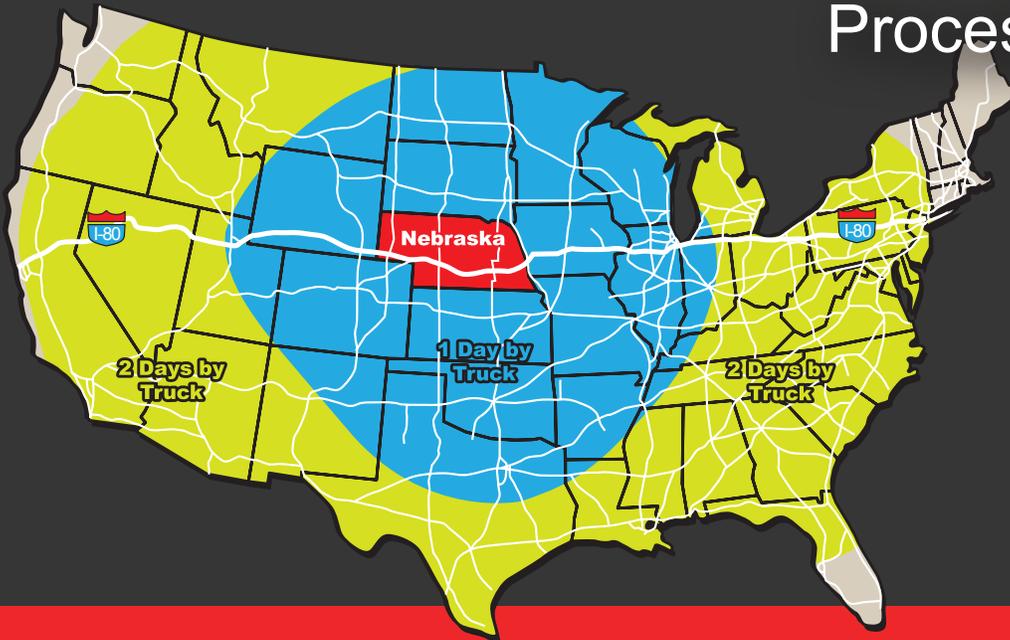


# Nebraska

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# EXECUTIVE SUMMARY

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The “Food Processing Industry” (NAICS 311) is one of the largest manufacturing sectors in the United States. The Annual Survey of Manufactures, 2011 indicates the total value of shipments from the food processing sector totaled \$710,365.6 million and accounted for 12.9 percent of the total value of shipments by U.S. manufacturers in 2011. Value added in the industry totaled \$264,500.8 million in 2011. Moreover, food processing establishments accounted for 12.8 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 products 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.

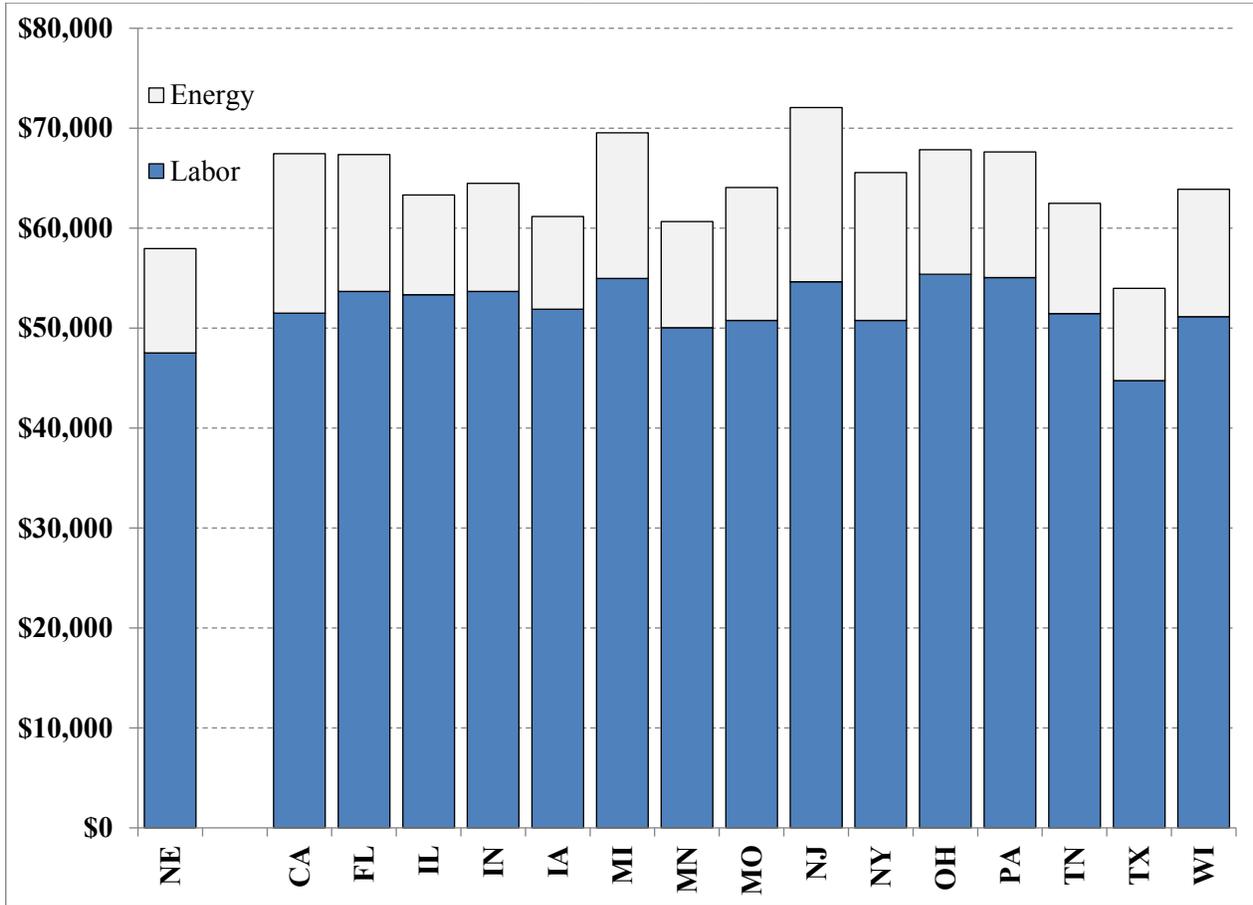
In the model plant analysis, estimated labor related costs include the direct wages paid to production workers and costs associated with workers’ compensation insurance, unemployment insurance, social security, and fringe benefits. Compared to the average labor costs for the 15 alternative states, Nebraska is found to offer an annual savings of \$234,484 in labor related costs, which is 9.0 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 16.4 percent more than the Nebraska rate and the average industrial gas rate is 25.8 percent more. Combining these advantages, Nebraska’s energy cost for the model plant is 16.8 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 \$340,095, or 10.5 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 11.7 percent more than the Nebraska labor and energy costs.

Figure 1 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**  
**Food Processing 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 processing industry (NAICS 311).

Source: Table A-6.

## PART A

### THE FOOD PROCESSING INDUSTRY

#### I. Industry Characteristics and Trends

The “Food Processing Industry” (NAICS 311) is one of the largest manufacturing sectors in the United States. The *Annual Survey of Manufactures, 2011* indicates the food processing sector accounted for 12.9 percent of the total value of shipments by U.S. manufacturers in 2011. Moreover, food processing establishments accounted for 12.8 percent of total manufacturing employment in the United States.

As the data shown in Table 1 indicate, the value of shipments for the food processing industry in the U.S. totaled \$710,365.6 million in 2011. Value added in the industry totaled \$264,500.8 million, with total employees numbering 1,359,000 and production workers numbering 1,072,800. Capital expenditures for the food processing industry totaled \$15,850.6 million in 2011.

Data for the 1997–2011 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 1997–2011, the value of shipments by industry establishment grew by 68.4 percent, industry value added increased by 61.6 percent and annual capital expenditures grew by 46.8 percent. During the same period, the number of production workers decreased by 3.6 percent and total employment in the food processing industry decreased by 7.4 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 processing industry has been enhanced by growth in capital expenditures made by industry establishments.

### Table 1

**The Food Processing Industry (NAICS 311),  
Characteristics and Trends, Selected Years, 1997–2011**

Year	Total Employees	Production Workers	Value Added	Value of Shipments	Capital Expenditures	Avg. Hourly Earnings, Prod. Wrkrs.
	----- Thousands -----		----- (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
2005	1,440.3	1,099.5	234,662.2	532,402.1	12,076.0	14.31
2006	1,416.9	1,089.6	233,406.9	536,939.2	12,656.0	14.92
2007	1,464.2	1,139.3	241,064.1	589,725.6	13,193.9	15.19
2008	1,437.2	1,114.5	246,598.3	649,905.6	15,677.6	15.42
2009	1,394.2	1,091.4	258,615.4	628,566.1	13,631.8	15.85
2010	1,363.8	1,076.4	259,174.4	649,338.8	14,020.5	16.44
2011	1,359.0	1,072.8	264,500.8	710,365.6	15,850.6	16.61

Data for the food industry as defined by the 2007 definition for NAICS 311, Food Processing Industry.  
Source: U.S. Bureau of the Census, *Census of Manufactures, Geographic Series 1997, 2002, and 2007*; and *Annual Survey of Manufactures, 2009 and 2011*.

During the 1997–2011 review period, annual capital expenditures increased 46.8 percent, from \$10,799.2 million in 1997 to \$15,850.6 million in 2011. With a 3.6 percent decrease in the number of production workers during the same period, the annual capital expenditures per worker by food processing manufacturers increased by 52.2 percent, from \$9,709 per production worker in 1997 to \$14,775 in 2011.

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 show, average hourly wages for production workers in the food processing industry increased by 47.4 percent, from \$11.27 per hour in 1997 to \$16.61 per hour in 2011. During the same period, the consumer price index increased by 40.1 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 1997–2011 period was an increase of 5.1 percent during the 16-year review period or an annual increase of 0.4 percent per year.

## II. Industry Structure

As the reader will note, the “Food Processing 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 processing 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 “Grain and oilseed milling” (NAICS 3112), for which industry shipments grew by 97.5 percent between 2002 and 2011. The value of industry shipments for “Animal food manufacturing” (NAICS 3111), the second fastest growing industry subgroup, grew by 93.0 percent between 2002 and 2011. For the “Food Processing Industry” (NAICS 311) as a whole, industry shipments grew by 54.8 percent between 2002 and 2011.

