

# **Economic Importance of and Economic Impacts Associated with Livestock Production in Phelps County, Nebraska**

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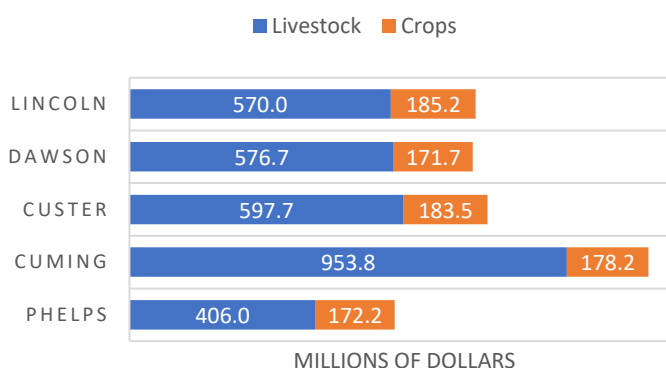
## Executive Summary

Information provided in this report focuses on the economic importance of the livestock sector in Phelps County, Nebraska (Phelps County). The first part of the report reviews agriculture data from the *2017 Census of Agriculture*. The second part of the report analyzes the direct, indirect, and total economic impacts associated with livestock operations in Phelps County. This analysis utilizes an IMPLAN input-output (I-O) database and model developed specifically for Phelps County.

### Livestock and Agricultural Production in Phelps County, Nebraska

The *2017 Census of Agriculture* provides data showing the importance of agriculture and the livestock sector in Phelps County. Data presented in the chart indicate the market value of agricultural products sold in Phelps County totaled \$578.2 million in 2017. Considering the per farm value of agricultural products sold, Phelps County's average of \$1,558,601 ranked 1<sup>st</sup> among Nebraska's 93 counties and was 329.1 percent of the state per farm average of \$473,652.

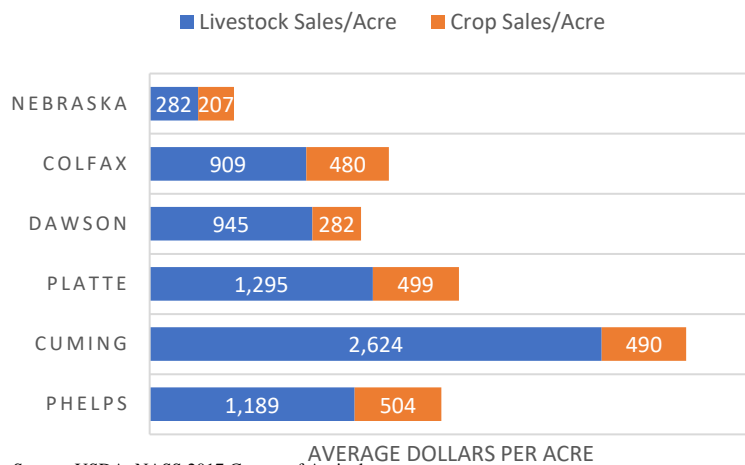
**MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD, PHELPS COUNTY & SELECTED OTHER COUNTIES, 2017**



Source: USDA, NASS 2017 Census of Agriculture

The average market value of agricultural products sold per acre is shown in the current chart and includes the data for Phelps County and for the other leading five counties in terms of this measure, along with the Nebraska data. Phelps County, with a value of \$1,693, ranks 3<sup>rd</sup> among

**AVERAGE PER ACRE VALUE OF AGRICULTURAL PRODUCTS SOLD, PHELPS COUNTY & SELECTED OTHER COUNTIES, 2017**



Source: USDA, NASS 2017 Census of Agriculture

the Nebraska counties in terms of the market value of agriculture products per acre, with \$1,189 of that amount accounted for by livestock and livestock products. Phelps County's per acre average for all agricultural products is 347.0 percent of the state per acre average of \$488.

Data provided in this report indicate that livestock and livestock products are a significant source of income for Phelps County farmers. The per farm market value of livestock and livestock products sold averaged \$1,094,382 (70.2

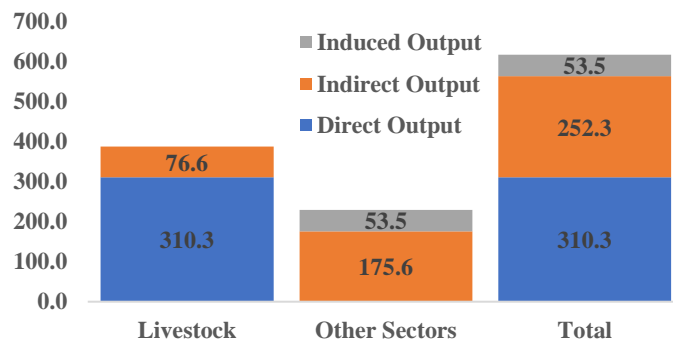
percent of the total market value of all agricultural products sold) for Phelps County, ranking the county 3<sup>rd</sup> among the Nebraska counties in terms of this measure. The average Phelps County per farm value for livestock and livestock products sold was 401 percent greater than the average per farm value of \$272,709 for Nebraska as a whole.

