

Nebraska

PROFIT OPPORTUNITIES FOR FOOD MANUFACTURING



Nebraska Public Power District

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EXECUTIVE SUMMARY

The “Food Manufacturing Industry” (NAICS 311) is one of the largest manufacturing sectors in the United States. The U.S. Census Annual Survey of Manufactures, 2013 indicates the total value of shipments from the food manufacturing sector totaled \$760,811.2 million and accounted for 13.0 percent of the total value of shipments by U.S. manufacturers in 2013. Value added in the industry totaled \$269,172.7 million in 2013. Moreover, food processing establishments accounted for 12.4 percent of total manufacturing employment in the United States.

This study has been developed specifically for use by manufacturers of food and related products to show how a Nebraska plant location can help them better respond to market conditions and significantly improve their competitive position. Nebraska provides substantial advantages for both small and large food production facilities. An attractive business climate, a well-educated and productive labor force, reliable supplies of low cost energy, ready access to raw materials and intermediate processed inputs, and a location central to the national consumer market are among the leading advantages the state offers manufacturers of food products.

Included in this study is an analysis of geographically variable labor and energy costs. The analysis makes cost comparisons among states on the basis of a model manufacturing plant. The model plant assumes employment of 50 production workers and the manufacture of a product representative for the food manufacturing industry as a whole. Sixteen states are examined in the analysis. Besides Nebraska, these states include those that currently have the largest

production in the industry as well as other states near Nebraska with which it typically competes for industrial location projects.

In the model plant analysis, estimated labor related costs include the direct wages paid to production workers and costs associated with workers’ compensation insurance, unemployment insurance, social security, and fringe benefits. Compared to the average labor costs for the 15 alternative states, Nebraska is found to offer an annual savings of \$141,500 in labor related costs, which is 5.3 percent less than the average labor costs for the other states.

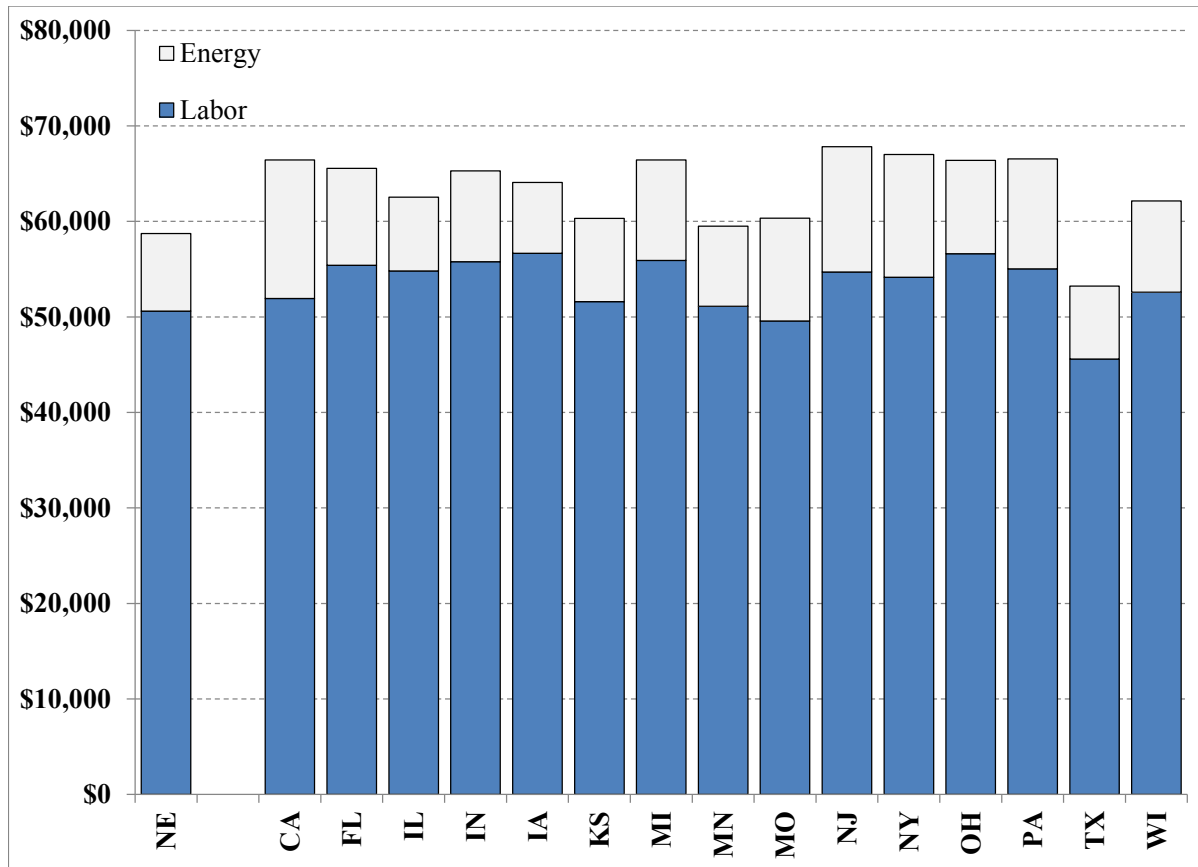
This study also concludes that a Nebraska plant location offers a significant energy cost advantage. Industrial electric rates for the 15 alternative states average 19.2 percent more than the Nebraska rate and the average industrial gas rate is 37.1 percent more. Combining these advantages, Nebraska’s energy cost for the model plant is 19.9 percent less than the average energy cost for the 15 alternative locations.

Together, Nebraska’s annual labor and energy costs for the model plant are \$242,271, or 7.6 percent less than the average annual labor and energy costs for the 15 alternative states. Conversely, the average labor and energy costs in the other 15 states are 8.3 percent more than the Nebraska labor and energy costs.

Figure 1 (following page) provides a summary of the labor and energy costs for the model plant in Nebraska and for each of the 15 alternate plant sites. These costs are shown on a per-production-worker basis.

Figure 1

**Labor and Energy Costs per Production Worker for
the Food Manufacturing Industry (NAICS 311)**



Calculated labor (wages, workers' compensation insurance, unemployment insurance, social security, and fringe benefits) and energy (electricity and natural gas) costs for the food manufacturing industry (NAICS 311).

Source: Table A-6.

PART A

THE FOOD MANUFACTURING INDUSTRY

I. Industry Characteristics and Trends

The “Food Manufacturing Industry” (NAICS 311) is one of the largest manufacturing sectors in the United States. The *Annual Survey of Manufactures, 2013* indicates the food manufacturing sector accounted for 13.0 percent of the total value of shipments by U.S. manufacturers in 2013. Moreover, food manufacturing establishments accounted for 12.4 percent of total manufacturing employment in the United States.

As the data shown in Table 1 indicate, the value of shipments for the food manufacturing industry in the U.S. totaled \$760,811.2 million in 2013. Value added in the industry totaled \$269,172.7 million, with total employees numbering 1,372,200 and production workers numbering 1,083,700. Capital expenditures for the food manufacturing industry totaled \$15,743.9 million in 2013.

Data for the 1997–2013 review period provided in Table 1 show there has been significant nominal growth in value added, the value of shipments, and capital expenditures, while industry employment has declined slightly. Between 1997–2013, the value of shipments by industry establishment grew by 80.4 percent, industry value added increased by 64.5 percent and annual capital expenditures grew by 45.8 percent. During the same period, the number of production workers decreased by 2.6 percent and total employment in the food manufacturing industry decreased by 6.5 percent. Obviously, the growth in value added and the value of shipments occurring during the sixteen-year review period resulted from increases in worker productivity.

Worker productivity in the food manufacturing industry has been enhanced by growth in capital expenditures made by industry establishments.

Table 1

**The Food Manufacturing Industry (NAICS 311),
Characteristics and Trends, Selected Years, 1997–2013**

Year	Total Employees	Production Workers	Value Added	Value of Shipments	Capital Expenditures	Avg. Hourly Earnings, Prod. Wrkrs.
	---- (Thousands) ----	---- (Thousands) ----	---- (Millions \$) ----	---- (Millions \$) ----	---- (Millions \$) ----	(\$)
1997	1,467.0	1,112.3	163,675.3	421,737.0	10,799.2	11.27
2002	1,506.9	1,140.6	203,639.6	458,786.5	10,954.1	13.27
2007	1,464.9	1,139.1	240,900.9	589,859.0	13,196.5	15.18
2008	1,437.8	1,113.7	246,222.0	649,056.2	15,649.5	15.37
2009	1,384.7	1,084.9	258,084.5	627,185.3	13,582.6	15.89
2010	1,364.2	1,075.5	265,919.2	646,451.5	14,064.2	16.45
2011	1,346.2	1,063.1	264,192.4	708,682.7	15,738.5	16.62
2012	1,400.0	1,094.5	259,078.5	738,515.0	17,143.9	16.85
2013	1,372.2	1,083.7	269,172.7	760,811.2	15,743.9	17.25

Data for the food industry as defined by the 2012 definition for NAICS 311, Food Manufacturing.

Sources: U.S. Bureau of the Census, *Census of Manufactures, Geographic Series 1997, 2002, and 2007*; *Industry Series: Detailed Statistics by Industry for the United States, 2012*; and *Annual Survey of Manufactures, 2009, 2011, and 2013*.

During the 1997–2013 review period, annual capital expenditures increased 45.8 percent, from \$10,799.2 million in 1997 to \$15,743.9 million in 2013. With a 2.6 percent decrease in the number of production workers during the same period, the annual capital expenditures per worker by food processing manufacturers increased by 49.6 percent, from \$9,709 per production worker in 1997 to \$14,528 in 2013.

The growth in worker productivity has not contributed to significant increases in payments to workers during the review period, at least not in real terms. As the data presented in Table 1 (previous page) show, average hourly wages for production workers in the food manufacturing industry increased by 53.0 percent, from \$11.27 per hour in 1997 to \$17.25 per hour in 2013. During the same period, the consumer price index increased by 45.1 percent, resulting in a much more modest increase in average hourly earnings for industry production workers in real, or inflation-adjusted terms. When average hourly earnings are adjusted using the consumer price index, the change in average hourly earnings for the 1997–2013 period was an increase of 5.4 percent during the 16-year review period or an annual increase of 0.3 percent per year.

II. Industry Structure

As the reader will note, the “Food Manufacturing Industry” (NAICS 311) is subdivided into nine 4-digit NAICS code classifications. And as a subsequent table will indicate, these nine 4-digit industry classifications are further divided into additional 5-digit NAICS subgroups.

The data presented in Table 2 show the general categories of products produced and sold by the food manufacturing industry. The table also provides insights into the relative sizes of the industry subgroups and the growth in industry shipments among the primary (4-digit NAICS) industry subgroups. The fastest growing industry subgroup at the 4-digit NAICS level was “Animal food manufacturing” (NAICS 3111), for which industry shipments grew by 55.6 percent between 2007 and 2013. The value of industry shipments for “Grain and oilseed milling” (NAICS 3112), the second fastest growing industry subgroup, grew by 49.1 percent between 2007 and 2013. For the “Food Manufacturing Industry” (NAICS 311) as a whole, industry shipments grew by 29.0 percent between 2007 and 2013.

Table 2
The Food Manufacturing Industry (NAICS 311),
Value of Industry Shipments by Major Industry Subgroup, 2007, 2012, and 2013

NAICS	Industry Subgroup	Value of Shipments			% Change 2007–2013	% of Total 2013
		2007	2012	2013		
		--- (Million Dollars) ---			(%)	(%)
311	Food manufacturing	589,859.0	738,515.0	760,811.2	29.0	100.0
3111	Animal food manufacturing	39,009.9	58,384.7	60,716.3	55.6	8.0
3112	Grain and oilseed milling	69,490.6	101,540.8	103,588.7	49.1	13.6
3113	Sugar and confectionery product manufacturing	27,249.3	32,774.1	33,336.7	22.3	4.4
3114	Fruit and vegetable preserving and specialty food manufacturing	60,956.1	69,215.7	71,236.2	16.9	9.4
3115	Dairy product manufacturing	91,683.5	107,714.2	111,936.4	22.1	14.7
3116	Animal slaughtering and processing	160,128.9	199,303.8	205,803.3	28.5	27.1
3117	Seafood product preparation and packaging	11,024.2	10,692.4	11,158.4	1.2	1.5
3118	Bakeries and tortilla manufacturing	55,547.2	64,441.4	66,173.2	19.1	8.7
3119	Other food manufacturing	74,769.4	94,447.8	96,862.0	29.5	12.7

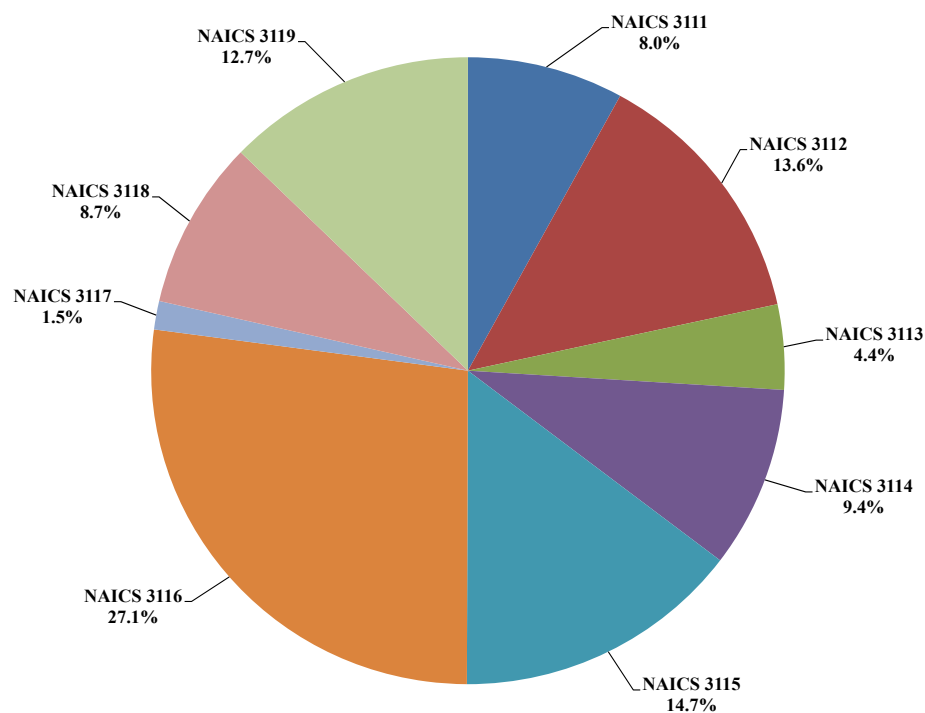
Source: U.S. Bureau of the Census, *Census of Manufactures, Summary Series 2007 and Industry Series 2012* and *Annual Survey of Manufactures, Geographic Area Statistics, 2013*.

Other food manufacturing industry subgroups experiencing relatively faster growth in the value of shipments between 2007 and 2013 included “Other food manufacturing” (NAICS 3119), with a 29.5 percent increase, followed by “Animal slaughtering and processing” (NAICS 3116), which experienced a 28.5 percent increase and “Sugar and confectionery product manufacturing” (NAICS 3113), which experienced a 22.3 percent increase.