**Table 2**  
**The Food Processing Industry (NAICS 311),**  
**Value of Industry Shipments by Major Industry Subgroup, 2002, 2007, and 2011**

NAICS	Industry Subgroup	Value of Shipments			% Change	% of Total
		2002	2007	2011	2002–2011	2011
		----- Million Dollars -----			(%)	(%)
<b>311</b>	<b>Food Manufacturing</b>	<b>458,786.5</b>	<b>589,725.6</b>	<b>710,365.6</b>	<b>54.8</b>	<b>100.0</b>
3111	Animal food manufacturing	28,025.0	39,173.9	54,082.3	93.0	7.6
3112	Grain & oilseed milling	47,616.6	69,754.9	94,025.3	97.5	13.2
	Sugar & confectionery product	25,455.1	27,278.1	33,120.4	30.1	4.7
3113	manufacturing					
3114	Fruit & vegetable preserving & specialty food manufacturing	53,667.9	60,704.8	65,019.7	21.2	9.2
3115	Dairy product manufacturing	66,175.9	91,583.7	106,002.0	60.2	14.9
3116	Animal slaughtering & processing	122,920.6	160,062.5	195,726.7	59.2	27.6
3117	Seafood product preparation & packaging	8,809.8	11,072.9	10,579.7	20.1	1.5
3118	Bakeries & tortilla manufacturing	49,068.0	55,486.8	61,051.5	24.4	8.6
3119	Other food manufacturing	57,047.8	74,608.0	90,758.1	59.1	12.8

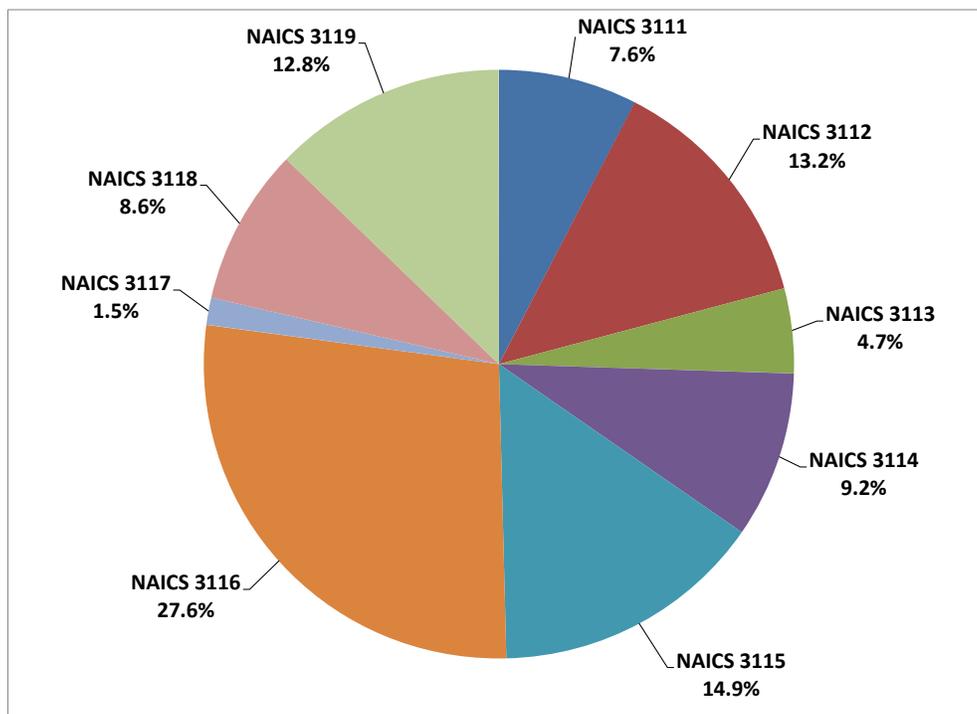
Source: U.S. Bureau of the Census, *Census of Manufactures, Summary Series 2002 and 2007* and *Annual Survey of Manufactures, Geographic Area Statistics 2011*.

Other food processing industry subgroups experiencing relatively faster growth in the value of shipments between 2002 and 2011 included “Dairy product manufacturing” (NAICS 3115), which recorded a 60.2 percent increase, followed by “Animal slaughtering and processing” (NAICS 3116), which experienced a 59.2 percent increase and “Other food manufacturing” (NAICS 3119), with a 59.1 percent increase.

The data in Table 2 and Figure 2 show the relative importance of the food processing 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 27.6 percent of total industry shipments in 2011. The second largest sector, “Dairy product manufacturing” (NAICS 3115) accounted for 14.9 percent followed by “Grain and oilseed milling” (NAICS 3112 - 13.2 percent), “Other food manufacturing” (NAICS 3119 - 12.8 percent), “Fruit and vegetable preserving and specialty food manufacturing” (NAICS 3114 - 9.2 percent), “Bakeries and tortilla manufacturing” (NAICS 3118 - 8.6 percent), “Animal food manufacturing” (NAICS 3111 - 7.6 percent), “Sugar and confectionery product manufacturing” (NAICS 3113 - 4.7 percent) and “Seafood product preparations and packaging” (NAICS 3117 - 1.5 percent).

**Figure 2**  
**Value of Shipments by Industry Subgroup,**  
**Food Processing Industry (NAICS 311), 2011**



**Total Industry 2011 Shipments - \$710,365.6 Million**

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

Source: Table 2

The data presented in Table 3 provide further detail for the industry subgroups that comprise the food processing manufacturing industry. Data showing the number of employees, production workers, value added, value of shipments, and capital expenditures are shown for the “Food Processing Industry” (NAICS 311) as a whole for 2011 and for the NAICS 4-digit and 5-digit subgroups that make up the food manufacturing industry. Data showing the number of companies and establishments for 2007 are also displayed. 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 show, it is also the largest food industry sector in terms of employees, production workers, and value added.

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 9,548 of the total 21,355 companies in the food processing industry and 10,312 of the total 25,616 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.



### ***KYS Foods and Cayenne, LLC***

In 1979, KaiYen Mai’s parents brought KYS Foods, which produces jerky to San Francisco. Seven years ago, Mai, now owner, began looking for a new facility in five states but could not find a building. Mai said she ultimately chose Scottsbluff, Nebraska, because it’s a small town, friendly, and helpful as she stated, “We felt the community would be here for us when the move was over.”

Mai additionally stated, “local incentives were important, as not all places have them.”

# Table 3

## The Food Processing Industry (NAICS 311), Number of Companies and Establishments, Employment, Value of Shipments, Value Added, and Capital Expenditures by Major Sector and Industry Subgroups, 2011\*

NAICS Code	Industry Description	Number of Companies*	Number of Establishments*	All Employees	Production Workers	Value		Capital Expenditures
						Added	Shipments (Thousands \$)	
<b>311</b>	<b>FOOD PROCESSING INDUSTRY</b>	<b>21,355</b>	<b>25,616</b>	<b>1,358,996</b>	<b>1,072,841</b>	<b>264,500,763</b>	<b>710,365,597</b>	<b>15,850,621</b>
<b>3111</b>	<b>Animal food manufacturing</b>	<b>1,184</b>	<b>1,767</b>	<b>43,104</b>	<b>29,749</b>	<b>16,164,944</b>	<b>54,082,330</b>	<b>808,548</b>
31111	Animal food manufacturing	1,184	1,767	43,104	29,749	16,164,944	54,082,330	808,548
<b>3112</b>	<b>Grain &amp; oilseed milling</b>	<b>464</b>	<b>790</b>	<b>50,499</b>	<b>37,427</b>	<b>29,278,380</b>	<b>94,025,296</b>	<b>1,610,335</b>
31121	Flour milling & malt manufacturing	244	384	15,554	11,405	5,921,362	19,837,318	415,591
31122	Starch & vegetable fats & oils manufacturing	195	347	23,435	16,462	16,653,784	63,755,277	801,404
31123	Breakfast cereal manufacturing	35	59	11,510	9,560	6,703,233	10,432,700	393,340
<b>3113</b>	<b>Sugar &amp; confectionery product manufacturing</b>	<b>1,631</b>	<b>1,841</b>	<b>65,429</b>	<b>49,241</b>	<b>15,633,531</b>	<b>33,120,351</b>	<b>1,204,459</b>
31131	Sugar manufacturing	37	75	13,222	10,583	3,361,921	9,727,957	373,299
31132	Chocolate & confectionery mfg from cacao beans	154	165	7,297	5,036	1,295,074	4,757,594	67,316
31133	Confectionery mfg from purchased chocolate	1,050	1,165	26,385	19,956	5,788,072	9,988,087	494,104
31134	Nonchocolate confectionery manufacturing	411	436	18,526	13,667	5,188,464	8,646,713	269,740
<b>3114</b>	<b>Fruit &amp; vegetable preserving &amp; specialty food manufacturing</b>	<b>1,248</b>	<b>1,610</b>	<b>160,869</b>	<b>133,186</b>	<b>29,476,711</b>	<b>65,019,666</b>	<b>2,290,319</b>
31141	Frozen food manufacturing	499	634	85,457	71,076	12,114,265	26,967,196	1,028,963
31142	Fruit & vegetable canning, pickling & drying	772	976	75,413	62,111	17,362,446	38,052,470	1,261,356
<b>3115</b>	<b>Dairy product manufacturing</b>	<b>1,073</b>	<b>1,584</b>	<b>130,791</b>	<b>95,481</b>	<b>32,353,478</b>	<b>106,001,994</b>	<b>2,623,864</b>
31151	Dairy product (except frozen) manufacturing	742	1,194	111,889	80,682	28,878,826	98,618,666	2,399,479
31152	Ice cream & frozen dessert manufacturing	347	390	18,901	14,799	3,474,652	7,383,329	224,386
<b>3116</b>	<b>Meat product manufacturing</b>	<b>3,151</b>	<b>3,773</b>	<b>474,400</b>	<b>414,672</b>	<b>53,824,373</b>	<b>195,726,679</b>	<b>2,514,006</b>
31161	Animal slaughtering & processing	3,151	3,773	474,400	414,672	53,824,373	195,726,679	2,514,006
<b>3117</b>	<b>Seafood product preparation &amp; packaging</b>	<b>559</b>	<b>652</b>	<b>29,686</b>	<b>24,898</b>	<b>3,931,459</b>	<b>10,579,683</b>	<b>309,269</b>
31171	Seafood product preparation & packaging	559	652	29,686	24,898	3,931,459	10,579,683	309,269
<b>3118</b>	<b>Bakeries &amp; tortilla manufacturing</b>	<b>9,548</b>	<b>10,312</b>	<b>248,979</b>	<b>171,696</b>	<b>35,153,938</b>	<b>61,051,462</b>	<b>1,832,025</b>
31181	Bread & bakery product manufacturing	8,558	9,143	187,202	121,129	21,850,259	35,790,737	1,139,181
31182	Cookie, cracker & pasta manufacturing	694	801	47,356	39,486	11,497,217	22,109,204	613,497
31183	Tortilla manufacturing	329	368	14,421	11,081	1,806,462	3,151,521	79,347
<b>3119</b>	<b>Other food manufacturing</b>	<b>2,850</b>	<b>3,287</b>	<b>155,238</b>	<b>116,490</b>	<b>48,683,950</b>	<b>90,758,135</b>	<b>2,657,796</b>
31191	Snack food manufacturing	470	571	42,177	33,813	17,546,575	29,729,526	869,351
31192	Coffee & tea manufacturing	337	360	12,934	9,028	5,983,335	12,405,938	358,665
31193	Flavoring syrup & concentrate manufacturing	150	173	6,718	4,340	7,495,167	9,750,011	204,561
31194	Seasoning & dressing manufacturing	584	674	31,171	21,282	8,069,081	17,734,906	436,204

\* "Number of Companies" and "Number of Establishments" are 2007 values; all other items are 2011 values.

