$107,023,001	2,024

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 60
The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Hood County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$5,466,631	\$1.512.476	\$1.029.990	15
Forestry & Fishery Products	\$2,171	\$2,472	\$891	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$199,343,362	\$43.689.002	\$20,149,307	115
Miscellaneous Mining	\$0	\$0	\$0	0
New Construction	\$34,648,472	\$15,750,399	\$12,979,318	212
Maintenance & Repair Construction	\$18,308,775	\$9,846,123	\$8,113,819	128
Food Products & Tobacco	\$0	\$0	\$0	0
Textile Mill Products	\$157.025	\$46.049	\$39.038	1
Apparel	\$197,644	\$109,120	\$55,414	1
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$2,660,895	\$1,333,705	\$870,559	13
Chemicals & Petroleum Refining	\$4,347,770	\$734,063	\$344,680	2
Rubber and Leather Products	\$96,190	\$41,057	\$23,986	0
Lumber Products & Furniture	\$59,939	\$19,909	\$14,165	0
Stone, Clay, & Glass Products	\$2,012,653	\$1,023,299	\$535,214	8
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$198.780	\$76,239	\$49.131	0
Machinery, Except Electrical	\$1,297,951	\$547,022	\$390,700	4
Electric & Electronic Equipment	\$14,605	\$8,022	\$4.677	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp Equip, Except Motor Vehicles	\$66,803	\$27,902	\$18,111	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$145,883	\$55,113	\$38,069	0
Transportation	\$5,123,938	\$3,397,068	\$2,246,804	30
Communication	\$3,093,780	\$1,918,071	\$818,955	5
Electric, Gas, Water, Sanitary Serv	\$19,620,823	\$4,398,435	\$1,919,332	6
Wholesale Trade	\$3,952,501	\$2,672,767	\$1,541,079	17
Retail Trade	\$33,663,180	\$27,908,320	\$16,688,308	501
Finance	\$6,032,492	\$3,322,058	\$1,934,498	16
Insurance	\$4,291,474	\$2,574,364	\$1,539,023	18
Real Estate	\$56,067,183	\$12,969,967	\$2,089,706	21
Hotels, Lodging Places, Amusements	\$3,449,106	\$1,803,728	\$1,183,336	30
Personal Services	\$7,063,339	\$4,360,188	\$3,392,406	62
Business Services	\$14,300,469	\$8,730,156	\$7,121,498	92
Eating & Drinking Places	\$16,654,268	\$9,764,862	\$5,195,443	270
Health Services	\$11,341,999	\$7,940,194	\$6,713,501	121
Miscellaneous Services	\$10,238,849	\$4,202,287	\$3,642,973	91
Households	\$334,822	\$334,822	\$327,749	21
Total	\$464,253,773	\$171,119,260	\$101,011,681	1,797



Table 61
The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Jack County
Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$8,575,381	\$2,378,088	\$1,619,631	25
Forestry & Fishery Products	\$0	\$0	\$0	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$413,211,958	\$90,556,483	\$41,764,561	237
Miscellaneous Mining	\$489,175	\$209,825	\$123,307	1
New Construction	\$36,891,899	\$16,770,209	\$13,819,705	226
Maintenance & Repair Construction	\$22,017,336	\$11,866,896	\$9,779,008	154
Food Products & Tobacco	\$355,966	\$91,733	\$46,860	0
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$0	\$0	\$0	0
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$0	\$0	\$0	0
Chemicals & Petroleum Refining	\$3,400,126	\$583,940	\$274,191	2
Rubber and Leather Products	\$0	\$0	\$0	0
Lumber Products & Furniture	\$0	\$0	\$0	0
Stone, Clay, & Glass Products	\$408,678	\$207,653	\$108,616	1
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$10,623,692	\$4,047,015	\$2,612,771	50
Machinery, Except Electrical	\$2,286,504	\$966,097	\$690,181	7
Electric & Electronic Equipment	\$0	\$0	\$0	0
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp Equip, Except Motor Vehicles	\$0	\$0	\$0	0
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$0	\$0	\$0	0
Transportation	\$16,337,537	\$10,716,643	\$7,087,587	101
Communication	\$3,430,481	\$2,130,525	\$909,571	7
Electric, Gas, Water, Sanitary Serv	\$28,449,346	\$6,372,864	\$2,780,889	10
Wholesale Trade	\$7,251,751	\$4,902,592	\$2,826,909	32
Retail Trade	\$47,835,439	\$39,663,828	\$23,717,721	713
Finance	\$10,013,332	\$5,539,424	\$3,225,563	29
Insurance	\$2,433,786	\$1,461,355	\$873,720	12
Real Estate	\$58,707,533	\$12,620,492	\$2,033,446	19
Hotels, Lodging Places, Amusements	\$2,918,971	\$1,538,262	\$1,009,169	28
Personal Services	\$9,939,744	\$6,141,782	\$4,778,349	90
Business Services	\$27,420,221	\$16,641,224	\$13,574,941	184
Eating & Drinking Places	\$25,275,499	\$14,823,147	\$7,886,771	406
Health Services	\$9,390,629	\$6,634,048	\$5,609,090	102
Miscellaneous Services	\$15,920,613	\$6,556,351	\$5,683,926	147
Households	\$786,546	\$786,546	\$769,883	58
Total	\$764,372,142	\$264,207,022	\$153,606,367	2,640

