Economic Importance of and Economic Impacts Associated with Livestock Production in York County

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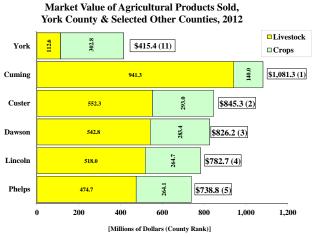
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Executive Summary

Information provided in this report focuses on the economic importance of the livestock sector in York County, Nebraska (York County). The first part of the report reviews agriculture data from the *2012 Census of Agriculture*. These data provide information on the importance of agriculture and the livestock sector in York County. The second part of the report analyzes the direct, indirect, and total economic impacts associated with livestock operations in York County. This analysis utilizes an IMPLAN input-output (I-O) database and model developed specifically for York County.

<u>Livestock and Agricultural</u> <u>Production in York County,</u> <u>Nebraska</u>

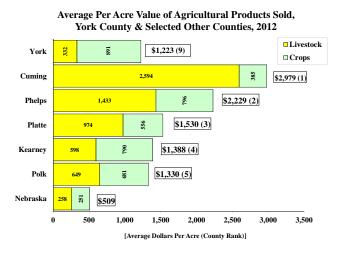
The 2012 Census of Agriculture provides data showing the importance of agriculture and the livestock sector in York County. The data presented in the chart indicate the market value of agricultural products sold in York County totaled \$415.4 million in 2012. Considering the per farm value of agricultural products sold, York County's average of



Note: Parts may not sum to totals due to rounding

\$767,861 ranked 9th among Nebraska's 93 counties and was 166.3 percent of the state per farm average of \$461,661.

The average market value of agricultural products sold per acre is shown in the current chart and includes the data for York County and for the other leading five counties in



terms of this measure, along with the Nebraska data. York County, with a value of \$1,223, ranks 9th among the Nebraska counties in terms of the market value of agriculture products per acre, with \$332 of that amount accounted for by livestock and livestock products. York County's per acre average for all agricultural products is 240.3 percent of the state per acre average of \$509.

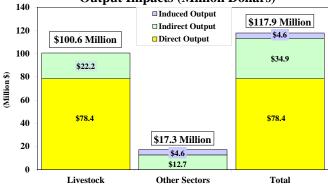
Data provided in this report indicate that livestock and livestock products are a significant source of income for York County farmers. The per farm market value of livestock and livestock products sold averaged \$208,211 (27.1 percent of the total market value of all agricultural products sold) for York County, ranking the county 44th among the Nebraska counties in terms of this measure. The average York County per farm value for livestock and livestock products sold was 11.0 percent lower than the average per farm value of \$233,962 for Nebraska as a whole.

Economic Impacts Associated with Livestock Production in York 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 York County. The analysis utilizes an IMPLAN input-output (I-O) model developed for York 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.

Livestock Sector Economic Impacts in York County

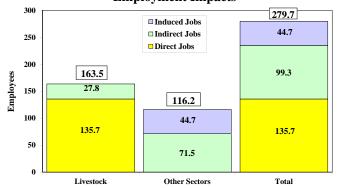
Output Impacts (Million Dollars)



 $Source: Computed \ from \ IMPLAN \ Input-Output \ Model \ for \ York \ County, 2013 \ data.$

- Total Output Effects: The total 2013 value of output directly associated with sales to final demand by the livestock sector in York County is estimated to be \$78.4 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 York County are estimated to be \$117.9 million. Of this total, 85.3 percent (\$100.6 million) is accounted for by output (direct, indirect, and induced) produced by the livestock sector

Livestock Sector Economic Impacts in York County Employment Impacts



Source: Computed from IMPLAN Input-Output Model for York County, 2013 data.

and the indirect and induced effects in other sectors represent an additional \$17.3 million of output.

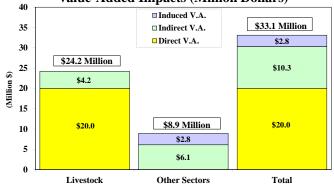
- Employment Effects: There are an estimated 135.7 individuals employed in the York County livestock products sector producing the output dedicated to sales to final demand (\$78.4 million). When the indirect and induced employment effects are included, employment in the livestock sector is estimated to be

163.5 workers (and proprietors). The other secondary employment effects (indirect and induced effects in sectors other than livestock and livestock products) account for an additional 116.2 employees that support livestock production. When the indirect and induced effects for all sectors are included, the estimated York County employment supporting the production of livestock is estimated to be 279.7 workers.