Source: U.S. Bureau of the Census, *Census of Manufactures, Summary Series 2007* and *Annual Survey of Manufactures, Geographic Area Statistics 2011*.

### III. Industry Production and Location Characteristics

The food processing industry encompasses a very large and diverse industry. In 2007, 25,616 establishments were primarily engaged in food processing, a decrease of 8.2 percent from 2002 (see Table 4). It is of interest to note, that most of the decline in the number of establishments in the food processing industry occurred in establishments with fewer than 20 employees. Between 2002 and 2007, the number of establishments with 20 or more employees (accounting for 33.5 percent of 2007 establishments) declined by 1.6 percent. Establishments with fewer than 20 employees decreased by 11.2 percent between 2002 and 2007.

The data presented in Table 4 compares selected characteristics for the food processing industry as a whole for 2002, 2007, and 2011. Over the 2002–2011 period, the number of employees

declined by 9.8 percent from 1,506,800 to 1,359,000 while production workers decreased by 6.0 percent, from 1,140,700 in 2002 to 1,072,800.

The cost of materials (purchased inputs) increased by 75.5 percent, from \$255.3 billion in 2002 to \$448.2 billion in 2011. Another important factor contributing to the 55.0 percent increase in the value of shipments or the value of output produced by the food processing industry was the value added by manufacture, which increased by 30.0 percent, from \$203.5 billion in 2002 to \$264.5 billion in 2011.

The Table 4 data, along with data from the *Annual Survey of Manufacturers*, indicate that establishments in the “Food Processing Industry” (NAICS 311) are more labor intensive than manufacturing establishments generally. In 2011, production workers accounted for 78.9 percent of total employment in the food processing industry, compared to 69.9 percent for all manufacturing.

**Table 4**  
**Production Characteristics for the Food Processing Industry (NAICS 311) 2002, 2007, and 2011**

	2002	2007	2011	Percent Change	
				2002-2007	2007-2011
Establishments					
Number	27,915	25,616	N/A	-8.2	N/A
With 20+ Employees	8,736	8,594	N/A	-1.6	N/A
All Employees					
Number [thousands]	1,506.8	1,464.2	1,359.0	-2.8	-7.2
Payroll [million \$]	45,490.1	50,387.9	52,828.3	10.8	4.8
Production Workers					
Number [thousands]	1,140.7	1,139.3	1,072.8	-0.1	-5.8
Hours [millions]	2,283.7	2,282.8	2,172.2	0.0	-4.8
Wages [million \$]	30,284.3	34,674.9	36,089.0	14.5	4.1
Average Hourly Wage [\$]	13.26	15.19	16.61	14.6	9.3
Value Added by Manufacture [million \$]	203,500.9	241,064.1	264,500.8	18.5	9.7
Cost of Materials [million \$]	255,344.3	351,493.5	448,203.6	37.7	27.5
Value of Shipments [million \$]	458,205.8	589,725.6	710,365.6	28.7	20.5
Cost of Purchased Fuels and Electric Energy					
Electric Energy [million \$]	3,554.7	4,855.8	6,104.1	36.6	25.7
Purchased Fuels [million \$]	3,182.6	5,493.1	5,027.8	72.6	-8.5
Quantity of Purchased Electric Energy [million kWh]	67,310.8	80,297.9	90,585.3	19.3	12.8

N/A - Not Available

Source: U.S. Bureau of the Census, *Census of Manufactures, Geographic Area Statistics 2002*; *Census of Manufactures, Summary Series 2007*; and *Annual Survey of Manufacturers, Geographic Area Statistics 2011*.

The importance of production workers relative to total employment in the food processing industry has also increased over time. The number of production workers in the industry decreased from 1,140,700 in 2002 to 1,072,800 in 2011—a decrease of 6.0 percent. Total industry employment declined by 9.8 percent for the same period. Total production worker hours declined by a slightly smaller rate, 4.9 percent, than total production workers and total production worker wages grew by 19.2 percent between 2002 and 2011. These data highlight the increasing importance of reliable and productive sources of labor for the food processing industry.

As previously noted, the total cost of materials increased by 75.5 percent between 2002 and 2011. 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 71.7 percent, while the cost of purchased fuels increased by only 58.0 percent from 2002 to 2011.

Table 5 provides data for selected additional production characteristics for the food processing industry for 2007. The industry data presented in Table 5 are for the “Food Processing 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 21,355 companies and 25,616 industry establishments in the food processing industry in 2007. Establishments in the animal slaughtering and processing sector totaled 3,773 in 2007, 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, 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 processing industry. Food processing establishments

**Table 5**

**Establishment Characteristics for the Food Processing Industry (NAICS 311) and the Meat Product Manufacturing Subgroup (NAICS 3116), 2007**

	<b>NAICS 311 Food Products</b>	<b>NAICS 3116 Animal Slaughtering and Processing</b>	<b>Other Food Products</b>
Number of Companies	21,355	3,212	18,143
Number of Establishments	25,616	3,773	21,843
Est. - with 20+ Employees	8,594	1,463	7,131
Est. - with 20+ Employees (% of Total)	33.5	38.8	32.6
Est. - with 100+ Employees	3,196	761	2,435
Est. - with 100+ Employees (% of Total)	12.5	20.2	11.1
Establishments per Company	1.20	1.17	1.20
Production Workers	1,139,268	436,454	702,814
Average Prod. Workers per Establishment	44.5	115.7	32.2
Value Added (Million \$)	241,064.1	51,753.2	189,310.8
Per Establishment (\$1,000)	9,410.7	13,716.7	8,666.9
Per Production Worker (\$)	211,595.6	118,576.5	269,361.2
Value of Shipments (Million \$)	589,725.6	160,062.5	429,663.1
Per Establishment (\$1,000)	23,021.8	42,423.1	19,670.5
Per Production Worker (\$)	517,635.5	366,734.0	611,346.8

Source: U.S. Bureau of the Census, *Census of Manufactures, Summary Series 2007*.

with 20 or more employees accounted for 33.5 percent of total industry establishments in 2007. For the animal slaughtering and processing sector, establishments with 20 or more employees accounted for 38.8 percent of establishments, while for the balance of the industry the comparable statistic was 32.6 percent. The differences between the animal slaughtering & 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 processing industry as a whole, 12.5 percent of the establishments had 100 or more employees. This statistic for the meat products manufacturing industry was 20.2 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 processing industry had 44.5 production workers in 2007. Further review of the data in Table 5 indicate establishments in the meat products manufacturing sector were much larger, with an average of 115.7 production workers per establishment, which was 3.6 times the average size of 32.2 production workers per establishment for the balance of the industry. Obviously, a few very large plants and many small establishments characterize the meat products manufacturing sector.

Companies in the food processing 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 processing industry. Data in Table 6 demonstrate that shipping distances for these commodities have generally been increasing. In 2007, the average distance shipped for all four commodity subgroups exceeded 240 miles. For the subgroups “Animal feed and products of animal origin, n.e.c.” and “Grains, alcohol, and tobacco products,” the average distance shipped in 2007 exceeded 400 miles.

To provide an indication of the geographic dispersion of the food processing industry, Table 7 presents 2011 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 64.8 percent of total value added in the food processing industry. Moreover, these states account for 65.5 percent of total industry shipments and 60.2 percent of total production workers in the food processing industry.

**Table 6**  
**Shipment Characteristics for the Food Processing Industry (NAICS 311)**  
**Related Commodities, Selected Commodities, 2002 and 2007**

Commodity Sector	Value (Mil. \$)	Tons (1,000)	Ton-miles	Average Miles		% Change
	2007	2007	2007 (Mil.)	2007	2002	2002-2007
Animal feed & products of animal origin, n.e.c.	\$90,472	246,436	76,188	499	167	198.8
Meat, fish, seafood, & their preparations	\$277,251	98,413	48,549	247	162	52.5
Grains, alcohol & tobacco products	\$143,139	120,023	50,732	403	189	113.2
Other prepared foodstuffs and fats & oils	\$479,757	468,435	171,452	268	179	49.7

Source: U.S. Bureau of the Census, *Census of Transportation, 2002 and 2007 Commodity Flow Survey*.

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 2011, California, with total shipments by food processing establishments of \$71,271 million, was the largest food processing state, accounting for 10.0 percent of the total U.S. food product shipments. Texas, with shipments of food products totaling \$43,304 million, ranked second among the states and contributed 6.1 percent of the total industry shipments. In terms of the value of shipments of food products, Illinois ranked third, followed by Wisconsin, Iowa, Pennsylvania, and Ohio. Nebraska, with shipments of food products

totaling \$26,678 million, ranked ninth among the states and accounted for 3.8 percent of total industry shipments.

The average hourly earnings of production workers in the food processing industry shown in Table 7 indicate Nebraska production workers had average hourly earnings (\$16.31) that were 1.8 percent lower than the U.S. average of \$16.61, and 8.4 percent less than the average of \$17.80 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 processing 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 Processing Industry (NAICS 311)**  
**Production Workers, Average Wages, Value Added, and Value of Shipments**  
**Selected States and the U.S., 2011**

State	Employees (1,000)	Production Workers (1,000)	Average Hourly Earnings (\$)	Value Added (\$1,000,000)	Value of Shipments (\$1,000,000)	% of U.S. Value of Shipments
Nebraska	34.2	28.0	16.31	6,517	26,678	3.8
California	149.0	113.7	17.44	28,215	71,271	10.0
Florida	24.2	18.2	18.39	5,453	12,620	1.8
Illinois	70.5	54.1	18.07	16,077	42,315	6.0
Indiana	33.2	25.4	18.47	7,927	20,404	2.9
Iowa	47.7	38.9	17.71	11,012	37,526	5.3
Michigan	24.6	19.3	18.72	7,340	15,224	2.1
Minnesota	46.4	37.1	17.02	8,436	26,828	3.8
Missouri	36.1	29.9	17.42	7,585	21,334	3.0
New Jersey	26.2	18.7	18.44	4,741	11,926	1.7
New York	42.1	31.9	17.22	7,073	18,497	2.6
Ohio	48.6	38.4	18.98	12,329	28,127	4.0
Pennsylvania	65.4	48.8	18.73	13,099	32,036	4.5
Tennessee	33.9	26.1	17.60	7,689	17,852	2.5
Texas	83.6	66.7	15.33	15,405	43,304	6.1
Wisconsin	63.0	50.5	17.39	12,622	39,324	5.5
Total Sel. States	828.7	645.7	N/A	171,521	465,264	65.5
Percent of U.S.	61.0	60.2	N/A	64.8	65.5	65.5
Total U.S.	1,359.0	1,072.8	16.61	264,501	710,366	100.0

N/A - Not Available.