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 62
The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Johnson County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$16,878,743	\$4,657,124	\$3,171,817	42
Forestry & Fishery Products	\$63,471	\$70,060	\$25,883	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$494,174,312	\$108,306,359	\$49,950,625	285
Miscellaneous Mining	\$842,513	\$363,507	\$213,744	1
New Construction	\$103,197,608	\$46,911,259	\$38,657,824	631
Maintenance & Repair Construction	\$49,620,271	\$26,595,260	\$21,916,140	339
Food Products & Tobacco	\$3,933,225	\$1,014,425	\$518,069	5
Textile Mill Products	\$77,022	\$21,294	\$17,961	0
Apparel	\$7,898,722	\$4,366,112	\$2,212,107	50
Paper & Allied Products	\$5,514,329	\$2,479,870	\$1,121,098	9
Printing & Publishing	\$7,829,777	\$3,928,023	\$2,563,642	33
Chemicals & Petroleum Refining	\$31,682,209	\$5,275,674	\$2,477,346	12
Rubber and Leather Products	\$5,195,350	\$2,218,411	\$1,296,937	22
Lumber Products & Furniture	\$2,346,507	\$784,343	\$559,218	6
Stone, Clay, & Glass Products	\$5,787,141	\$2,955,751	\$1,546,002	20
Primary Metal	\$645,919	\$197,243	\$146,284	1
Fabricated Metal Products	\$22,125,197	\$8,481,694	\$5,475,956	101
Machinery, Except Electrical	\$9,193,104	\$3,863,560	\$2,760,389	34
Electric & Electronic Equipment	\$1,458,747	\$795,365	\$475,237	2
Motor Vehicles & Equipment	\$2,741,604	\$617,635	\$401,670	3
Transp Equip, Except Motor Vehicles	\$872,071	\$364,693	\$238,119	1
Instruments & Related Products	\$621,248	\$266,327	\$202,570	1
Miscellaneous Manufacturing	\$2,261,098	\$859,974	\$593,004	5
Transportation	\$31,530,251	\$20,857,972	\$13,794,807	175
Communication	\$10,794,076	\$6,693,037	\$2,857,415	17
Electric, Gas, Water, Sanitary Serv	\$38,581,539	\$8,653,098	\$3,776,074	9
Wholesale Trade	\$30,021,290	\$20,303,468	\$11,707,172	129
Retail Trade	\$113,590,390	\$94,158,517	\$56,303,774	1,674
Finance	\$13,001,510	\$7,126,185	\$4,149,554	32
Insurance	\$6,921,055	\$4,149,964	\$2,480,544	24
Real Estate	\$108,973,558	\$18,194,779	\$2,931,511	22
Hotels, Lodging Places, Amusements	\$6,537,478	\$3,452,751	\$2,265,394	60
Personal Services	\$24,095,347	\$14,896,938	\$11,590,137	200
Business Services	\$28,692,431	\$17,178,576	\$14,013,375	171
Eating & Drinking Places	\$54,490,332	\$31,940,976	\$16,994,179	870
Health Services	\$36,422,159	\$25,559,503	\$21,610,789	393
Miscellaneous Services	\$31,982,668	\$13,035,072	\$11,300,456	271
Households	\$1,246,806	\$1,246,806	\$1,220,130	73
Total	\$1,311,841,078	\$512,841,607	\$313,536,955	5,724



Table 63

The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Montague County

Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs
Agricultural Products & Services	\$4,744,613	\$1,310,500	\$892,363	10
Forestry & Fishery Products	\$101,656	\$104,139	\$38,748	Ċ
Coal Mining	\$581,568	\$167,887	\$177,174	Ċ
Crude Petroleum & Natural Gas	\$82,194,283	\$18,005,456	\$8,304,204	46
Miscellaneous Mining	\$293,646	\$128,021	\$75,277	Ċ
New Construction	\$74,282,336	\$33,767,042	\$27,826,163	454
Maintenance & Repair Construction	\$8,611,412	\$4,613,875	\$3,802,061	57
Food Products & Tobacco	\$0	\$0	\$0	
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$2,399,112	\$1,332,726	\$675,245	17
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$2,330,978	\$1,160,215	\$757,402	10
Chemicals & Petroleum Refining	\$0	\$0	\$0	o o
Rubber and Leather Products	\$1,570,408	\$678,923	\$396,707	8
Lumber Products & Furniture	\$730,063	\$248,009	\$176,887	1
Stone, Clay, & Glass Products	\$940,904	\$474,751	\$248,313	7
Primary Metal	\$0	\$0	\$0	C
Fabricated Metal Products	\$1,264,301	\$491,205	\$317,150	7
Machinery, Except Electrical	\$1,302,222	\$544,630	\$389,129	2
Electric & Electronic Equipment	\$294,180	\$159,783	\$95,419	0
Motor Vehicles & Equipment	\$0	\$0	\$0	C
Transp Equip, Except Motor Vehicles	\$65,552	\$27,043	\$17,452	C
Instruments & Related Products	\$0	\$0	\$0	C
Miscellaneous Manufacturing	\$671,113	\$257,039	\$177,210	1
Transportation	\$9,881,558	\$6,488,907	\$4,291,479	54
Communication	\$2,177,179	\$1,350,377	\$576,542	2
Electric, Gas, Water, Sanitary Serv	\$9,254,690	\$2,079,733	\$907,494	1
Wholesale Trade	\$3,180,076	\$2,151,535	\$1,240,749	15
Retail Trade	\$27,301,075	\$22,625,865	\$13,529,534	397
Finance	\$4,881,144	\$2,667,928	\$1,553,345	11
Insurance	\$2,432,897	\$1,455,574	\$870,036	9
Real Estate	\$37,883,702	\$7,439,271	\$1,198,491	13
Hotels, Lodging Places, Amusements	\$1,925,060	\$1,009,577	\$662,280	17
Personal Services	\$5,569,942	\$3,423,772	\$2,663,831	51
Business Services	\$6,858,456	\$4,232,196	\$3,452,316	42
Eating & Drinking Places	\$12,956,492	\$7,594,862	\$4,040,643	206
Health Services	\$9,560,355	\$6,678,852	\$5,646,989	98
Miscellaneous Services	\$8,905,183	\$3,679,473	\$3,189,756	78
Households	\$451,145	\$451,145	\$441,434	32
Total	\$325,597,302	\$136,800,310	\$88,631,827	1,647