**Economic Impacts Associated with Livestock Production in Phelps County, Nebraska**

The second part of the report provides an assessment of the positive employment and other economic effects associated with the production of livestock and livestock products in Phelps County. The analysis utilizes an IMPLAN input-output (I-O) model developed for Phelps County. The major positive employment and other economic effects associated with the production of livestock and livestock products are summarized in the continuing portion of the Executive Summary.

**- Total Output Effects:** The total 2017 value of output directly associated with sales to final demand by the livestock sector in Phelps County is estimated to be \$310.3 million. When the secondary output effects (indirect and induced output) are added, the total output effects associated with the production of livestock and livestock products in Phelps County are estimated to be \$616.1 million. Of this total, 62.8 percent (\$386.9 million) is accounted for by output

**Livestock Sector Economic Impacts in Phelps County**  
Output Impacts (Million Dollars)



Source: Compiled from IMPLAN Input-Output Model for Phelps County, 2017 Data

**Livestock Sector Economic Impacts in Phelps County**  
Employment Impacts (Million Dollars)



Source: Compiled from IMPLAN Input-Output Model for Phelps County, 2017 Data

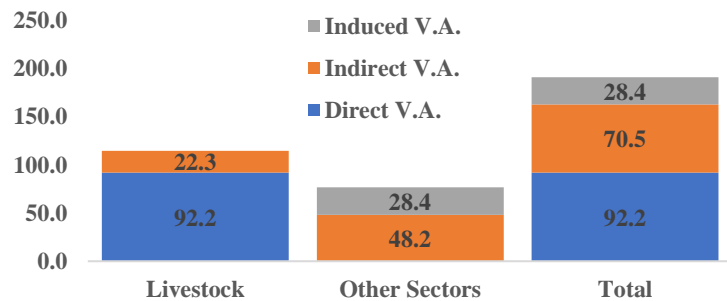
(direct, indirect, and induced) produced by the livestock sector and the indirect and induced effects in other sectors represent an additional \$229.1 million of output.

**- Employment Effects:** There are an estimated 428.6 individuals employed in the Phelps County livestock products sector producing the output dedicated to sales to final demand (\$310.3 million). When the indirect and induced employment effects are included, employment in the livestock sector is estimated to be 533.6 workers (and proprietors). The other secondary employment effects (indirect and

induced effects in sectors other than livestock and livestock products) account for an additional 964.8 employees that support livestock production. When the indirect and induced effects for all sectors are included, the estimated Phelps County employment supporting the production of livestock is estimated to be 1,498.5 workers.

– **Value-Added Effects:** The value-added effects associated with livestock production in Phelps County provide a good measure of the economic value associated with this sector. Value-added consists of payments to the factors of production within the local economy and includes payments to labor, proprietors’ income, other property income, and indirect business taxes. As the information and analysis provided in this report indicate, the total value-added effects associated with the production of livestock and livestock products in Phelps County in 2017 are estimated to be \$191.1 million. Of this amount, \$114.5 million represents value-added in the livestock products sector itself and \$76.6 million is value-added in other economic sectors supporting the production of livestock and livestock products in Phelps County.