The data in Table 2 and Figure 2 show the relative importance of the food manufacturing industry subgroups, in terms of value of shipments for each industry subgroup. “Animal slaughtering and processing” (NAICS 3116) sector is the largest industry

subgroup, accounting for 27.1 percent of total industry shipments in 2013. The second largest sector, “Dairy product manufacturing” (NAICS 3115) accounted for 14.7 percent followed by “Grain and oilseed milling” (NAICS 3112 - 13.6 percent), “Other food manufacturing” (NAICS 3119 - 12.7 percent), “Fruit and vegetable preserving and specialty food manufacturing” (NAICS 3114 - 9.4 percent), “Bakeries and tortilla manufacturing” (NAICS 3118 - 8.7 percent), “Animal food manufacturing” (NAICS 3111 - 8.0 percent), “Sugar and confectionery product manufacturing” (NAICS 3113 - 4.4 percent), and “Seafood product preparation and packaging” (NAICS 3117 - 1.5 percent).

Figure 2
Value of Shipments by Industry Subgroup,
Food Manufacturing Industry (NAICS 311), 2013



Total Industry 2013 Shipments - \$760,811.2 Million

NAICS 3111	Animal food manufacturing	NAICS 3116	Animal slaughtering and processing
NAICS 3112	Grain and oilseed milling	NAICS 3117	Seafood product preparation and packaging
NAICS 3113	Sugar and confectionery product manufacturing	NAICS 3118	Bakeries and tortilla manufacturing
NAICS 3114	Fruit and vegetable preserving and specialty food manufacturing	NAICS 3119	Other food manufacturing
NAICS 3115	Dairy product manufacturing		

Note: Percentages may not total 100% due to rounding.
Source: Table 2.

The data presented in Table 3 provide further detail for the industry subgroups that comprise the food manufacturing industry. Data showing the number of companies and establishments for 2012 and number of employees, production workers, value added, value of shipments, and capital expenditures are shown for the “Food Manufacturing Industry” (NAICS 311) as a whole for 2013 and for the NAICS 4-digit and 5-digit subgroups that make up the food manufacturing industry. As previously shown, the “Animal slaughtering and processing” sector (NAICS 3116) is the largest industry subgroup in terms of industry shipments. As the data presented in Table 3 (following page) show, it is also the largest food industry sector in terms of employees, production workers, value added, and capital expenditures. It is also of interest to

note that the largest 5-digit NAICS subgroup is “Animal slaughtering and processing” (NAICS 31161), which is identical to the 4-digit NAICS 3116 sector.

The largest industry subgroup, in terms of the number of companies and establishments, is the “Bakeries and tortilla manufacturing” (NAICS 3118) subgroup. This industry subgroup accounts for 9,877 of the total 22,086 companies in the food manufacturing industry and 10,546 of the total 25,575 industry establishments. Further inspection of the data for this sector reveals that the 5-digit sector, “Bread and bakery product manufacturing” (NAICS 31181), account for most of the companies and establishments in this industry sector.



Fusion Ranch

In 1977, KaiYen Mai’s parents brought Hsin Tung Yang Foods Co. to San Francisco from Taiwan. Ten years ago, Mai, now owner, began looking for a new facility in more than five states but could not find a building. Mai ultimately chose Scottsbluff, Nebraska, and established Fusion Ranch because it is a small tight-knit community and had local incentives. Last year, Fusion Jerky was launched which is a healthy, handcrafted jerky that is all natural, gluten free, no preservatives, no MSG, and lower in sodium jerky.

Table 3

The Food Manufacturing Industry (NAICS 311),
Number of Companies and Establishments, Employment, Value of Shipments,
Value Added, and Capital Expenditures by Major Sector and Industry Subgroups, 2013*

NAICS Code	Industry Description	Number of Companies*	Number of Establishments*	All Employees	Production Workers	Value		Value of		Capital Expenditures
						Added	Shipments	----- (Thousand \$)	-----	
311	FOOD MANUFACTURING	22,086	25,575	1,372,158	1,083,732	269,172,726	760,811,230	15,743,862		
3111	Animal food manufacturing	1,103	1,680	43,655	29,763	16,605,294	60,716,313	1,127,020		
31111	Animal food manufacturing	1,103	1,680	43,655	29,763	16,605,294	60,716,313	1,127,020		
3112	Grain and oilseed milling	473	808	52,009	38,347	29,029,318	103,588,735	1,693,419		
31121	Flour milling and malt manufacturing	237	404	15,491	11,439	6,242,497	20,655,032	384,900		
31122	Starch and vegetable fats and oils manufacturing	199	341	22,998	15,716	17,371,755	71,857,618	965,716		
31123	Breakfast cereal manufacturing	37	63	13,520	11,192	5,415,066	11,076,085	342,804		
3113	Sugar and confectionery product manufacturing	1,705	1,847	68,488	50,268	14,839,016	33,336,710	1,076,062		
31131	Sugar manufacturing	43	75	13,191	10,818	3,607,720	10,517,401	432,226		
31134	Nonchocolate confectionery manufacturing	421	439	17,862	13,618	3,991,802	7,610,844	258,209		
31135	Chocolate and chocolate confectionery manufacturing	1,241	1,333	37,435	25,832	7,239,494	15,208,466	385,627		
3114	Fruit and vegetable preserving and specialty food manufacturing	1,377	1,695	162,401	136,312	33,218,562	71,236,234	1,958,265		
31141	Frozen food manufacturing	540	693	89,130	75,574	13,894,226	30,988,069	964,078		
31142	Fruit and vegetable canning, pickling, and drying	837	1,002	73,270	60,739	19,324,336	40,248,164	994,186		
3115	Dairy product manufacturing	1,142	1,599	129,866	95,454	31,100,300	111,936,389	2,301,240		
31151	Dairy product (except frozen) manufacturing	799	1,211	111,521	81,164	27,994,406	104,381,778	2,129,603		
31152	Ice cream and frozen dessert manufacturing	343	388	18,345	14,290	3,105,895	7,554,611	171,637		
3116	Animal slaughtering and processing	3,053	3,591	475,478	416,795	55,742,126	205,803,347	3,505,274		
31161	Animal slaughtering and processing	3,053	3,591	475,478	416,795	55,742,126	205,803,347	3,505,274		
3117	Seafood product preparation and packaging	501	595	31,387	26,198	4,437,729	11,158,372	281,432		
31171	Seafood product preparation and packaging	501	595	31,387	26,198	4,437,729	11,158,372	281,432		
3118	Bakeries and tortilla manufacturing	9,877	10,546	245,943	169,823	36,595,528	66,173,164	1,700,807		
31181	Bread and bakery product manufacturing	8,880	9,409	177,333	114,974	22,898,299	38,690,454	907,478		
31182	Cookie, cracker, and pasta manufacturing	662	773	51,771	40,691	11,452,589	23,618,852	624,478		
31183	Tortilla manufacturing	335	364	16,839	14,157	2,244,641	3,863,858	168,851		
3119	Other food manufacturing	2,855	3,214	162,931	120,772	47,604,852	96,861,966	2,100,342		
31191	Snack food manufacturing	510	607	45,286	36,224	17,633,346	32,860,722	690,205		
31192	Coffee and tea manufacturing	414	446	15,446	9,918	4,495,065	11,985,199	283,515		
31193	Flavoring syrup and concentrate manufacturing	132	147	6,881	4,522	6,446,439	8,695,124	208,753		
31194	Seasoning and dressing manufacturing	620	703	31,143	20,875	9,424,235	20,229,708	377,709		
31199	All other food manufacturing	1,179	1,311	64,175	49,233	9,605,767	23,091,213	540,159		

*Values for "Number of Companies" and "Number of Establishments" are for 2012 from the U.S. Census of Manufactures, 2012.

Source: U.S. Bureau of the Census. Annual Survey of Manufactures. General Statistics. 2013.

III. Industry Production and Location Characteristics

The food manufacturing industry encompasses a very large and diverse industry. In 2012, 25,575 establishments were primarily engaged in food processing, a decrease of 0.2 percent from 2007. From 2007 to 2012, establishments with fewer than 20 employees increased by 2.2 percent while establishments with 20 or more employees decreased by 4.8 percent.

The data presented in Table 4 compares selected characteristics for the food manufacturing industry as a whole for 2007, 2012, and 2013. Over the 2007–2013 period, the number of employees declined by 6.3 percent from 1,464,200 to 1,372,300, while production workers decreased by 4.9 percent, from 1,139,300 in 2007 to 1,083,700.

The cost of materials (purchased inputs) increased by 39.9 percent, from \$351.5 billion in 2007 to \$491.9 billion in 2013. Another important factor contributing to the 29.0 percent increase

in the value of shipments or the value of output produced by the food manufacturing industry was the value added by manufacture, which increased by 11.7 percent, from \$241.1 billion in 2007 to \$269.2 billion in 2013.

The Table 4 data, along with data from the *Census of Manufacturers*, indicate that establishments in the “Food Manufacturing Industry” (NAICS 311) are more labor intensive than manufacturing establishments generally. In 2013, production workers accounted for 79.0 percent of total employment in the food manufacturing industry, compared to 69.9 percent for all manufacturing.

The importance of production workers relative to total employment in the food manufacturing industry has also increased over time. The number of production workers in the industry decreased from 1,139,300 in 2007 to 1,083,700 in 2013—a decrease of 4.9 percent. Total industry employment declined by 6.3 percent for the same period. Total production worker hours declined by a slightly smaller rate, 3.6 percent, than

Table 4
Production Characteristics for the Food Manufacturing Industry (NAICS 311) 2007, 2012, and 2013

	2007	2012	2013	Percent Change	
				2007-2012	2012-2013
Establishments					
Number	25,616	25,575	N/A	-0.2	N/A
With 20+ Employees	8,594	8,183	N/A	-4.8	N/A
All Employees					
Number [thousands]	1,464.2	1,400.0	1,372.2	-4.4	-2.0
Payroll [million \$]	50,387.9	54,546.0	55,651.4	8.3	2.0
Production Workers					
Number [thousands]	1,139.3	1,094.5	1,083.7	-3.9	-1.0
Hours [millions]	2,282.8	2,195.6	2,199.5	-3.8	0.2
Wages [million \$]	34,674.9	36,995.3	37,951.0	6.7	2.6
Average Hourly Wage [\$]	15.19	16.85	17.25	10.9	2.4
Value Added by Manufacture [million \$]	241,064.1	259,078.5	269,172.7	7.5	3.9
Cost of Materials [million \$]	351,493.5	481,481.2	491,859.3	37.0	2.2
Value of Shipments [million \$]	589,725.6	738,515.0	760,811.2	25.2	3.0
Cost of Purchased Fuels and Electric Energy					
Electric Energy [million \$]	4,855.8	5,398.4	5,583.4	11.2	3.4
Purchased Fuels [million \$]	5,493.1	3,829.2	4,039.7	-30.3	5.5
Quantity of Purchased Electric Energy [million kWh]	80,297.9	77,834.1	77,094.2	-3.1	-1.0

N/A: Not Available.

Sources: U.S. Bureau of the Census, *Census of Manufactures, Summary Series 2007 and Industry Series, 2012* and U.S. Bureau of the Census, *Annual Survey of Manufactures, General Statistics, 2013*.

total production workers and total production worker wages grew by 9.4 percent between 2007 and 2013. These data highlight the increasing importance of reliable and productive sources of labor for the food manufacturing industry.

As previously noted, the total cost of materials increased by 39.9 percent between 2007 and 2013. Energy inputs are an important production input for which the cost has increased less rapidly during the same time period. The cost of purchased electricity increased by 15.0 percent, while the cost of purchased fuels decreased by 26.5 percent from 2007 to 2013.

Table 5 provides data for selected additional production characteristics for the food manufacturing industry for 2012. The industry data presented in Table 5 are for the “Food Manufacturing Industry” (NAICS 311) as a whole, the “Animal slaughtering and processing” subsector (NAICS 3116), and the balance of the industry, excluding animal slaughtering

& processing. As the data indicate, there were 22,086 companies and 25,575 industry establishments in the food manufacturing industry in 2012. Establishments in the animal slaughtering and processing sector totaled 3,591 in 2012, or 14.7 percent of the total industry establishments. Further inspection of the data indicates that the “Animal slaughtering and processing” sector had, on average, much larger establishments than for the balance of the industry.

Data showing the distribution of manufacturing establishments by size is also of interest as one compares the “Animal slaughtering and processing” sector to the balance of the food manufacturing industry. Food processing establishments with 20 or more employees accounted for 32.0 percent of total industry establishments in 2012. For the animal slaughtering and processing sector, establishments with 20 or more employees accounted for 37.8 percent of establishments, while for the balance of the industry the comparable statistic

Table 5

**Establishment Characteristics for the Food Manufacturing Industry (NAICS 311),
Animal Slaughtering and Processing Industry (NAICS 3116),
and Other Food Manufacturing (NAICS 3119), 2012**

	NAICS 311 Food Manufacturing	NAICS 3116 Animal Slaughtering and Processing	NAICS 3119 Other Food Products
Number of Companies	22,086	3,053	19,033
Number of Establishments	25,575	3,591	21,984
Est. - with 20+ Employees	8,183	1,357	6,826
Est. - with 20+ Emp (% of Total)	32.0	37.8	31.0
Est. - with 100+ Employees	3,154	722	2,432
Est. - with 100+ Emp (% of Total)	12.3	20.1	11.1
Establishments per Company	1.16	1.18	1.16
Production Workers	1,094,518	413,908	680,610
Average Prod. Workers per Estab.	42.8	115.3	31.0
Value Added (Million \$)	259,078.5	52,645.6	206,432.9
Per Establishment (\$1,000)	10,130.1	14,660.4	9,390.1
Per Production Worker (\$)	236,705.6	127,191.5	303,305.7
Value of Shipments (Million \$)	738,515.0	199,303.8	539,211.2
Per Establishment (\$1,000)	28,876.4	55,500.9	24,527.4
Per Production Worker (\$)	674,739.9	481,517.1	792,247.0

Source: U.S. Bureau of the Census, *Census of Manufactures, Industry Series: Detailed Statistics by Industry for the United States, 2012*.

was 31.0 percent. The differences between the animal slaughtering and processing sector and the balance of the industry are more pronounced when looking at the number and share of establishments with 100 or more employees. For the food manufacturing industry as a whole, 12.3 percent of the establishments had 100 or more employees. This statistic for the animal slaughtering and processing manufacturing industry was 20.1 percent, compared to only 11.1 percent of establishments with 100 employees or more for the balance of the industry.

The average establishment in the food manufacturing industry had 42.8 production workers in 2012. Further review of the data in Table 5 indicate establishments in the animal slaughtering and processing sector were much larger, with an average of 115.3 production workers per establishment, which was 3.7 times the average size of 31.0 production workers per establishment for the balance of the industry. Obviously, a few very large plants and many small establishments characterize the animal food manufacturing sector.

Companies in the food manufacturing industry tend to locate plants in areas that provide a balance between access to material inputs and market orientation. Over the past few years, however, the location orientation has shifted somewhat, with access to material inputs combined with access to national markets gaining in importance, relative

to a location orientation to local and regional markets.

