

The closure of the Cargill plant in Plainview, Texas, came as a surprise to many people in the region and in the agriculture industry overall. The closure has sparked a need for employees to find other employment opportunities either locally or outside the region. Concern for the welfare of these former employees, their families, and the affected communities is evident throughout Hale County as seen in career fairs and other support efforts. Recent newspaper articles have noted that many employees and community members have shown an appreciation for Cargill, while at the same time undergoing challenges and seeking new employment, either locally or outside the region.

Plainview and Hale County leaders are exploring opportunities to stabilize the local business community and to support displaced workers, which account for almost 13 percent of the county's workforce. Understanding the economic impacts of the closure and the potential development opportunities is critical.

Economic Impact

The loss of 2,000 jobs at the Plainview plant includes an estimated loss of more than \$865 million in gross sales and \$60 million in labor income from the plant alone. However, some of that employment and income loss is spread across other counties where workers reside. An estimated 1,462 jobs and \$41.0 million in labor income lost occurred in Hale County. Adjacent Castro, Floyd, Lamb, and Swisher counties were estimated to lose about 156 jobs and \$4.4 million in pay (Table 1). The employment and income attributed to each county was calculated based on commuting patterns.ⁱ

Table 1. Estimated direct employment and labor income losses by county.

County	Employment	Labor Income
Castro	8	\$224,448
Floyd	58	\$1,627,248
Hale	1,462	\$41,017,872
Lamb	40	\$1,122,240
Swisher	50	\$1,402,800
Other Counties	538	\$15,094,128

The direct effect of the plant closure is multiplied because other area businesses supplying the packing house will experience reduced business-to-business sales (indirect effect) and the former employees of the packing house and other affected businesses will generate less household spending in the region (induced effect). The total impact on the economy is the sum of the direct, indirect, and induced effects. For Hale County, the total loss resulting from the packing plant closure is estimated at \$1.0 billion in output (gross sales), including \$285.9 million in value-added (contribution to gross regional product) and \$97.2 million in labor income, as well as almost 2,600 full-and part-time jobs (Table 2).ⁱⁱ Of course, some workers will find other jobs in the area or commute and spend at least part of their earnings in Hale County, mitigating the losses.

Table 2. Economic loss impacts of packing house closure on Hale County, net of workers residing in surrounding counties.

Impact Type	Output	Value Added	Labor Income	Employment
Direct Effect	\$866,616,700	\$199,865,500	\$45,719,100	1,462.0
Indirect Effect	\$132,918,800	\$63,935,400	\$39,784,700	767.4
Induced Effect	\$36,872,300	\$22,056,100	\$11,667,400	366.0
Total Effect	\$1,036,407,800	\$285,856,900	\$97,171,200	2,595.4

The surrounding counties may experience some loss of business-to-business sales, but the primary loss in these counties will be due to reduced incomes. Each county is estimated to lose \$70,800 to \$436,000 in gross sales (Table 3) in addition to the income loss directly attributable to the packing plant closure (Table 1). These figures are low relative to the \$4.4 million in income loss across the four counties because of leakages in spending. A large portion of residents' incomes are spent outside the counties and in larger cities such as Plainview, Lubbock, and Amarillo and even outside the state.

Table 3. Induced economic loss impacts to surrounding counties resulting from reduced labor income.

County	Output	Value Added	Labor Income	Employment
Castro	\$70,800	\$44,700	\$25,000	0.6
Floyd	\$436,000	\$278,500	\$122,000	4.6
Lamb	\$284,600	\$180,900	\$78,700	2.6
Swisher	\$418,600	\$250,500	\$113,000	4.4

The common losses between Hale County and surrounding counties underscore the potential benefits of regional planning and collaboration to mitigate economic damage from negative events and to enhance the benefits of future development efforts.

Tax Implications

The full tax implications of the plant closure are difficult to assess, especially given that the plant will be idled and maintained with the expectation of reopening in the future. Depreciation and the value of equipment that remains at the facility will affect tax revenue to the county and other local taxing units. Some decrease in property values is likely to occur as the supply of housing exceeds demand. Evidence from other locations and real estate expert opinion suggests that property value declines could be 10% or more, resulting in estimated tax revenue decreases as outlined in Table 4.ⁱⁱⁱ

Table 4. Estimated changes in property tax revenues by taxing unit.