– Value-Added Effects: The value-added effects associated with livestock production in York 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 Sector Economic Impacts in York County

Value-Added Impacts (Million Dollars)



Note: Impact components may not sum to total due to rounding. Source: Computed from IMPLAN Input-Output Model for York County, 2013 data.

livestock products in York County in 2013 are estimated to be \$33.1 million. Of this amount, \$24.2 million represents value-added in the livestock products sector itself and \$8.9 million is value-added in other economic sectors supporting the production of livestock and livestock products in York County.

Livestock-Related Impacts Not Analyzed

The analysis discussed in this report considers the backward-linkages associated with livestock production in York 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 Economic Well Being

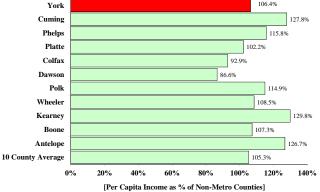
A key question about the importance of the livestock industry concerns its contributions to the economic well being of residents of York County and other Nebraska counties where the production of livestock and livestock products may be even more significant as a contributor to the overall level of economic activity. Data presented in this report

provide some insights into the relationship between livestock production and economic well being, measured in terms of per capita personal income.

Per capita personal income in Cuming County, which is the leading county in Nebraska in terms of the production of livestock and livestock products, was 43.6 percent more than the average per capita personal income for all non-metropolitan, Nebraska counties for the year 2012. For the ten-year period from 2003 to 2012, the average per capita personal income in Cuming County was 27.8 percent more than the average for the non-metropolitan areas of Nebraska. In the case of York County, which ranked 32nd among the Nebraska counties in terms of livestock and livestock products sold per acre, per capita income for the ten-year period from 2003 to 2012 was \$36,466. This per capita income level was 6.4 percent greater than the average per capita income level for all non-metropolitan Nebraska counties for the ten-year review period. Moreover, per capita personal income for York County in 2012 was \$50,638 or 14.7 percent above the average per capita personal income level for all non-metropolitan Nebraska counties.

For the top ten Nebraska livestock counties, in terms of the average value of livestock and livestock products sold per acre, the ten-year (2003–2012) average per capita personal income was 5.3 percent more than for all non-metropolitan counties. The per-capita personal income for the leading livestock counties in 2012 was 9.2 percent more than for all non-metropolitan counties.

Per Capita Personal Income, 10 Year Average*, as a Percent of Non-Metro Average, York County & Leading Livestock Counties**



* 10 Year Average (2003-2012).

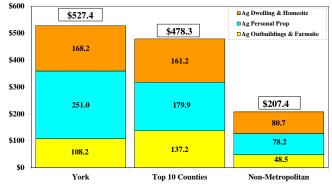
**Note: Leading ten Nebraska counties in terms of value of livestock and livestock products produced per acre.

Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce

Livestock Production and Property Taxes

Livestock production activity contributes in a significant and positive manner to the tax

Per Acre Assessed Valuation for the Agriculture Sector*, York County, Non-Metro Area & Leading Livestock Counties**



* Note: Excludes agriculture land.

** Per acre values for the leading ten livestock counties

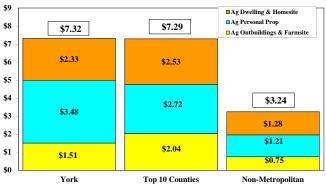
Source: See Table Seven.

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 \$478.3 for the leading ten Nebraska livestock counties, 130.6 percent more than the \$207.4 per acre assessed valuation for all non-metropolitan counties in the state. In the case of York County, the per acre assessed valuation of agricultural property (except agricultural land) was

\$527.4. This value was 154.3 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 \$7.29 for the ten leading Nebraska livestock counties. This level of per acre tax revenues was \$4.05, or 125.0 percent more than per acre tax revenues for the same class of agricultural property for all non-metropolitan Nebraska

Per Acre Taxes Levied for the Agriculture Sector*, York County, Non-Metro Area & Leading Livestock Counties**



* Note: Excludes agriculture land

** Per acre values for the leading ten livestock counties

Source: See Table Seven

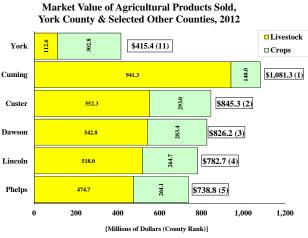
counties. In the case of York County, the per acre taxes levied on this class of agricultural property were \$7.32 or 125.9 percent greater than per acre taxes levied for all non-metropolitan counties.

