



# Agricultural and Resource Policy Report

**Colorado  
State  
University**

**Extension**

Department of Agricultural and Resource Economics, Fort Collins, CO 80523-1172  
<http://dare.colostate.edu/pubs>

## THE ESTIMATED VALUE OF CONAGRA PACKING PLANTS IN WELD COUNTY, CO

Andrew Seidl and Stephan Weiler <sup>1</sup>

- *"Agribusinesses directly account for about 36% of Weld County's economy."*
- *"Meat-packing plants directly account for about 14% of total economic activity."*
- *"About 25% of Weld County's economy is linked to the ConAgra packing plants."*

### Introduction

Agriculture and agribusiness are very important to the Weld County economy and traditional lifestyle. The total value of Weld County economic activity in 1996 (the most recent year for which we have complete aggregate information) reached almost \$8 billion. Agriculture and agribusinesses directly accounted for about 36% of that total and their indirect and induced effects imply a strong influence on the local economy. As the single most important sub-sector of the county economy by some four-fold in terms of sales, meat-packing plants alone directly accounted for about 14% of total economic activity. We estimate the impact of ConAgra's beef and lamb packing plants to the Weld County economy in order to provide county residents information to guide their decision-making toward their economic development objectives.

### Direct, indirect, induced, value-added and total economic impacts

Meat-packing is a "basic" industry to Weld County. Basic industries provide new income to a locality by selling (exporting) goods and services to people outside of the locality. Meat and meat-animal product sales and the local jobs and income directly responsible for the production of meat products sold represent the direct impact of the industry on the county.

The Weld meat-packing industry also generates indirect impacts as the revenues from external sales of meat-animal products are respent in the county. The indirect impact of the meat-packing industry on Weld County includes purchases of a variety of agricultural inputs and professional services in the process of producing meat and meat products. These effects appear as local jobs and income in those industries serving the meat packing industry (e.g., feed lots, veterinarians, feed suppliers, rendering plants, implement suppliers, trucking and transport).

In addition to the direct and indirect impacts of the production and sales of meat-animal products outside of Weld County, the meat-packing industry is responsible for induced economic impacts in the form of the

<sup>1</sup> Assistant Professors, Departments of Agricultural and Resource Economics and Economics, respectively, Colorado State University, Ft. Collins, CO, 80523-1172. Contact: [aseidl@agsci.colostate.edu](mailto:aseidl@agsci.colostate.edu). T: 970-491-7071; F: 970-491-2067.

local goods and service purchased by people using the salaries and wages earned contributing to the productivity of the meat-packing industry. These induced expenditures translate into jobs and income for retailers, bank tellers, grocery store clerks, restaurant employees, and gas station attendants.

Output effects are the effects driven by the sales of meat and meat-animal products outside of the county (exports). Employment effects are the jobs created by the direct, indirect and induced effects of the sale of meat and meat-animal products. Export sales also contribute to the value of the packing plant and result in economic returns to the owner of the plant, his employees, and to the county in the form of business and property taxes. These are the valued-added portion of the total output impacts of meat and meat product production. An estimate of the total economic impact of the meat-packing industry on Weld County can be derived as the sum of its direct, indirect and induced impacts implied by export sales and intra-county value-added.

#### **Local economic impact multipliers**

The term “multiplier” is used to refer to the total amount of economic activity or impact generated by a dollar of export sales. Multipliers are commonly expressed in terms of local sales, income, jobs, or value-added generated per dollar of export sales.

Output or sales multipliers provide a measure of total sales in the local economy per dollar of external (export) sales. The output multiplier for meat packing plants in Weld County is 1.898 indicating that \$1.90 in total sales takes place in Weld County for each dollar of sales outside of the county. Analogously, employment multipliers indicate the number of local jobs generated per million dollars of external sales. The meat-packing industry directly or indirectly generates 10.83 jobs for each million dollars of sales in meat and meat-animal products. Of the total export sales multiplier, the value-added multiplier indicates the total returns to the primary factors of meat production in Weld County for each dollar of sales outside of the county. The total value-added multiplier for the Weld County meat-packing industry is mostly comprised of proprietor and employee earnings (multipliers of 0.05 and 0.22, respectively). Direct, indirect, induced, multipliers are reported for employment, output and value-added impacts on the local economy.

#### **Economic Value of ConAgra Packing Plants to Weld County**

While their slaughter capacity may exceed 1.5 million head per year, ConAgra has indicated that they purchased approximately 723,000 beef cattle and 675,000 lambs for approximately \$628 million dollars in Weld County in 1999. These purchases were from feedlots, both their own and other proprietors, for the purpose of processing them in one of the two ConAgra meat-packing plants located in Weld County. In order to estimate the value of the packing plants to the local economy, animal purchases going into the packing plant from feedlots must be transformed into sales of meat and meat products coming out of the packing plant. Our best estimate of total output sales from the two ConAgra packing plants is \$1.3 billion in 1999.

Table 1 indicates that 1999 sales of \$1.3 billion worth of meat and meat-products sold by the two ConAgra plants provided the equivalent of almost \$2.5 billion in total economic impact in Weld County. About \$300 million of the total was in employee compensation for more than 14 thousand workers. A little more than 1/2 of the total economic activity generated by these sales accrues directly to the meat packing business, while a little less than 1/2 accrues to those industries providing goods and services to the industry and its employees. A little more than 1/3 of the employee compensation and less than 1/3 of the jobs generated by these sales are in the meat-packing industry. The other 2/3 of the salaries, wages and jobs generated are in the Weld County industries that provide goods and services to the ConAgra and its employees (Table 1).