**Livestock Sector Economic Impacts in Phelps County**  
**Value Added Impacts (Million Dollars)**



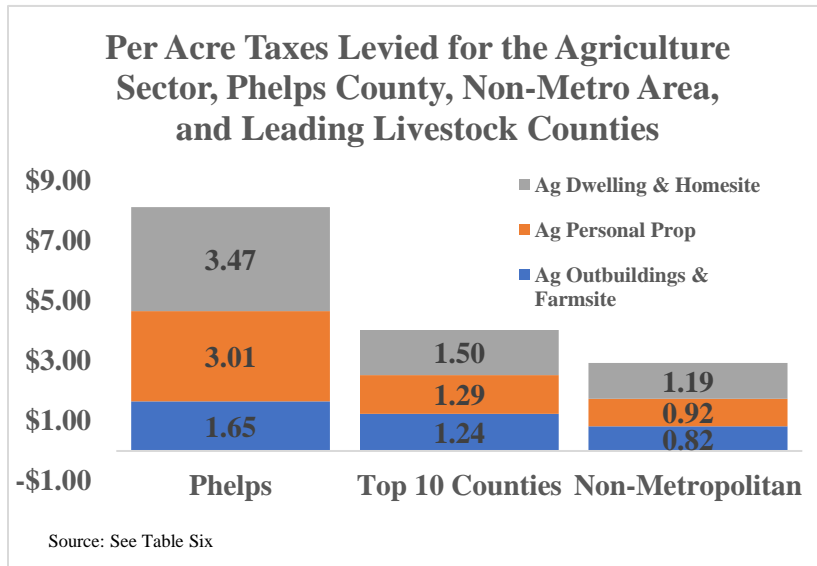
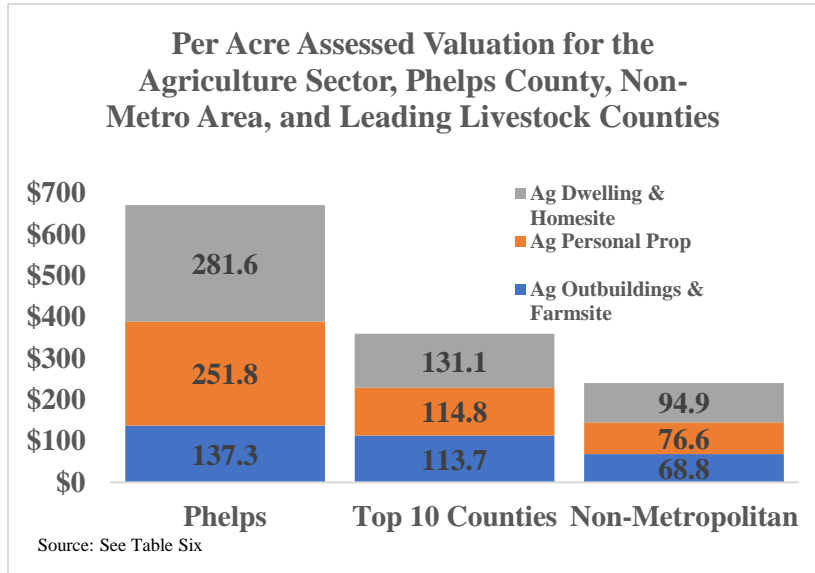
Source: Compiled from IMPLAN Input-Output Model for Phelps County, 2017 Data

**Livestock-Related Impacts Not Analyzed**

The analysis discussed in this report considers the backward-linkages associated with livestock production in Phelps County. That is, the analysis has considered impacts associated with economic sectors providing inputs to support livestock production. The analysis has not considered the “stemming from” effects, or the economic impacts associated with those industry sectors with forward linkages from the livestock production sector. The obvious sector in this regard would be food processing activities utilizing meat products as an input. Obviously, the food and meat processing industry creates a very substantial amount of additional employment and economic activity in Nebraska and in many Nebraska counties, suggesting the contributions of the livestock industry may be significantly greater than reported in this analysis if these forward linkages were considered.

**Livestock Production and Property Taxes**

Livestock production activity contributes in a significant and positive manner to the tax base and to tax revenues needed to support local schools and other local public services. The per acre assessed valuation of agricultural property (other than agricultural land) was \$359.6 for the leading ten Nebraska livestock counties, 49.6 percent more than the \$240.3 per acre assessed valuation for all non-metropolitan counties in the state. In the case of Phelps County, the per acre assessed valuation of agricultural property (except agricultural land) was \$670.7. This value was 179.1 percent greater than the per acre assessed value of the same class of property for all non-metropolitan counties.



Local tax revenues are also significantly enhanced by the presence of livestock production activity. As this chart illustrates, per acre taxes levied on agricultural property (other than agricultural land) were \$4.03 for the ten leading Nebraska livestock counties. This level of per acre tax revenues was \$2.93, or 37.5 percent more than per acre tax revenues for the same class of agricultural property for all non-metropolitan Nebraska counties. In the case of Phelps County, the per acre taxes levied

on this class of agricultural property were \$8.13 or 177.5 percent greater than per acre taxes levied for all non-metropolitan counties.

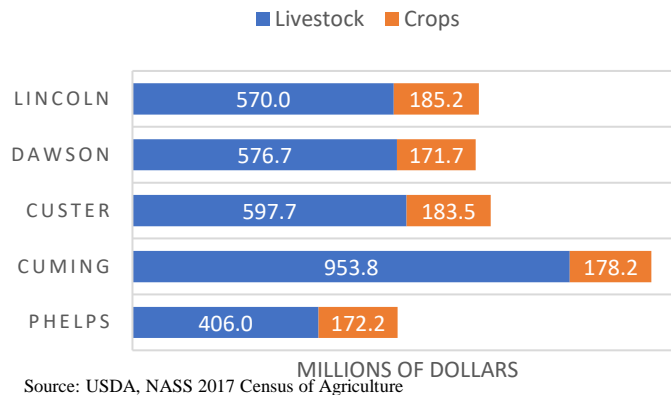
## Economic Importance of and Economic Impacts Associated with Livestock Production in Phelps County, Nebraska

Information provided in this report focuses on the economic importance of the livestock sector in Phelps County, Nebraska (Phelps County). The first part of the report reviews agriculture data from the *2017 Census of Agriculture*. These data provide information on the importance of agriculture and the livestock sector in Phelps County. The second part of the report analyzes the direct, indirect, and total economic impacts associated with livestock operations in Phelps County. This analysis utilizes an IMPLAN input-output (I-O) database and model developed specifically for Phelps County.