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 64
The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Palo Pinto County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$1,714,594	\$474.805	\$323,366	6
Forestry & Fishery Products	\$53,425	\$60,085	\$22,172	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$171,827,773	\$37,656,267	\$17.367.037	98
Miscellaneous Mining	\$255,913	\$110,380	\$64,913	0
New Construction	\$31,657,237	\$14,390,652	\$11,858,801	194
Maintenance & Repair Construction	\$11,298,266	\$6,081,491	\$5,011,588	79
Food Products & Tobacco	\$6,698,475	\$1,728,236	\$882,891	16
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$982,962	\$543,066	\$275,100	7
Paper & Allied Products	\$1,457,716	\$658,603	\$297,709	3
Printing & Publishing	\$1,216,487	\$609,299	\$397,702	7
Chemicals & Petroleum Refining	\$1,747,944	\$295,740	\$138,905	1
Rubber and Leather Products	\$1,433,948	\$611,072	\$357,239	7
Lumber Products & Furniture	\$657,408	\$217,657	\$155,241	2
Stone, Clay, & Glass Products	\$1,724,014	\$874,722	\$457,486	7
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$6,733,881	\$2,585,524	\$1,669,226	32
Machinery, Except Electrical	\$1,682,678	\$709,464	\$506,812	5
Electric & Electronic Equipment	\$369,229	\$202,170	\$120,870	1
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp Equip, Except Motor Vehicles	\$48,106	\$20,019	\$13,038	0
Instruments & Related Products	\$333,980	\$144,244	\$109,621	1
Miscellaneous Manufacturing	\$627,975	\$237,051	\$163,525	2
Transportation	\$5,901,603	\$3,887,390	\$2,570,874	35
Communication	\$2,573,716	\$1,594,951	\$680,910	4
Electric, Gas, Water, Sanitary Serv	\$15,777,983	\$3,537,033	\$1,543,492	5
Wholesale Trade	\$4,530,987	\$3,064,015	\$1,766,674	21
Retail Trade	\$26,335,790	\$21,834,321	\$13,056,186	390
Finance	\$4,151,621	\$2,288,818	\$1,332,790	11
Insurance	\$920,556	\$552,165	\$330,105	3
Real Estate	\$45,401,584	\$10,761,768	\$1,734,009	17
Hotels, Lodging Places, Amusements	\$1,954,110	\$1,025,542	\$672,713	17
Personal Services	\$5,489,749	\$3,385,557	\$2,634,013	48
Business Services	\$12,999,077	\$7,984,733	\$6,513,498	87
Eating & Drinking Places	\$13,159,091	\$7,716,165	\$4,105,410	211
Health Services	\$7,331,087	\$5,141,458	\$4,347,130	81
Miscellaneous Services	\$8,303,744	\$3,418,722	\$2,963,719	75
Households	\$409,805	\$409,805	\$401,122	29
Total	\$397,762,513	\$144,812,990	\$84,845,888	1,502



Table 65
The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Parker County
Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$6,944,223	\$1,913,728	\$1,303,306	14
Forestry & Fishery Products	\$1,055	\$1,014	\$449	0
Coal Mining	\$44,111	\$12,429	\$13,082	0
Crude Petroleum & Natural Gas	\$95,797,770	\$20,991,789	\$9,681,289	54
Miscellaneous Mining	\$388,642	\$169,643	\$99,825	0
New Construction	\$95,220,982	\$43,285,268	\$35,669,780	583
Maintenance & Repair Construction	\$13,408,693	\$7,154,068	\$5,895,366	90
Food Products & Tobacco	\$4,392,569	\$1,136,666	\$580,614	9
Textile Mill Products	\$3,288	\$779	\$629	0
Apparel	\$2,522,952	\$1,401,106	\$709,836	20
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$1,983,472	\$989,333	\$645,572	11
Chemicals & Petroleum Refining	\$7,246,018	\$1,164,589	\$546,838	1
Rubber and Leather Products	\$2,219,627	\$959,399	\$560,926	10
Lumber Products & Furniture	\$393,083	\$133,857	\$95,574	0
Stone, Clay, & Glass Products	\$3,137,394	\$1,589,788	\$831,338	10
Primary Metal	\$1,585,052	\$488,319	\$363,506	9
Fabricated Metal Products	\$14,726,102	\$5,716,331	\$3,690,558	70
Machinery, Except Electrical	\$2,866,681	\$1,195,648	\$854,169	12
Electric & Electronic Equipment	\$40,439	\$21,943	\$12,996	0
Motor Vehicles & Equipment	\$330,327	\$70,999	\$46,172	0
Transp Equip, Except Motor Vehicles	\$239,838	\$99,404	\$65,036	0
Instruments & Related Products	\$20,357	\$8,703	\$6,685	0
Miscellaneous Manufacturing	\$947,305	\$364,207	\$251,212	1
Transportation	\$13,330,573	\$8,799,180	\$5,819,606	71
Communication	\$3,560,165	\$2,209,130	\$943,125	3
Electric, Gas, Water, Sanitary Serv	\$16,557,684	\$3,720,281	\$1,623,498	2
Wholesale Trade	\$11,128,352	\$7,530,168	\$4,341,838	43
Retail Trade	\$44,093,826	\$36,541,721	\$21,850,764	636
Finance	\$6,814,047	\$3,711,184	\$2,161,044	13
Insurance	\$5,189,163	\$3,104,459	\$1,855,959	21
Real Estate	\$56,524,151	\$10,158,719	\$1,636,690	16
Hotels, Lodging Places, Amusements	\$4,499,412	\$2,351,911	\$1,542,824	36
Personal Services	\$9,160,533	\$5,646,185	\$4,392,963	76
Business Services	\$21,184,429	\$13,319,175	\$10,865,045	142
Eating & Drinking Places	\$20,520,106	\$12,025,907	\$6,398,607	319
Health Services	\$10,651,737	\$7,496,964	\$6,339,005	115
Miscellaneous Services	\$13,166,469	\$5,398,849	\$4,680,472	115
Households	\$631,598	\$631,598	\$618,214	42
Total	\$491,472,223	\$211,514,443	\$136,994,413	2,548