The data in Table 6 show the transportation characteristics of commodities produced by the food manufacturing industry. Data in Table 6 indicate shipping distances for “Meat, poultry, fish, seafood, and their preparations” and “Milled grain products and preparation, and bakery products” have increased, while shipping distances for “Animal feed, eggs, honey, and other products of animal origin” and “Other prepared foodstuffs, and fats and oils” have decreased. In 2012, the average distance shipped for “Animal feed, eggs, honey, and other products of animal origin” was slightly less than 400 miles and the average shipping distances for the other three categories ranged between 230 miles for “Other prepared foodstuffs, and fats and oils” and 262 miles for “Milled grain products and preparation, and bakery products.”

To provide an indication of the geographic dispersion of the food manufacturing industry, Table 7 (following page) presents 2013 data, the most recent year these data are available for this report, on employment, production workers, value added by manufacturer, and value of shipments for 16 selected states. As indicated in the table, establishments located in the 16 states for which data are presented contribute 62.7 percent of total value added in the food manufacturing industry. Moreover, these states account for 65.7 percent of

Table 6
Shipment Characteristics for the Food Manufacturing Industry (NAICS 311)
Related Commodities, Selected Commodities, 2007 and 2012

Commodity Sector	Value (Mil. \$) 2012	Tons (Thous.) 2012	Ton-miles 2012 (Mil.)	Average Miles		% Change 2007-2012
				2007	2012	
Animal Feed, Eggs, Honey, and Other Products of Animal Origin	114,147	223,393	57,800	494	383	-22.5
Meat, Poultry, Fish, Seafood, and Their Preparations	302,921	90,439	43,185	206	243	18.0
Milled Grain Products and Preparations, and Bakery Products	164,323	120,915	58,984	169	262	55.0
Other Prepared Foodstuffs, and Fats and Oils	597,943	522,932	180,437	318	230	-27.7

Source: U.S. Bureau of the Census, *Census of Transportation, 2007 and 2012 Commodity Flow Survey*.

total industry shipments and 59.6 percent of total production workers in the food manufacturing industry.

Included among these states are Nebraska and neighboring states that typically compete with Nebraska for plant locations. Also included are the leading states with the greatest concentrations of food processing activity. The 16 states are included in this study as alternative sites for plant locations and are evaluated in Appendix A of this report using the geographically variable labor and energy costs.

In 2013, California, with total shipments by food processing establishments of \$75,426 million, was the largest food manufacturing state, accounting for 9.9 percent of the total U.S. food product shipments. Illinois, with shipments of food products totaling \$44,436 million, ranked second among the states and contributed 5.8 percent of the total industry shipments. In terms of the value of shipments of food products, Texas ranked third,

followed by Wisconsin, Iowa, Pennsylvania, and Ohio. Nebraska, with shipments of food products totaling \$28,407 million, ranked tenth among the states and accounted for 3.7 percent of total industry shipments.

The average hourly earnings of production workers in the food manufacturing industry shown in Table 7 indicate Nebraska production workers had average hourly earnings (\$17.40) that were 0.9 percent higher than the U.S. average of \$17.25, and 4.8 percent less than the average of \$18.27 for the other 15 selected states. In highlighting Nebraska's average hourly earnings, it is notable that Nebraska has a higher concentration of its food manufacturing industry (and workers) in the "Animal slaughtering and processing" sector (NAICS 3116). And, as wages in the meat products manufacturing sector are generally lower than in other food industry sectors, one would expect Nebraska wages to be less than other areas.

Table 7
Food Manufacturing Industry (NAICS 311)
Production Workers, Average Wages, Value Added, and Value of Shipments
Selected States and the U.S., 2013

State	Employees (1,000)	Production Workers (1,000)	Average Hourly Earnings (\$)	Value Added (Million \$)	Value of Shipments (Million \$)	% of U.S. Value of Shipments (%)
Nebraska	33.7	28.2	17.40	6,116	28,407	3.7
California	150.7	115.8	17.59	28,377	75,426	9.9
Florida	25.4	18.9	19.01	4,958	12,856	1.7
Illinois	71.4	55.8	18.69	15,898	44,436	5.8
Indiana	32.9	24.3	19.23	7,906	22,391	2.9
Iowa	47.2	38.5	19.40	11,187	42,020	5.5
Kansas	27.8	23.3	17.73	5,408	23,007	3.0
Michigan	29.8	22.0	19.15	7,054	16,510	2.2
Minnesota	44.7	35.1	17.48	8,189	28,456	3.7
Missouri	38.0	32.3	16.99	8,046	24,017	3.0
New Jersey	27.5	19.3	18.55	4,794	12,617	1.7
New York	44.3	31.7	18.44	7,093	19,313	2.5
Ohio	49.7	37.9	19.44	13,762	31,878	4.2
Pennsylvania	61.8	47.3	18.77	12,792	32,293	4.2
Texas	81.5	65.0	15.68	14,186	43,516	5.7
Wisconsin	62.3	50.1	17.96	13,104	42,469	5.6
Total Sel. States	828.7	645.5	N/A	168,869	499,613	65.3
Percent of U.S.	60.4	59.6	N/A	62.7	65.7	65.7
Total U.S.	1,372.2	1,083.7	17.25	269,173	760,811	37,951.0

N/A - Not Available.

Source: U.S. Bureau of the Census, *Annual Survey of Manufactures, Geographic Area Statistics: 2013*.

IV. Capital Investment and Industry Outlook

Capital investment in the food manufacturing industry exceeded \$15.7 billion in 2013. As the data presented in Table 8 show, capital investment totaled \$15,743.9 million, a 19.3 percent increase from 2007.

As data provided in Table 8 also indicate, the growth and rate of capital investment in the food manufacturing industry varied significantly among the industry subgroups. The “Animal food manufacturing (NAICS 3111) sector recorded the greatest increase (62.7 percent) in capital expenditures between 2007 and 2013, followed by “Sugar and confectionery product manufacturing” (NAICS 3113 – 39.2 percent) and “Animal slaughtering and processing” (NAICS 3116 – 28.8 percent).

Two subgroups experienced declines in capital expenditures. The “Seafood product preparation and packaging” (NAICS 3117) and “Other food manufacturing” (NAICS 3119) subgroups experienced the declines of 5.5 and 1.4 percent respectively.

The food manufacturing industry in the United States is expected to record stable employment and moderate output growth trends over the long term. As indicated by the data presented in Table 9 (next page), employment in the food manufacturing industry (NAICS 311) declined moderately during the 2002–2012 period and is projected to decline by an average rate of 0.2 percent per year between 2012 and

2022. This projected decline is less than an average annual decline of 2.4 percent per year for all manufacturing employment between 2002 and 2012 and a projected average annual decline of 0.5 percent for the 2012–2022 period.

Real, constant-dollar, output in the food manufacturing industry is projected to increase by 17.5 percent, or by an average annual rate of 1.6 percent, in real, inflation-adjusted terms between 2012 and 2022. As the data presented in Table 9 indicate, this is slightly less than the projected increase in output for the total manufacturing sector (27.2 percent, or an average annual rate of 2.4 percent) for the 2012–2022 projection period.

The long run outlook for the food manufacturing industry is very positive. Expanding global markets and incomes will provide large and growing markets for this industry. On balance, the factors affecting individual companies producing food products will depend to a great extent on their ability to compete within their industry and in the markets for their products. While many external factors will influence the overall performance of the industry, the outlook for the individual companies that can control costs and respond to emerging and changing market opportunities and consumer tastes and behavior will be significantly enhanced. Appendix A of this study discusses how food processing establishments can better respond to market conditions and significantly improve their competitive positions with a Nebraska plant location.

Table 8
Capital Expenditures in the Food Manufacturing Industry (NAICS 311),
by Industry Subgroup, 2007, 2012, and 2013

NAICS	Industry Group	Capital Expenditures			% Change		2013 Cap. Exp. as Percent of Value Added
		2007	2012	2013	2007-2012	2012-2013	
311	Food manufacturing	\$13,196,530	\$17,143,913	\$15,743,862	29.9	-8.2	5.85
3111	Animal food manufacturing	692,604	1,023,463	1,127,020	47.8	10.1	6.79
3112	Grain and oilseed milling	1,561,443	1,777,630	1,693,419	13.8	-4.7	5.83
3113	Sugar and confectionery product manufacturing	772,978	1,197,114	1,076,062	54.9	-10.1	7.25
3114	Fruit and vegetable preserving and specialty food manufacturing	1,636,394	2,305,592	1,958,265	40.9	-15.1	5.90
3115	Dairy product manufacturing	1,869,415	2,771,426	2,301,240	48.3	-17.0	7.40
3116	Animal slaughtering and processing	2,721,718	3,723,343	3,505,274	36.8	-5.9	6.29
3117	Seafood product preparation and packaging	297,933	261,253	281,432	-12.3	7.7	6.34
3118	Bakeries and tortilla manufacturing	1,513,211	1,763,157	1,700,807	16.5	-3.5	4.65
3119	Other food manufacturing	2,130,834	2,320,935	2,100,342	8.9	-9.5	4.41

Source: U.S. Bureau of the Census, *Census of Manufactures, Summary Series 2007 and Industry Series 2012* and *Annual Survey of Manufactures, Geographic Area Statistics*, 2013.

Table 9**Employment and Output, Food Manufacturing Sector by Industry Subgroup,
for All Manufacturing, 2002, 2012, and Projected 2022**

NAICS	Industry Sector / Subgroup	Part A -- Employment				
		Thousands of Jobs			Avg. Ann. Rate of Change	
		2002	2012	2022	2002–2012	2012–2022
31-33	Manufacturing	15,258.7	11,918.9	11,369.4	-2.4	-0.5
311	Food manufacturing	1,525.8	1,468.7	1,441.8	-0.4	-0.2
3111	Animal food manufacturing	51.2	53.3	48.3	0.4	-1.0
3112	Grain and oilseed milling	61.8	60.2	57.4	-0.3	-0.5
3113	Sugar and confectionery product manufacturing	84.3	66.8	53.5	-2.3	-2.2
3114	Fruit and vegetable preserving and specialty food manufacturing	183.2	169.6	150.5	-0.8	-1.2
3115	Dairy product manufacturing	136.8	135.8	129.6	-0.1	-0.5
3116	Animal slaughtering and processing	517.2	484.8	517.8	-0.6	0.7
3117	Seafood product preparation and packaging	43.7	39.4	35.7	-1.0	-1.0
3118	Bakeries and tortilla manufacturing	296.7	284.5	271.6	-0.4	-0.5
3119	Other food manufacturing	150.9	174.3	177.4	1.5	0.2

NAICS	Industry Sector / Subgroup	Part B -- Value of Output				
		Billions of Chain-Weighted 2005 Dollars ^(a)			Avg. Ann. Rate of Change	
		2002	2012	2022	2002–2012	2012–2022
31-33	Manufacturing	4,320.8	4,407.6	5,604.8	0.2	2.4
311	Food manufacturing	498.3	489.7	575.2	-0.2	1.6
3111	Animal food manufacturing	28.2	20.4	24.9	-3.2	2.0
3112	Grain and oilseed milling	54.8	43.7	50.7	-2.3	1.5
3113	Sugar and confectionery product manufacturing	27.2	38.4	45.1	3.5	1.6
3114	Fruit and vegetable preserving and specialty food manufacturing	56.0	57.8	67.3	0.3	1.5
3115	Dairy product manufacturing	72.1	75.1	89.4	0.4	1.8
3116	Animal slaughtering and processing	142.2	151.5	177.9	0.6	1.6
3117	Seafood product preparation and packaging	9.0	8.8	10.2	-0.2	1.6
3118	Bakeries and tortilla manufacturing	48.9	49.1	57.2	0.0	1.5
3119	Other food manufacturing	60.0	48.4	56.8	-2.1	1.6

^(a) Output shown in billions of chain-weighted constant (2005) dollars.

Source: U.S. Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections, www.bls.gov/emp/
Employment and output projections for 2022 (2012).

PART B

NEBRASKA ADVANTAGES FOR MANUFACTURERS OF FOOD PRODUCTS

The food manufacturing industry appears to have both a market orientation and a resource orientation depending on the specific product produced, the type of establishment, and the market area served. Those establishments which appear to be oriented to plant locations near markets they are serving tend to be the smaller industry establishments which may have identified local market opportunities. Establishments which appear to be more resource oriented in terms of their plant locations tend to be the larger establishments, which produce goods for national distribution or serve significant regional markets. For the industry as a whole, the location orientation tends to favor a combination of resource availability and market access.

I. Availability of Inputs in Nebraska

Agriculture and agribusiness represent an important segment of the Nebraska economy and provide the basic economic foundation for continued expansion of the state's economy.

Essential services available to the agricultural sector and the processing, distribution, and packaging for related food products have provided much of the impetus for growth of the Nebraska economy. The substantial availability of agricultural and agriculturally related resources represent a significant advantage for Nebraska's existing food manufacturing sector and for new and expanding food processing establishments.

Table 10 provides data on Nebraska companies engaged in various types of food processing activity. The largest concentration of Nebraska food industry establishments is found in NAICS 31161, "Animal slaughtering and processing," followed by NAICS 31111, "Animal food manufacturing." As indicated by the data provided in the table, 113 establishments in the state slaughter and further process animal and meat products. Moreover, this industry subgroup employs the most workers, with 26 of these establishments employing more than 100 workers,

Table 10

Nebraska Food Manufacturing Establishments by Industry and Employment Size, 2013

NAICS	Industry Group	Employment Size				
		Total	Less Than 100 Emp.	100-499 Emp.	500-999 Emp.	1,000 or More Emp.
		----- (Number of Establishments) -----				
31111	Animal food manufacturing	51	46	5	0	0
31121	Flour milling and malt manufacturing	9	8	1	0	0
31122	Starch and vegetable fats and oils manufacturing	3	2	1	0	0
31123	Breakfast cereal manufacturing	2	0	1	1	0
31131	Sugar manufacturing	1	0	1	0	0
31134	Nonchocolate confectionery manufacturing	2	1	1	0	0
31135	Chocolate and chocolate confectionery manufacturing	0	0	0	0	0
31141	Frozen food manufacturing	4	3	1	0	0
31142	Fruit and vegetable canning, pickling, and drying	4	4	0	0	0
31151	Dairy product (except frozen) manufacturing	9	7	2	0	0
31152	Ice cream and frozen dessert manufacturing	2	2	0	0	0
31161	Animal slaughtering and processing	113	87	12	6	8
31171	Seafood product preparation and packaging	0	0	0	0	0
31181	Bread and bakery product manufacturing	47	43	4	0	0
31182	Cookie, cracker, and pasta manufacturing	0	0	0	0	0
31183	Tortilla manufacturing	2	1	1	0	0
31191	Snack food manufacturing	3	3	0	0	0
31192	Coffee and tea manufacturing	0	0	0	0	0
31193	Flavoring syrup and concentrate manufacturing	0	0	0	0	0
31194	Seasoning and dressing manufacturing	1	1	0	0	0
31199	All other food manufacturing	8	5	2	1	0
311	Food manufacturing	270	221	33	8	8

Source: U.S. Census Bureau *County Business Patterns: 2013*.

14 employing more than 500 workers, and 8 employing more than 1,000 workers.

A review of the types of existing food product manufacturers reported in Table 10 (previous page) reveals that many of the significant inputs required by other food manufacturing industry establishments are currently available in Nebraska. Major beef processors operate some of the industry's largest processing facilities in Nebraska. A variety of additional food processors will be able to take advantage of these significant and important local inputs.