### Livestock and Agricultural Production in Phelps County, Nebraska

The 2017 Census of Agriculture provides data showing the importance of agriculture and the livestock sector in Phelps County. Data presented in the chart indicate the market value of agricultural products sold in Phelps County totaled \$578.2 million in 2017. This level of sales of agricultural products ranked Phelps County 6<sup>th</sup> among the Nebraska counties in terms of this measure. In terms of the per farm value of agricultural products sold, Phelps County's average of \$1,558,601 ranked 1<sup>st</sup> among Nebraska's 93 counties and was 329.1 percent of the state per farm average of \$473,652.

**MARKET VALUE OF AGRICULTURAL  
PRODUCTS SOLD, PHELPS COUNTY &  
SELECTED OTHER COUNTIES, 2017**

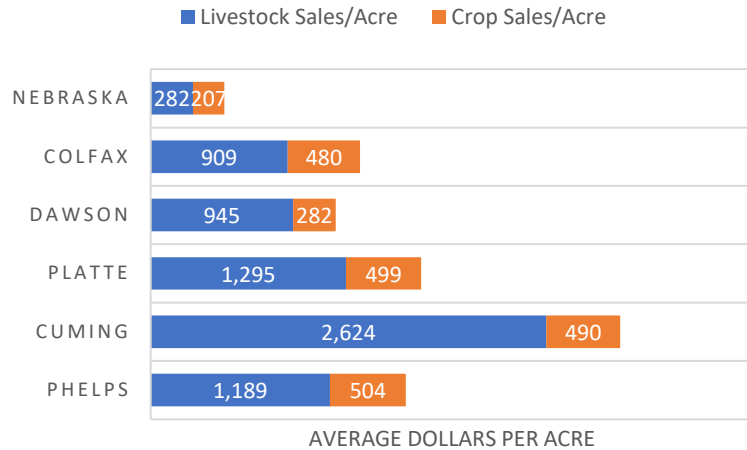


Source: USDA, NASS 2017 Census of Agriculture

The data reporting the market value of total agricultural products sold may be somewhat misleading as these data are affected by the geographic size of the county (number of farms and acres). For example, Custer County ranks 2<sup>nd</sup> in terms of the total market value of agricultural products sold; this high ranking results, in part, from the county's relatively large size. When these data are normalized for the size of the county, Custer County does not maintain its high ranking. Custer County ranks 2<sup>nd</sup> in terms of the total market value of agricultural products sold but ranks 47<sup>th</sup> among Nebraska's 93 counties in terms of sales per acre.

The average market value of agricultural products sold per acre is shown in the current chart and includes the data for Phelps County and for the other leading five counties in terms of this measure, along with the Nebraska data. These Data are also shown in Table One. Phelps County, with a value of \$1,693, ranks 3<sup>rd</sup> among the Nebraska counties in terms of the market value of agriculture products per acre, with \$1,189 of that amount accounted for by livestock and livestock products. Phelps County's per acre average for all agricultural products is 347.0 percent of the state per acre average of \$488.

**AVERAGE PER ACRE VALUE OF AGRICULTURAL PRODUCTS SOLD, PHELPS COUNTY & SELECTED OTHER COUNTIES, 2017**



Source: USDA, NASS 2017 Census of Agriculture

Data presented in Table One indicate that livestock and livestock products are an important source of income for Phelps County farmers. The per farm market value of livestock and livestock products sold averaged \$1,558,601 for Phelps County, ranking the county 1<sup>st</sup> among Nebraska's 93 counties in terms of this measure. The market value of livestock products sold in Phelps County accounted for 70.2 percent of the total market value of all agricultural products sold, compared to 57.6 percent for Nebraska. The average Phelps County per-farm value (for livestock and livestock products sold) was 300.1 percent greater than the average per farm value of \$273,513 for Nebraska.