Taxing Unit	2011 Base	10%	25%
Hale County	\$9,713,300	\$9,033,400	\$8,013,500
Lockney Independent School District	\$4,100	\$3,800	\$3,400
Abernathy Independent School District	\$7,393,700	\$6,876,200	\$6,099,800
Cotton Center Independent School	\$536,800	\$499,200	\$442,900
Hale Center Independent School District	\$1,207,600	\$1,123,100	\$996,300
Petersburg Independent School District	\$665,800	\$619,200	\$549,300
Plainview Independent School District	\$11,985,500	\$11,146,500	\$9,888,000
Olton Independent School District	\$248,900	\$231,500	\$205,400
City of Abernathy	\$342,600	\$308,400	\$257,000
City of Hale Center	\$233,800	\$210,400	\$175,400
City of Petersburg	\$191,600	\$172,400	\$143,700
City of Plainview	\$4,328,800	\$3,896,000	\$3,246,600
High Plains Underground Water	\$152,400	\$141,700	\$125,700
Swisher County Taxing Units Likely to Be Significantly Affected			
Tulia Independent School District	\$1,640,400	\$1,525,500	\$1,353,300
Kress Independent School District	\$672,400	\$625,300	\$554,700
City of Kress	\$58,000	\$52,200	\$43,500
City of Tulia	\$319,400	\$287,500	\$239,600

A higher rate of tax delinquency is also expected as people are unable to pay their taxes due to reduced incomes or are unable to rent unoccupied housing units. The extent to which those declines can be offset by higher tax rates is a political question, but one would expect opposition to tax rate hikes in the face of reduced county income.

Sales tax revenues are estimated to decrease by \$1.3 million in the county as business activity declines (Table 5). This decline in tax revenue within the county is associated with a \$67.5 million dollar decrease in taxable sales, about 14.1 percent of the 2011 taxable sales recorded by the Texas Comptroller, and a \$174.8 million decrease in total (taxable and non-taxable) sales.^{iv}

Table 5. Estimated sales tax losses and associated losses in sales for sales taxing units within Hale County.

Taxing Unit	Sales Tax or Sales Loss
City (approx. 95% to Plainview, 1.5¢ tax)	\$1,012,300
Hale County (0.05¢ tax)	\$337,400
Total revenue w/in county	\$1,349,700
<i>Revenue to State of Texas (6.25¢ tax)</i>	<i>\$4,217,800</i>
Decline in taxable sales in the county	\$67,485,100
Estimated decline in total sales	\$174,847,800

As residents migrate from Hale County to pursue employment elsewhere, some of the burden of reduced tax revenues will be mitigated by a reduced need for specific services. However, infrastructure will need to be maintained for the safety and welfare of the population as well as in anticipation of an increased need for infrastructure, services, and amenities should the plant re-open or other development opportunities materialize. Unfortunately, the demand for many social services increases as families face increased financial and emotional pressures. For example, the mental health of laid off workers declines in the first 12 to 18 months and then recovers while their physical health starts out strong but declines over time.^v Many of these services are provided by state and federal agencies, but social service providers within the county are likely to see increased workloads.

Ultimately, development to offset the loss of the plant will help to replace lost revenues, although such development is also likely to incur some costs. Cooperation between governmental (e.g., county, local) and quasi-governmental (e.g., economic and community development corporations, institutions of higher education, and workforce training agencies) units may address both resource-sharing and development opportunities. Still, a reduction in population and resources is likely to necessitate unpopular decisions, such as consolidation of government functions and elimination of some services.