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

Information provided in this report focuses on the importance of the livestock sector to the economy of York County, Nebraska (York County). The first part of the report reviews agriculture data from the 2012 Census of Agriculture. These data provide insights into the importance of agriculture and the livestock sector in York County. The second part of the report analyzes the secondary economic impacts associated with livestock production in York County. This analysis utilizes an IMPLAN input-output (I-O) database and model developed specifically for York County.

<u>Livestock and Agricultural</u> <u>Production in York County,</u> Nebraska

The 2012 Census of Agriculture provides data showing the importance of agriculture and the livestock sector for York County. The values presented in Table One on Page 8 include data for York County, Nebraska and selected Nebraska counties. The market value of agricultural products sold in York County was \$415.4 million in 2012. This level of sales of



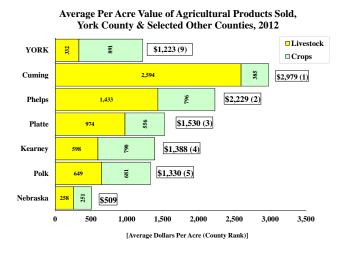
Note: Parts may not sum to totals due to rounding.

agricultural products ranked York County 11th among the Nebraska counties in terms of this measure. In terms of the per farm value of agricultural products sold, York County's average of \$767,862 ranked 9th among the counties and was 166.3 percent of the Nebraska per farm average of \$461,661.

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 2nd 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 2nd in terms of the total market value of agricultural products sold but ranks 44th 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 York County, the top five Nebraska counties in terms of this measure, along with the Nebraska data. These data are also shown in Table One. In terms of the market value of agriculture products sold per acre, York County, with a value of \$1,223, ranks 9th among Nebraska's 93 counties. York County's per acre average for all agricultural products is 240.3 percent of the Nebraska per acre average of \$509.

Data presented in Table One indicate that livestock and livestock products are an important source of income for York County farmers. The per farm market value of livestock and livestock products sold averaged \$208,211 for York County, ranking the county 44th among Nebraska's 93 counties in terms of this measure. The market value of livestock products sold in York County accounted for 27.1 percent



of the total market value of all agricultural products sold, compared to 50.7 percent for Nebraska. The average York County per farm value (for livestock and livestock products sold) was 11.0 percent less than the average per farm value of \$233,962 for Nebraska.

Table One also provides data reporting the number of farms; land in farms; farm employment; estimated market value of land and buildings; estimated market value of machinery and equipment; and net cash farm income of farm operations for York County, selected other Nebraska counties, and Nebraska.

Table One Agricultural Characteristics, York County, Nebraska, and Selected Nebraska Counties, 2012

	York											
	County	Nebraska	Colfax	Cuming	Custer	Dawson	Kearney	Lincoln	Phelps	Platte	Polk	Wheeler
Number of farms	541	49,969	554	918	1,352	806	344	1,168	405	942	466	198
% FT Farms ^(a)	70.6	59.7	66.1	61.2	62.9	64.6	78.5	59.2	72.3	64.9	66.1	67.7
Land in farms (Acres)	339,591	45,331,783	257,628	362,926	1,503,594	630,466	293,608	1,423,398	331,390	426,329	245,268	357,134
Average size (Acres)	628	907	465	395	1,112	782	854	1,219	818	453	526	1,804
Farm employment(b)	567	47,969	593	1,033	1,351	782	432	1,062	518	933	523	270
Average per farm	1.0	1.0	1.1	1.1	1.0	1.0	1.3	0.9	1.3	1.0	1.1	1.4
Estimated market value of land	& buildings											
Average per farm (\$)	3,534,628	2,159,268	2,460,460	2,120,511	2,110,533	2,429,274	4,508,817	1,749,910	3,684,979	2,302,509	3,128,151	2,208,791
Average per Acre (\$)	5,631	2,380	5,291	5,364	1,898	3,106	5,283	1,436	4,504	5,088	5,943	1,225
Estimated market value of all n	nachinery &	equipment										
Average per farm (\$)	429,435	230,222	266,197	285,514	187,440	263,305	440,389	196,783	546,161	284,312	329,976	254,587
Market value of agricultural pr	oducts sold											
\$1,000	415,413	23,068,756	337,904	1,081,302	845,305	826,281	407,425	782,661	738,795	652,105	326,239	259,840
Average per farm (\$)	767,862	461,661	609,935	1,177,888	625,225	1,025,162	1,184,376	670,087	1,824,185	692,256	700,083	1,312,325
Average per acre (\$)	1,223	509	1,312	2,979	562	1,311	1,388	550	2,229	1,530	1,330	728
Market value of livestock, poult	ry & their p	roducts										
Per farm (\$)	208,211	233,962	401,130	1,025,381	408,541	673,490	510,416	443,485	1,172,160	440,714	341,612	1,134,157
% Livestock	27.1	50.7	65.8	87.1	65.3	65.7	43.1	66.2	64.3	63.7	48.8	86.4
Net cash farm income of operat	ion											
Average per farm (\$)	263,787	108,593	96,417	93,037	103,792	173,787	331,212	115,078	328,179	157,397	199,971	73,619
(-)												<u> </u>