**Table One.**  
**Agricultural Characteristics, Phelps County, Nebraska**  
**and Selected Nebraska Counties, 2017**

	Phelps County	Nebraska	Colfax	Cuming	Custer	Dawson	Kearney	Lincoln	Platte	Polk	Wheeler
<b>Number of Farms</b>	371	46,332	516	804	1,108	686	342	1,040	836	432	215
% FT Farms <sup>(a)</sup>	66.6	51.6	59.1	53.0	55.9	56.1	68.6	45.6	52.7	60.7	57.0
<b>Land in Farms</b>											
Average size (Acres)	921	971	508	452	1358	889	852	1305	459	581	1662
<b>Farm Employment<sup>(b)</sup></b>											
Average per farm	1.7	1.2	1.4	1.4	1.3	1.5	1.3	1.2	1.3	1.2	1.4
<b>Estimated market value of land &amp; buildings</b>											
Average per farm (\$)	4,707,223	2,674,492	3,149,351	2,752,249	3,361,912	3,034,516	4,456,076	2,184,451	2,903,960	3,434,576	2,539,799
Average per acre (\$)	5,114	2,754	6,194	6,087	2,475	3,412	5,232	1,674	6,328	5,911	1,528
<b>Estimated Market Value of all machinery &amp; equipment</b>											
Average per farm (\$)	603,438	268,968	354,733	334,881	269,342	336,300	482,408	221,829	345,260	369,062	258,222
<b>Market value of agricultural products sold</b>											
\$1,000	578,241	21,983,429	364,450	1,131,997	781,155	748,426	369,734	755,236	688,562	330,698	283,147
Average per farm (\$)	1,558,601	474,476	706,298	1,407,956	705,014	1,091,000	1,081,094	726,188	823,639	765,505	1,316,963
Average per acre (\$)	1693	489	1389	3114	519	1227	1269	557	1795	1317	793
<b>Market value of livestock, poultry, &amp; their products</b>											
\$1,000	406,016	12,672,422	238,473	953,825	597,650	576,681	212,945	569,997	496,964	200,333	262,213
Per farm (\$)	1,094,383	273,513	462,157	1,186,350	539,395	840,643	622,646	548,074	594,455	463,734	1,219,595
% Livestock	70.2	57.6	65.4	84.3	76.5	77.1	57.6	75.5	72.2	60.6	92.6
<b>Net cash farm income of operation</b>											
Average per farm(\$)	238,327	87,824	160,192	208,355	61,700	134,473	171,422	99,002	149,717	207,562	153,701

<sup>(a)</sup>Full-time farms are defined as those where the principal operator has indicated their primary occupation is farming

<sup>(b)</sup>Farm employment estimates for 2017 from U.S. Department of Commerce, Bureau of Economic Analysis (BEA), where farm employment included farm proprietors and hired labor.

Source: USDA National Agricultural Statistics Service, *2017 Census of Agriculture*.



## Economic Impacts Associated with Livestock Production in Phelps County, Nebraska

Information presented in the continuing portion of this report focuses on the economic impacts associated with livestock operations in Phelps County. This analysis utilizes an IMPLAN economic input-output (I-O) model developed specifically for Phelps County.

From the Phelps County I-O model, economic multipliers are derived that quantify the level or magnitude of economic activity necessary to support the production activity of local livestock enterprises. As such, the input-output analysis identifies and quantifies economic linkages associated with the inputs required in order for the livestock sector to produce the level of output it has achieved (backward linkages). The model does not evaluate forward linkages. That is, the model does not provide a measure of additional (downstream) processing made possible by the production of the livestock output, although this is certainly an important factor for Nebraska and for many Nebraska counties.

To provide a basic understanding of the structure and size of the agricultural sector within Phelps County, data in Table One provide basic information from the *2017 Census of Agriculture* describing production activity and other parameters for the farm sector.

The IMPLAN database and input-output model provide further insight into the value of production of livestock and livestock products in Phelps County. The data in Table Two present estimates of the value of production for the livestock sector reported by the IMPLAN database and I-O model for Phelps County for 2017. As the data in Table Two show, the total value of output for livestock and livestock products was reported to be \$386.9 million for 2017.

**Table Two**  
**Agricultural Sector Sales, Phelps County, 2017**

<b>Industry</b>	<b>Sales (\$1,000)</b>	<b>Percent Total Sales</b>
<b>Crops</b>	<b>220,413</b>	<b>36.3%</b>
Oilseed Farming	76,372	12.6%
Grain Farming	142,197	23.4%
All Other Crop Farming	1,844	0.3%
<b>Livestock &amp; Livestock Products</b>	<b>386,928</b>	<b>63.7%</b>
Beef Cattle Ranching and Farming	379,065	62.4%
Dairy Cattle and Milk Production	1,614	0.3%
Poultry and Egg Production	330	0.1%
Animal Production, except cattle and poultry and eggs	5,919	
<b>Total Agricultural Sales</b>	<b>607,341</b>	<b>100.0%</b>

Source: IMPLAN Input-Output model and 2017 database for Phelps County.

The data in Table Two also provide a further disaggregation of livestock and livestock products. As reported in Table Two, beef cattle ranching and farming (which includes cow-calf operations and cattle feeding) were reported to have a value of production of \$379.1 million for the year 2017. Dairy cattle and milk production was \$1.6 million and poultry and egg production was

\$0.3 million in Phelps County in 2017. Other animal production activities, except cattle and poultry, (primarily hog production) had an estimated output value of \$5.9 million. The data presented in Table Two show the most significant livestock sector is the beef-producing sector, accounting for 98.0 percent of the total production of livestock and livestock products in Phelps County in 2017.

### **Economic Impact Analysis**

The economic linkages and impacts associated with livestock operations in Phelps County are analyzed in the balance of this report. The analysis utilizes an input-output model developed for Phelps County, for which the livestock producing sectors have been collapsed (aggregated) into one sector (livestock and livestock products). This involves aggregating the livestock sectors shown in Table Two into one livestock sector. The analysis then focuses on the economic impacts associated with the production of livestock and livestock products in Phelps County. This analysis involves identifying the multiplier effects associated with this production sector, where the multiplier effects evaluated include the output multiplier, the employment multiplier, and the value-added multiplier.