Skills and Opportunities

The animal slaughtering, rendering, and processing sector has traditionally been the largest industry in Hale County, in terms of output as well as employment and income. The industry generated 32% of total sales and employed 11 percent of employees in the county. The next largest industries by employment are state and local government (non-education) and colleges and universities. In terms of total sales, the second largest industry is flour milling, which has just over a third of the sales of the animal processing industry. The sector with the third largest sales was imputed rental activity for owner-occupied housing, followed by crop farming and trucking. Both housing values and the trucking industry are also likely to suffer as a result of the plant closure. Agriculture and agribusiness, supporting more than \$500 million in sales in the county even after the packing plant closure, will remain an important industry.

The packing plant supported 9 percent of labor income in Hale County. Most jobs required workers with a high school diploma or less education. This demand supported a wage structure that allowed low-education workers to narrow the wage gap with more educated workers in the region relative to the wage gap in Texas and the U.S. (Figure 1).^{vi} As a result, the county has a larger proportion of workers with no diploma or only a diploma than the rest of the state.^{vii} At the same time, workers with less education and lower wages are often less mobile

than more educated, highly paid workers for a variety of economic and social reasons, which may increase the need for job placement assistance.

Of course, the absence of a formal education does not indicate a lack of worker skills or ability. The O*NET occupational database identifies skills held by plant workers and potential target industries for their future employment.^{viii} Their dependability, coordination, and time management skills, as well as their strength, dexterity and stamina, will prove attractive to many industries that deal with practical problems requiring hands-on solutions. Occupations well-suited to the local economy and resources may include nursery and farm workers, production workers, machine operators, and welders.

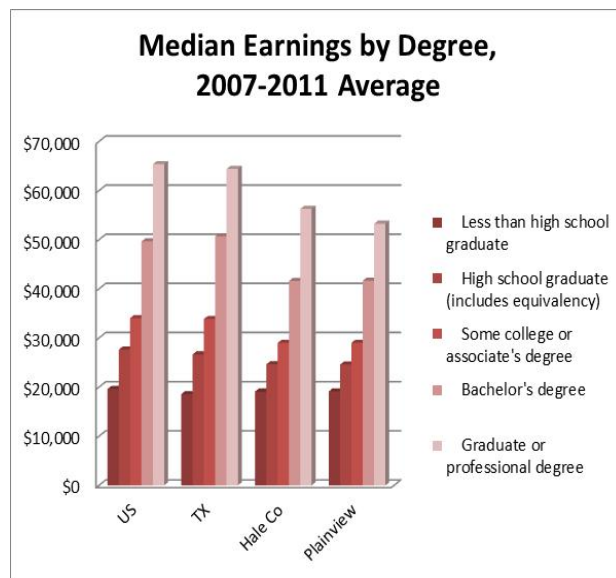


Figure 1. Median earnings by education level.

Concluding Remarks

The closure of the packing plant will significantly impact the local and regional economies. However, the magnitude of the impact, particularly on the real estate sector and local government revenues and budgets, is uncertain and depends upon the opportunities that are available to displaced workers and the reaction of the region's officials and other community leaders.

ⁱ U.S. Census Bureau. 2012. On the Map. <http://onthemap.ces.census.gov/>.

ⁱⁱ MIG. 2011. IMPLAN 2009 Software and Data.

ⁱⁱⁱ Tax Rates and Levies by County. 2011. <http://www.window.state.tx.us/taxinfo/proptax/taxrates/>. Actual revenues may be slightly lower because fixed deductions will make up a larger portion of value.

^{iv} Texas Comptroller Sales Tax Historical Data. <https://ourcpa.cpa.state.tx.us/allocation/HistSales.jsp>. Total sales are based on taxable sales equal to 38.6% of total sales in 2011, the latest year for which data is published.

^v Beer, A. and H. Thomas. 2008. Editorial: A tale of two cities: auto plant closures and policy responses in Birmingham and Adelaide. *Policy Studies* 23(3): 249-253.

^{vi} U.S. Census Bureau. 2012. American Community Survey, 5-year Estimates, Median Earnings in the Past 12 Months, 2007-2011, Table B20004.

^{vii} U.S. Census Bureau. 2012. American Community Survey, 5-year Estimates, Educational Attainment, 2007-2011, Table S1501.

^{viii} <http://www.onetonline.org/>.