The significant concentration of major food processors within Nebraska is related to the substantial availability of agricultural commodities produced in the state. Nebraska provides substantial agricultural inputs for beef, poultry, and dairy products processors. Moreover, the food and feed grains and other crops in the state represent an important agricultural resource both for supporting the livestock, poultry, dairy, and related products industry and as a raw materials input for further processing by Nebraska's food products manufacturers.

Table 11 provides data on agricultural production for selected crops (Part A) and livestock commodities (Part B on next page) in Nebraska. As these data illustrate, the state accounts for a substantial share of total U.S. production for these agricultural commodities.

Nebraska ranks third in the production of corn for grain with 1,664.3 million bushels in 2015. As shown in Part A of Table 11, Nebraska's corn crop accounted for 12.2 percent of total U.S. production. Sorghum for grain production in Nebraska totaled 20.2 million bushels, accounting for 3.5 percent of the total U.S. production. Nebraska also produced significant amounts of soybeans (7.4 percent of U.S. production), wheat (2.4 percent of U.S. production), hay (4.4 percent of U.S. production), and dry edible beans (11.4 percent of U.S. production).

One of the most significant attributes of Nebraska, in terms of agricultural output, is the production of livestock and livestock products. As the data provided in Part B of Table 11 show, 19.4 percent of the nation's cattle on feed as of January 1, 2015, were in Nebraska, which ranked first among the

Table 11
Production of Selected Agricultural Commodities in Nebraska

Part A -- Selected Crops				
	Corn for Grain, 2015		Sorghum for Grain, 2015	
	Acres Harvested	Production	Acres Harvested	Production
	(1,000)	(1,000 Bu.)	(1,000)	(1,000 Bu.)
Nebraska	8,900	1,664,300	220	20,240
% of U.S.	11.0	12.2	2.9	3.5
U.S. Total	81,101	13,686,063	7,673	572,658
	Wheat, 2015		Soybeans, 2015	
	Acres Harvested	Production	Acres Harvested	Production
	(1,000)	(1,000 Bu.)	(1,000)	(1,000 Bu.)
Nebraska	1,300	52,000	5,150	288,400
% of U.S.	2.7	2.4	6.2	7.4
U.S. Total	48,454	2,136,039	83,549	3,916,448
	All Hay, 2014		Dry Edible Beans, 2014	
	Acres Harvested	Production	Acres Harvested	Production
	(1,000)	(1,000 Tons)	(1,000)	(1,000 CWI)
Nebraska	2,600	6,260	139	3,336
% of U.S.	4.6	4.4	8.2	11.4
U.S. Total	56,539	142,100	1,702	29,287

Table continued on following page (including source notes).

Table 11, continued

Part B -- Selected Livestock, Poultry, and Related Products				
	Cattle on Feed, Jan. 1, 2015		All Cattle & Calves, Jan. 1, 2015	
	Number		Number	
	(1,000 Head)		(1,000 Head)	
Nebraska	2,530		6,300	
% of U.S.	19.4		7.0	
U.S. Total	13,025		89,800	
	Milk Cows, Jan. 1, 2015		Commercial Cattle Slaughter, 2014	
	Number		Number	Live Weight
	(1,000 Head)		(1,000 Head)	(1,000 Pounds)
Nebraska	54		6,684.0	9,299,912
% of U.S.	0.6		22.2	23.2
U.S. Total	9,307		30,170.0	40,045,321
	Hogs & Pigs, Dec. 1, 2014		Commercial Hog Slaughter, 2014	
	Number		Number	Live Weight
	(1,000 Head)		(1,000 Head)	(1,000 Pounds)
Nebraska	3,200		7,139.0	2,014,836
% of U.S.	4.7		6.7	6.6
U.S. Total	67,726		106,876.0	30,431,080
	Milk Produced, 2014		Chicken (Excl. Broilers), Dec. 1, 2014	
	Quantity		Number	Value
	(Million Pounds)		(Number Head)	(\$1,000)
Nebraska	1,195		11,554.0	35,817
% of U.S.	0.6		2.4	1.8
U.S. Total	206,046		479,050.0	1,962,126
	Layers and Eggs, 2014			
	Avg. Number of			
	Layers	Eggs		
	(1,000 Head)	(Millions)		
Nebraska	9,466	2,860		
% of U.S.	2.6	2.9		
U.S. Total	360,873	99,768		

Source: U.S. Department of Agriculture, National Agricultural Statistics Service (USDA, NASS), *Agricultural Statistics, 2015*, www.nass.usda.gov/

states in terms of this measure. Nebraska also led the nation in the commercial cattle slaughter in 2014, accounting for 23.2 percent of the total live weight.

Other livestock and livestock products, of which Nebraska produced significant quantities in

2014, include hogs (6.7 percent of the U.S. total, commercial slaughter), chickens (2.4 percent of the U.S. total inventory, and 2.6 percent of layers), and egg production (2.9 percent of the total, U.S. eggs produced).

II. Nebraska Location Resources

In addition to the significant availability of raw materials and intermediate inputs, Nebraska offers a wide range of other locational advantages for food processors. In this section of the study, Nebraska resources and location attributes important to establishments in the food manufacturing industry are presented and discussed. An evaluation of geographically variable labor and energy costs for selected states is presented in Appendix A, which follows this section, using a model manufacturing establishment producing a representative food product.

Nebraska lies near both the population and the geographic centers of the United States (Figure 3). The nation's population center moved across the Mississippi River for the first time in 1980 and continues to shift westward. The current population center is near Plano, Missouri, and the geographic center is in Butte County, South Dakota (the geographic center of the 48 contiguous states is Smith County, Kansas). Within one day, goods shipped by truck from Nebraska reach more than 25 percent of the U.S. population; add a second day and the percentage skyrockets to more than 90 percent.

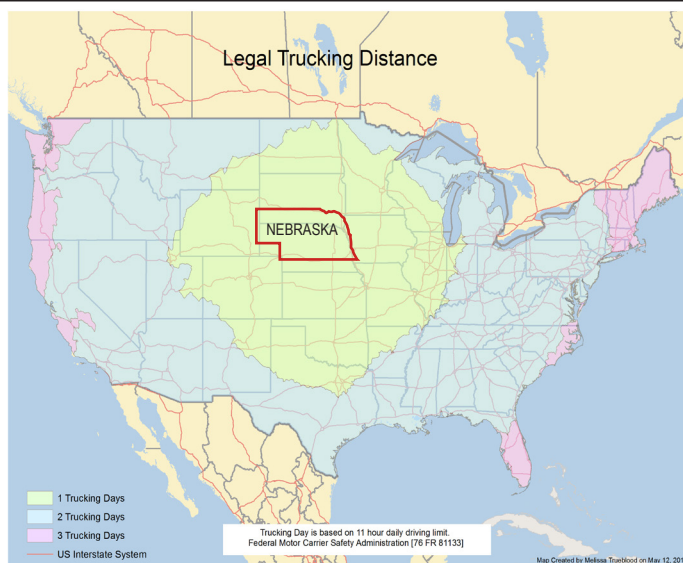
In addition to being a prominent location for national markets, Nebraska is well situated to

serve international markets, which are important to many food products manufacturers. For example, the Union Pacific's main railroad line in central Nebraska is the busiest freight corridor in the world; many of the trains carry grain to West Coast ports for shipment around the world. Also, the state currently has operating Foreign Trade Zones in Omaha (Zone No. 19, Grantee/Operator: Dock Board of the city of Omaha/Douglas Civic Center) and in Lincoln (Zone No. 59, Grantee/Operator: Lincoln Chamber of Commerce Foreign Trade Zone). Foreign trade zones reduce or eliminate duties and excise taxes by allowing "domestic activity involving foreign items to take place as if it were outside of U.S. Customs territory."

Access to Markets - Transportation

Nebraska's central location is especially advantageous for transportation services. The state's communities are connected by a good highway system that includes 8,539 miles of interstate, freeway, and arterial roads. That system includes a 455-mile stretch of Interstate 80, the most traveled east-west transcontinental route of the interstate highway system. North-south interstate highways that add to Nebraska's market include Interstate 29, which passes along the state's eastern border in Iowa, and Interstate 25, which passes in close proximity to the state's western border.

Figure 3
Truck Access to Regional and National Markets



More than 13,500 licensed motor carriers with worldwide connections are based in Nebraska and serve businesses throughout North America. Largely because of Nebraska's good interstate connections, the state is home to one of the largest trucking companies in the country, Werner Enterprises, headquartered in Omaha.

The nation's two largest rail companies—BNSF Railway Company and Union Pacific Railroad—provide rail service to many Nebraska communities. Ten freight railroads operate more than 3,200 miles of track throughout Nebraska. No major city in the United States is more than five days by rail from Nebraska. Amtrak provides passenger service in Nebraska with stops in five communities.

The Union Pacific (UP) maintains headquarters in Omaha and is one of the largest railroads in North America with 32,000 miles of track in the western two-thirds of the country. UP operates more than 1,000 miles of track in Nebraska. The Harriman Dispatching Center in Omaha is one of the most technologically advanced dispatching facilities in the country. Union Pacific's Bailey Yard in North Platte is the largest rail freight car classification yard in the world. The yard covers 2,850 acres, switches 10,000 rail cars daily, and has more than 300 miles of track. Union Pacific's main line in central Nebraska is the busiest rail freight corridor in the world, with more than 115 trains operating over the line every 24 hours.

BNSF Railway Company (BNSF) operates more than 1,500 route miles of track in Nebraska, is one of the state's primary railroads transporting two million carloads of freight in Nebraska each year, and employs more than 4,000 people in the state. BNSF has rail yards in Alliance, Lincoln, McCook, and Omaha; intermodal and automotive facilities in Omaha; and mechanical shops in Alliance and Lincoln.

Commercial airline service is available in nine Nebraska cities, providing direct service to major hubs. Scheduled air freight service is provided to five additional communities with on-demand service available. A total of 81 public-use airports are located throughout the state.

With the Missouri River forming Nebraska's eastern border, the state is a western terminus for barge traffic. Barges have access to both the Gulf of Mexico via the Mississippi River and to the Atlantic Ocean via the Great Lakes and the St. Lawrence Seaway.

Low Cost Utilities

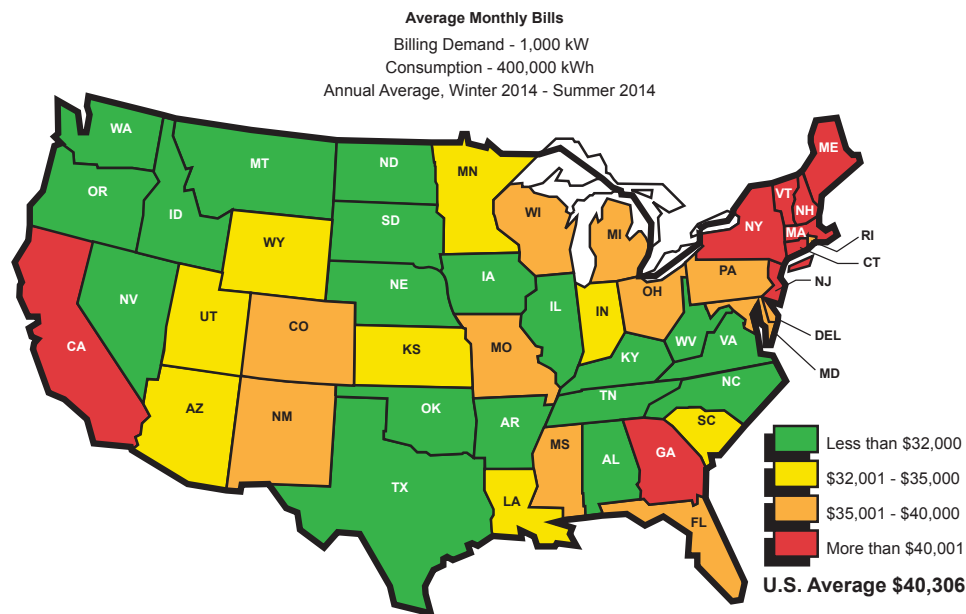
In providing a full range of reliable utilities with many cost advantages, Nebraska offers additional benefits to food processors. Nebraska's electric rates for typical industrial customers are 21.0 percent less than the U.S. average and are among the lowest of the 48 contiguous states (Figure 4, next page). This benefit is of particular importance to the food manufacturing industry, with its high level of electricity use relative to total energy consumption. A statewide grid system with regional interconnections assures reliability of service and adequacy of supply.

One of the reasons for Nebraska's low electric rates is its close proximity to the vast low-sulfur coal fields of eastern Wyoming. It is also the only state in the nation with electric service provided entirely by public power. Nebraska's two largest utilities, Nebraska Public Power District (NPPD) and Omaha Public Power District (OPPD), have under their control an efficient and dependable "mix" of generating systems to supply current and projected needs; the mix includes coal, nuclear, hydro, wind, gas, oil, and diesel sources.

Some major electric-generating facilities in Nebraska are:

- 1,300-megawatt NPPD coal-fired Gerald Gentleman Station near Sutherland, Unit No. 1 on-line in 1979 and Unit No. 2 on-line in 1982
- 1,330-megawatt OPPD coal-fired plant at Nebraska City, Unit No. 1 on-line in 1979 and Unit No. 2 online in 2009
- 800-megawatt NPPD Cooper Nuclear Station near Brownville, on-line in 1974
- 486-megawatt OPPD Fort Calhoun Nuclear Station, on-line in 1973

Figure 4
Electric Costs for Industrial Service, Winter 2014–Summer 2014



Source: Edison Electric Institute, “Typical Bills and Average Rates Report,” January 1, 2014 and July 1, 2014. State averages are weighted using eight months of January 2014 data and four months of July 2014 data. Nebraska data represent the average for Omaha Public Power District, Lincoln Electric System, and Nebraska Public Power District using the same seasonal weighting.

NPPD owns and operates a 59 MW wind generation facility near Ainsworth. NPPD has long-term agreements to purchase 122 MW of wind generated power from facilities located near Bloomfield, 80 MW from a facility near Petersburg, 75 MW from a facility located in Custer County, Nebraska, and 75 MW from a facility near Steele City.

Nebraska utilities also operate 12 hydroelectric plants and receive a power allotment from the Western Area Power Administration (WAPA) hydroelectric facilities on the Missouri River. The utilities operate with a reserve capacity that protects users against voltage reductions and brownouts. Furthermore, the utilities are members of the Mid-Continent Area Power Pool (MAPP), the Southwest Power Pool (SPP), and the Western System Power Pool (WSPP).

Natural gas in Nebraska is also attractive to industry for service, supply, and price. A gas-producing state, Nebraska is close and well connected by pipeline to the major gas fields of the central and southern plains. The state’s average cost of industrial gas is less than both the regional and national averages.

The pipelines of two major companies, Northern Natural Gas and Kinder Morgan, provide an ample supply of natural gas to most areas of Nebraska. Depending on usage requirements, natural gas is offered both on a “firm” and “interruptible” basis.

High Quality Work Force

Any industry derives benefits from a productive and well-educated labor force. Nebraska’s labor force has a strong work ethic and technical proficiency. Individuals with the foresight and diligence to transform it into a world center of agricultural production settled the state. Their descendants maintain a work ethic and mechanical aptitude that carry over into the state’s manufacturing sector. Contributing to Nebraska’s high labor productivity are very low absenteeism and labor turnover rates. Furthermore, Nebraska employers pay among the lowest unemployment insurance and workers’ compensation costs in the nation.