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 66
The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Tarrant County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$12,400,680	\$3,429,292	\$2,335,518	29
Forestry & Fishery Products	\$124,488	\$141,964	\$52,599	0
Coal Mining	\$90,804	\$25,879	\$27,307	0
Crude Petroleum & Natural Gas	\$1,429,426,143	\$313,269,670	\$144,479,215	820
Miscellaneous Mining	\$634,833	\$272,495	\$159,645	2
New Construction	\$117,156,705	\$53,256,744	\$43,886,902	717
Maintenance & Repair Construction	\$121,249,207	\$65,178,344	\$53,710,750	841
Food Products & Tobacco	\$80,341,328	\$20,697,588	\$10,572,978	172
Textile Mill Products	\$126,448	\$37,271	\$31,695	1
Apparel	\$11,737,110	\$6,472,339	\$3,279,085	79
Paper & Allied Products	\$11,339,367	\$5,137,048	\$2,322,616	26
Printing & Publishing	\$17,399,447	\$8,743,007	\$5,706,709	84
Chemicals & Petroleum Refining	\$53,706,245	\$9,130,517	\$4,287,181	27
Rubber and Leather Products	\$10,806,806	\$4,585,437	\$2,680,516	50
Lumber Products & Furniture	\$4,877,256	\$1,608,498	\$1,147,080	16
Stone, Clay, & Glass Products	\$10,223,790	\$5,226,188	\$2,733,563	40
Primary Metal	\$18,561,323	\$5,626,381	\$4,188,286	70
Fabricated Metal Products	\$36,576,733	\$13,886,639	\$8,965,509	167
Machinery, Except Electrical	\$14,614,698	\$6,164,185	\$4,403,382	47
Electric & Electronic Equipment	\$8,965,525	\$4,908,995	\$2,934,765	19
Motor Vehicles & Equipment	\$5,699,093	\$1,312,986	\$853,199	9
Transp Equip, Except Motor Vehicles	\$2,935,677	\$1,230,707	\$803,957	6
Instruments & Related Products	\$1,609,097	\$691,347	\$525,546	4
Miscellaneous Manufacturing	\$4,423,562	\$1,668,396	\$1,151,110	13
Transportation	\$64,305,443	\$42,433,706	\$28,064,642	382
Communication	\$36,315,055	\$22,455,677	\$9,587,126	88
Electric, Gas, Water, Sanitary Serv	\$61,562,575	\$13,801,967	\$6,022,555	15
Wholesale Trade	\$75,182,930	\$50,830,778	\$29,309,670	337
Retail Trade	\$227,133,549	\$188,312,022	\$112,604,702	3,399
Finance	\$33,735,813	\$18,585,683	\$10,822,417	92
Insurance	\$36,298,765	\$21,790,455	\$13,026,669	142
Real Estate	\$330,468,280	\$73,029,769	\$11,766,512	104
Hotels, Lodging Places, Amusements	\$22,487,896	\$11,773,435	\$7,723,624	190
Personal Services	\$47,722,168	\$29,519,442	\$22,965,962	425
Business Services	\$88,553,307	\$53,177,463	\$43,379,384	564
Eating & Drinking Places	\$112,400,081	\$65,900,239	\$35,062,373	1,819
Health Services	\$74,581,794	\$52,292,511	\$44,214,176	814
Miscellaneous Services	\$61,701,854	\$25,119,070	\$21,775,691	562
Households	\$2,083,791	\$2,083,791	\$2,039,648	129
Total	\$3,249,559,665	\$1,203,807,927	\$699,604,263	12,303



Table 67
The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Wise County
Detailed Industrial Category

