

The Economic and Fiscal Impacts of Devon Energy in Denton, Tarrant, and Wise Counties

Prepared for Devon Energy by

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Introduction

Over the past six years, north Texas has witnessed an unprecedented natural gas drilling boom, with hundreds of wells completed in the Barnett Shale. Though geologists and engineers have known for decades that the Barnett holds up to 30 trillion cubic feet of natural gas, until recently production was both economically and technologically unworkable. But three important developments have made drilling and production economically feasible in the shale: the application of hydraulic fracturing that induces the brittle shale to release gas from the rock, severance tax incentives, and rising natural gas prices.

This new drilling and production activity in the Barnett shale has stimulated substantial employment growth in Denton, Tarrant and Wise Counties and generated millions of new tax dollars for local municipalities, counties and school districts. For example, according to the Wise County Appraisal District mineral valuations in 2003 exceeded \$1.4 billion. In the Northwest Independent School District, minerals—mainly natural gas—now account for 52 percent of total taxable property and currently yield more than \$6 million annually for the district.

Though many other companies are buying up leases and drilling wells, Devon Energy is by far the biggest player with approximately 310 full-time employees, dozens of contractors, and more than 3000 wells operating in the Fort Worth basin. Because of its large presence in the north Texas region, Devon contributes significantly to the local economy. In what follows, we examine the size and scope of Devon's economic and fiscal contributions with particular emphasis on Denton, Tarrant and Wise counties.

Our estimates of the economic and fiscal impacts of Devon Energy's operations in Denton, Tarrant, and Wise counties are based on financial data provided by Devon for 2003. These data are then used as inputs into an input/output model to estimate total impacts in the three counties. For this analysis we used an IMPLAN input/output model developed by the Minnesota IMPLAN Group. This model is widely used for academic and professional studies and offers appropriately conservative estimates of the direct, indirect, and induced impacts of economic activities. The direct impacts are those represented by Devon's spending on exploration and production activities. Indirect impacts represent the economic activity generated by Devon's vendors as they perform services or make goods acquired by Devon. Estimates of induced impacts are based on Devon's employees and contractors spending a portion of their earnings in the local economy.

Our analysis is divided into three components. In the first we examine the one-time impacts of site development and drilling activities. Once a well has been drilled and developed, the activity moves to another site and, for the most part, this category of spending ceases. The second component captures recurring spending, which includes maintenance and repair of facilities, salaries, and administrative expenses. Included in each of these components is the value of royalties, rents, and corporate profits that likely stay in the local area. Finally, we examine recent demographic, employment and fiscal trends in Denton, Tarrant and Wise Counties to illustrate how Devon's operations are contributing to regional prosperity.

Impacts of Site Development and Drilling Activities

In 2003, spending for site development and drilling by Devon totaled \$360 million in the three counties, creating over \$475 million in economic activity (see Table 1). More than \$96 million in labor income was paid to the 2,010 workers employed as a result of these activities. An additional \$109 million in property income increased Devon's impact on the regional economy. Moreover, state and local jurisdictions enjoyed \$22.5 million in direct, indirect, and induced tax revenues. Devon Energy's expenditures in 2003 are representative of spending levels in recent years.

Table 1

Economic and Fiscal Impacts of Site Development and Drilling Activities (Denton, Tarrant, and Wise Counties)

Description	2003 Impacts
Spending	\$ 360,261,000
Total Economic Activity	\$ 475,223,000
Total Labor Income	\$ 96,646,000
Total Employment	2,010
Total Property Income*	\$ 108,783,000
State and Local Taxes ⁺	\$ 22,501,000

* Includes royalties, rents, dividends, and corporate profits. + Includes sales, excise, property taxes, fees, and licenses. Sources: Devon Energy and authors' estimates

Impacts from Recurring Operations

Devon Energy's recurring operations also have a substantial impact on the regional economy. In 2003, Devon spent in excess of \$106 million on operations, maintenance, and repair of well facilities in the three counties creating more than \$136 million in economic activity. This activity supported 526 direct, indirect, and induced jobs boosting local labor income by \$25 million. Other property income from rents, royalties and other sources exceeded \$26.7 million that year, while state and local taxing

entities enjoyed a \$65 million boost to their revenues from Devon’s recurring operations (see Table 2).

Table 2
Economic and Fiscal Impacts of Recurring Operations
(Denton, Tarrant, and Wise Counties)

Description	2003 Impacts
Spending	\$ 106,520,000
Total Economic Activity	\$ 136,032,000
Total Labor Income	\$ 25,089,000
Total Employment	526
Total Property Income*	\$ 26,731,000
State and Local Taxes ⁺	\$ 66,583,000

* Includes royalties, rents, dividends, and corporate profits. + Includes sales, excise, property taxes, severance taxes, fees, and licenses. Sources: Devon Energy and authors’ estimates.