Nebraska’s work force quality is also highly rated by the state’s employers and by various national comparisons. In 2013, 90.2 percent

of the state's population 25 years of age and older were high school graduates, compared to 86.6 percent nationally. In addition, the 2013 Nebraska public high school graduation rate was 88.5 percent. One reason for the high graduation rate is the state's comparatively low student-teacher ratio—13.73:1 in 2011–2012 compared to 16.01:1 for the nation. Finally, Nebraska students consistently score above the U.S. average on both standardized achievement tests and college entrance exams. In 2014 Nebraska students averaged 21.7 on the ACT college entrance test, compared to 21.0 nationally. Moreover, Nebraska's average composite ACT score was achieved with 86 percent of graduates taking the exam, compared to 57 percent of graduates nationwide.

Higher Education Resources and Research

Companies within the food manufacturing industry can be major beneficiaries of flexible, state-of-the-art education resources helping assure a trained, technically skilled work force in Nebraska.

UNIVERSITY OF NEBRASKA SYSTEM

The industry relies on the presence of quality institutions of higher learning for research, teaching, and a flow of skilled workers. The University of Nebraska (NU) system, with campuses in Lincoln, Omaha, and Kearney, has the largest facilities among the state's 20 colleges and universities and offers advanced degrees in most professional fields. It is a major center for both basic and applied research and has a combined student enrollment of more than 45,000.

Founded in 1869, the Lincoln campus of the University of Nebraska is the state's land-grant university. Nebraska was the first university west of the Mississippi to establish a graduate college (in 1896); today, NU is one of the top 50 American universities in the number of doctoral degrees granted annually. The University of Nebraska boasts 22 Rhodes scholars and 2 Nobel laureates among its alumni. In 2015, U.S. News & World Report recognized four University of Nebraska-Lincoln online programs as some of the top programs in the nation. These included NU's online graduate education, bachelor of

science in applied science, master of engineering management programs, and the master of business administration. These programs are among the more than 100 degree, certificate, and endorsement online programs offered by the four campuses of the University of Nebraska system.

The Food Processing Center - University of Nebraska-Lincoln (www.fpc.unl.edu) is a major resource available to food manufactures. The Food Processing Center understands that food is both a science and a business but are also two different, yet interconnected worlds. The Food Processing Center at the University of Nebraska-Lincoln provides technical support to the food industry in product and process development as well as business assistance to small companies and entrepreneurs. Through a unique combination of science, engineering, and business development services that parallel the growing needs of the industry, the Food Processing Center supports the food industry by way of improving their market and economic vitality.

The mission statement of the Food Processing Center is to advance the value-added food manufacturing industry by partnering on technical and business development from idea through ongoing market support. The Center's goals are to stimulate the development of new food businesses, assist current manufacturers to become more efficient, productive, and diverse. The Food Processing Center assists new, as well as existing food processors, through educational programs for administrators, managers, and employees within the industry. Current programs and services are provided to meet the ever-changing challenges of the food industry, with new, innovative services and workshops continually added in order to meet these needs. All services are provided on a strictly confidential basis.

The Food Processing Center Team

The Food Processing Center team is made up of food scientists and business professionals that are wholly committed to providing services to the food industry. Services are provided to food processors ranging from micro-entrepreneur start-ups to established Fortune 500 food companies. The Food Processing Center's team

has access to state-of-the-art pilot plants and labs which allow them to provide outstanding assistance within the following service areas:

- Applied Research & Engineering
- Labeling & Regulatory Compliance
- Laboratory Services
- Pilot Plants
- Product & Process Development
- Professional Development Opportunities and Education
- Sensory Analysis Laboratory
- Small Business Development Services

The Food Processing professional team works in conjunction with the Food Science and Technology faculty as well as faculty in other departments within the University of Nebraska, such as Agricultural Economics, Animal Science, Agronomy and Horticulture, Plant Sciences, and Biological Systems Engineering.

Applied Research & Engineering

This unit, known as ARE, serves as the bridge between fundamental research and the food industry. ARE utilizes and adapts the findings of original scientific research to meet specific industry needs. ARE helps businesses improve efficiencies and sharpen their competitive edge.

Labeling & Regulatory Compliance

Understanding FDA and USDA labeling regulations can be a daunting task for any company. Labeling assistance and reviews are provided to ensure that packaging is in compliance with regulations.

Laboratory Services

From routine analysis to specialized research projects, the Food Processing Center provides rapid and accurate microbiological testing so companies can make appropriate decisions regarding the safety of their food products. These comprehensive services allow companies to bring safe products to the market and quickly address food safety issues.

Pilot Plants

The Food Processing Center has extensive equipment that can be used to produce samples or to develop, scale-up, and test product formulas and food ingredients. Utilizing the Center's equipment saves a company time and money in bringing finished products to the marketplace.

Product & Process Development

The Food Processing Center provides innovative formulation and process development for a wide range of food and beverage products. This includes concept and prototype development, scale-up, ingredient application, and line extensions.

Professional Development Opportunities

Providing the opportunity for employees to learn new skills and update their knowledge is critical for any company to remain viable in the marketplace. The Food Processing Center provides companies with a variety of unique educational and training opportunities so companies can continue to be successful.

Sensory Analysis Laboratory

Sensory analysis studies allow companies to better understand, determine, and target specific markets. The Center designs and conducts studies in their sensory facility to meet the objective of each client.

Small Business Development Services

Launched in 1989, the National Food Entrepreneur Program has helped thousands of entrepreneurs nationwide realize their dream of starting a food company. The program begins with the one-day Recipe to Reality Seminar and individualized consultation is provided through Product to Profit.

OTHER STATE COLLEGES

In addition to the University of Nebraska system, Nebraska operates a state college system with campuses at Chadron, Peru, and Wayne. A variety of private colleges and universities are also located in Nebraska including Creighton University in Omaha, Nebraska Wesleyan



The
Food
Processing
Center

Success Story: Apollo Foods

Friends & Sports Enthusiasts Launch Healthy Frozen Novelities

Apollo Food Group, LLC of Boston, MA, produces and markets healthy frozen Greek yogurt novelties under the brand name Yasso™—a variation of the Greek word yassou which means hello.

Amanda Klane and Drew Herrington were standout high school athletes—Amanda in soccer and Drew in track and field—and went on to compete collegiately at the Division I level. In July of 2009, the duo teamed up to explore the idea of starting a food manufacturing business after Amanda was introduced to frozen Greek yogurt while working as a food broker. Inspired by the product, Amanda and Drew embarked on a journey to create a healthy, high protein frozen novelty product utilizing Greek yogurt.

To help with the development of their product, they began looking for outside assistance. After determining a private laboratory would be too expensive, they started exploring universities as a more affordable solution. They came across the Food Processing Center at the University of Nebraska-Lincoln and contacted Laurie Keeler, senior manager of Product Development, who has a background in the dairy industry and wide-ranging experience with developing novel food products.

Drew and Amanda worked with Laurie and her product development colleague, Julie Reiling, on the creation of a frozen dairy novelty utilizing Greek yogurt. The goal was a scalable formulation for mass production; one resulting in a high protein product containing less than 70 calories per 75-gram serving. The final product, Yasso™, was a healthy frozen Greek yogurt delivering 6 grams of protein and only 70 calories per bar.

Additional product attributes include:

- Made from probiotic-rich Greek style yogurt
- All natural
- Fat-free
- Gluten-free
- Made with rBST-free milk
- A good source of calcium
- No corn syrup or artificial sugars
- Kosher
- No added sodium

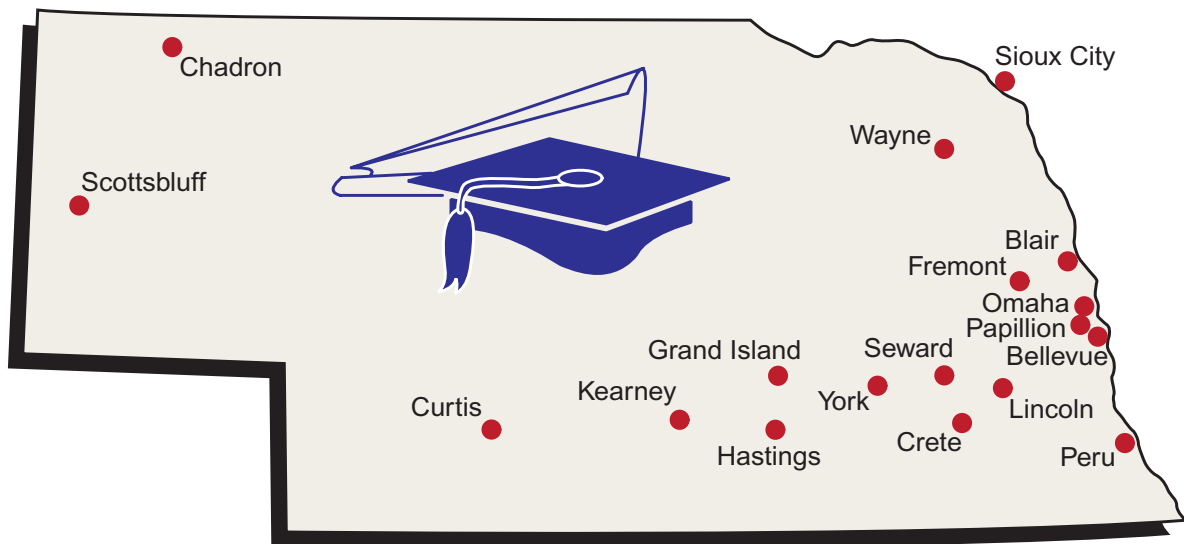
The first order of Yasso™ Greek yogurt bars was delivered to retailers in March, 2011. Today the bars are available in more than 30 different retail chains nationwide with a heavy concentration on both coasts.

University in Lincoln, and others located throughout the state (see Figure 5A, next page).

Another important facet of higher education in Nebraska is the statewide community college system that provides specialized training programs for new and expanding industries. As indicated in Figure 5B (next page), the state has six community college areas, which provide services in 26 cities across the state. The colleges offer a full curricula of occupational

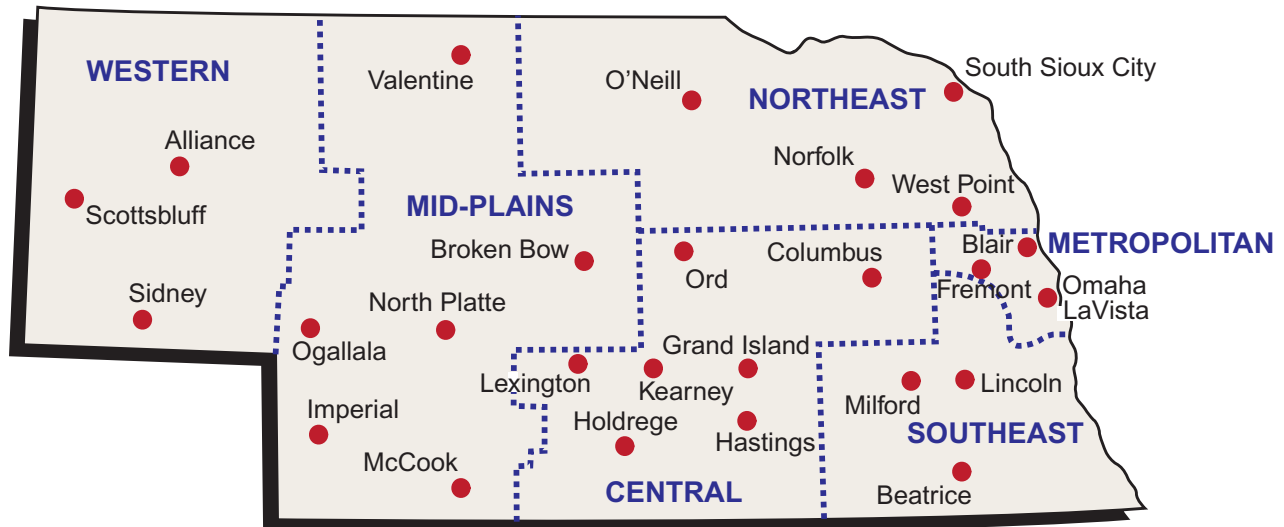
courses, which provide a steady flow of skilled graduates to Nebraska industries. As examples, Hastings and Milford Community College campuses offer vocational/technical training in more than 50 different one-year and two-year programs. Training is accomplished through the extensive use of hands-on activities and is centered around practical application of technical knowledge gained in lecture and laboratory sessions.

Figure 5A
Location of Nebraska Area Colleges and Universities



Source: Nebraska Coordinating Commission for Postsecondary Education.

Figure 5B
Community Colleges in Nebraska



Source: Nebraska Community College System.

Performance-Based Tax Incentives

In 2005 the Nebraska Legislature enacted the Nebraska Advantage Tax Incentive Program and amended the program in 2008 and 2010. The Nebraska Advantage package replaced and improved on Nebraska's existing tax incentive programs and created a business climate that makes Nebraska the preferred location for business start-ups and expansions. The Nebraska Advantage rewards businesses that invest in the state and hire Nebraskans. In this progressive, pro-business climate, corporate income and sales taxes are reduced or virtually eliminated. Further information about the Nebraska Advantage is summarized in this study and is available at www.NebraskaAdvantage.biz.

The legislative components of the Nebraska Advantage package include:

Nebraska Advantage Act (LB 312)

- Expanded incentives for six “tiers” of investment and/or job creation
- Small business advantage
- Research and development advantage
- Microenterprise tax credit advantage
- Rural development advantage
- State and local sales tax exemptions of manufacturing machinery, equipment, and related services

Qualified businesses for Tier One include scientific testing research and development, manufacturing, and targeted export services. Qualified businesses for Tiers Two, Three, Four, and Five include the above plus data processing, telecommunications, insurance, financial services, distribution, storage, transportation, and headquarters (administrative). All businesses other than retail qualify for Super Tier Six. Retail sales of tangible personal property to specified markets can also qualify under Tiers Two through Six.

Nebraska Agricultural Innovation Advantage (LB 90)

- Agriculture opportunities and value-added partnership act
- Building entrepreneurial communities act
- Ethanol production incentive cash fund enhancement

Other components in the Nebraska Advantage package are:

Nebraska Customized Job Training Advantage - Provides a flexible job training program with grants from \$500 to \$4,000 per job. Additional funds may be available for new jobs created in rural or high poverty areas. Companies can design their own training or a statewide training team can assist with training assessments, training plans, curriculum development, and instruction.

Nebraska Research and Development Advantage - Offers a refundable tax credit for research and development activities undertaken by a business entity. The credit is equal to 15 percent of federal credit allowed under Section 41 of the Internal Revenue Code of 1986. The credit is increased to 35 percent of the federal credit allowed under Section 41 if the business firm makes expenditures on the campus of a Nebraska college or university or a facility owned by a college or university in Nebraska. An important feature—businesses with little or no income may take advantage of the tax credit by receiving a sales tax refund or a refundable income tax credit.

Nebraska Microenterprise Tax Credit Advantage - Provides a 20 percent refundable investment tax credit to micro businesses on new investment in targeted communities. Applicants may qualify for a maximum \$10,000 throughout the life of the program. The credit is geared to companies with five or fewer employees, including start-ups. Credits are approved through an application process with the Nebraska Department of Revenue and evaluated on expected local economic impacts. The credits are earned on new expenditures for wages, buildings, certain expenses, and non-vehicle depreciable personal property.