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

Source: USDA National Agricultural Statistics Service, 2012 Census of Agriculture.

⁽b) Farm employment estimates for 2012 from U.S. Department of Commerce, Bureau of Economic Analysis (BEA), where farm employment includes farm proprietors and hired labor.

Economic Impacts Associated with Livestock Production in York County, Nebraska

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

From the York 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 York County, data in Table One provide basic information from the 2012 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 York 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 York County for 2013. As the data in Table Two show, the total value of output for livestock and livestock products was reported to be \$100.6 million for 2013 (compared to the \$112.6 million market value of livestock and livestock products sold reported by the 2012 Census of Agriculture).

Table Two
Agricultural Sector Sales, York County, 2013

Industry	Sales (1,00	0 \$)	Percent Total Sales
Crops		\$213,210.1	68.0%
Oilseed farming	\$56,638.6		18.1%
Grain farming	\$154,039.7		49.1%
All other crop farming	\$2,531.8		0.8%
Livestock & Livestock Products		\$100,554.0	32.0%
Beef cattle ranching and farming	\$81,635.3		26.0%
Dairy cattle and milk production	\$922.3		0.3%
Poultry and egg production	\$3,214.8		1.0%
Animal production, except cattle and poultry and eggs	\$14,781.6		4.7%
Total Agricultural Sales		\$313,764.1	100.0%

Source: IMPLAN Input-Output model and 2013 database for York 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) was reported to have a value of production of \$81.6 million for the year 2013. Dairy cattle and milk production was \$0.9 million and poultry and egg production was \$3.2 million in York in 2013. Other animal production activities, except cattle and poultry, (primarily hog production) had an estimated output value of \$14.8 million. The data presented in Table Two show the most significant livestock sector is the beef-producing sector, accounting for 81.2 percent of the total production of livestock and livestock products in York County in 2013. Moreover, the beef-producing sector accounted for 101.1 of the 163.5 total reported employees in the livestock-producing sector and accounted for 56.1 percent of the value added by the livestock and livestock products sector.

Economic Impact Analysis

The economic linkages and impacts associated with livestock operations in York County are analyzed in the balance of this report. The analysis utilizes an input-output model developed for York 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 York 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 York 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 York 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 York County, there will be an estimated increase in total economic output of \$1.5039 for the York County economy.

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

					Multipliers ^(b)	
Multipliers	Direct ^(a)	Indirect ^(a)	Induced ^(a)	Total	Type I ^(c)	Type SAM ^(d)
Output	1.0000	0.4452	0.0587	1.5039	1.4452	1.5039
Employment	1.7309	1.2666	0.5702	3.5677	1.7318	2.0612
Value Added	0.2551	0.1314	0.0357	0.4222	1.5150	1.6550

⁽a) 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.

Source: Calculated for the York 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 \$0.42 for each dollar of sales of livestock and livestock products to final demand. This total value-added effect includes the direct effect of \$0.26 associated with the initial sales of one dollar of output to final demand, \$0.13 of payment to the factors of production associated with the increase in output (sales) for the intermediate (supplying) sectors, and the induced effect of \$0.04 related to the increased household demand for goods and services resulting from the increased payment to labor (household income). The value-added multiplier of 1.66 indicates for each dollar of value-added in the livestock and livestock products sector, we would expect to see approximately \$0.66 of additional value-added in other sectors of the York 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 3.6 jobs supported, including the direct, indirect, and induced components of the employment multiplier. Moreover, the employment multiplier of 2.1 indicates that for each 100 workers employed in the livestock and livestock products sector, we would expect to find 110 workers employed in other sectors which support livestock production in York County.

