

Texas Comptroller of Public Accounts
Economic Development and Analysis Division

**ESTIMATED IMPACTS¹
OF A NEW MANUFACTURING FACILITY²
ON THE ECONOMY OF SCURRY COUNTY, TX**

The Economic Development and Analysis Division of the Texas Comptroller of Public Accounts received a request for an economic impact study from Mr. Bill Lavers, Executive Director of the Development Corporation of Snyder (Texas). Mr. Lavers wanted to find out the potential impact of a new manufacturing facility on the economy of the area that his organization serves.

The following information was obtained from Mr. Lavers regarding the proposed activities of the new firm:

TABLE 1: Background Information.

NAICS Code	<ul style="list-style-type: none">• 326122³
Estimated Employment	<ul style="list-style-type: none">• 35 to start• 55 at full operations
Estimated Annual Payroll	<ul style="list-style-type: none">• \$1.5 Million
Expenditures to Construct and Put Facility into Operations	<ul style="list-style-type: none">• \$11.5 Million (for the facility)• \$2 Million (for the rail spur)
Estimated Firm Output	<ul style="list-style-type: none">• 50 to 60 million pounds per year• \$0.80 to \$1.10 per pound

SOURCE: Mr. Bill Lavers, Development Corporation of Snyder (e-mail correspondences between November 21 and 28, 2011).

For the purpose of this analysis, three distinct activities were estimated to assess their impacts on Scurry County⁴. These activities are as follows:

1. The impact of construction and establishment of the facility and its associated infrastructure;
2. The impact of firm operations at full capacity; and,
3. The impact of firm employees' payroll spending in the county.

Using the information presented above and the IMPLAN⁵ input-output models for Scurry County, the estimated contributions of these activities to the local total industry output⁶ and local employment are presented in Tables 2 through 4.

¹ The economic impacts generated in the reports/studies developed by the Economic Development and Analysis Division are subject to the disclaimers outlined in the following link:

<http://www.window.state.tx.us/texasedge/disclaimer.html>.

² The location for the new facility is in Snyder, TX.

³ NAICS 326122 represents the Plastic Pipe and Pipe Fitting Manufacturing Industry. (<http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=326122&search=2007> NAICS Search.)

⁴ The smallest geographic area that the IMPLAN model used in this analysis is able to examine is the county level. Given this limitation, the impacts of the above mentioned activities in Snyder will be examined at the county-level (Scurry County).

⁵ <http://www.implan.com/>

Texas Comptroller of Public Accounts
Economic Development and Analysis Division

Impact of Facility and Infrastructure Construction

TABLE 2: Estimated Impacts of Facility and Infrastructure⁷ Construction to Total Industry Output in Scurry County.

Direct Impact	Indirect Impact	Induced Impact	Total Impact
\$13.5 million	\$1.4 million	\$1.7 million	\$16.6 million

SOURCES: IMPLAN Input-Output Model for Scurry County & TxCPA calculations.

Based on the information presented in Table 1, it was assumed that a total of \$13.5 million will be spent (locally) on the construction of the facility and the rail spur. Approximately 85 percent of this direct expenditure (\$11.5 million) is for the facility while the remaining 15 percent (\$2 million) will be used to build the rail spur. Incorporating this information into the county's IMPLAN Model shows that an additional \$3.1 million of economic activity (industry production) will be generated by other industries in the county's economy. Approximately \$1.4 million of this activity will be generated by in-county industries that supply inputs to the construction and establishment of the facility and its associated infrastructure (Indirect Impact). The remaining \$1.7 million of total industry output generated by the county's businesses will represent the production of goods and services⁸ that cater to the consumer needs of the construction workers and the employees of in-county supplying industries (Induced Impact). Overall, the construction and establishment of the facility and its associated infrastructure will generate over \$16.6 million of total industry output from Scurry County industries.

It should be noted that no employment estimated were included in this segment of the analysis. The reasons for this are (1) no construction employment estimated were provided; and, (2) construction employment is temporary in nature and its indirect and induced impacts will be short-lived.