Source: U.S. Bureau of the Census, *Annual Survey of Manufactures, Geographic Area Statistics: 2011*.

#### IV. Capital Investment and Industry Outlook

Capital investment in the food processing industry exceeded \$15.8 billion in 2011. As the data presented in Table 8 show, capital investment totaled \$15,850.6 million, a 44.9 percent increase from 2002.

As data provided in Table 8 also indicate, the growth and rate of capital investment in the food products industry varied significantly among the industry subgroups. The “Other food manufacturing” (NAICS 3119) sector recorded the greatest increase (87.7 percent) in capital expenditures between 2002 and 2011, followed by the “Sugars and confectionery product manufacturing” (NAICS 3113 - 62.4 percent) and the “Grain and oilseed milling” sector (NAICS 3112 - 57.5 percent).

The “Animal slaughtering and processing” (NAICS 3116) and “Fruit and vegetable preserving and specialty food manufacturing” subgroups experienced the smallest growth in capital investment from 2002 to 2011.

The food processing 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, employment in the food processing industry (NAICS 311) declined moderately during the 2000–2010 period and is projected to grow by an average rate of 0.2 percent per year between 2010 and 2020. This projected

growth compares favorably with an average annual decline of 4.0 percent per year for all manufacturing employment between 2000 and 2010 and a projected average annual decline of 0.1 percent for the 2010–2020 period.

Real, constant-dollar, output in the food processing industry is projected to increase by 15.0 percent, or by an average annual rate of 1.4 percent, in real, inflation-adjusted terms between 2010 and 2020. As the data presented in Table 9 indicate, this is slightly less than the projected increase in output for the total manufacturing sector (31.2 percent, or an average annual rate of 2.8 percent) for the 2010–2020 projection period.

The long run outlook for the food processing 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 Processing Industry (NAICS 311),**  
**by Industry Subgroup, 2002, 2007, and 2011**

NAICS	Industry Group	Capital Expenditures			% Change		2011 Cap. Exp. as Percent of Value Added
		2002	2007	2011	2002–2007	2007–2011	
<b>311</b>	<b>Food manufacturing</b>	<b>\$10,936,876</b>	<b>\$13,193,895</b>	<b>\$15,850,621</b>	<b>20.6</b>	<b>20.1</b>	<b>5.27</b>
3111	Animal food manufacturing	\$576,171	\$693,816	\$808,548	20.4	16.5	4.03
3112	Grain & oilseed milling	\$1,022,322	\$1,565,527	\$1,610,335	53.1	2.9	4.43
3113	Sugar & confectionery product manufacturing	\$741,572	\$774,646	\$1,204,459	4.5	55.5	5.46
3114	Fruit & vegetable preservation & specialty food manufacturing	\$1,831,645	\$1,635,954	\$2,290,319	-10.7	40.0	6.87
3115	Dairy product manufacturing	\$1,735,787	\$1,871,167	\$2,623,864	7.8	40.2	7.91
3116	Animal slaughtering & processing	\$2,041,808	\$2,721,383	\$2,514,006	33.3	-7.6	4.49
3117	Seafood product prep. & packaging	\$202,464	\$299,444	\$309,269	47.9	3.3	4.98
3118	Bakeries & tortilla manufacturing	\$1,369,400	\$1,521,823	\$1,832,025	11.1	20.4	3.95
3119	Other food manufacturing	\$1,415,707	\$2,110,135	\$2,657,796	49.1	26.0	5.59

Source: U.S. Bureau of the Census, *Census of Manufactures, Geographic Series 2002 and Summary Series 2007*, and *Annual Survey of Manufactures, Geographic Area Statistics 2011*.

**Table 9****Employment and Output, Food Processing Sector by Industry Subgroup,  
for All Manufacturing, 2000, 2010, and Projected 2020**

NAICS Industry Sector / Subgroup		Part A -- Employment				
		Thousands of Jobs			Avg. Ann. Rate of Change	
		2000	2010	2020	2000–2010	2010–2020
<b>31-33</b>	<b>Manufacturing</b>	<b>17,262.9</b>	<b>11,524.0</b>	<b>11,450.9</b>	<b>-4.0</b>	<b>-0.1</b>
<b>311</b>	<b>Food manufacturing</b>	<b>1,553.3</b>	<b>1,446.8</b>	<b>1,470.2</b>	<b>-0.7</b>	<b>0.2</b>
3111	Animal food manufacturing	54.6	50.4	46.6	-0.8	-0.8
3112	Grain & oilseed milling	64.8	58.3	56.1	-1.1	-0.4
3113	Sugar and confectionery product manufacturing	92.1	69.5	67.1	-2.8	-0.3
3114	Fruit and vegetable preserving & specialty food manufacturing	197.3	171.4	159.6	-1.4	-0.7
3115	Dairy product manufacturing	136.0	127.9	122.0	-0.6	-0.5
3116	Animal slaughtering & processing	506.9	490.2	537.0	-0.3	0.9
3117	Seafood product preparation & packaging	44.9	38.3	41.0	-1.6	0.7
3118	Bakeries & tortilla manufacturing	306.4	276.2	274.6	-1.0	-0.1
3119	Other food manufacturing	150.3	164.6	166.2	0.9	0.1

NAICS Industry Sector / Subgroup		Part B -- Value of Output				
		Billions of Chained-Weighted 2005 Dollars <sup>(a)</sup>			Avg. Ann. Rate of Change	
		2000	2010	2020	2000–2010	2010–2020
<b>31-33</b>	<b>Manufacturing</b>	<b>\$4,585.1</b>	<b>\$4,363.0</b>	<b>\$5,723.3</b>	<b>-0.5</b>	<b>2.8</b>
<b>311</b>	<b>Food manufacturing</b>	<b>497.6</b>	<b>530.7</b>	<b>610.2</b>	<b>0.6</b>	<b>1.4</b>
3111	Animal food manufacturing	30.4	26.4	31.7	-1.4	1.9
3112	Grain & oilseed milling	62.9	52.6	63.2	-1.8	1.9
3113	Sugar & confectionery product manufacturing	28.5	27.4	29.9	-0.4	0.9
3114	Fruit and vegetable preserving & specialty food manufacturing	54.0	63.8	71.3	1.7	1.1
3115	Dairy product manufacturing	70.7	75.3	88.5	0.6	1.6
3116	Animal slaughtering & processing	137.7	149.6	174.8	0.8	1.6
3117	Seafood product preparation & packaging	7.5	9.7	11.1	2.6	1.3
3118	Bakeries & tortilla manufacturing	51.0	55.0	62.5	0.8	1.3
3119	Other food manufacturing	54.9	70.9	78.0	2.6	1.0

<sup>(a)</sup> 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/](http://www.bls.gov/emp/)  
Employment and output projections for 2020 (2012).

## PART B

# NEBRASKA ADVANTAGES FOR MANUFACTURERS OF FOOD PRODUCTS

The food processing 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 processing sector and for new and expanding food manufacturing 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, 120 establishments in the state slaughter and further process animal and

### Table 10

**Nebraska Food Processing Establishments by Industry and Employment Size, 2010**

NAICS	Industry Group	Total	Employment Size			
			<100	100-499	500-999	>999
----- (Number of Establishments) -----						
31111	Animal food manufacturing	59	54	5	0	0
31121	Flour milling & malt manufacturing	8	6	2	0	0
31122	Starch & vegetable fats & oils manufacturing	8	6	2	0	0
31123	Breakfast cereal manufacturing	2	0	1	1	0
31131	Sugar manufacturing	1	0	1	0	0
31132	Chocolate & confectionery manufacturing from cacao beans	0	0	0	0	0
31133	Confectionery manufacturing from purchased chocolate	3	3	0	0	0
31141	Frozen food manufacturing	2	1	1	0	0
31142	Fruit & vegetable canning, pickling & drying	2	2	0	0	0
31151	Dairy product (except frozen) manufacturing	10	7	3	0	0
31152	Ice cream & frozen dessert manufacturing	2	2	0	0	0
31161	Animal slaughtering & processing	120	93	12	7	8
31171	Seafood product preparation & packaging	0	0	0	0	0
31181	Bread & bakery product manufacturing	44	39	5	0	0
31182	Cookie, cracker & pasta manufacturing	3	3	0	0	0
31183	Tortilla manufacturing	4	3	1	0	0
31191	Snack food manufacturing	3	2	1	0	0
31192	Coffee & tea manufacturing	3	3	0	0	0
31194	Seasoning & dressing manufacturing	2	2	0	0	0
31199	All other food manufacturing	13	9	3	1	0
<b>311</b>	<b>Total Food Manufacturing</b>	<b>289</b>	<b>235</b>	<b>37</b>	<b>9</b>	<b>8</b>

Source: U.S. Census Bureau *County Business Patterns: 2010*.

meat products. Moreover, this industry subgroup employs the most workers, with 27 of these establishments employing more than 100 workers, 15 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 reveals that many of the significant inputs required by other food processing 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) 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 1,271.8 million bushels in 2012. As shown in Part A of Table 11, Nebraska's corn crop accounted for 11.9 percent of total U.S. production. Sorghum for grain production in Nebraska totaled 4.0 million bushels, accounting for 1.6 percent of the total U.S. production. Nebraska also produced significant amounts of soybeans (6.8 percent of U.S. production), wheat (2.3 percent of U.S. production), hay (4.3 percent of U.S. production), and dry edible beans (9.8 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.

**Table 11**  
**Production of Selected Agricultural Commodities in Nebraska**

	<b>Part A -- Selected Crops</b>			
	<b>Corn for Grain, 2012</b>		<b>Sorghum for Grain, 2012</b>	
	<b>Acres Harvested</b>	<b>Production</b>	<b>Acres Harvested</b>	<b>Production</b>
	(1,000)	(1,000 Bu.)	(1,000)	(1,000 Bu.)
Nebraska	9,150	1,271,850	60	4,020
% of U.S.	10.4	11.9	1.2	1.6
U.S. Total	87,721	10,725,191	5,016	256,164
	<b>Wheat, 2012</b>		<b>Soybeans, 2012</b>	
	<b>Acres Harvested</b>	<b>Production</b>	<b>Acres Harvested</b>	<b>Production</b>
	(1,000)	(1,000 Bu.)	(1,000)	(1,000 Bu.)
Nebraska	1,300	53,300	4,950	202,950
% of U.S.	2.7	2.3	6.5	6.8
U.S. Total	48,991	2,269,117	75,693	2,971,022
	<b>All Hay, 2012</b>		<b>Dry Edible Beans, 2012</b>	
	<b>Acres Harvested</b>	<b>Production</b>	<b>Acres Harvested</b>	<b>Production</b>
	(1,000)	(1,000 Tons)	(1,000)	(1,000 Bu.)
Nebraska	2,480	5,624	135	3,038
% of U.S.	4.5	4.3	8.0	9.8
U.S. Total	55,633	131,144	1,690	31,033

Table continued on following page (including source notes).