Each of the multipliers, in turn, consists of three components: the direct effect, the indirect effect, and the induced effect. The output multiplier defines (quantifies) the change in total output for the economy, which is associated with the delivery of an additional unit (dollar) of output of livestock and livestock products to final demand.

The multipliers specified for the livestock sector recognize that changes in output (increases in sales to final demand) by this sector will require additional inputs from other businesses or economic sectors be provided. The industries or economic sectors supplying additional inputs to the livestock sector will find they also must purchase additional inputs in order to expand their output to supply the increased inputs demanded by the livestock enterprises. As the increased demand for goods and services associated with the initial increase in sales to final demand works itself through the sectors of the economy, these effects are collected and termed the indirect effects component of each of the economic multipliers.

The induced component of the economic multipliers follows from the increased personal income (payments to households) in Phelps County resulting from the increase in the demand for labor, both with respect to the direct and indirect economic effects. That is, as output is increased by the livestock products sector (direct effect) and in the economic sectors that supply the additional inputs to the livestock sector (indirect effects), these sectors will add labor inputs and increase their payments to labor. The translation of the additional household incomes into additional expenditures for (consumer) goods and services is referred to as the induced effects. The three effects—direct, indirect, and induced—together represent the total economic impacts embodied in the multipliers utilized to measure the economic impacts associated with the subject livestock enterprises.

The estimated direct, indirect, and induced components of the economic multipliers associated with the production of livestock and livestock products in Phelps County are provided in Table Three. The three economic multipliers for which values are reported include the output, value-added, and employment multipliers. The output multiplier indicates that for each dollar of sales

to final demand by the livestock sector in Phelps County, there will be an estimated increase in total economic output of \$1.9855 for the Phelps County economy.

**Table Three**  
**Input-Output Multipliers for the Livestock & Livestock Products Sector,**  
**Phelps County, Nebraska**

Multipliers	Direct <sup>(a)</sup>	Indirect <sup>(a)</sup>	Induced <sup>(a)</sup>	Total	Multipliers <sup>(b)</sup>	
					Type I <sup>(c)</sup>	Type SAM <sup>(d)</sup>
Output	1.0000	0.8131	0.1724	1.9855	1.8131	1.9855
Employment	1.3812	2.0087	1.4392	4.8291	2.4542	3.4962
Value Added	0.2971	0.2272	0.0915	0.6158	1.7646	2.0726

<sup>(a)</sup> Direct, indirect, induced, and total output and value added values are the increase in dollar sales and dollar value added for each dollar increase in final demand. The employment values are the increases in jobs per million dollars of increase in final demand.

<sup>(b)</sup> The multipliers are calculated using the data from the IMPLAN model for the Custer County Study Area.

<sup>(c)</sup> Type I = (Direct + Indirect) / Direct

<sup>(d)</sup> Type SAM = (Direct + Indirect + Induced) / Direct

Source: Calculated for the Custer County economy using the Micro IMPLAN database and computer software.

The value-added multiplier estimates there will be total payments to the factors of production of \$0.6158 for each dollar of sales of livestock and livestock products to final demand. This total value-added effect includes the direct effect of \$0.2971 associated with the initial sales of one dollar of output to final demand, \$0.2272 of payment to the factors of production associated with the increase in output (sales) for the intermediate (supplying) sectors, and the induced effect of \$0.0915 related to the increased household demand for goods and services resulting from the increased payment to labor (household income). The value-added multiplier of 2.0726 indicates for each dollar of value-added in the livestock and livestock products sector, we would expect to see approximately \$2.07 of additional value-added in other sectors of the Phelps County economy.

The employment multiplier indicates for each \$1,000,000 of sales to final demand by the livestock and livestock products sector, there will be a total of 3.5 jobs supported, including the direct, indirect, and induced components of the employment multiplier. Moreover, the employment multiplier of 3.5 indicates that for each 100 workers employed in the livestock and livestock products sector, we would expect to find 250.62 workers employed in other sectors which support livestock production in Phelps County.

Table Four provides a summary of the economic effects associated with the production of livestock and livestock products in Phelps County. As the information provided in this table is reviewed, it will be of interest to note the estimated sales to final demand by the livestock sector are presented in the table as the direct effects (output, employment, and value-added). For example, the direct output (value of production) associated with sales of livestock and livestock products to the final demand sector by Phelps County livestock producers is estimated to be \$310.3 million. From the Phelps County I-O model, we estimate that for the Phelps County

livestock sector to sell this amount of output to final demand, it would need to produce a total of \$386.9 million of total output, as approximately 19.8 percent (\$76.6 million) of the total output would represent intermediate sales (sales by one producer in the livestock sector to other producers in the same sector).