				Employment
Category	Total Expenditures	Gross	Personal Income	(Permanent Jobs)
		Product		
Agricultural Products & Services	\$33,842,156	\$9,368,249	\$6,380,353	97
Forestry & Fishery Products	\$734,659	\$846,721	\$314,426	3
Coal Mining	\$4,551,789	\$1,320,944	\$1,391,407	7
Crude Petroleum & Natural Gas	\$1,526,616,870	\$334,563,513	\$154,300,409	876
Miscellaneous Mining	\$1,780,430	\$762,849	\$448,548	4
New Construction	\$106,936,652	\$48,610,943	\$40,058,470	654
Maintenance & Repair Construction	\$127,876,928	\$68,813,993	\$56,707,127	892
Food Products & Tobacco	\$0	\$0	\$0	0
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$5,567,576	\$3,069,399	\$1,555,253	41
Paper & Allied Products	\$0	\$0	\$0	0
Printing & Publishing	\$6,232,401	\$3,131,249	\$2,044,212	25
Chemicals & Petroleum Refining	\$1,510,605	\$258,577	\$120,862	1
Rubber and Leather Products	\$3,336,705	\$1,414,182	\$826,343	12
Lumber Products & Furniture	\$3,375,599	\$1,108,753	\$790,670	13
Stone, Clay, & Glass Products	\$10,930,156	\$5,579,162	\$2,917,413	43
Primary Metal	\$0	\$0	\$0	0
Fabricated Metal Products	\$36,116,754	\$13,700,078	\$8,844,668	164
Machinery, Except Electrical	\$8,904,214	\$3,759,205	\$2,685,835	28
Electric & Electronic Equipment	\$10,739,635	\$5,889,075	\$3,520,648	25
Motor Vehicles & Equipment	\$5,578,561	\$1,290,214	\$838,041	8
Transp Equip, Except Motor Vehicles	\$2,236,448	\$937,309	\$612,318	5
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$438,132	\$164,826	\$113,693	1
Transportation	\$62,747,104	\$41,326,074	\$27,331,645	381
Communication	\$26,091,616	\$16,151,348	\$6,895,701	52
Electric, Gas, Water, Sanitary Serv	\$90,333,168	\$20,239,858	\$8,832,181	29
Wholesale Trade	\$48,034,676	\$32,474,473	\$18,724,643	217
Retail Trade	\$213,465,006	\$176,990,804	\$105,835,236	3,179
Finance	\$28,799,492	\$15,895,223	\$9,255,897	79
Insurance	\$14,764,848	\$8,865,586	\$5,300,521	57
Real Estate	\$230,236,756	\$45,369,479	\$7,310,167	66
Hotels, Lodging Places, Amusements	\$21,163,860	\$11,078,167	\$7,267,213	183
Personal Services	\$45,185,700	\$27,929,038	\$21,729,299	390
Business Services	\$45,242,069	\$26,389,700	\$21,527,534	277
Eating & Drinking Places	\$106,870,757	\$62,665,268	\$33,341,631	1,736
Health Services	\$52,282,541	\$36,804,974	\$31,119,276	560
Miscellaneous Services	\$63,355,152	\$25,938,954	\$22,486,741	572
Households	\$2,053,981	\$2,053,981	\$2,010,790	131
Total	\$2,947,932,997	\$1,054,762,167	\$613,439,168	10,809

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 68
The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Young County
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$1,950,857	\$541.415	\$368,742	6
Forestry & Fishery Products	\$3,958	\$4,686	\$1,717	0
Coal Mining	\$0	\$0	\$0	0
Crude Petroleum & Natural Gas	\$169,483,028	\$37,143,421	\$17,130,519	97
Miscellaneous Mining	\$180,751	\$77,318	\$45,455	0
New Construction	\$8,475,166	\$3,852,615	\$3,174,797	52
Maintenance & Repair Construction	\$9,606,519	\$5,180,506	\$4,269,046	68
Food Products & Tobacco	\$336,197	\$86,582	\$44,239	1
Textile Mill Products	\$0	\$0	\$0	0
Apparel	\$34,254	\$18,865	\$9,543	0
Paper & Allied Products	\$300,219	\$136,954	\$61,919	1
Printing & Publishing	\$1,099,278	\$552,148	\$360,387	6
Chemicals & Petroleum Refining	\$633,784	\$109,727	\$51,523	0
Rubber and Leather Products	\$809,563	\$342,017	\$199,961	4
Lumber Products & Furniture	\$466,172	\$151,776	\$108,197	2
Stone, Clay, & Glass Products	\$533,592	\$271,460	\$141,988	3
Primary Metal	\$1,785,691	\$541,051	\$402,736	7
Fabricated Metal Products	\$3,433,595	\$1,299,500	\$838,941	16
Machinery, Except Electrical	\$1,304,911	\$551,925	\$394,299	4
Electric & Electronic Equipment	\$1,080,571	\$594,415	\$355,383	3
Motor Vehicles & Equipment	\$0	\$0	\$0	0
Transp Equip, Except Motor Vehicles	\$283,948	\$118,917	\$77,725	1
Instruments & Related Products	\$0	\$0	\$0	0
Miscellaneous Manufacturing	\$17,488	\$6,547	\$4,484	0
Transportation	\$3,392,146	\$2,235,869	\$1,478,717	21
Communication	\$3,662,918	\$2,263,559	\$966,371	9
Electric, Gas, Water, Sanitary Serv	\$12,273,061	\$2,747,945	\$1,199,112	5
Wholesale Trade	\$3,255,980	\$2,200,909	\$1,269,086	15
Retail Trade	\$18,227,090	\$15,115,028	\$9,038,306	273
Finance	\$3,238,902	\$1,794,853	\$1,045,187	10
Insurance	\$1,326,296	\$796,866	\$476,421	6
Real Estate	\$16,350,847	\$3,040,691	\$489,916	5
Hotels, Lodging Places, Amusements	\$1,193,236	\$627,909	\$411,893	11
Personal Services	\$3,906,662	\$2,411,884	\$1,876,468	35
Business Services	\$3,288,519	\$1,891,360	\$1,542,871	21
Eating & Drinking Places	\$9,638,714	\$5,653,321	\$3,007,858	157
Health Services	\$5,108,575	\$3,583,254	\$3,029,668	56
Miscellaneous Services	\$5,865,807	\$2,414,652	\$2,093,335	55
Households	\$291,813	\$291,813	\$285,617	22
Total	\$292,840,107	\$98,651,756	\$56,252,426	969