## Table 11, continued

<b>Part B -- Selected Livestock, Poultry, and Related Products</b>				
	<b>Cattle on Feed, Jan. 1, 2012</b>		<b>All Cattle &amp; Calves, Jan. 1, 2012</b>	
	<b>Number</b>		<b>Number</b>	
	(1,000 Head)		(1,000 Head)	
Nebraska	2,650	6,450		
% of U.S.	18.8	7.1		
U.S. Total	14,121	90,769		
	<b>Milk Cows, 2011</b>		<b>Commercial Cattle Slaughter, 2011</b>	
	<b>Number</b>		<b>Number</b>	<b>Live Weight</b>
	(1,000 Head)		(1,000 Head)	(1,000 Pounds)
Nebraska	56	6,865.6	9,055,722	
% of U.S.	0.6	20.1	20.9	
U.S. Total	9,230	34,086.6	43,402,255	
	<b>Hogs &amp; Pigs, Dec. 1, 2011</b>		<b>Commercial Hog Slaughter, 2011</b>	
	<b>Number</b>		<b>Number</b>	<b>Live Weight</b>
	(1,000 Head)		(1,000 Head)	(1,000 Pounds)
Nebraska	3,150	7,712.0	2,104,923	
% of U.S.	4.7	7.0	6.9	
U.S. Total	66,361	110,860.0	30,422,112	
	<b>Milk Produced, 2011</b>		<b>Chicken Inventory, Dec. 1, 2011</b>	
	<b>Quantity</b>		<b>Number</b>	<b>Value</b>
	(Millioin Pounds)		(Number Head)	(\$1,000)
Nebraska	1,173	11,290.0	32,741	
% of U.S.	0.6	2.5	1.9	
U.S. Total	196,245	447,251.0	1,697,719	
<b>Layers and Eggs, 2011</b>				
	<b>Avg. Number of</b>			
	<b>Layers</b>	<b>Eggs</b>		
	(1,000 Head)	(Millions)		
Nebraska	9,419	2,697		
% of U.S.	2.8	2.9		
U.S. Total	340,335	91,855		

Source: U.S. Department of Agriculture, National Agricultural Statistics Service (USDA, NASS), *Agricultural Statistics, 2012*, and [www.nass.usda.gov/](http://www.nass.usda.gov/)

As the data provided in Part B of Table 11 show, 18.8 percent of the nation's cattle on feed as of January 1, 2012, were in Nebraska, which ranked second among the states in terms of this measure. Nebraska also led the nation in the commercial cattle slaughter in 2011, accounting for 20.9 percent of the total live weight.

Other livestock and livestock products, of which Nebraska produced significant quantities in 2011, include hogs (6.9 percent of the U.S. total, commercial slaughter), chickens (2.5 percent of the U.S. total inventory, and 2.8 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 processing 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.

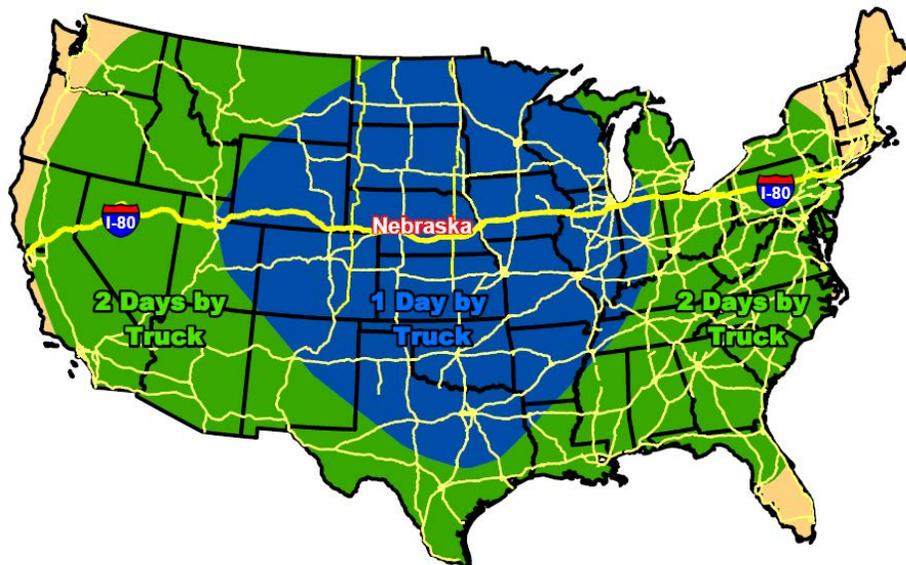
In addition to being a prominent location for national markets, Nebraska is well situated to

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

**Figure 3**  
**Truck Access to Regional and National Markets**



Iowa, and Interstate 25, which passes in close proximity to the state's western border.

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, is 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 the most technologically advanced dispatching facility 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 315 miles of track. Union Pacific's main line in central Nebraska is the busiest rail freight corridor in the world, with more than 145 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). This benefit is of particular importance to the "Food processing" 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.

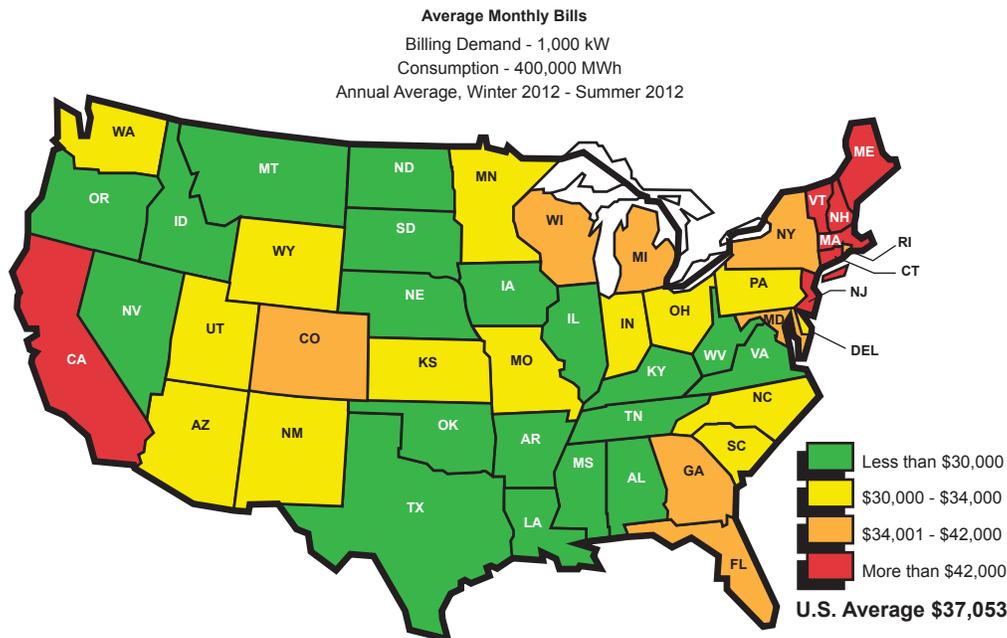
One of the reasons for Nebraska's low electric rates is its close proximity to the vast low-sulfur coal fields of eastern Wyoming. It is also the only state in the nation with electric service provided entirely by public power. Nebraska's two largest utilities, Nebraska Public Power District (NPPD) and 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 2012–Summer 2012



Source: Edison Electric Institute, “Typical Bills and Average Rates Report,” January 1, 2012 and July 1, 2012. State averages are weighted using eight months of January 2012 data and four months of July 2012 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 120 MW of wind generated power from facilities located near Bloomfield, 80 MW from a facility near Petersburg, 80 MW from a facility located in Custer County, Nebraska, and 75 MW from a facility to be constructed 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 2011, 91.0 percent of the state's population 25 years of age and older were high school graduates, compared to 85.9 percent nationally. In addition, the 2009–2010 Nebraska public high school graduation rate was 90.0 percent, ranking among the highest in the nation. One reason for the high graduation rate is the state's comparatively low student-teacher ratio—13.36:1 in 2010–2011 compared to 15.97:1 for the nation. Finally, Nebraska students consistently score above the U.S. average on both standardized achievement tests and college entrance exams. In 2011 Nebraska students averaged 22.1 on the ACT college entrance test, compared to 21.1 nationally. Moreover, Nebraska's average composite ACT score was achieved with 76 percent of graduates taking the exam, compared to 49 percent of graduates nationwide.

### **Higher Education Resources and Research**

Companies within the food processing 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 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. The University of Nebraska (NU) is one of a selected group of research universities that holds membership in the Association of American Universities—a distinction granted in 1909. 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.

The Food Processing Center—University of Nebraska-Lincoln ([www.fpc.unl.edu](http://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 and marketing assistance. 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. These services include but are not limited to product and process development, market research, business planning, and laboratory testing. The Food Processing Center's professional team works in conjunction with the Food Science and Technology faculty as well as faculty in other departments within the University

of Nebraska-Lincoln, such as Agricultural Economics, Animal Science, Agronomy and Horticulture, Plant Sciences, Biological Systems Engineering, and Business Administration.

### **Technical Assistance**

The Food Processing Center's technical assistance team has access to state-of-the-art pilot plants, which allows them to provide assistance with process development, ingredient functionality, scale-up, and research. They also provide the industry with a wide range of support through workshops and seminars including Better Process Control School, Molds and Mycotoxins, Pet Foods, and Extrusion, just to name a few. Additionally, the team supports the industry with process engineering needs including front end engineering, equipment specifications, process optimization, and quality assurance as well as food safety and security issues.

Another area of expertise is product development and design. Formulation, concept, and prototype development are provided to food processors ranging from the micro-business entrepreneur to the Fortune 500 business. The Food Processing Center provides support and assistance with line extensions and quality improvements by assisting with developing "new and improved" products. In addition, labeling assistance for nutritional fact panels and ingredients statements as well as general label requirements are provided.

To round out the assistance, the Food Processing Center also provides laboratory services to the food and feed industries, such as pathogen, general microbiology, environmental and mycotoxin testing. Through the microbiological services, the Food Processing Center can help clients to determine the success of quality control programs, check contamination levels of raw products, and study interventions for the reduction of microbial contamination. Among other services provided by the laboratory are shelf life testing, acidified food testing and review, pH, water activity, and basic HACCP training.

### **Business Consulting**

The Food Processing Center team works closely with food businesses in development of business plans and feasibility studies as well as assists

with the development of strategic plans. The team provides expertise in marketing research to help companies understand their competition, analyze the current trends, and conducts surveys to collect primary information. The Food Processing Center works closely with the state economic developers and communities to assist with new food business recruitment and existing food business retention. Some examples of these partners are: the Nebraska Department of Economic Development, Nebraska Public Power District, other statewide utilities, and community economic development organizations. The Food Processing Center assists these developers with plant relocation and/or expansion needs of a food manufacturer. The Food Processing Center is an active partner in the Nebraska Manufacturing Extension Partnership, which is part of the National Manufacturing Extension Partnership. This national network consists of more than 2,000 professionals working in all 50 states providing direct support and assistance to manufacturers.