⁽b) The multipliers are calculated using the data from the IMPLAN model for the York County Study Area.

⁽c) Type I = (Direct + Indirect) / Direct

⁽d) Type SAM = (Direct + Indirect + Induced) / Direct

Table Four provides a summary of the economic effects associated with the production of livestock and livestock products in York 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 York County livestock producers is estimated to be \$78.4 million. From the York County I-O model, we estimate that for the York County livestock sector to sell this amount of output to final demand, it would need to produce a total of \$100.6 million of total output, as approximately 22.1 percent (\$22.2 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 York County, Nebraska
(Annual Estimates, 2013)

	Livestock Products	Other Economic Sectors	Total Economic Impacts
Output Effects (\$1,000)			
Direct Output	\$78,400,000	\$0	\$78,400,000
Indirect, Output (0.4452 of Direct)	\$22,200,000	\$12,700,000	\$34,900,000
Induced, Output (0.0587 of Direct)	\$0	\$4,600,000	\$4,600,000
Total Output	\$100,600,000	\$17,300,000	\$117,900,000
Employment Effects			
Direct Employment (FTE)	135.7	0.0	135.7
Indirect Employment (0.7318 of Direct)	27.8	71.5	99.3
Induced Employment (0.3294 of Direct)	0.0	44.7	44.7
Total Employment (FTE)	163.5	116.2	279.7
Value Added Effects (\$1,000)			
Direct Value Added	\$20,000,000	\$0	\$20,000,000
Indirect Value Added (0.5150 of Direct)	\$4,200,000	\$6,100,000	\$10,300,000
Induced Value Added (0.1400 of Direct)	\$0	\$2,800,000	\$2,800,000
Total Value Added	\$24,200,000	\$8,900,000	\$33,100,000

^{*} Impact components may not sum to totals due to rounding.

Source: Estimates computed by Kenneth Lemke, PhD, Nebraska Public Power District, using data from the Input-Output Model for York County (2013 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 York County are estimated to be \$117.9 million. Of this total, 85.3 percent (\$100.6 million) is accounted for by output (direct, indirect, and induced) produced by the livestock sector and the indirect and induced effects in other York County economic sectors represent an additional \$17.3 million of output.

-Employment Effects

There are an estimated 135.7 people employed in the livestock products sector to produce the output dedicated to sales to final demand (\$78.4 million); when the indirect and induced effects are included, the estimated employment in the livestock sector increases to 163.5 people. The other secondary employment effects (indirect and induced effects in sectors other than livestock and livestock products), account for an additional 116.2 jobs and total employment in York County supporting the production of livestock and livestock products is estimated to be 279.7 employees.

-Value-Added Effects

The value-added effects associated with the livestock production in York 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 York County are estimated to be \$33.1 million. Of this amount, \$24.2 million is value-added in the livestock products sector itself and an estimated \$8.9 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 York County.

Table Five provides additional detail describing the economic effects associated with the production of livestock and livestock products in York 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 York 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 York County.

Table Five

Distribution of Livestock Production Economic Impacts, by Selected Economic Sector^(a),

York County, Nebraska, 2013

	ary, restusii	% Tot.			% Tot.
Industry	Total Output	Output	Value Added	Emp.	Emp.
Livestock	\$95,616,366	85.3%	\$24,173,742	163.8	58.6%
Monetary authorities and depository credit intermediation activities	\$6,770,408	6.0%	\$2,822,551	20	7.2%
Wholesale trade businesses	\$1,887,768	1.7%	\$1,733,181	14.6	5.2%
Nondepository credit intermediation and related activities	\$1,125,214	1.0%	\$586,357	8.3	3.0%
Imputed rental activity for owner-occupied dwellings	\$821,850	0.7%	\$818,316	0	0.0%
Food services and drinking places	\$552,092	0.5%	\$265,067	11	3.9%
Private hospitals	\$378,664	0.3%	\$174,182	3	1.1%
Warehousing and storage	\$375,537	0.3%	\$190,187	4.1	1.5%
Telecommunications	\$323,478	0.3%	\$187,965	0.9	0.3%
Offices of physicians, dentists, and other health practitioners	\$320,820	0.3%	\$170,196	2.8	1.0%
Accounting, tax preparation, bookkeeping, and payroll services	\$246,218	0.2%	\$147,921	2.9	1.0%
Securities, commodity contracts, investments, and related activities	\$244,641	0.2%	\$17,492	3.4	1.2%
Transport by truck	\$241,132	0.2%	\$114,529	2.1	0.8%
Maintenance and repair construction of nonresidential structures	\$202,013	0.2%	\$75,573	1.7	0.6%
Civic, social, professional, and similar organizations	\$187,824	0.2%	\$52,841	2.6	0.9%
Natural gas distribution	\$185,592	0.2%	\$106,503	0.1	0.0%
Other state and local government enterprises	\$142,449	0.1%	\$26,322	0.5	0.2%
Automotive repair and maintenance, except car washes	\$137,829	0.1%	\$77,216	1.7	0.6%
Private junior colleges, colleges, universities, and professional schools	\$134,711	0.1%	\$67,661	1.2	0.4%
Total All Others	\$2,254,646	2.0%	\$1,261,714	35	12.5%
Total	\$112,149,252	100.0%	\$33,069,516	279.7	100.0%