Table 69

The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in the Barnett Shale Region Detailed Industrial Category

				Employment
Category	Total	Gross	Personal	(Permanen
	Expenditures	Product	Income	Jobs)
Agricultural Products & Services	\$132,142,883	\$36,525,539	\$24,875,525	341
Forestry & Fishery Products	\$1,521,608	\$1,704,498	\$632,390	
Coal Mining	\$5,635,281	\$1,633,060	\$1,720,590	-
Crude Petroleum & Natural Gas	\$5,722,413,087	\$1,254,082,836	\$578,380,855	3.284
Miscellaneous Mining	\$6,070,231	\$2,615,686	\$1,537,181	1
New Construction	\$1,038,706,363	\$472,172,022	\$389,099,404	6,355
Maintenance & Repair Construction	\$481,971,783	\$258,927,400	\$213,372,586	3,328
Food Products & Tobacco	\$145,289,729	\$37,474,996	\$19,143,389	299
Textile Mill Products	\$491,126	\$138,934	\$117,541	
Apparel	\$44,993,320	\$24,869,314	\$12,600,350	308
Paper & Allied Products	\$23,484,884	\$10,607,945	\$4,795,711	48
Printing & Publishing	\$56,601,340	\$28,382,901	\$18,525,884	26
Chemicals & Petroleum Refining	\$154,918,115	\$26,037,618	\$12,225,560	73
Rubber and Leather Products	\$34,677,335	\$14,786,397	\$8,643,964	159
Lumber Products & Furniture	\$18,897,524	\$6,285,070	\$4,481,958	52
Stone, Clay, & Glass Products	\$49,112,776	\$25,019,376	\$13,084,710	18
Primary Metal	\$43,575,687	\$13,305,586	\$9,904,179	17
Fabricated Metal Products	\$206,412,404	\$79,100,928	\$51,068,076	95
Machinery, Except Electrical	\$58,857,472	\$24,771,200	\$17,697,105	20
Electric & Electronic Equipment	\$29,105,938	\$15,928,750	\$9,522,158	6
Motor Vehicles & Equipment	\$19,655,604	\$4,482,326	\$2,912,572	2
Transp Equip, Except Motor Vehicles	\$7,582,757	\$3,175,104	\$2,073,772	1
Instruments & Related Products	\$3,600,764	\$1,545,931	\$1,175,224	
Miscellaneous Manufacturing	\$13,623,294	\$5,164,935	\$3,562,396	3.
Transportation	\$278,093,713	\$183,404,378	\$121,297,844	1,60
Communication	\$129,281,835	\$80,017,089	\$34,161,931	24
Electric, Gas, Water, Sanitary Serv	\$397,203,934	\$89,072,802	\$38,868,880	10
Wholesale Trade	\$255,601,574	\$172,844,159	\$99,663,238	1.12
Retail Trade	\$1,024,601,089	\$849,400,910	\$507,914,943	15,20
Finance	\$145,016,156	\$79,755,423	\$46,442,057	38
Insurance	\$93,862,143	\$56,307,082	\$33,662,163	36.
Real Estate	\$1,251,553,800	\$252,338,857	\$40,656,840	36
Hotels, Lodging Places, Amusements	\$88,202,325	\$46,234,248	\$30,330,888	76
Personal Services	\$214,396,928	\$132,431,506	\$103,034,133	1,86
Business Services	\$387,249,421	\$235,685,493	\$192,259,421	2,50
Eating & Drinking Places	\$499,717,537	\$292,972,410	\$155,877,575	8,01
Health Services	\$298,134,079	\$209,270,076	\$176,940,784	3,21
Miscellaneous Services	\$301,763,821	\$123,536,880	\$107,095,724	2,69
Households	\$11,579,945	\$11,579,945	\$11,334,452	76
Total	\$13,675,599,605	\$5,163,589,612	\$3,100,693,953	55,38

NOTE: All monetary values are given in constant 2006 dollars.