Assistance is provided with seeking sources of funding through identification of grant opportunities, as well as assisting companies and individuals with writing "winning" proposals is another important program within the Food Processing Center. Assistance includes interpreting RFPs (Request for Proposals), developing budgets, and reviewing finalized documents for completeness.

### **New Food Processing Center Services**

**Food Safety:** Businesses need to comply with frequently changing new regulation as they move their products through the supply chain. Auditors come in and identify problems, but do not offer solutions. As part of its new initiatives, the Food Processing Center is seeking certification in Safe Quality Foods, one of the quality management systems recognized by the Global Food Safety Initiative. The Food Processing Center will then be able to help food manufactures address audits and food safety issues and get them back to doing what they do best—making great products!

**Applied Research and Engineering (ARE):** This unit of the Food Processing Center 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. The focus is on solving practical problems and providing solutions in environments that are often complex, and require advanced research. ARE's research and development resources are diverse and unique.

Experts in a wide range of areas, covering all major disciplines, are available to provide comprehensive assistance to the food industry. The latest analytical and laboratory resources are also available for advanced applied research projects.



### **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.

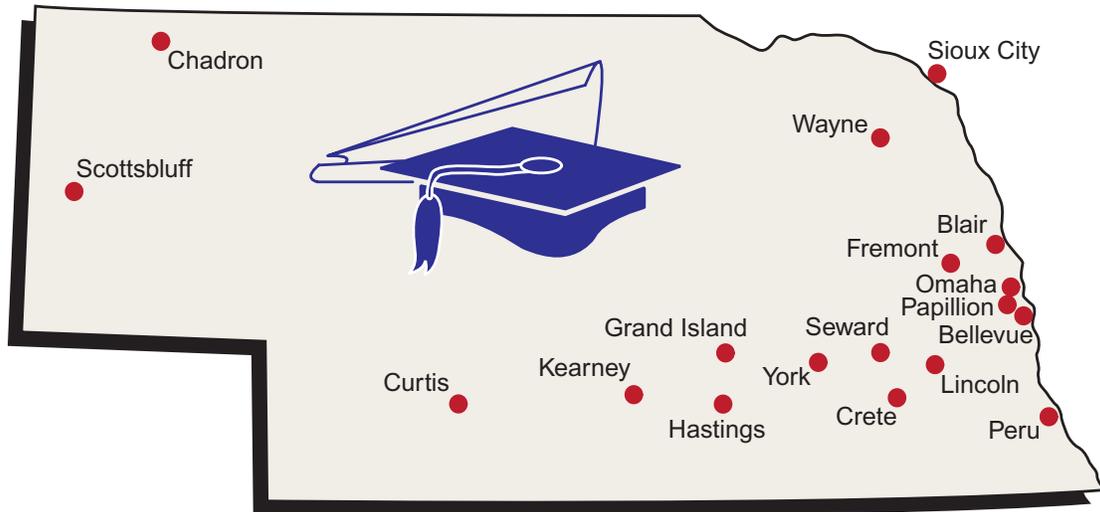
Additional product attributes include:

- 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.

## Figure 5A

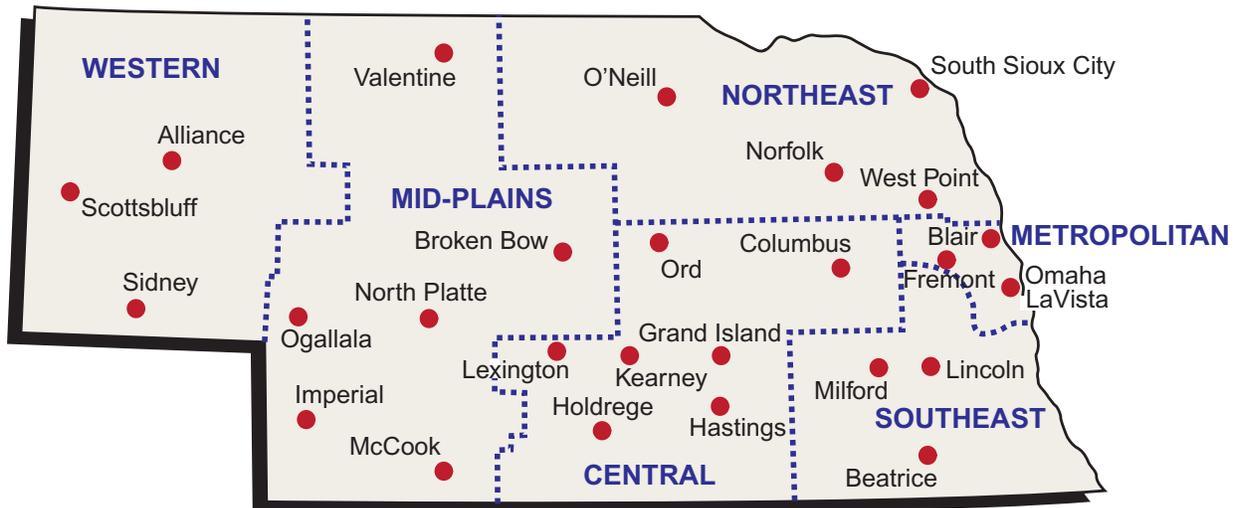
Location of Nebraska Area Colleges and Universities



Source: Nebraska Coordinating Commission for Postsecondary Education.

## Figure 5B

Community Colleges in Nebraska



Source: Nebraska Community College System.

**Companion Animal Wellness:** Household pets are beloved members of the family and their health and well-being is a high priority. Pathogens such as Salmonella can contaminate the food of animal companions and cause forborne illness in the animals and also in humans. The Food Processing Center helps to make sure pet owners are not bringing contaminated products into their home helping businesses minimize the risk that pet food products end up featured in the worst kinds of headlines.

**Information Age:** Because Googling and Wiki don't always give the precision and accuracy of information businesses need, the Food Processing Center offers data management assistance and data research services so businesses have what they need to make informed decisions that shape their growth, direction, and management.

**Co-product Innovation:** The Food Processing Center is partnering with businesses to discover and commercialize opportunities to develop products from waste streams and make a real difference to the bottom line.

**Taking the Next Step:** This program is designed for businesses that have achieved some success and are ready to move to the next level and increase sales, product line, or territory. The Food Processing Center's new intensive, hands-on workshop is for those committed to achieving transformational growth for their company.

**Entrepreneur and Start-up Assistance:** The Food Entrepreneur Assistance program assists food business start-ups by providing a one-day seminar designed to inform and educate businesses with understanding the food industry. In addition, the Food Processing Center provides one-on-one consulting to assist each individual with their product concept from development to packaging and marketing. The clients' high rate of success speaks for itself about the quality of the program.

The Center offers the National Small Food Manufacturers Conference. This annual conference attracts small business owners from all over the United States. During this dynamic

two-day event, nationally recognized speakers present information to attendees to enable them to grow their food business.

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

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, the state has six community college areas, which provide services in 25 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.

#### **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](http://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](http://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 10 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](http://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% to 4%, 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). 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 indicates on average, the cost of living in Nebraska is 1.2 percent above the U.S. average. Of particular interest is the cost of housing, which in Nebraska averages 5.9 percent less than for the U.S. as a whole for families renting a home and the cost of utilities, which is 0.3 percent less than the U.S. average.

## Table 12

**Cost of Living in Nebraska, Compared to the National Average,  
As of January 1, 2013**

	All Items Index <sup>(a)</sup>	Consum- ables	Transpor- tation <sup>(b)</sup>	Health Services	Monthly Rent <sup>(c)</sup>	Home Value <sup>(c)</sup>	Utilities	Income/ Payroll Taxes
U.S. Average	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nebraska	101.2	92.0	99.6	93.3	94.1	99.4	99.7	106.4
Omaha, NE	98.1	93.2	98.6	91.9	128.6	87.4	88.1	106.4
Lincoln, NE	106.3	94.9	99.7	95.0	109.8	115.3	101.4	106.4
Nonmetro NE <sup>(d)</sup>	100.1	91.5	99.7	93.4	87.8	95.6	101.4	106.4

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

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

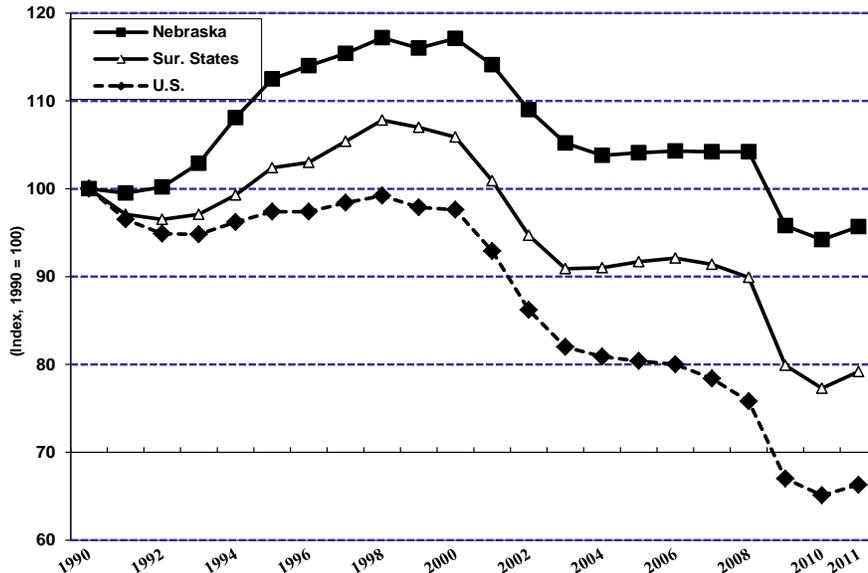
<sup>(c)</sup> Assumes a house of 1,613 square feet for both rental assumption and home value.

<sup>(d)</sup> 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 January 1, 2013.

## Figure 6

**Manufacturing Employment, Nebraska, Surrounding States,  
and the U.S., 1990–2011, 1990=100**



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

Source: Bureau of Labor Statistics, [www.bls.gov](http://www.bls.gov).

2008(P): Preliminary data.

## CONCLUSIONS

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This study concludes the food processing 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 products 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.

The three organizations cooperating in the preparation of this study can also assist food products 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](mailto:rjnelse@nppd.com)  
<http://econdev.nppd.com>



**Nebraska Public Power District**  
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# 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, Tennessee, Texas, and Wisconsin. The second group of states includes Iowa, Missouri, and Nebraska. Combined, these two groups of states account for 64.8 percent of the value added by manufacture in the food processing 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 be quantified.