Total Impacts from Development, Drilling and Recurring Operations

While development and drilling activities cannot be assumed to continue *ad infinitum*, it is appropriate to consider the total impacts from all operations at a given point in time. Using data provided by Devon Energy from their financial statements in 2003, we estimated the company’s total impact on Denton, Tarrant, and Wise counties combined (see Table 3). In 2003, total impacts associated with Devon’s operations were \$611 million. Over 2,500 area jobs were supported by Devon paying in excess of \$122 million in wages, salaries, and benefits. In addition, property income from royalties, rents, dividends, and corporate profits boosted local income by \$135 million. State and local taxing jurisdictions also saw their Devon-related receipts increase to more than \$89 million. Clearly, Devon is one of the major sources of economic activity in the three-county area.

Table 3

**Total Economic and Fiscal Impacts of Devon Energy Operations
In Denton, Tarrant, and Wise Counties**

Description	2003 Impacts
Total Economic Activity	\$ 611,256,000
Total Labor Income	\$ 121,734,000
Total Employment	2,536
Total Property Income*	\$ 135,515,000
State and Local Taxes ⁺	\$ 89,084,000

*Includes royalties, rents, dividends, and corporate profits. + Includes sales, excise, property taxes, severance taxes, fees, and licenses. Sources: Devon Energy and authors' estimates.

Demographic, Employment and Fiscal Trends in Denton, Tarrant and Wise Counties

As suggested above, Devon Energy has contributed to the recent prosperity of the north Texas region. Table 4 indicates how rapidly the counties of Denton, Tarrant and Wise have grown, especially when compared to Dallas County. Denton and Wise Counties have posted double-digit population gains since 2000 while Tarrant's population has increased seven percent. By contrast, Dallas County's population has increased by a mere two percent.

Table 4

Population for Dallas, Denton, Tarrant, and Wise Counties

County	1990	2000	2003	% Change 1990-2000	% Change 2000-2003
Dallas	1,852,810	2,218,899	2,272,200	20%	2%
Denton	273,525	432,976	507,400	58%	17%
Tarrant	1,170,103	1,446,219	1,549,250	24%	7%
Wise	34,679	48,793	53,950	41%	11%

Source: North Central Texas Council of Governments

Recent employment gains are even more impressive (see Table 5). Since 1990, Denton and Wise Counties have recorded job growth of 61 percent and 71 percent,

respectively, while Tarrant County posted a gain of 23 percent. By contrast, net job growth between 1990 and 2003 was only 14 percent in Dallas County. Importantly, Devon Energy’s activities helped to offset some of the job losses in north Texas associated with the economic downturn of 2001 to 2003. Denton, Tarrant and Wise Counties continued to post net job growth during the recession even as Dallas County witnessed a four percent decline in employment.

Table 5

Employment for Dallas, Denton, Tarrant, and Wise Counties

County	1990	2000	2003	% Change 1990-2000	% Change 2000-2003
Dallas	1,016,748	1,198,735	1,147,564	18%	-4%
Denton	162,900	255,241	264,957	57%	4%
Tarrant	631,479	772,238	777,804	22%	1%
Wise	15,193	23,519	27,323	55%	16%

Source: U.S. Bureau of Labor Statistics

Job growth in the three-county region has been accompanied by significant income gains (see Table 6). Between 1990 and 2002, personal income jumped 185 percent in Denton County and 128 percent in Wise County while Tarrant County recorded a 99 percent income gain. Dallas County’s income growth was a more modest 93 percent over the 12-year period. Even during the recession of the early 2000s, income growth in the three-county region exceeded that of Dallas County.

According to recent projections from the North Central Texas Council of Governments (COG), Denton, Tarrant and Wise Counties will continue to outperform Dallas County in terms of population and job growth for the foreseeable future (see Tables 7 and 8). Energy production is one of the factors accounting for the faster growth projections.

Table 6**Personal Income for Dallas, Denton, Tarrant, and Wise Counties**

County	1990	2000	2002	% Change 1990-2000	% Change 2000-2002
Dallas	\$42,235,901	\$80,217,322	\$82,526,922	90%	3%
Denton	\$5,199,622	\$14,506,927	\$15,443,601	179%	6%
Tarrant	\$23,080,004	\$44,068,188	\$47,785,292	91%	8%
Wise	\$496,504	\$1,076,166	\$1,193,322	117%	11%

Source: Bureau of Economic Analysis

Table 7**Population Projections for Dallas, Denton, Tarrant, and Wise Counties
(000)**

County	2005	2010	2015	2020	2025	2030	% Change 2005-2030
Dallas	2,390.5	2,487.0	2,564.4	2,625.0	2,746.4	2,817.2	18%
Denton	546.0	643.6	758.9	862.3	989.3	1,085.3	99%
Tarrant	1,620.8	1,746.1	1,909.5	2,047.6	2,184.9	2,291.7	41%
Wise	56.2	65.8	74.6	82.8	93.1	102.4	82%

Source: North Central Texas Council of Governments

Table 8**Employment Projections for Dallas, Denton, Tarrant, and Wise Counties
(000)**

County	2005	2010	2015	2020	2025	2030	% Change 2005-2030
Dallas	1,924.2	2,055.7	2,198.4	2,334.4	2,467.8	2,529.4	31%
Denton	193.6	228.2	279.7	323.1	357.2	413.5	114%
Tarrant	985.1	1,077.3	1,168.7	1,265.5	1,340.2	1,388.2	41%
Wise	22.8	25.2	28.8	31.9	34.9	37.9	66%

Source: North Central Texas Council of Governments

As mentioned earlier, local governments and school districts in Denton, Tarrant and Wise Counties are receiving a windfall of tax receipts as a result of the operations of

Devon Energy and other energy producers. Table 9 and Figure 1 illustrate the tremendous gains in gas production and property values that have occurred just since 2000. More importantly, these higher valuations have generated huge property tax revenue gains for the three counties (see Table 10). Devon and the other operators in the three-county region have also helped fill the coffers of the state treasury through exponentially higher natural gas severance tax revenues (see Table 11).