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

Table 70
The Current Annual Impact of All Major Sources of Stimulus Associated with the Barnett Shale on Business Activity in Texas
Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$173,471,304	\$47,890,501	\$32,614,424	447
Forestry & Fishery Products	\$3,817,284	\$4,229,124	\$1,565,343	12
Coal Mining	\$22,849,585	\$6,619,573	\$6,972,743	25
Crude Petroleum & Natural Gas	\$6,145,550,491	\$1,346,747,973		3,508
Miscellaneous Mining	\$8,803,130	\$3,793,465	\$621,120,663 \$2,229,255	3,506
New Construction	\$1,038,706,363	\$472,172,022	\$389,099,404	6,355
Maintenance & Repair Construction	\$527,160,798	\$282,764,039	\$233,016,960	3,622
Food Products & Tobacco	\$392,238,545	\$101,154,806	\$51,677,512	809
Textile Mill Products	\$4,949,705	\$1,404,011	\$1,188,689	15
Apparel	\$81,613,705	\$45,098,401	\$22,852,535	544
Paper & Allied Products			\$11,523,428	102
Printing & Publishing	\$56,626,097	\$25,490,406	\$27,995,710	382
Chemicals & Petroleum Refining	\$85,495,276	\$42,892,605	\$34,743,688	273
Rubber and Leather Products	\$442,810,431	\$73,990,642		240
Lumber Products & Furniture	\$53,651,922 \$24,260,981	\$22,896,860 \$8,092,810	\$13,381,920 \$5,770,723	65
				216
Stone, Clay, & Glass Products Primary Metal	\$59,877,380	\$30,559,586	\$15,982,289	422
Fabricated Metal Products	\$108,085,507	\$32,958,445	\$24,532,064	
Machinery, Except Electrical	\$227,310,426	\$87,103,284	\$56,231,697	1,051 365
	\$97,726,989	\$41,098,554	\$29,360,199	305 93
Electric & Electronic Equipment Motor Vehicles & Equipment	\$51,473,548	\$28,081,699	\$16,781,697	93 34
Transp Equip, Except Motor Vehicles	\$28,318,383	\$6,395,299	\$4,152,343	34 22
Instruments & Related Products	\$14,491,297	\$6,053,441	\$3,954,565	22 25
	\$12,156,360	\$5,217,185	\$3,967,993	
Miscellaneous Manufacturing	\$23,410,339	\$8,891,542	\$6,133,305	56
Transportation	\$324,668,779	\$214,560,864	\$141,904,106	1,917
Communication	\$234,888,326	\$145,136,826	\$61,963,103	530
Electric, Gas, Water, Sanitary Serv	\$626,358,435	\$140,450,460	\$61,287,238	174
Wholesale Trade Retail Trade	\$415,516,036	\$281,007,085	\$162,032,163	1,866
	\$1,148,250,259	\$951,850,324	\$569,178,988	17,021
Finance	\$182,455,271	\$100,104,695	\$58,290,365	452 794
Insurance	\$202,628,040	\$121,511,875	\$72,642,106	
Real Estate	\$1,743,095,535	\$374,353,906	\$60,316,279	567
Hotels, Lodging Places, Amusements	\$113,147,046	\$59,226,978	\$38,856,039	918
Personal Services	\$243,702,603	\$150,637,624	\$117,198,476	2,173
Business Services	\$628,080,896	\$386,435,635	\$315,231,969	4,039
Eating & Drinking Places	\$555,351,098	\$325,549,124	\$173,210,060	8,874
Health Services	\$375,051,506	\$263,057,762	\$222,417,773	4,005
Miscellaneous Services	\$328,034,586	\$133,853,317	\$116,039,632	2,911
Households	\$15,171,361	\$15,171,361	\$14,850,861	1,013
Total	\$16,821,255,621	\$6,394,504,111	\$3,802,268,311	65,953



Table 71

The Projected Typical Annual Impact of All Major Sources of Stimulus
Associated with the Barnett Shale on Business Activity in the Barnett Shale
Region (Average over 10 Years)—Detailed Industrial Category

				Employment
	Total	Gross	Personal	(Permanent
Category	Expenditures	Product	Income	. Jobs)
Agricultural Products & Services	\$259,045,084	\$71,663,406	\$48,806,162	704
Forestry & Fishery Products	\$3,013,750	\$3,437,395	\$1,275,255	11
Coal Mining	\$11,558,947	\$3,352,190	\$3,531,801	17
Crude Petroleum & Natural Gas	\$12,910,330,137	\$2,829,383,273	\$1,304,907,019	7,419
Miscellaneous Mining	\$12,000,332	\$5,156,077	\$3,030,466	26
New Construction	\$1,549,736,348	\$704,474,500	\$580,531,236	9,482
Maintenance & Repair Construction	\$1,041,819,249	\$560,257,163	\$461,687,122	7,262
Food Products & Tobacco	\$289,693,274	\$74,673,925	\$38,145,949	615
Textile Mill Products	\$947,906	\$276,657	\$233,992	4
Apparel	\$87,892,848	\$48,524,246	\$24,585,621	614
Paper & Allied Products	\$47,482,471	\$21,509,862	\$9,724,349	108
Printing & Publishing	\$112,775,054	\$56,606,615	\$36,947,902	544
Chemicals & Petroleum Refining	\$315,553,697	\$53,495,724	\$25,118,213	160
Rubber and Leather Products	\$68,479,401	\$29,110,103	\$17,017,446	317
Lumber Products & Furniture	\$37,193,171	\$12,293,401	\$8,766,182	117
Stone, Clay, & Glass Products	\$93,084,582	\$47,466,152	\$24,823,843	367
Primary Metal	\$78,707,254	\$23,959,955	\$17,834,734	305
Fabricated Metal Products	\$365,261,112	\$139,331,945	\$89,953,700	1,685
Machinery, Except Electrical	\$124,348,043	\$52,417,146	\$37,447,600	427
Electric & Electronic Equipment	\$60,495,434	\$33,159,951	\$19,823,313	137
Motor Vehicles & Equipment	\$39,678,195	\$9,136,479	\$5,936,441	59
Transp Equip, Except Motor Vehicles	\$15,544,122	\$6,516,515	\$4,256,255	33
Instruments & Related Products	\$7,292,984	\$3,131,760	\$2,380,802	18
Miscellaneous Manufacturing	\$26,964,936	\$10,187,660	\$7,026,872	71
Transportation	\$545,360,141	\$359,433,663	\$237,717,699	3,231
Communication	\$258,216,916	\$159,804,382	\$68,225,911	525
Electric, Gas, Water, Sanitary Serv	\$801,912,325	\$179,756,063	\$78,440,583	234
Wholesale Trade	\$507,899,952	\$343,407,864	\$198,011,482	2,271
Retail Trade	\$2,011,447,313	\$1,667,641,695	\$997,197,430	29,925
Finance	\$293,695,934	\$161,864,598	\$94,254,649	800
Insurance	\$188,124,620	\$112,915,135	\$67,504,393	747
Real Estate	\$2,562,826,490	\$539,024,365	\$86,847,947	795
Hotels, Lodging Places, Amusements	\$174,224,198	\$91,329,805	\$59,914,853	1,526
Personal Services	\$421,828,790	\$260,644,724	\$202,786,330	3,684
Business Services	\$718,260,658	\$432,904,665	\$353,140,102	4,606
Eating & Drinking Places	\$995,361,951	\$583,610,887	\$310,513,381	16,036
Health Services	\$585,445,584	\$410,914,132	\$347,433,472	6,349
Miscellaneous Services	\$594,489,612	\$243,414,681	\$211,019,301	5,369
Households	\$22,622,591	\$22,622,591	\$22,143,234	1,516
Total	\$28,240,615,406	\$10,368,811,350	\$6,108,943,041	108,116