### Table A-1

**Alternative Locations for a Model Plant for the Food Processing Industry (NAICS 311)**

State	Percent of Value Added by Manufacture <sup>(a)</sup>
<b>Nebraska</b>	<b>2.5</b>
California	10.7
Florida	2.1
Illinois	6.1
Indiana	3.0
Iowa	4.2
Michigan	2.8
Minnesota	3.2
Missouri	2.9
New Jersey	1.8
New York	2.7
Ohio	4.7
Pennsylvania	5.0
Tennessee	2.9
Texas	5.8
Wisconsin	4.8
<b>Total Selected States*</b>	<b>64.8</b>

<sup>(a)</sup> Percent of the 2011 U.S. total value added by manufacture for establishments in NAICS 311.

\* Values do not sum due to rounding.

Source: U.S. Bureau of the Census, *Annual Survey of Manufactures, 2011*.

The model plant is assumed to manufacture a product representative of the “Food Processing Industry” (NAICS 311) as a whole. To specify the relevant labor and energy costs, information was obtained from the *Annual Survey of Manufactures, 2011*, and the U.S. Energy Administration *2006 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 \$12,327,600 and the total annual output (value of shipments) is estimated to be \$33,108,000. Energy inputs are

## Table A-2

### Characteristics of a Model Plant for the Food Processing Industry (NAICS 311)

	Total Model Plant	Per Production Worker
Production Workers	50	---
Value Added [dollars] <sup>(a)</sup>	12,327,600	246,552
Total Output [dollars] <sup>(b)</sup>	33,108,000	662,160
Energy Inputs [million BTUs] <sup>(c)</sup>	50,902	1,018

<sup>(a)</sup> Estimated value added applies the 2011 value added per production worker for the Food Processing Industry (NAICS 311) to the model plant (see Table 4).

<sup>(b)</sup> Estimated value of shipments derived by applying the 2011 value of shipments per production worker to the model plant (see Table 4).

<sup>(c)</sup> Estimated by applying the 2011 ratio of energy inputs per production worker to the model plant (see Table A-3).

Source: Calculated from data presented in Tables 4 and A-3.

estimated at 50,902 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 2011. 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 50,901.8 million BTUs. Electric energy inputs are estimated to be 14,405.2 million BTUs (4,221,910 kWhs), or 28.3 percent of the total energy inputs, while natural gas inputs are estimated at 36,496.6 million BTUs, 71.7 percent of the total energy requirements.

## Table A-3

### Energy Use in Food Processing Manufacturing Establishments

#### Part A

Estimated 2011 Industry Energy Inputs		
	Trillion BTUs	Percent
Purchased Fuels and Electric Energy	1,092.1	100.0
Purchased Electric Energy	309.1	28.3
Purchased Fuels	783.1	71.7

Source: Energy use estimated from data from the U.S. Bureau of the Census, *Annual Survey of Manufactures, 2011* and U.S. Energy Information Administration, *2006 Manufacturing Energy Consumption Survey*.

#### Part B

Energy Inputs for the Food Processing Model Plant		
	Million BTUs	Percent
Purchased Electricity	14,405.2 (4,221,910 kWhs)	28.3
Natural Gas	36,496.6	71.7
Total Energy Inputs	50,901.8	100.0

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

## Labor-Related Costs

Labor costs in the food products 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.

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 the alternative plant sites. For example, 2011 average hourly earnings for Nebraska food processing workers (\$16.31) are 8.3 percent less 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 than the other states. In the case of unemployment



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](http://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](http://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](http://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](http://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 Processing Industry (NAICS 311)**

Plant Location	Hourly Wage Rate	Number of Production Workers	Total Payroll	Workers' Compensation		Social Security <sup>(c)</sup>	Fringe Benefits <sup>(d)</sup>	Total Labor Costs	Cost Difference Other States (-) Nebraska	Cost Relative Other States (/) Nebraska
				Insurance <sup>(a)</sup>	Unemployment Insurance <sup>(a)</sup>					
Nebraska	\$16.31	50	\$1,696,200	\$29,005	\$11,350	\$129,759	\$508,860	\$2,375,174	\$0	100.0
California	\$17.44	50	\$1,813,800	\$52,963	\$24,500	\$138,756	\$544,140	\$2,574,159	\$198,985	108.4
Florida	\$18.39	50	\$1,912,600	\$34,809	\$16,050	\$146,314	\$573,780	\$2,683,553	\$308,379	113.0
Illinois	\$18.07	50	\$1,879,300	\$53,184	\$26,550	\$143,766	\$563,790	\$2,666,590	\$291,416	112.3
Indiana	\$18.47	50	\$1,920,900	\$22,282	\$16,750	\$146,949	\$576,270	\$2,683,151	\$307,977	113.0
Iowa	\$17.71	50	\$1,841,800	\$34,994	\$24,350	\$140,898	\$552,540	\$2,594,582	\$219,408	109.2
Michigan	\$18.72	50	\$1,946,900	\$33,681	\$33,800	\$148,938	\$584,070	\$2,747,389	\$372,215	115.7
Minnesota	\$17.02	50	\$1,770,100	\$35,933	\$29,050	\$135,413	\$531,030	\$2,501,526	\$126,352	105.3
Missouri	\$17.42	50	\$1,811,700	\$29,350	\$15,100	\$138,595	\$543,510	\$2,538,255	\$163,081	106.9
New Jersey	\$18.44	50	\$1,917,800	\$52,548	\$38,800	\$146,712	\$575,340	\$2,731,200	\$356,026	115.0
New York	\$17.22	50	\$1,790,900	\$50,503	\$22,100	\$137,004	\$537,270	\$2,537,777	\$162,603	106.8
Ohio	\$18.98	50	\$1,973,900	\$34,346	\$17,500	\$151,003	\$592,170	\$2,768,919	\$393,745	116.6
Pennsylvania	\$18.73	50	\$1,947,900	\$41,880	\$29,150	\$149,014	\$584,370	\$2,752,314	\$377,140	115.9
Tennessee	\$17.60	50	\$1,830,400	\$36,974	\$16,150	\$140,026	\$549,120	\$2,572,670	\$197,496	108.3
Texas	\$15.33	50	\$1,594,300	\$25,509	\$16,500	\$121,964	\$478,290	\$2,236,563	-\$138,611	94.2
Wisconsin	\$17.39	50	\$1,808,600	\$38,885	\$27,800	\$138,358	\$542,580	\$2,556,223	\$181,049	107.6

(a) Values calculated by Ken Lemke, NPPD, using data for all manufacturing classifications from: *Oregon Workers' Compensation Premium Rate Rankings Calendar Year 2010*.

(b) Values calculated by Ken Lemke, NPPD, using data from unemployment *Insurance Data Summary, 2011*.

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

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

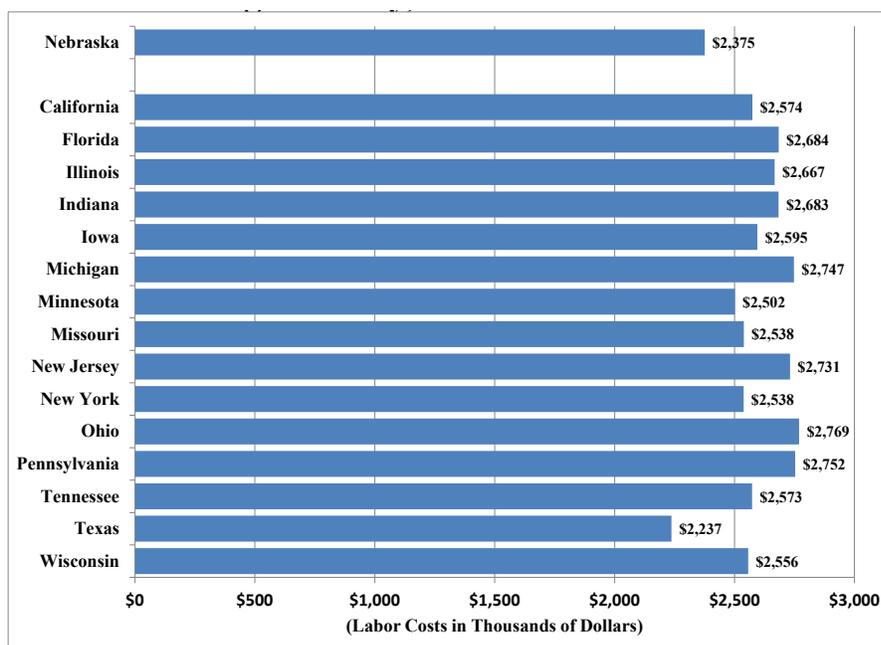
Sources: Oregon Department of Consumer & Business Services, *Oregon Workers' Compensation Premium Rate Rankings Calendar Year 2010, February 2011*.  
U.S. Department of Labor, Bureau of Labor Statistics, December 2012.

U.S. Bureau of the Census, *Annual Survey of Manufacturers, 2011*.

U.S. Department of Labor, Employment and Training Administration, *Unemployment Insurance Data Summary, 2012*.

## Figure A-1

### Estimated Total Labor Costs\* for a Model Plant for the Food Processing Industry Alternative Plant Locations



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

Source: See Table A-4.

insurance contributions, the average cost per employee for the 15 alternative states is estimated at \$472.00, more than double than the Nebraska cost of \$227.00. Insurance rates for workers' compensation average \$2.08 per \$100 of payroll for the 15 alternative states, 21.8 percent more than Nebraska's rate of \$1.71.

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 \$393,745 in annual savings when compared to Ohio. When compared to the average labor costs for the 15 alternative locations, Nebraska's annual labor cost advantage is \$234,484 or 9.0 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. For both energy

sources, Nebraska's rates are substantially less than 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 \$0.0852 per kWh or 16.4 percent more than the Nebraska rate of \$0.0732.

In the case of industrial rates for natural gas, the average for the 15 other states is 25.8 percent more than the Nebraska rate of \$5.85 per million BTUs.

Table A-5 and Figure A-2 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 and New Jersey locations, energy costs are

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

Plant Locations	Electricity		Natural Gas		Total Energy Cost	Cost Difference Other States (-) Nebraska	Cost Relative Other States (/) Nebraska
	Rate <sup>(a)</sup>	Cost	Rate <sup>(b)</sup>	Cost			
<b>Nebraska</b>	<b>\$0.0732</b>	<b>\$309,044</b>	<b>5.85</b>	<b>\$213,505</b>	<b>\$522,549</b>	<b>\$0</b>	<b>100.0</b>
California	0.1284	\$542,093	7.02	\$256,206	\$798,299	\$275,750	152.8
Florida	0.0901	\$380,394	8.33	\$304,017	\$684,411	\$161,862	131.0
Illinois	0.0565	\$238,538	7.13	\$260,221	\$498,759	-\$23,790	95.4
Indiana	0.0791	\$333,953	5.65	\$206,206	\$540,159	\$17,610	103.4
Iowa	0.0569	\$240,227	6.10	\$222,629	\$462,856	-\$59,693	88.6
Michigan	0.0926	\$390,949	9.25	\$337,594	\$728,543	\$205,994	139.4
Minnesota	0.0776	\$327,620	5.58	\$203,651	\$531,271	\$8,722	101.7
Missouri	0.0822	\$347,041	8.70	\$317,520	\$664,561	\$142,012	127.2
New Jersey	0.1231	\$519,717	9.63	\$351,462	\$871,179	\$348,630	166.7
New York	0.1013	\$427,679	8.55	\$312,046	\$739,725	\$217,176	141.6
Ohio	0.0836	\$352,952	7.40	\$270,075	\$623,027	\$100,478	119.2
Pennsylvania	0.0778	\$328,465	8.23	\$300,367	\$628,832	\$106,283	120.3
Tennessee	0.0730	\$308,199	6.64	\$242,337	\$550,536	\$27,987	105.4
Texas	0.0696	\$293,845	4.61	\$168,249	\$462,094	-\$60,455	88.4
Wisconsin	0.0858	\$362,240	7.56	\$275,914	\$638,154	\$115,605	122.1

<sup>(a)</sup> 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 3,512,081 kWh annually.