**Table Four**  
**Summary of Output, Employment, and Value-Added Effects**  
**Associated with the Livestock Products Sector in Phelps County, Nebraska**  
**(Annual Estimates, 2017)**

	Livestock Products	Other Economic Sectors	Total Economic Impacts
<b>Output Effects (\$1,000)</b>			
Direct Output	\$310,300,000	\$0	\$310,300,000
Indirect, Output (0.8131 of Direct)	\$76,600,000	\$175,600,000	\$252,300,000
Induced, Output (0.1724 of Direct)	\$0	\$53,500,000	\$53,500,000
<b>Total Output</b>	<b>\$386,900,000</b>	<b>\$229,100,000</b>	<b>\$616,100,000</b>
<b>Employment Effects</b>			
Direct Employment (FTE)	428.6	0.0	428.6
Indirect Employment (1.4542 of Direct)	105.0	518.3	623.3
Induced Employment (1.042 of Direct)	0.1	446.5	446.6
<b>Total Employment (FTE)</b>	<b>533.7</b>	<b>964.8</b>	<b>1,498.5</b>
<b>Value Added Effects (\$1,000)</b>			
Direct Value Added	\$92,200,000	\$0	\$92,200,000
Indirect Value Added (0.7646 of Direct)	\$22,300,000	\$48,200,000	\$70,500,000
Induced Value Added (0.308 of Direct)	\$0	\$28,400,000	\$28,400,000
<b>Total Value Added</b>	<b>\$114,500,000</b>	<b>\$76,600,000</b>	<b>\$191,100,000</b>

\*Impact components may not sum to totals due to rounding.

Source: Estimates computed by Brian R. Williams, PhD, Nebraska Public Power District using data from the Input-Output Model for Phelps County (2017 data).

### **-Output Effects**

A review of the data presented in Table Four indicates the total output effects (including the direct, indirect, and induced output) associated with the production of livestock and livestock products in Phelps County are estimated to be \$616.1 million. Of this total, 62.8 percent (\$386.9 million) is accounted for by output (direct, indirect, and induced) produced by the livestock sector and the indirect and induced effects in other Phelps County economic sectors represent an additional \$229.1 million of output.

### **-Employment Effects**

There are an estimated 428.6 people employed in the livestock products sector to produce the output dedicated to sales to final demand (\$310.3 million); when the indirect and induced effects are

included, the estimated employment in the livestock sector increases to 533.7 people. The other secondary employment effects (indirect and induced effects in sectors other than livestock and livestock products), account for an additional 964.8 jobs and total employment in Phelps County supporting the production of livestock and livestock products is estimated to be 1,498.5 employees.

#### **-Value-Added Effects**

The value-added effects associated with the livestock production in Phelps County provide a measure of the economic value associated with this sector. Value-added consists of payments to the factors of production within the economy and includes payments to labor, proprietors' income, other property income, and indirect business taxes. As the data in Table Four show, the total value-added effects related to the production of livestock and livestock products in Phelps County are estimated to be \$191.1 million. Of this amount, \$114.5 million is value-added in the livestock products sector itself and an estimated \$76.6 million is value-added in other economic sectors due to the additional economic activity required to support the production of livestock and livestock products in Phelps County.

Table Five provides additional detail describing the economic effects associated with the production of livestock and livestock products in Phelps County. The data in the table identify the business or economic sectors that are the primary beneficiaries of the economic activity resulting from livestock production in Phelps County. Shown in the table is a list of the economic and business sectors likely to be positively impacted by the production of livestock products. The impacts presented in the table include the predicted output, value-added, and employment impacts for each of the sectors associated with the production and sales to final demand of the output produced by the livestock sector in Phelps County.

**Table Five**  
**Distribution of Livestock Production Economic Impacts, by Selected Economic Sector<sup>(a)</sup>, Phelps County, Nebraska, 2017**

Industry	Total Output	% Tot. Output	Value Added	Emp.	% Tot. Emp.
Livestock	\$386,928,121	62.8%	\$114,514,266	533.7	35.6%
Wholesale trade	\$31,763,376	5.2%	\$21,260,097	136.4	9.1%
Grain farming	\$9,207,878	1.5%	\$1,227,535	5.0	0.3%
Owner-occupied dwellings	\$8,915,138	1.4%	\$5,819,092	0.0	0.0%
Support activities for agriculture and forestry	\$8,425,165	1.4%	\$7,908,911	135.5	9.0%
Truck transportation	\$7,652,867	1.2%	\$2,383,959	60.0	4.0%
Hospitals	\$7,628,631	1.2%	\$3,638,664	52.7	3.5%
Monetary authorities and depository credit intermediation	\$7,194,438	1.2%	\$3,684,467	31.2	2.1%
Real estate	\$5,745,815	0.9%	\$2,385,271	60.6	4.0%
Securities and commodity contracts intermediation and brokerage	\$4,812,240	0.8%	\$1,072,009	43.1	2.9%
Limited-service restaurants	\$2,538,066	0.4%	\$1,339,322	31.7	2.1%
Retail - Nonstore retailers	\$1,842,531	0.3%	\$549,331	19.6	1.3%
Local government electric utilities	\$1,842,472	0.3%	\$711,125	3.0	0.2%
Retail - Motor vehicle and parts dealers	\$1,692,605	0.3%	\$1,101,452	13.3	0.9%
Natural gas distribution	\$1,641,622	0.3%	\$951,457	2.0	0.1%
Offices of physicians	\$1,497,959	0.2%	\$971,626	10.6	0.7%
All other crop farming	\$1,415,519	0.2%	\$865,325	4.5	0.3%
Funds, trusts, and other financial vehicles	\$1,397,628	0.2%	\$131,946	5.2	0.3%
Automotive repair and maintenance, except car washes	\$1,133,766	0.2%	\$719,535	11.7	0.8%
Nursing and community care facilities	\$1,069,646	0.2%	\$647,030	15.1	1.0%
Total All Others	\$121,709,034	19.8%	\$19,190,851	323.6	21.6%
<b>Total</b>	<b>\$616,054,519</b>	<b>100.0%</b>	<b>\$191,073,273</b>	<b>1,498.5</b>	<b>100.0%</b>