Additional Tax Savings:

- Sales Tax Exemption On:
 - Manufacturing equipment
 - Manufacturing or processing raw materials
 - Common carrier vehicles
 - Utilities used in manufacturing
- No Tangibles Tax
- No Inventory Tax

- Sales Tax Refund on Pollution Control Equipment
- 100% Tax Exemption on Certain Personal Property

In a tax policy incentive, Nebraska determines the taxable income attributable to Nebraska operations using a single factor, or “sales only,” formula. This method for determining corporate income tax allocation provides a significant advantage to multi-state unitary firms that sell products or services outside Nebraska. Nebraska also provides a capital gains exemption. State residents may elect, on a one-time basis, to subtract from their income tax liability the gain from the sale of capital stock of a corporation acquired during Nebraska-based employment with the corporation.

New Economic Development Initiatives

Nebraska has recently adopted several new legislative initiatives and programs designed to build Nebraska’s innovation economy and foster new high-quality job opportunities. Additional information on all these initiatives can be viewed at www.neded.org.

Talent & Innovation Initiative (T12) - The four-part T12 was developed to enhance momentum in Nebraska’s fastest growing industries, maintain Nebraska world class workforce, and leverage private sector innovation.

Nebraska Internship Program (InternNE), LB 386, is a partnership with Nebraska businesses to create new, paid internship opportunities for college and university students. The program provides matching grants to create new internship opportunities and are for 500 to 750 juniors and seniors studying at four-year institutions or students in their second year at a Nebraska community college.

Grant awards will be made on a first-come, first-serve basis to companies creating new internship opportunities, which are capped at ten per business. Internships will pay at least minimum wage and range from 12-week to year-long programs. Grant amounts are lesser of 40 percent of reimbursable costs or up to \$3,500 in non-distressed areas, and

lesser of 60 percent of reimbursable costs or up to \$5,000 in distressed areas.

Business Innovation Act, LB 387, is intended to help businesses develop new technologies and leverage innovation to enhance quality job opportunities in the state. It will provide competitive matching grants for research, development, and innovation and will also help expand small business and entrepreneurial outreach efforts. Eligible grant activities may include: prototype development, product commercialization, applied research in the state, and support for small business and microenterprise lending.

Site & Building Development Fund, LB 388, makes state resources available to increase industrial site and building availability and support site ready projects. State funding will be focused initially on land and infrastructure development and building rehabilitation, with 40 percent of funding available to non-metro areas. Communities will provide matching funds. This program also makes funding available to assist with demolition of dilapidated residential and industrial buildings and offers direct support to communities that lose a major employer.

Angel Investment Tax Credit, LB 389, encourages investment in high-tech startup enterprises in Nebraska by providing a 35–40 percent refundable state income tax credit to qualified Nebraska investors investing in qualified early-state companies. Capped at \$3,000,000 annually, the program requires minimum investment of \$25,000 for individuals and \$50,000 for investment funds. Eligible small businesses must have fewer than 25 employees, with the majority based in the state.

Other Development Assistance Programs

Building on traditional advantages, Nebraska offers additional development assistance programs. Among those programs are the following:

Tax Increment Financing (TIF) - An additional incentive program of note is Nebraska’s Tax Increment Financing. TIF is a method of financing the public improvements associated with a private development project in a

blighted area by using the projected increase in property tax revenue that will result from the private development.

Community Development Block Grants (CDBG) - Eligible businesses may be able to qualify for CDBG through local governments so they may make improvements to the public infrastructure serving the project site. Performance based loans of up to \$1,000,000 may be awarded to qualifying companies creating new investments and jobs. Fifty-one percent of the new jobs must be held by or made available to low- or moderate-income persons. Other federal requirements apply. The program is administered by the Nebraska Department of Economic Development. More details are available at www.neded.org.

Industrial Revenue Bonds - All Nebraska counties and municipalities, as well as the Nebraska Development Finance Fund, are authorized to issue industrial revenue bonds to finance land, buildings, and equipment for industrial projects. No general election is required for an issue.

Other Financing Assistance - Supplementing traditional sources, financing assistance is also available through the Nebraska Investment Finance Authority, the Business Development Corporation of Nebraska, and the local development corporations. The Nebraska Department of Economic Development also administers development finance services, with staff helping assemble government financing with conventional financing to put together the best comprehensive package.

Nebraska Process Loan Fund - Focuses on making loans to qualifying small businesses. The minimum loan is \$50,000, with a maximum of \$2,000,000. Advantages with this loan are interest rates ranging from 0 percent to 4 percent, payment deferrals, and the ability to support loans that lack sufficient collateral to qualify the loan(s) from a private lender.

It is important to recognize the Nebraska Advantage package replaces and significantly enhances Nebraska's previous performance-based tax incentive programs. Those earlier incentives,

the first of which was passed by the Nebraska Legislature in 1987, had a profound effect in stimulating business investment, expansion, and job creation. Nebraska's previous tax incentive programs contributed to substantial investment and job creation, including total investment of more than \$23.5 billion and 121,000 jobs.

The combination of many factors, including Nebraska's attractive business climate, tax incentives, labor productivity, and effective job training programs as well as other positive attributes, has resulted in Nebraska's manufacturing sector significantly outperforming both that of the surrounding states and the U.S. as a whole. Manufacturing employment in Nebraska grew by 17.1 percent between 1990 and 2000. As the U.S. economy experienced two major recessions between 2000 and 2011, manufacturing employment in Nebraska declined but outperformed the Plains Region and the nation (Figure 6, next page). These data suggest that companies with Nebraska manufacturing plants benefit from location and other competitive advantages associated with doing business in Nebraska.

Quality of Life

For a potential newcomer to Nebraska, the state's livability is obviously also a consideration. Nebraska ranks high in quality of life studies. The state's landscape is clean and spacious, both in urban and rural areas. Residents blend Midwestern values with Western enthusiasm for growth and change. This helps create a high degree of citizen participation in both neighborhood and community-wide activities.

The cost of living in non-metropolitan Nebraska is consistently at or slightly below the national average. Data presented in Table 12 (next page) indicates on average, the cost of living in Nebraska is 1.1 percent below the U.S. average. Of particular interest is the cost of housing, which in Nebraska averages 7.1 percent less than for the U.S. as a whole for families renting a home and the cost of utilities, which is 12.7 percent less than the U.S. average.

Table 12
Cost of Living in Nebraska, Compared to the National Average,
As of July 1, 2015

	All Items Index ^(a)	Consum- ables	Transpor- tation ^(b)	Health Services	Monthly Rent ^(c)	Home Value ^(c)	Utilities	Income/ Payroll Taxes
U.S. Average	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nebraska	98.9	95.4	97.0	97.4	92.9	88.9	87.3	105.8
Omaha, NE	98.7	93.9	94.6	97.4	117.0	88.6	90.6	105.8
Lincoln, NE	103.1	98.6	97.5	99.0	105.4	99.7	86.7	105.8
Nonmetro NE ^(d)	96.1	94.8	97.5	97.0	82.3	80.7	86.7	105.8

^(a) Cost of living values computed for a family of three with an annual income of \$50,000.

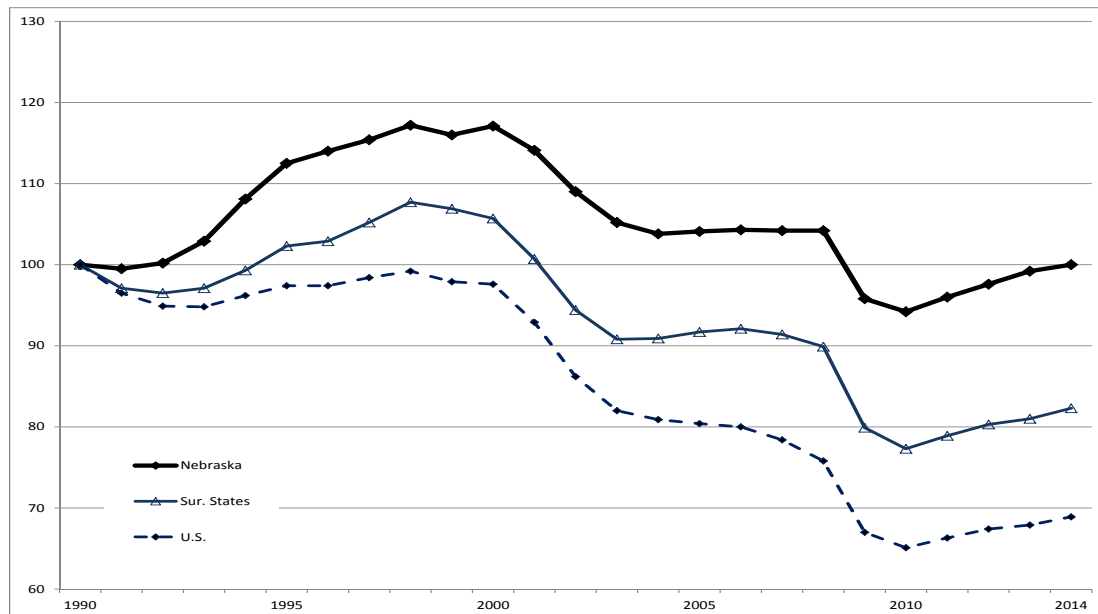
^(b) Transportation costs assumes ownership of two cars valued at \$14,312, which are driven a total of 20,000 miles annually.

^(c) Assumes a house of 1,613 square feet for both rental assumption and home value.

^(d) Nonmetro Nebraska data represent the average of 14 Nebraska cities outside of the Omaha and Lincoln metropolitan areas. These cities include Beatrice, Columbus, Dakota City, Fremont, Grand Island, Hastings, Kearney, McCook, Norfolk, North Platte, O'Neill, Scottsbluff, South Sioux City, and Valentine, Nebraska.

Source: Index values computed from cost-of-living data obtained from Economic Research Institute (ERI), Relocation Assessor Database as of July 1, 2015.

Figure 6
Manufacturing Employment, Nebraska, Surrounding States,
and the U.S., 1990–2014, 1990=100



Surrounding States include data for the states contiguous to Nebraska, as a group, including Colorado, Iowa, Kansas, Missouri, South Dakota, and Wyoming.

Source: Bureau of Labor Statistics, www.bls.gov.

CONCLUSIONS

This study concludes the food manufacturing industry is desirable for Nebraska and a Nebraska location is desirable for the industry. The locational advantages Nebraska offers appear well-suited to food products manufacturers. They cover a wide spectrum, ranging from an attractive business climate to a high quality of life at a relatively low cost, to the substantial raw materials and intermediate inputs Nebraska provides for food products manufacturers. But, as the study's model plant analysis demonstrates, in Appendix A, the competitive advantages Nebraska offers in important cost areas which vary geographically, such as labor and energy costs, are particularly noteworthy. The state's

well-educated and productive labor force is a long-standing asset, as are its very favorable electric and natural gas rates.

Essentially, the analysis presented in this study was based on state-to-state comparisons applicable to the food manufacturing industry generally. Individual manufacturers will therefore need to further consider the locational requirements of their manufacturing as well as the merits of specific sites within states. Certainly in terms of a general location situation for food products manufacturers, Nebraska has much to offer.



Open Range Beef (ORB) began a new meat processing operation in Gordon, Nebraska, in December 2013. ORB purchased the plant from the city of Gordon, in northwest Nebraska in June 2013 and immediately began remodeling the building's refrigeration system, installing new SaniCrete floors, walls, and upgrading and installing new processing equipment.

The 36,000-square-foot plant is furnished with the latest state-of-the-art equipment and 100 new and experienced employees. According to Co-plant Principal Pat Shudak, the meat processing plant is poised to process between 250 and 300 head of cattle per day. He also indicated that plans are being made to expand the plant's cooler space in the future and add 175 additional jobs.

"With cattle and agriculture being the two top leaders in revenue generation for the state of Nebraska, it's important that we try to maximize the opportunities that we have available," said Gordon City Manager Fred Hlava. "We feel very fortunate that the Open Range Beef investment group looked at this mid-sized plant as a business opportunity and to our advantage, one that will provide economic benefits for our community, region, and state."

The three organizations cooperating in the preparation of this study can also assist food manufacturers in assessing advantages in

Nebraska for a specific new location or expansion project. To obtain this assistance, write or call:

Economic Development Department
NEBRASKA PUBLIC POWER DISTRICT
PO Box 499
Columbus, Nebraska 68602-0499
(402) 563-5534
(800) 282-6773
Email: rjnelse@nppd.com
<http://econdev.nppd.com>



Nebraska Public Power District
Always there when you need us

NEBRASKA
Advantage

Business Development Division
**NEBRASKA DEPARTMENT OF
ECONOMIC DEVELOPMENT**
PO Box 94666
Lincoln, Nebraska 68509-4666
(402) 471-3778
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Food Processing Center
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www.fpc.unl.edu

N Nebraska
Engineering

APPENDIX A

LABOR AND ENERGY COST ANALYSIS

As shown in the previous sections, Nebraska offers a wide range of locational advantages for manufacturers of food and related products. In this appendix, labor and energy production cost factors that have geographic variability are analyzed. Such analysis permits the identification of the plant site providing the greatest advantage relative to these important input factors.

In the analysis of geographically variable labor and energy costs, the following procedures are used:

- 1) Selection of alternative plant locations for evaluation of the geographically variable labor and energy costs.
- 2) Definition of a model manufacturing plant for identifying labor and energy inputs and costs.
- 3) Evaluation of labor-related costs associated with each alternative plant location.
- 4) Evaluation of energy costs for each alternative plant location.

Alternative Plant Locations

Sixteen alternative plant locations were selected for comparison in this analysis. The plant locations essentially included two groups of states: (1) states that currently have the largest concentration of manufacturers of food products and (2) neighboring states that typically compete with Nebraska for industrial location projects. The first group of states includes California, Florida, Illinois, Indiana, Michigan, Minnesota, New Jersey, New York, Ohio, Pennsylvania, Texas, and Wisconsin. The second group of states includes Iowa, Kansas, Missouri, and Nebraska. Combined, these two groups of states account for 62.7 percent of the value added by manufacture in the food manufacturing industry (see Table A-1).

The Model Plant

To facilitate the analysis of the comparative labor and energy costs for the alternative states, it is useful to define a model plant for which the geographically variable costs can

Table A-1
Alternative Locations for a Model Plant
for the Food Manufacturing
Industry (NAICS 311)

State	Percent of Value Added by Manufacture ^(a)
Nebraska	2.3
California	10.5
Florida	1.8
Illinois	5.9
Indiana	2.9
Iowa	4.2
Kansas	2.0
Michigan	2.6
Minnesota	3.0
Missouri	3.0
New Jersey	1.8
New York	2.6
Ohio	5.1
Pennsylvania	4.8
Texas	5.3
Wisconsin	4.9
Total Selected States	62.7

^(a) Percent of the 2013 U.S. total value added by manufacture for establishments in NAICS 311.

Source: U.S. Bureau of the Census, *Annual Survey of Manufactures, 2013*.

be quantified. The model plant is assumed to manufacture a product representative of the "Food Manufacturing Industry" (NAICS 311) as a whole. To specify the relevant labor and energy costs, information was obtained from the *Annual Survey of Manufactures, 2013*, and the U.S. Energy Administration *2010 Manufacturing Energy Consumption Survey*.