Table 9

Production Value of Natural Gas
(\$000)

County	2000	2001	2002	2003	% change 2000-2003
Denton	\$12,746.6	\$26,042.2	\$130,838.2	\$363,528.9	2,752%
Tarrant	\$0	\$2,257.9	\$19,705.3	\$85,263.8	*3,676%
Wise	\$137,010.3	\$146,996.3	\$206,293.2	\$480,419.3	251%

* % change 2001-2003

Source: Texas Comptroller of Public Accounts

Table 10

Oil and Gas Property Tax Revenues

County	2000	2001	2002	2003	% change 2000-2003
Denton	\$110,860	\$473,153	\$951,067	\$2,783,624	2,411%
Tarrant	\$3,312	\$11,202	\$42,847	\$440,840	13,210%
Wise	\$1,139,716	\$2,973,090	\$3,024,554	\$5,483,608	381%

Source: Texas Comptroller of Public Accounts

Table 11

Natural Gas Severance Tax Revenue
(\$000)

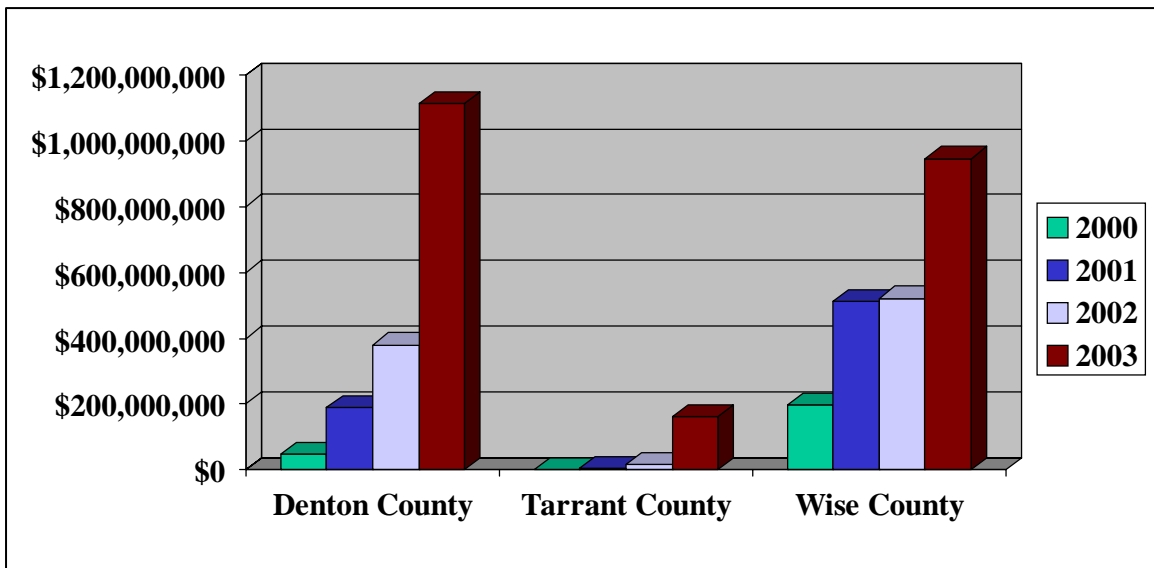
County	2000	2001	2002	2003	% change 2000-2003
Denton	\$956.0	\$1,953.2	\$9,812.9	\$27,264.7	2,752%
Tarrant	\$0	\$169.3	\$1,477.9	\$6,394.8	*3,676%
Wise	\$10,275.8	\$11,024.7	\$15,472.0	\$36,031.5	251%

* % change 2001-2003

Source: Texas Comptroller of Public Accounts

Figure 1

Oil and Gas Property Values



Source: Texas Comptroller of Public Accounts

Conclusion

As this report has shown, Devon Energy has a major impact on the economies of Denton, Tarrant and Wise Counties. In 2003 alone, Devon’s spending generated \$611 million of economic activity in the three-county region and supported more than 2,500

jobs. And nearly \$90 million of state and local tax revenues could be attributed to Devon Energy's operations last year.

Though it would be disingenuous to suggest that Devon Energy is solely responsible for the overall economic prosperity of the three-county region, without question Devon and the other gas producers operating in Denton, Tarrant and Wise Counties have helped stimulate the rapid population, employment and income gains recorded in recent years. And since natural gas prices are expected to remain high for the foreseeable future, Devon Energy will continue to be a major contributor to the regional economy in the years ahead.