⁽a) The business or economic sectors impacted by the production of \$78.4 million of livestock and livestock products for sales to final demand in York County (2013).

Source: Computed from the IMPLAN Input-Output Model for York County (2013 data).

Livestock Production and Economic Well Being

Data presented in Table Six provide further insight into the importance of livestock production activities as a contributing factor to economic well being for selected livestock production counties. Included in the table are data showing the average per acre value of livestock and livestock products sold for York County and for the leading livestock counties, according to this metric. Also included in the table are data showing per capita personal income for the counties, as a percent of per capita personal income for all non-metropolitan counties. The per capita personal income index data are included for two time periods. First the income index data are included for 2012. Also, recognizing the volatility of year-to-year changes in total personal and per capita personal income, especially in rural counties, an average per capita personal income index measure is included for a ten-year period, 2003–2012.

Table Six
Livestock Production and Per Capita Personal Income,
York County and Leading Livestock Counties

		& Livestock ts Per Acre	Per Capita Personal Income (% of Non-Metro Counties)		
County/Nebraska	Value (\$)	County Rank	2012	10 Yr. Avg. (2003-2012)	
York	332	32	114.7	106.4	
Nebraska	258	NA	102.0	110.2	
Cuming	2,594	1	143.6	127.8	
Phelps	1,433	2	118.6	115.8	
Platte	974	3	97.9	102.2	
Colfax	863	4	84.1	92.9	
Dawson	861	5	83.8	86.6	
Polk	649	6	126.3	114.9	
Wheeler	629	7	102.4	108.5	
Kearney	598	8	169.9	129.8	
Boone	596	9	108.9	107.3	
Antelope	587	10	167.1	126.7	
Average Top Ten Liv	estock Counties		109.2	105.3	

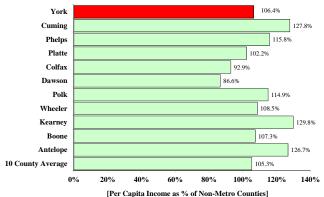
Source: USDA, National Agricultural Statistics Service, 2012 Census of Agriculture and U.S. Bureau of Economic Analysis (BEA), County Personal Income, 2003-2012.

As the data shown in Table Six and the accompanying chart indicate, per capita personal income for 2012 in Cuming County, the leading county in Nebraska in terms of the production of livestock and livestock products, was 43.6 percent more than the average per capita personal income for all non-metropolitan counties. For the ten-year period from 2003 to 2012, the average per capita personal income in Cuming County was 27.8 percent more than the average for the non-metropolitan areas of Nebraska. In the case of York County, which ranked 32nd among the Nebraska counties in terms of livestock sold per acre, average per capita income for the ten-year period, from 2003 to 2012, was \$36,466. This per capita income level was 6.4 percent above the average per

capita income level for all non-metropolitan counties for the 2003–2012 period. In 2012, per capita personal income for York County was \$50,638, or 14.7 percent more than the average per capita income level for all non-metropolitan counties.

The data presented in the table and the accompanying chart also show that, for the top ten livestock counties, the ten-year (2003–2012) average per capita personal income

Per Capita Personal Income, 10 Year Average*, as a Percent of Non-Metro Average, York County & Leading Livestock Counties**



* 10 Year Average (2003-2012).