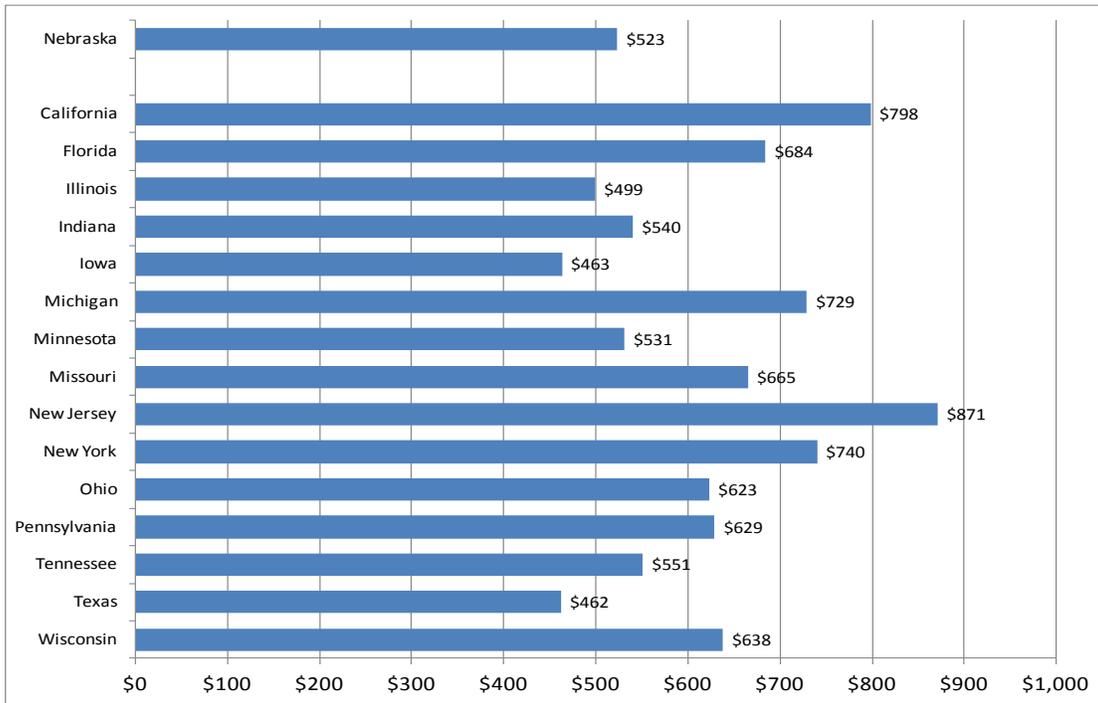
<sup>(b)</sup> Natural Gas rate is per million BTUs. The model plant is assumed to use 42,405.9 million BTUs annually.

Source: Natural Gas: U.S. Energy Information Agency, *Natural Gas Industrial Price, 2010*, [www.eia.gov/dnav/ng/ng\\_pri\\_sum\\_a\\_epg0\\_pin\\_dmcf\\_a.htm](http://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 Bills and Average Rates Report," July 1, 2012 and January 1, 2012. State averages weighted using eight months of January 2012 data and four months of July 2012 data. Nebraska data represent the average for Omaha Public Power District, Lincoln Electric System, and Nebraska Public Power District using the same seasonal weighting.

## Figure A-2

### Estimated Total Energy Costs\* for a Model Plant for the Food Processing Industry, Alternative Plant Locations



(Energy Costs in Thousands of Dollars)

\*Calculated energy costs include electricity and natural gas costs.  
Source: See Table A-5.

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 52.8 percent. When compared to the average total energy costs for the 15 alternative states, Nebraska energy costs are 16.8 percent lower, translating into an average annual savings of \$105,611.

### 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 \$704,656 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 \$340,095 annually, or 10.5 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 11.7 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 Processing Industry (NAICS 311)**

<b>Plant Locations</b>	<b>Total Labor Cost</b>	<b>Total Energy Cost</b>	<b>Total Labor and Energy Cost</b>	<b>Cost Difference Other States (-) Nebraska</b>	<b>Cost Relative Other States (/) Nebraska</b>
<b>Nebraska</b>	<b>\$2,375,174</b>	<b>\$522,549</b>	<b>\$2,897,723</b>	<b>\$0</b>	<b>100.0</b>
California	\$2,574,159	\$798,299	\$3,372,458	\$474,735	116.4
Florida	\$2,683,553	\$684,411	\$3,367,964	\$470,241	116.2
Illinois	\$2,666,590	\$498,759	\$3,165,349	\$267,626	109.2
Indiana	\$2,683,151	\$540,159	\$3,223,310	\$325,587	111.2
Iowa	\$2,594,582	\$462,856	\$3,057,438	\$159,715	105.5
Michigan	\$2,747,389	\$728,543	\$3,475,932	\$578,209	120.0
Minnesota	\$2,501,526	\$531,271	\$3,032,797	\$135,074	104.7
Missouri	\$2,538,255	\$664,561	\$3,202,816	\$305,093	110.5
New Jersey	\$2,731,200	\$871,179	\$3,602,379	\$704,656	124.3
New York	\$2,537,777	\$739,725	\$3,277,502	\$379,779	113.1
Ohio	\$2,768,919	\$623,027	\$3,391,946	\$494,223	117.1
Pennsylvania	\$2,752,314	\$628,832	\$3,381,146	\$483,423	116.7
Tennessee	\$2,572,670	\$550,536	\$3,123,206	\$225,483	107.8
Texas	\$2,236,563	\$462,094	\$2,698,657	-\$199,066	93.1
Wisconsin	\$2,556,223	\$638,154	\$3,194,377	\$296,654	110.2

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 processing manufacturer discussed in Part B of this report.



## Nebraska Advantage - TIER 2 Minimum 30 New Jobs & \$3 Million Investment

### Potential Tax Credits and Refunds

#### Food Processing

January 1, 2013

#### I. Compensation Credit - Percent of annual compensation (Medicare wages) paid to all new employees over 7 year period.

##### A. Assumptions are as follows -

Number of New Employees in Qualifying Year 1:	50
Average Annual Salary * :	\$33,924
Initial payroll:	\$1,696,200
Annual Cost-of-Living Increase beginning Year 2	3%
Combined Local & County Property Tax Rate:	0.01948200
① Wage credits earned after employer creates 30 fulltime qualified positions	
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
Year 1	50	\$1,696,200	\$16.31	4%	\$67,848
Year 2	50	\$1,747,086	\$16.80	4%	\$69,883
Year 3	50	\$1,799,499	\$17.30	4%	\$71,980
Year 4	50	\$1,853,484	\$17.82	4%	\$74,139
Year 5	50	\$1,909,088	\$18.36	5%	\$95,454
Year 6	50	\$1,966,361	\$18.91	5%	\$98,318
Year 7	50	\$2,025,352	\$19.47	5%	\$101,268
<b>Total</b>		\$12,997,068			<b>\$578,891</b>

**Potential  
Tax Credits  
and Refunds**

Compensation  
Tax Credit  
**\$578,891**

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

**NOTE:** Compensation credit can be used against employee withholding up to amount paid in.

	2011 Neb Ave Wage	60% NAW	75% NAW	100% NAW	125% NAW
Annual	<b>\$37,324.00</b>	\$22,394	\$27,993	\$37,324	\$46,655
Hourly	<b>\$17.95</b>	\$10.77	\$13.46	\$17.95	\$22.44
Compensation Credit %		<b>3%</b>	<b>4%</b>	<b>5%</b>	<b>6%</b>

\*The Nebraska average wage for 2011 is utilized in 2012 to calculate wage incentives

## APPENDIX B – Continued



II. Investment Tax Credits and Sales Tax Refunds						
<b>A. Assumptions about project investment are as follows *</b>						
1.	Building Cost					
	A. OWN: Purchase/New Construction				<b>\$2,000,000</b>	
	<b>OR</b>				<b>OR</b>	
	B. LEASE: Term of Lease Amount up to Ten Years				<b>\$0</b>	
2.	<b>Non-Manufacturing</b> Furniture, Fixtures and Equipment				<b>\$200,000</b>	
3.	Additional Investment (over 7 years)				<b>\$200,000</b>	
<b>Total investment subject to Sales and Use Tax over a 7 year period</b>					<b>\$2,400,000</b>	
4.	<b>Manufacturing</b> Machinery and Equipment (Exempt from Sales Tax)				<b>\$600,000</b>	
<b>TOTAL PROJECT INVESTMENT</b>					<b>\$3,000,000</b>	
* Assumes values of building, equipment, furniture and fixtures are <b>PRIOR</b> to application of any state and local sales or use taxes.						
<i>Note: For LB312 investment calculations, existing equipment and furnishings brought into the state can be calculated at original purchase price, rather than at depreciated value.</i>						
<b>B. Sales Tax Refund</b>						
		<b>State Sales Tax Rate</b>	<b>5.5%</b>			
		<b>Local Sales Tax Rate *</b>	<b>1.5%</b>			
		<b>TOTAL SALES TAX RATE</b>	<b>7.0%</b>			
* <a href="http://www.revenue.ne.gov/question/sales.html">Current Local Sales &amp; Use Tax Rates can be found at http://www.revenue.ne.gov/question/sales.html</a>						
1.	Building (calculates sales tax on materials only)					
	\$1,000,000	X	0.070	=	\$70,000	
2.	Furniture, Fixtures and Equipment					
	\$200,000	X	0.070	=	\$14,000	
3.	Additional Investment (over 7 years)					
	\$200,000	X	0.070	=	\$14,000	
<b>Total Sales Tax Refund:</b>					<b>\$98,000</b>	
<b>C. Investment Credit:</b> 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 tax liability or sales and use tax liabilities.						
		<b>\$3,000,000</b>	<b>x</b>	<b>10%</b>	<b>=</b>	<b>\$300,000</b>
<b>TOTAL TAX CREDITS AND REFUNDS</b>					<b>\$976,891</b>	

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 [econdev.nppd.com](http://econdev.nppd.com).



**Nebraska Public Power District**

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