Table A-2 presents industry characteristics used in developing the model plant, which is assumed to employ 50 production workers. Estimated production worker hours total 104,000 annually or 2,080 hours per worker. Value added by manufacture is estimated to be \$12,419,150 and the total annual output (value of shipments) is estimated to be \$35,102,500. Energy inputs are

Table A-2**Characteristics of a Model Plant for
the Food Manufacturing Industry (NAICS 311)**

	Total Model Plant	Per Production Worker
Production Workers	50	- - -
Value Added [dollars] ^(a)	12,419,150	248,383
Total Output [dollars] ^(b)	35,102,500	702,050
Energy Inputs [million BTUs] ^(c)	39,661	793

^(a) Estimated value added applies the 2013 value added per production worker for the Food Manufacturing Industry (NAICS 311) to the model plant (see Table 4).

^(b) Estimated value of shipments derived by applying the 2013 value of shipments per production worker to the model plant (see Table 4).

^(c) Estimated by applying the 2013 ratio of energy inputs per production worker to the model plant (see Table A-3).

Source: Calculated from data presented in Table A-3 and from U.S. Bureau of the Census, *Annual Survey of Manufactures, 2013*.

estimated at 39,661 million BTUs, with all energy inputs supplied by electricity and natural gas.

Energy Used in the Model Plant

The assumption that the model plant is representative of the industry as a whole leads to the assumption that energy used in the plant also should be characteristic of industry use patterns. Part A of Table A-3 presents data estimating energy use for the industry in 2013. The estimated energy use for the model plant was derived using the ratio of energy inputs to industry value added.

It was further assumed all energy inputs for the model plant are derived from electricity and natural gas.

Part B of Table A-3 indicates the model plant, employing 50 production workers, will have annual energy inputs of 39,661.0 million BTUs. Electric energy inputs are estimated to be 12,136.4 million BTUs (3,556,990 kWhs), or 30.6 percent of the total energy inputs, while natural gas inputs are estimated at 27,525.0 million BTUs, 69.4 percent of the total energy requirements.

Table A-3**Energy Use in Food Manufacturing Establishments**

	Trillion BTUs	Percent
Purchased Fuels and Electric Energy	859.6	100.0
Purchased Electric Energy	263.0	30.6
Purchased Fuels	596.6	69.4

Source: Energy use estimated from data from the U.S. Bureau of the Census, *Annual Survey of Manufactures, 2013* and U.S. Energy Information Administration, *2010 Manufacturing Energy Consumption Survey*.

Part B**Energy Inputs for the Food Manufacturing Model Plant**

	Million BTUs	Percent
Purchased Electricity	12,136.4 (3,556,990 kWhs)	30.6
Natural Gas	27,525.0	69.4
Total Energy Inputs	39,661.4	100.0

Source: Calculated from data in Table A-2 and Part A of this table.

Labor-Related Costs

Labor costs in the food manufacturing industry are affected by several factors: wage rates, productivity of workers, fringe benefits, and unemployment insurance and workers' compensation costs. Estimated labor-related costs for a model, food processing plant operating in Nebraska and in each of the 15 alternative state locations are presented in Table A-4 and Figure A-1 (next pages).

Table A-4 also includes data on wage rates for the states identified as alternative plant locations.

An analysis of state wage levels indicates Nebraska's food manufacturing production workers have hourly earnings, which are significantly less than all but two of the alternative plant sites. For example, 2013 average hourly earnings for Nebraska food processing workers (\$17.40) are 4.8 percent less than the average hourly wage rates for the other 15 states included as alternative plant locations.

The Nebraska costs for unemployment insurance and workers' compensation are significantly less



The
Food
Processing
Center

eCreamery, Personalized Ice Cream Gifts

Becky App and Abby Jordan wanted to provide gift-givers a new personalized gift; something the receiver would like and that would connect the gift to the receiver in a way only the giver could communicate.

The model for **eCreamery.com** materialized in 2006 when their investor, Mark Hasebroock, purchased an existing, though somewhat dysfunctional, website that allowed users to create custom ice creams. Immediately, Abby and Becky had the idea to move away from customized self-purchase and create a space that invited personalized gifting.

To learn more about the intricacies of starting a food business Abby and Becky attended the Food Processing Center's seminar "From Recipe to Reality." This nationally recognized workshop is specifically designed for food entrepreneurs and provides an overview of the marketing, business, and technical aspects that need to be taken into consideration.

The education they received from this course included information on federal and state regulations, packaging requirements, distribution channels, and valuable contacts with industry experts. The pair subsequently worked on recipe development, distribution (shipping), and revamping the website. The duo launched **eCreamery.com** in mid-2007.

In 2011 Abby and Becky were approached by The Food Processing Center to take part in a new initiative pioneered by Gallup, Inc. Over the past five years, Gallup has been adapting their globally validated behavioral economic sciences/systems specifically to help entrepreneurs increase sales, profits, and ultimately, to sustainably grow their businesses. The end product—the Entrepreneur Acceleration System (EAS)—uses one-on-one mentoring to facilitate an entrepreneur's growth strategy.

Since Recipe to Reality and the knowledge that The Food Processing Center has been able to give to **eCreamery.com**, they have seen tremendous sales and growth. As people continue to learn ice cream gifts exist and the public's comfort level with shipping frozen foods increases, **eCreamery.com** is confident in the continued growth of their company. Currently, as they look towards expansion they have begun researching ways to lower shipping costs to their customers. Production and distribution capabilities on either coast are their latest move in order to better serve the needs of their target audience.

Table A-4

Total Annual Labor-Related Costs for a Model Plant for the Food Manufacturing Industry (NAICS 311)

Plant Location	Hourly Wage Rate	Number of Production Workers	Total Payroll	Workers' Compensation		Social Security ^(c)	Fringe Benefits ^(d)	Total Labor Costs	Cost Difference Other States (-) Nebraska		Cost Relative Other States (/) Nebraska
				Insurance ^(a)	Unemployment Insurance ^(b)				Nebraska	Nebraska	
Nebraska	\$17.40	50	\$1,809,600	\$32,211	\$6,876	\$138,434	\$542,880	\$2,530,001	\$0	100.0	
California	17.59	50	1,829,400	63,663	14,269	139,949	548,820	2,596,101	66,100	102.6	
Florida	19.01	50	1,977,000	35,981	12,851	151,241	593,100	2,770,173	240,172	109.5	
Illinois	18.69	50	1,943,800	45,679	19,632	148,701	583,140	2,740,952	210,951	108.3	
Indiana	19.23	50	1,999,900	21,199	14,799	152,992	599,970	2,788,860	258,859	110.2	
Iowa	19.40	50	2,017,600	37,931	18,158	154,346	605,280	2,833,315	303,314	112.0	
Kansas	17.73	50	1,843,900	28,580	13,645	141,058	553,170	2,580,353	50,352	102.0	
Michigan	19.15	50	1,991,600	33,459	20,115	152,357	597,480	2,795,011	265,010	110.5	
Minnesota	17.48	50	1,817,900	36,176	17,270	139,069	545,370	2,555,785	25,784	101.0	
Missouri	16.99	50	1,767,000	34,987	11,839	135,176	530,100	2,479,102	-50,899	98.0	
New Jersey	18.55	50	1,929,200	54,403	24,694	147,584	578,760	2,734,641	204,640	108.1	
New York	18.44	50	1,917,800	52,740	14,959	146,712	575,340	2,707,551	177,550	107.0	
Ohio	19.44	50	2,021,800	35,179	12,535	154,668	606,540	2,830,722	300,721	111.9	
Pennsylvania	18.77	50	1,952,100	39,042	24,987	149,336	585,630	2,751,095	221,094	108.7	
Texas	15.68	50	1,630,700	26,254	8,643	124,749	489,210	2,279,556	-250,445	90.1	
Wisconsin	17.96	50	1,867,800	35,862	22,414	142,887	560,340	2,629,303	99,302	103.9	

^(a) Values calculated by Ken Lemke, NPPD, using data for all manufacturing classifications from: *Oregon Workers' Compensation Premium Rate Rankings Calendar Year 2014*.

^(b) Values calculated by Ken Lemke, NPPD, using third quarter, 2014 data from *Unemployment Insurance Data Summary, 1st Quarter 2015*.

^(c) Employer Social Security costs are 7.65 percent of payroll (wages).

^(d) Fringe benefit costs are assumed to be 30 percent of payroll.

Sources: Oregon Department of Consumer & Business Services, *Oregon Workers' Compensation Premium Rate Rankings Calendar Year 2014, October 2014*.

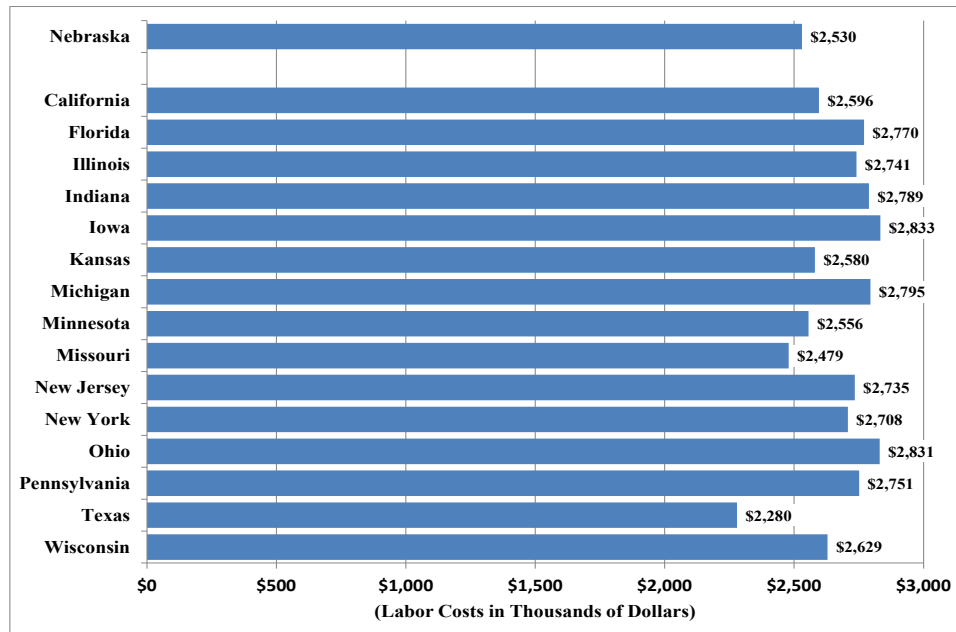
U.S. Department of Labor, Bureau of Labor Statistics, August 2015.

U.S. Bureau of the Census, *Annual Survey of Manufactures, 2013*.

U.S. Department of Labor, Employment and Training Administration, *Unemployment Insurance Data, 2015*.

Figure A-1

Estimated Total Labor Costs* for a Model Plant for the Food Manufacturing Industry Alternative Plant Locations



*Calculated labor costs include wages, workers' compensation insurance, unemployment insurance, social security, and fringe benefits.

Source: See Table A-4.

than the other states. In the case of unemployment insurance contributions, the average cost per employee for the 15 alternative states is estimated at \$334.00, 142.0 percent higher than the Nebraska cost of \$138.00. Insurance rates for workers' compensation average \$1.99 per \$100 of payroll for the 15 alternative states, 14.7 percent more than Nebraska's rate of \$1.78.

If located in Nebraska, the model plant has a significant labor cost advantage over the alternative locations. The Nebraska labor cost advantage reaches as high as \$303,314 in annual savings when compared to Iowa. When compared to the average labor costs for the 15 alternative locations, Nebraska's annual labor cost advantage is \$141,500 or 5.3 percent lower.

Energy Costs

The availability and cost of energy are increasingly important factors in the industrial location process. Rates for industrial electricity and natural gas for the alternative plant locations are presented in Table A-5 (next page). For both energy sources, Nebraska's rates are substantially less than all but two of the alternative locations. The average electric rate for a 1,000 kW billing demand with monthly usage of 400,000 kWhs for the 15 alternative plant sites is \$0.0937 per kWh or 19.2 percent more than the Nebraska rate of \$0.0786.

In the case of industrial rates for natural gas, the average for the 15 other states is 37.1 percent more than the Nebraska rate of \$4.60 per million BTUs.

Table A-5 and Figure A-2 (following page) provide an analysis of the energy costs for the operation of the model plant. The total energy costs for the alternative locations include the cost for the assumed level of electrical energy and natural gas inputs for the operation of the plant.

Nebraska provides a significant energy cost savings compared to the average of the alternative plant locations. When considering the California, New Jersey, and New York locations, energy costs are more than 50 percent greater than the Nebraska energy costs. In the case of the California plant location, energy costs exceed the Nebraska costs by 78.7 percent. When compared to the average total energy costs for the 15 alternative states, Nebraska energy costs are 19.9 percent lower, translating into an average annual savings of \$100,771.

Table A-5
Annual Energy Costs for a Model Plant for the Food Manufacturing Industry (NAICS 311)

Plant Locations	Electricity		Natural Gas		Total Energy Cost	Cost Difference Other States (-) Nebraska	Cost Relative Other States (/) Nebraska
	Rate ^(a)	Cost	Rate ^(b)	Cost			
Nebraska	\$0.0786	\$279,579	\$4.60	\$126,615	\$406,194	\$0	100.0
California	0.1545	549,555	6.40	176,160	725,715	319,521	178.7
Florida	0.0917	326,176	6.59	181,390	507,566	101,372	125.0
Illinois	0.0633	225,157	5.84	160,746	385,903	-20,291	95.0
Indiana	0.0843	299,854	6.37	175,334	475,188	68,994	117.0
Iowa	0.0631	224,446	5.29	145,607	370,053	-36,141	91.1
Kansas	0.0857	304,834	4.72	129,918	434,752	28,558	107.0
Michigan	0.0955	339,693	6.79	186,895	526,588	120,394	129.6
Minnesota	0.0805	286,338	4.81	132,395	418,733	12,539	103.1
Missouri	0.0894	317,995	7.97	219,374	537,369	131,175	132.3
New Jersey	0.1229	437,154	7.97	219,374	656,528	250,334	161.6
New York	0.1246	443,201	7.24	199,281	642,482	236,288	158.2
Ohio	0.0911	324,042	5.98	164,600	488,642	82,448	120.3
Pennsylvania	0.0924	328,666	8.97	246,899	575,565	169,371	141.7
Texas	0.0777	276,378	3.82	105,146	381,524	-24,670	93.9
Wisconsin	0.0890	316,572	5.86	161,297	477,869	71,675	117.6

^(a) Electric rate is cost per kWh using the average per kWh cost for 1,000 kW monthly demand with 400,000 kWh of consumption. The model plant is assumed to use 3,556,990 kWh annually.

^(b) Natural Gas rate is per million BTUs. The model plant is assumed to use 27,525.0 million BTUs annually.