<sup>(a)</sup> The business or economic sectors impacted by the production of \$310,300,000 of livestock and livestock products for sales to final demand in Phelps County (2017).

Source: Computed from the IMPLAN Input-Output Model for Phelps County (2017 data).

### **Livestock Production and Property Taxes**

As the data presented in Table Six show, livestock production activity contributes, in a significant and positive manner, to the tax base and to tax revenues needed to support local schools and other local public services. Part A of the table indicates the per acre assessed valuation of agricultural property (other than agricultural land) was \$359.6 for the leading ten livestock counties, 50 percent more than the \$240.3 per acre assessed valuation for all non-metropolitan counties in the state. In the case of Phelps County, the per acre assessed valuation of agricultural property (except agricultural land) was \$670.7. This value was 179 percent greater than the per acre assessed value of the same class of property for all non-metropolitan counties.

<b>Table Six</b>					
<b>Agricultural Property Valuations and Taxes Levied Per Acre, Phelps County, Non-Metropolitan Nebraska, and Leading Nebraska Livestock Counties</b>					
<b>Part A -- Per Acre Assessed Valuation</b>					
County/Non Metro	Ag Outbuildings & Farmsite	Ag Personal Property	Ag Dwelling & Homesite	Ag Land	Total
Phelps	137.3	251.8	281.6	4,564.8	5,235.6
Non Metro	68.8	76.6	94.9	1,967.3	2,207.6
Cuming	289.0	223.9	220.9	5,741.5	6,475.4
Custer	81.9	51.4	83.7	1,703.9	1,920.8
Dawson	112.5	138.6	142.3	2,808.4	3,201.7
Lincoln	31.0	49.0	77.6	1,152.4	1,310.0
Platte	381.4	293.3	414.5	5,971.3	7,060.5
Antelope	150.2	206.9	166.7	3,553.5	4,077.3
Boone	225.5	180.7	152.7	4,239.1	4,798.0
Chase	67.1	101.5	70.3	1,905.8	2,144.6
Webster	57.9	67.5	83.1	2,368.6	2,577.0
Average Top Ten Livestock Counties	113.7	114.8	131.1	2,584.6	2,944.2

<b>Part B -- Per Acre Taxes Levied</b>					
County/Non Metro	Ag Outbuildings & Farmsite	Agricultural Personal Property	Ag Dwelling & Homesite	Ag Land	Total
Phelps	1.65	3.01	3.47	54.18	62.30
Non Metro	0.82	0.92	1.19	23.57	26.51
Cuming	3.13	2.44	2.40	62.70	70.67
Custer	0.90	0.56	0.92	18.60	20.97
Dawson	1.62	2.06	2.08	41.13	46.89
Lincoln	0.40	0.64	1.06	15.27	17.37
Platte	3.75	2.95	4.21	59.74	70.65
Antelope	1.51	2.08	1.69	35.95	41.23
Boone	1.97	1.59	1.33	37.06	41.95
Chase	0.66	0.99	0.71	18.77	21.13
Webster	0.81	0.91	1.15	31.99	34.86
Average Top Ten Livestock Counties	1.24	1.29	1.50	29.03	33.06

\* Non-Metro Area includes Nebraska Counties except Cass, Douglas, Lancaster, Sarpy, Saunders, Seward, and Washington Counties.

Source: Values calculated by Brian R. Williams, Ph.D., Economist, NPPD, using data from Nebraska Department of Revenue, 2019 Annual report of the Property Assessment Division.

Part B of Table Six also illustrates that local tax revenues are significantly enhanced by the presence of livestock production activity. These data show the per acre taxes levied on agricultural property (other than agricultural land) were \$4.03 for the top ten livestock counties. This level of per farm tax revenues was \$1.10, or 37.5 percent more than per acre tax revenues for the same class of agricultural property for all non-metropolitan counties. In the case of Phelps County, per acre taxes levied on this class of agricultural property were \$8.13, or 177.4 percent greater the average per acre tax levied for all non-metropolitan areas.

**If further information about this analysis is desired or if the reader has questions about any aspect of this report, please contact:**

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