Table 2 catalogues the 20 industries having an \$8 million or more relation with the operation of the ConAgra meat packing plants in Weld County in terms of estimated monetary, job and employee compensation impacts. The estimated related activity in these listed industries account for more than 90% of the total estimated economic activity from the plant, 80% of employee compensation and 75% of the jobs in the county. Logically, the greatest impacts are in the meat packing industry, followed by cattle feed lots, wholesale trade, the sheep, lambs and goats industry, motorized freight and trucking services, and ranch fed cattle (Table 2).

#### **Caveats**

We have calculated and reported these effects in terms of output impacts, value-added impacts and

**Table 1: Economic Value of ConAgra Packing Plants to Weld County**

	Total Output (1999\$)	Employee Compensation (1999\$)	Employment (FTE)
Direct	1,300,000,000	119,921,624	3,773.9
Indirect	1,005,281,061	121,743,657	7,481.1
Induced	161,870,030	55,887,091	2,829.1
<i>Total</i>	<i>2,467,151,112</i>	<i>297,552,372</i>	<i>14,084.1</i>

Source: Baseline sales provided by ConAgra. Calculations based upon estimated \$1.3 billion in export sales of meat and meat products from Weld County in 1999. Calculated with IMPLAN regional input-output economic impact estimator, 1997.

**Table 2: Weld County industry-specific value of ConAgra packing plants**

	Total output (\$)	% of total	Employee comp. (\$)	Employment (FTE)
Meat packing plants	1,326,932,224	53.78	122,406,048	3,852.0
Cattle feedlots	556,711,424	22.56	28,519,406	1,544.1
Wholesale trade	70,352,128	2.85	27,216,076	812.8
Sheep, lambs and goats	59,859,680	2.43	1,765,090	1,735.7
Motor freight transport	47,167,172	1.91	12,157,566	474.2
Ranch fed cattle	39,276,796	1.59	909,584	185.2
Real estate	30,397,942	1.23	1,389,116	167.2
Banking	25,405,340	1.03	5,919,268	191.5
Maintenance & repair, industrial	21,088,392	0.85	8,693,061	316.9
Range fed cattle	17,286,724	0.70	256,240	58.9
Owner-occupied dwellings	14,196,744	0.58	0	0
Doctors & dentists	12,401,479	0.50	5,944,278	147.7
Insurance carriers	12,260,304	0.50	3,482,875	111.6
Eating & drinking establishments	11,071,510	0.45	3,490,234	364.6
Hospitals	9,741,693	0.39	5,049,605	172.0
State & Local Gov't, non-ed.	9,399,051	0.38	7,680,948	228.6
Electrical services	9,294,282	0.38	1,580,110	21.0
Other medical & health services	8,539,885	0.35	2,860,979	183.1
Paperboard containers & boxes	8,491,223	0.34	1,847,388	48.9
Agricultural services	8,039,881	0.33	3,711,963	377.6

Source: Baseline sales provided by ConAgra. Calculations based upon estimated \$1.3 billion in export sales of meat and meat products from Weld County in 1999. The 20 industries with in-county estimated relation of greater than \$8 million in economic activity are shown. Calculated with IMPLAN regional input-output economic impact estimator, 1997.

employment impacts by the local industries most strongly affected by this economic activity. The tool used to generate the estimates of these impacts is termed a "multiplier." Multipliers are imperfect measures of economic impact and changes in social welfare. However, they do provide a basis from which policy related discussion might take place.

In isolation, multipliers do not indicate what the opportunity cost of using scarce resources in a particular activity is; they do not indicate highest and best use. Estimates based upon multipliers will be imperfect because of locally specific leakages at each successive round of spending (due to imported purchases, taxes, fees, savings, and non-local beneficiaries), lack of

consideration of such important issues as new construction and potential environmental impacts of the industry, and due to the fact that multipliers are not precisely calculated using the actual situation in the specific locality. Furthermore, given the breadth and depth of the plants' role in the Weld County's economic structure, these valuations may understate their impact. For example, the local labor market has developed its particular characteristics because of the plants' labor demands.

In isolation, multipliers do not indicate what the opportunity cost of using scarce resources in a particular activity is; they do not indicate highest and best use. Estimates based upon multipliers will be imperfect because of locally specific leakages at each successive round of spending (due to imported purchases, taxes, fees, savings, and non-local beneficiaries), lack of consideration of such important issues as new construction and potential environmental impacts of the industry, and due to the fact that multipliers are not precisely calculated using the actual situation in the specific locality.

Multipliers will not take into account the impact of externalities such as odor/air quality, water quality, and life style that may be quite important to this issue. These estimations may not capture the fact that tradi-

tionally high turnover rate in the meat-packing industry has implications for the quality of benefits provided by the employer and the type of employee attracted to the industry. In addition, not all economic activity should be interpreted as good economic activity. For example, if an industry provides a large indirect contribution to the hospital and medical industry, it may be that it is a dangerous and potentially undesirable profession to be used to spur economic development.

### **Conclusions**

The ConAgra packing plants and feed lots are practically synonymous with Greeley and Weld County. Aspects of this coevolution have positive connotations and some features can be negatively received. As a highly important part of the Weld County economy, local change in the meat packing industry implies significant change in the county's social and economic landscape. We have estimated that more than 25% of Weld County's economic activity is tied to animal agriculture. Some 14 thousand jobs and \$300 million in employee compensation in Weld County are linked to the industry. We put these estimations forward as an essential point of departure for the reasoned discussion of the value of the ConAgra packing plants to Weld County and the potential impact of future changes in the County and its economy.