**Note: Leading ten Nebraska counties in terms of value of livestock and livestock products produced per acre. Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce.

was 5.3 percent more than for all non-metropolitan counties. In 2012, per capita personal income in the leading livestock counties was 9.2 percent more than for all non-metropolitan counties.

Livestock Production and Property Taxes

As the data presented in Table Seven 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 \$478.3 for the leading ten livestock counties, 130.6 percent more than the \$207.4 per acre assessed valuation for all non-metropolitan counties in the state. In the case of York County, the per acre assessed valuation of agricultural property (except agricultural land) was \$527.4. This value was 154.2 percent greater than the per acre assessed value of the same class of property for all non-metropolitan counties.

Table Seven
Agricultural Property Valuations and Taxes Levied Per Acre, York County,
Non-Metropolitan Nebraska, and Leading Nebraska Livestock Counties

Part A -- Per Acre Assessed Valuation

	Ag. Outbuildings	Ag. Personal	Ag. Dwelling &		
County/Non Metro	& Farmsite	Property	Homesite	Ag. Land	Total
York	\$108.2	\$251.0	\$168.2	\$3,491.3	\$4,018.6
Non-Metro	\$48.5	\$78.2	\$80.7	\$1,047.4	\$1,254.8
Cuming	\$219.3	\$222.4	\$191.6	\$2,877.3	\$3,510.5
Phelps	\$77.5	\$261.2	\$136.0	\$2,140.0	\$2,614.6
Platte	\$241.9	\$249.5	\$325.5	\$3,141.3	\$3,958.2
Colfax	\$176.4	\$191.4	\$254.2	\$2,806.6	\$3,428.6
Dawson	\$97.1	\$132.3	\$206.9	\$1,268.5	\$1,704.8
Polk	\$150.3	\$216.6	\$234.5	\$2,707.3	\$3,308.7
Wheeler	\$72.9	\$40.8	\$24.0	\$665.0	\$802.8
Kearney	\$109.6	\$189.4	\$111.0	\$2,132.0	\$2,542.0
Boone	\$163.9	\$179.4	\$64.7	\$2,014.6	\$2,422.7
Antelope	\$110.2	\$184.7	\$111.5	\$1,935.9	\$2,342.3
Average Top Ten	_				
Livestock Counties	\$137.2	\$179.9	\$161.2	\$2,051.5	\$2,529.8

Table continues with footnotes and sources on next page.

Table Seven Continued

Agricultural Property Valuations and Taxes Levied Per Acre, York County, Non-Metropolitan Nebraska, and Leading Nebraska Livestock Counties

Part B Per	Acre Taxes	Levied
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County/Non Metro	Ag. Outbuildings & Farmsite	Ag. Personal	Ag. Dwelling & Homesite	A a L and	Total
County/Non Metro	& rariisite	Property	Homesite	Ag. Land	Total
York	\$1.51	\$3.48	\$2.33	\$49.07	\$56.39
Non-Metro	\$0.75	\$1.21	\$1.28	\$16.18	\$19.42
Cuming	\$3.37	\$3.43	\$2.96	\$44.39	\$54.15
Phelps	\$1.27	\$4.28	\$2.22	\$35.22	\$43.00
Platte	\$3.22	\$3.25	\$4.32	\$41.94	\$52.73
Colfax	\$2.95	\$3.21	\$4.27	\$47.38	\$57.81
Dawson	\$1.63	\$2.25	\$3.91	\$21.33	\$29.14
Polk	\$2.27	\$3.26	\$3.54	\$40.70	\$49.77
Wheeler	\$0.92	\$0.52	\$0.30	\$8.40	\$10.14
Kearney	\$1.80	\$3.08	\$1.83	\$34.35	\$41.07
Boone	\$2.25	\$2.48	\$0.89	\$27.73	\$33.35
Antelope	\$1.53	\$2.59	\$1.57	\$27.00	\$32.70
Average Top Ten					
Livestock Counties	\$2.04	\$2.72	\$2.53	\$30.82	\$38.11

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

Source: Values calculated by Kenneth M. Lemke, Ph.D., Economist, NPPD, using data from Nebraska Department of Revenue, 2013 Annual Report of the Property Assessment Division.

Part B of Table Seven 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 \$7.29 for the top ten livestock counties. This level of per farm tax revenues was \$4.05, or 125.0 percent more than per acre tax revenues for the same class of agricultural property for all non-metropolitan counties. In the case of York County, per acre taxes levied on this class of agricultural property were \$7.32, or 125.9 percent greater than 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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