Impact of Firm Operations

In order to estimate the potential impact of the new firm on the area economy, the following assumptions were employed:

1. The firm is operating at employment levels equivalent to 55 workers; and,
2. Total output for the firm is estimated at \$52.3 million. This represents the product of 55 million pounds⁹ of output at a per pound price of \$0.95¹⁰.

⁶ Total industry output refers to the total dollar value of all goods and services (both intermediate and final) produced in the local economy.

⁷ The proposed rail spur.

⁸ Examples of the industries producing these goods and services are banks, grocery stores, gasoline stations, hospitals and restaurants.

⁹ Average of the minimum (50 million) and maximum (60 million) output.

¹⁰ Average of the minimum (\$0.80) and maximum (\$1.10) price per pound of output.

Texas Comptroller of Public Accounts
Economic Development and Analysis Division

Given these assumptions, the estimated impacts of the firm's operations on the county's total economic output and employment are presented in Table 3.

TABLE 3: Estimated Impacts of the New Firm's Operations on Total Industry Output and Employment in Scurry County.

Variable	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Total Industry Output	\$52.3 million	\$4.3 million	\$0.8 million	\$57.4 million
Employment	55 workers	25 workers	9 workers	89 workers

SOURCES: IMPLAN Input-Output Model for Scurry County & TxCPA calculations.

In terms of total industry output, the firm's estimated production of \$52.3 million is anticipated to generate an additional \$5.1 million in the production of intermediate and final goods and services in the county economy. Approximately 84 percent (\$4.3 million) of this additional output are expected to be generated by in-county industries that supply inputs to the firm (indirect impact). The remaining \$800,000 of output is projected to be generated by in-county firms that will provide for the consumer needs of the firm's and input-supply industries' workers (induced impact).

As far as employment is concerned, the firm is expected to employ 55 workers at full capacity. It is assumed that this level of employment is needed to support the production of over \$52 million worth of output. Input-supplying firms in the county are projected to devote 25 workers (indirect impact) to produce \$4.3 million worth of inputs for the firm. An additional 9 workers (induced impact) in other industries in the county are anticipated to help produce more than \$800,000 worth of consumer goods and services to provide for the needs of the firm's and input-supplying industries' workers. Overall, in order to produce \$57.4 million of goods and services that stem from the projected operations of the new manufacturing facility, a total of 89 workers in Scurry County will need to be mobilized.

Impact of Firm Employee Expenditures

Based on Table 1, the firm's expected annual payroll is approximately \$1.5 million. Workers receiving this income are likely to spend their income on consumer goods and services. Such expenditures will trigger the production of goods and services in the county. In order to estimate the impacts of payroll expenditures, the following assumptions were used:

1. The annual payroll of the new firm's workers are to be spent in Scurry County; and,
2. The annual payroll will be reduced from \$1.5 million to \$1.275 million to reflect the 15 percent marginal tax imposed on federal income taxes for persons earning approximately \$27,272¹¹.

¹¹ Average income given average annual payroll of \$1.5 million and employment at 55 workers. The 15 percent marginal tax rate was obtained from the Tax Foundation's US Federal Individual Income Tax Rates History, 1913-2011 (<http://www.taxfoundation.org/publications/show/151.html>).

Texas Comptroller of Public Accounts
Economic Development and Analysis Division

Incorporating these assumptions into the direct impact column, Table 4 shows the projected indirect, induced, and total impacts associated with the estimated consumer spending of the new firm's workers in Scurry County.

TABLE 4: Estimated Impacts of Firm Employee Consumer Spending on Total Industry Output in Scurry County.

Direct Impact	Indirect Impact	Induced Impact	Total Impact
\$1,275,000	\$52,000	\$38,831	\$1,365,831

SOURCES: IMPLAN Input-Output Model for Scurry County & TxCPA calculations.

The IMPLAN model for Scurry County estimated that the direct consumer spending of \$1.275 million by the new firm's workers will generate an additional \$90,831 spending associated with the production of goods and services in the county. Approximately 57 percent of this additional spending/production (\$52,000) will be generated by in-county industries that will supply inputs to local firms¹² that provide consumer goods and services to the new firm's workers. An additional \$38,831 in induced impact will be triggered by the consumer spending associated with the new firm's workers.

¹² Examples of these firms include grocery stores, banks, hospitals, restaurants, etc.