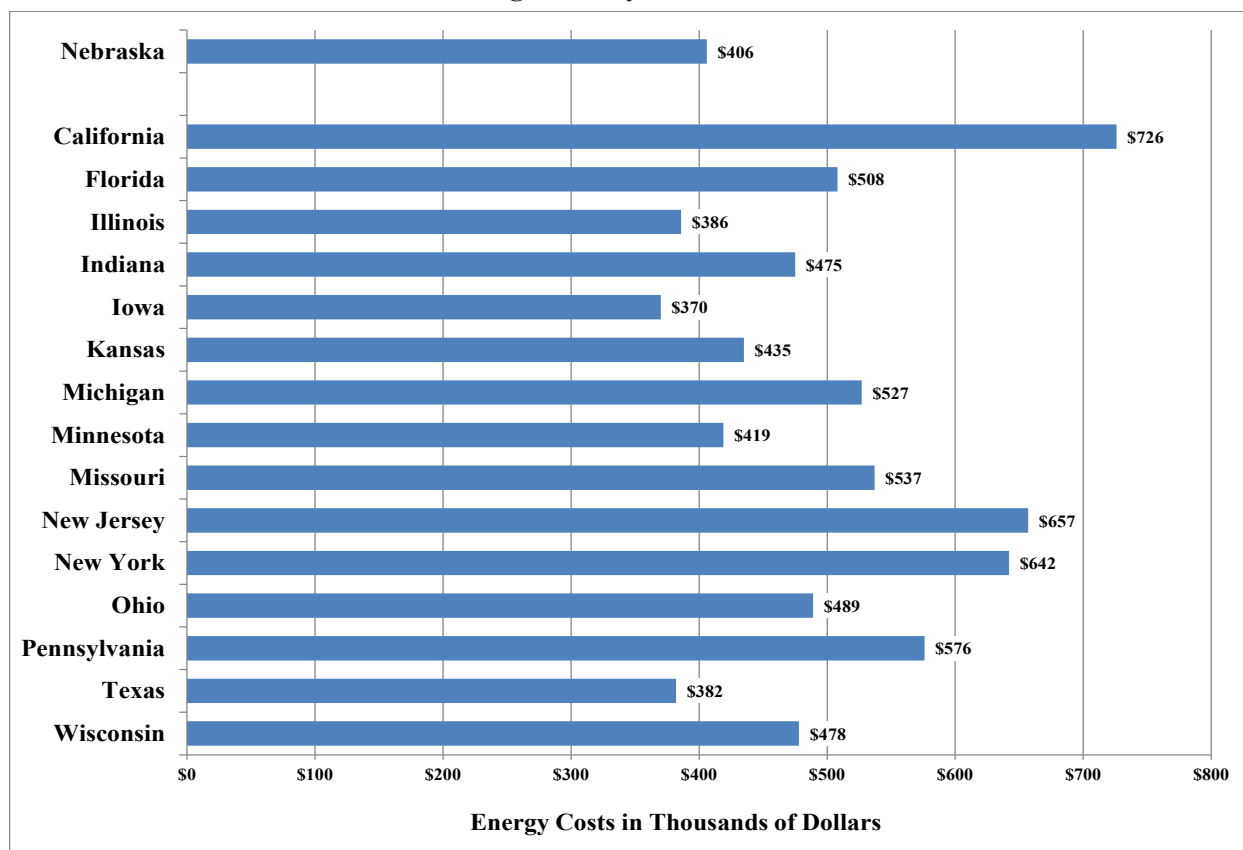
Sources:

Natural Gas: U.S. Energy Information Agency, *Natural Gas Industrial Price*, 2013, www.eia.gov/dnav/ng/ng_pri_sum_a_epg0_pin_dmcf_a.htm. Values converted from price per MCF to per mmBTUs by dividing prices by 1.027.

Electric: Edison Electric Institute, *Typical Residential, Commercial, and Industrial Bills*, January 1, 2014 and July 1, 2014. State average weighted using eight months of January 2014 data and four months of July 2014 data. Nebraska data represent average for Nebraska Public Power District, Omaha Public Power District and Lincoln Electric System using the same seasonal weighting

Figure A-2

Estimated Total Energy Costs* for a Model Plant for the
Food Manufacturing Industry, Alternative Plant Locations



*Calculated energy costs include electricity and natural gas costs.

Source: See Table A-5.

Labor and Energy Cost Summary

Combining the labor and energy cost findings, the results of the model plant analysis are summarized in Table A-6. As the table shows, the comparative annual cost advantage associated with the Nebraska location reaches a high of \$454,974 when compared to the New Jersey site. When considering the average labor and energy costs for the 15 alternative states, the cost advantage of the Nebraska location is \$242,271 annually, or 7.6 percent less than the average costs for the other 15 plant sites considered.

Conversely, the average labor and energy costs for the alternative states are 8.3 percent more than the costs associated with a Nebraska location. Inescapable from these results is the conclusion that, in terms of major labor and energy input costs, manufacturers of food products with Nebraska facilities have a clear competitive advantage over manufacturing establishments in the industry not so fortunately located.

Table A-6
Summary of Labor and Energy Costs for a Model Plant for
the Food Manufacturing Industry (NAICS 311)

Plant Locations	Total Labor Cost	Total Energy Cost	Total Labor and Energy Cost	Cost Difference Other States (-) Nebraska	Cost Relative Other States (/) Nebraska
Nebraska	\$2,530,001	\$406,194	\$2,936,195	\$0	100.0
California	2,596,101	725,715	3,321,816	385,621	113.1
Florida	2,770,173	507,566	3,277,739	341,544	111.6
Illinois	2,740,952	385,903	3,126,855	190,660	106.5
Indiana	2,788,860	475,188	3,264,048	327,853	111.2
Iowa	2,833,315	370,053	3,203,368	267,173	109.1
Kansas	2,580,353	434,752	3,015,105	78,910	102.7
Michigan	2,795,011	526,588	3,321,599	385,404	113.1
Minnesota	2,555,785	418,733	2,974,518	38,323	101.3
Missouri	2,479,102	537,369	3,016,471	80,276	102.7
New Jersey	2,734,641	656,528	3,391,169	454,974	115.5
New York	2,707,551	642,482	3,350,033	413,838	114.1
Ohio	2,830,722	488,642	3,319,364	383,169	113.0
Pennsylvania	2,751,095	575,565	3,326,660	390,465	113.3
Texas	2,279,556	381,524	2,661,080	-275,115	90.6
Wisconsin	2,629,303	477,869	3,107,172	170,977	105.8

Source: Calculated from data presented in Tables A-4 and A-5.

APPENDIX B

NEBRASKA INCENTIVES

The Nebraska Advantage consists of six “tiers” of investment and job creation activity. The following example spreadsheet illustrates the job creation and investment levels required and the

tax incentives generated by Tier 2, which includes the estimated investment and jobs created for the model food manufacturer discussed in Part B of this report.

NEBRASKA Advantage

Nebraska Advantage - TIER 2

Minimum 30 New Jobs & \$3 Million Investment

Potential Tax Credits and Refunds

Food Manufacturing

2015

I. Compensation Credit - Percent of annual compensation (Medicare wages)

A. Assumptions are as follows -

Number of New Employees in Qualifying Year 1:	50	Projected Tax Credits and Refunds				
Average Annual Salary * :	\$36,192					
Initial payroll:	\$1,809,600					
Annual Cost-of-Living Increase beginning Year 2	3%					
Combined Local & County Property Tax Rate:	0.01844700					
① Wage credits earned after employer creates 10 fulltime qualified positions & makes \$1 million investment						
② Only positions earning at least 60% of the Nebraska Average Wage are eligible to earn Compensation Credit						
*** Local & County Property Tax Rates: http://www.revenue.state.ne.us/PAD/research/valuation.html						
	Employees	Payroll	Hourly Wage	Comp % *	Comp Credit	Compensation Tax Credit \$637,367
Year 1	50	\$1,809,600	\$17.40	4%	\$72,384	
Year 2	50	\$1,863,888	\$17.92	4%	\$74,556	
Year 3	50	\$1,919,805	\$18.46	4%	\$76,792	
Year 4	50	\$1,977,399	\$19.01	5%	\$98,870	
Year 5	50	\$2,036,721	\$19.58	5%	\$101,836	
Year 6	50	\$2,097,822	\$20.17	5%	\$104,891	
Year 7	50	\$2,160,757	\$20.78	5%	\$108,038	
Total		\$13,865,992			TOTAL	

* Use Table below to determine appropriate Compensation Percentage for each year.

NOTE: Compensation credit can be used against sales, income tax and employee withholding up to amount paid in.

2013		60% NAW	75% NAW	100% NAW	125% NAW
Neb Ave Wage					
Annual	\$39,268.00	\$23,561	\$29,451	\$39,268	\$49,085
Hourly	\$18.88	\$11.33	\$14.16	\$18.88	\$23.60
Compensation Credit %		3%	4%	5%	6%

*The Nebraska average wage for 2013 is utilized in 2014 to calculate wage incentives

II. Projected Investment

A. Initial assumptions about project investment are as follows *

A. Real Estate Calculation - Where Business Owns Real Estate

1. Purchase Price of Building; OR

2. Cost of Constructing a New Building

Total Value of Purchased or Constructed Building(s)

\$ 1,500,000

\$ -

\$ 1,500,000

APPENDIX B – Continued

NEBRASKA ADVANTAGE - TIER 2

B.	Equipment Purchases - Where Business Owns Equipment 1. Purchase Price of Office and Other Equipment 2. Purchase Price of Used Equipment Brought Into Nebraska 3. Purchase Price of Production Equipment Total Value of Equipment Purchases	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">\$</td><td style="width: 50%;">500,000</td><td style="width: 40%;"></td></tr> <tr><td>\$</td><td>-</td><td></td></tr> <tr><td>\$</td><td>1,000,000</td><td></td></tr> <tr><td></td><td></td><td style="text-align: right;">\$ 1,500,000</td></tr> </table>	\$	500,000		\$	-		\$	1,000,000				\$ 1,500,000	<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> SALES TAX REFUND </div>
\$	500,000														
\$	-														
\$	1,000,000														
		\$ 1,500,000													
C.	Real Estate Calculation - Where Business Leases Real Estate 1. Monthly Lease Payment: 2. Term of Lease in Months: Investment Referenced by Term of Lease; OR Potential Real Estate Investment Realized Over Max. 10 Year Period	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">\$</td><td style="width: 50%;">-</td><td style="width: 40%;"></td></tr> <tr><td></td><td>60</td><td></td></tr> <tr><td></td><td></td><td style="text-align: right;">\$ -</td></tr> <tr><td style="color: green;">\$</td><td></td><td style="text-align: right;">-</td></tr> </table>	\$	-			60				\$ -	\$		-	
\$	-														
	60														
		\$ -													
\$		-													
D.	Equipment Calculation - Where Business Leases Equipment 1. Monthly Lease Payment: 2. Term of Lease in Months: Investment Referenced by Equipment Leasing	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">\$</td><td style="width: 50%;">-</td><td style="width: 40%;"></td></tr> <tr><td></td><td>60</td><td></td></tr> <tr><td></td><td></td><td style="text-align: right;">\$ -</td></tr> </table>	\$	-			60				\$ -				
\$	-														
	60														
		\$ -													
B.	Additional Real Estate and Equipment Purchases (7 years) 1. Cost of Purchasing or Improving Existing Building 2. Equipment Purchases subject to sales tax 3. Equipment Purchases <u>not</u> subject to sales tax Value of Additional Investment Made Over 7 years	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">\$</td><td style="width: 50%;">-</td><td style="width: 40%;"></td></tr> <tr><td>\$</td><td>-</td><td></td></tr> <tr><td>\$</td><td>-</td><td></td></tr> <tr><td></td><td></td><td style="text-align: right;">\$ -</td></tr> </table>	\$	-		\$	-		\$	-				\$ -	
\$	-														
\$	-														
\$	-														
		\$ -													
PROJECTED AMOUNT OF INVESTMENT		\$ 3,000,000													
③ Assumes that building and equipment values are established prior to the application of any sales or use taxes ④ Utilize the original purchase price of used equipment brought into Nebraska to qualify investment tax credits															
III. C. Sales Tax Refund															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 50%;">State Sales Tax Rate</td><td style="width: 50%;">5.5%</td></tr> <tr><td>Local Sales Tax Rate *</td><td>1.5%</td></tr> <tr><td>TOTAL SALES TAX RATE</td><td>7.0%</td></tr> </table>		State Sales Tax Rate	5.5%	Local Sales Tax Rate *	1.5%	TOTAL SALES TAX RATE	7.0%								
State Sales Tax Rate	5.5%														
Local Sales Tax Rate *	1.5%														
TOTAL SALES TAX RATE	7.0%														
* Current Local Sales & Use Tax Rates can be found at http://www.revenue.ne.gov/question/sales.html															
A.	Building Construction: (calculates sales tax on materials assumed at 50% construction costs) 1. Initial Building Construction 2. Additional Building Construction 50% Building Construction Costs Eligible for Sales Tax Credit	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">\$</td><td style="width: 50%;">1,500,000</td><td style="width: 40%;"></td></tr> <tr><td>\$</td><td>-</td><td></td></tr> <tr><td></td><td></td><td style="text-align: right;">\$ 750,000</td></tr> </table>	\$	1,500,000		\$	-				\$ 750,000	<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> SALES TAX REFUND </div>			
\$	1,500,000														
\$	-														
		\$ 750,000													
B.	Equipment Purchases Subject to Sales Tax 1. Initial Office and Other Equipment 2. Additional Office and Other Equipment Equipment Purchases Eligible for Sales Tax Credits	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">\$</td><td style="width: 50%;">500,000</td><td style="width: 40%;"></td></tr> <tr><td>\$</td><td>-</td><td></td></tr> <tr><td></td><td></td><td style="text-align: right;">\$ 500,000</td></tr> </table>	\$	500,000		\$	-				\$ 500,000				
\$	500,000														
\$	-														
		\$ 500,000													
Sales Tax Rate Applied to Eligible Investment		7.0%													
100% Estimated Sales Tax Refund =			\$87,500												
IV. C. Investment Credit:															
Percent of investment in qualified property during 6-7 year entitlement period. Includes all investment in building, equipment and components. For leased space, investment is equal to annual lease rate times term of lease for up to 10 years. This credit may be applied to state corporate income or sales and use tax liabilities.			Investment Tax Credit												
\$	3,000,000	x 10%	= \$300,000												
			\$300,000												
ESTIMATED TAX CREDITS AND REFUNDS			\$1,024,867												
ESTIMATED TAX CREDITS, REFUNDS AND EXEMPTIONS			\$1,024,867												
* Nebraska Advantage permits the business to apply the earned tax credits toward: the employer and employee state withholding taxes, local and state sales tax, state income and use tax. Data Center companies may also apply the earned tax credits toward local real estate taxes if the business real estate is not included in a local redevelopment plan.															
WAIVER of LIABILITY: Users of the Nebraska Advantage Benefit Calculator are advised that only the Nebraska Department of Revenue can determine the financial benefits that may be earned from the projected business activity. The Nebraska Department of Economic Development and its representatives waive any responsibility for the accuracy of the projections, or receipt of the actual benefits anticipated by the user.															

September 2015

Nebraska Public Power District (NPPD), Nebraska's largest electric utility, is proud of the areas it serves and has published this document in an effort to assist in the economic development of the NPPD service area. For more information on Nebraska as a business location, contact the Economic Development Department, Nebraska Public Power District, General Offices, 1414 15th Street, P.O. Box 499, Columbus, Nebraska 68602, (800) 282-6773. Visit our web site at <http://econdev.nppd.com>.



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