NOTE: All monetary values are given in constant 2006 dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group

Table 72
The Projected Typical Annual Impact of All Major Sources of Stimulus
Associated with the Barnett Shale on Business Activity in Texas
(Average over 10 Years)—Detailed Industrial Category

Category	Total Expenditures	Gross Product	Personal Income	Employment (Permanent Jobs)
Agricultural Products & Services	\$341,660,024	\$94,397,033	\$64,286,701	930
Forestry & Fishery Products	\$7,495,405	\$8,440,970	\$3,125,543	28
Coal Mining	\$45,506,181	\$13,192,666	\$13,896,739	56
Crude Petroleum & Natural Gas	\$13,845,464,388	\$3,034,219,535	\$1,399,381,943	7,925
Miscellaneous Mining	\$17,289,235	\$7,429,369	\$4,366,535	35
New Construction	\$1,549,736,348	\$704,474,500	\$580,531,236	9,482
Maintenance & Repair Construction	\$1,134,432,093	\$609,196,393	\$502,018,126	7,873
Food Products & Tobacco	\$780,199,850	\$201,086,756	\$102,728,978	1,646
Textile Mill Products	\$9,692,466	\$2,826,619	\$2,393,411	35
Apparel	\$160,428,493	\$88,552,898	\$44,871,316	1,102
Paper & Allied Products	\$111,167,705	\$50,207,810	\$22,697,552	231
Printing & Publishing	\$169,257,851	\$84,994,326	\$55,475,123	798
Chemicals & Petroleum Refining	\$890,701,837	\$150,190,048	\$70,524,498	552
Rubber and Leather Products	\$105,535,035	\$44,905,037	\$26,245,636	478
Lumber Products & Furniture	\$47,643,301	\$15,798,272	\$11,265,636	147
Stone, Clay, & Glass Products	\$112,342,543	\$57,399,403	\$30,018,641	422
Primary Metal	\$194,905,657	\$59,249,173	\$44,101,022	754
Fabricated Metal Products	\$399,658,169	\$152,446,535	\$98,416,047	1,842
Machinery, Except Electrical	\$207,098,924	\$87,230,919	\$62,317,252	761
Electric & Electronic Equipment	\$103,283,178	\$56,451,551	\$33,738,298	210
Motor Vehicles & Equipment	\$55,685,892	\$12,712,657	\$8,255,141	77
Transp Equip, Except Motor Vehicles	\$28,572,379	\$11,956,191	\$7,811,174	49
Instruments & Related Products	\$23,901,201	\$10,258,863	\$7,801,320	56
Miscellaneous Manufacturing	\$46,297,066	\$17,524,991	\$12,088,528	126
Transportation	\$632,855,258	\$417,984,255	\$276,441,703	3,812
Communication	\$462,671,921	\$285,864,650	\$122,044,084	1,053
Electric, Gas, Water, Sanitary Serv	\$1,268,921,698	\$284,412,380	\$124,107,419	392
Wholesale Trade	\$815,365,282	\$551,342,016	\$317,910,163	3,692
Retail Trade	\$2,246,870,433	\$1,862,697,777	\$1,113,838,172	33,386
Finance	\$367,833,771	\$202,231,888	\$117,758,806	961
Insurance	\$400,203,795	\$240,125,893	\$143,552,334	1,604
Real Estate	\$3,575,572,368	\$798,995,168	\$128,734,981	1,215
Hotels, Lodging Places, Amusements	\$221,658,260	\$116,041,672	\$76,128,764	1,836
Personal Services	\$477,956,876	\$295,518,504	\$229,918,019	4,281
Business Services	\$1,160,083,388	\$707,385,138	\$577,044,629	7,417
Eating & Drinking Places	\$1,099,725,669	\$644,718,044	\$343,025,164	17,647
Health Services	\$735,125,604	\$515,559,442	\$435,911,015	7,919
Miscellaneous Services	\$644,512,371	\$263,043,580	\$228,036,924	5,799
Households	\$29,852,155	\$29,852,155	\$29,221,084	2,025
Total	\$34,527,164,069	\$12,790,915,075	\$7,472,029,657	128,652