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# THE ECONOMIC IMPACT OF ILLINOIS'S LIVESTOCK INDUSTRY

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## I. Introduction

### A: Executive Summary

The Illinois livestock industry is at a crossroads; by almost any measure it is an industry in decline and this decline has only accelerated over the last ten years. The volume of business has declined, there are fewer farms, and its rank among other states has fallen. Yet the food industry in the state is active, numerous opportunities have emerged for serving the urban markets of St. Louis and Chicago, and there is significant interest by outside investors to locate modern swine and dairy production facilities in the state. But at the same time, livestock operations face real constraints, ranging from citizen concerns about proximity to such operations (“NIMBY,” or “Not In My Back Yard”), to concerns about environmental impact, odor and nuisance, and animal welfare. From this the question emerges, how should the industry respond?

This study represents the first step in the process of repositioning the Illinois livestock industry for renewed growth. The purpose is to provide factual evidence of the economic impact of the industry statewide. By understanding how the industry impacts the state, the industry is in a position to craft its strategy. Specifically, the study uses IMPLAN (an economic input-output model) to measure the economic impacts of the livestock sector as a whole and of six livestock classes (dairy, beef, sheep, poultry, swine, and nontraditionally commercial, or NTC, species), at the state, county, and legislative district levels.

In Illinois, livestock is a \$3.4-billion industry directly employing more than 28,000 individuals. Swine production has the largest impact overall on the state economy, with direct marketings of more than \$1 billion. Beef has the second largest economic impact and dairy is third. There are more than 7,000 commercial livestock operations in the state. Another 65,000 livestock operations in the state are either NTC (60%) or small farms with traditional commercial species (30%). Nontraditionally commercial farms contribute only 1.1% (\$38 million) of livestock's cash receipts. Henry County is the leading livestock-producing county, and among legislative districts, the 37<sup>th</sup> is the leading state senatorial district and the 74<sup>th</sup> is the leading representative district. In terms of livestock's relative importance to a particular region, it has the most significant economic impact, by county, in Carroll County, comprising more than 25% of its economy; by legislative district, it represents 17% of the economy of the 37<sup>th</sup> senatorial district, and 14% in the 110<sup>th</sup> representative district.

### B. Methodology

Policymakers, industry members, and regional planners often need information about the economic impact of specific industries on the economy at large. Changes in employment or output often occur locally as a result of new business locations, business closings, and regulatory changes. Expansion of an industry will then have economic impact on other parts of the economy. For example, expansion of sales by livestock farms within a

region will mean increased sales by businesses that support livestock farms, increased incomes for farm proprietors and workers, and increased sales for local retail and service businesses. Input-output (I/O) analysis is one of the most widely used methods to evaluate the economic impact of a particular sector in the economy (Schaffer, 1999).

An I/O model traces the flow of goods, services, and employment among related sectors of the economy. Using a matricial framework, the basic industries in the economy are linked through the marketing chain in terms of product supply, labor allocation, and demand. The I/O model is a fully balanced model in that all supply must have an end destination, whether it be inventory or consumption. Thus the I/O approach models the economy in general equilibrium. The input-output flows are also balanced across counties, states, and the nation. As one can imagine, modeling the economy in such a comprehensive way is a daunting task.

Most large I/O models depend on secondary information, provided mostly by government. This raises the first important issue related to I/O modeling: a critical tradeoff. The uses for I/O modeling are very important, with powerful implications, but this power comes at a price. Secondary information, such that the government provides, is not complete across all industries and political units. Because of the massive complications of collecting high-quality data on firms and industries, the most common approach the government uses is to survey small samples of the population under study. This “second-best” option, using small samples, has obvious data quality problems related to poor sampling properties. Such problems are not specific to I/O models, but to macroeconomic information in general. Therefore I/O modelers constantly wrestle with the data quality problem and strive to achieve a balance with functionality.

A second issue relates to agricultural data in particular. The motivation to use I/O modeling to study the livestock industry is clear; yet agriculture is one of the most cumbersome industries for which to collect data (Lindall, 1998; MIG, 2000). I/O models depend on public secondary data about output produced, prices received, labor required, taxes paid, and consumption. The government has an easier time collecting such data from industries that utilize more formal business practices, contain larger firms, and that are relatively more concentrated. Industries that consist of many smaller firms with numerous informal transactions are more difficult for the government to follow. Agriculture has a high concentration of unincorporated firms and informally employs large quantities of labor. Therefore I/O models are challenged by the agricultural sector.

### **IMPLAN Agricultural Database**

To conduct our analysis we selected a software product and database called IMPLAN Pro, version 2.0 (2000). Since 1993, the IMPLAN software and database have been developed under exclusive rights by the Minnesota IMPLAN Group (MIG), Inc. (Stillwater, Minnesota), which licenses and distributes the software to users. IMPLAN has been used for several other livestock studies, such as Lawrence and Otto, 1994 (cattle);

Morse, 1998 (poultry); American Horse Council Federation,<sup>1</sup> 1996 (horses); and Ferris, 2000 (all of agriculture, including livestock).

IMPLAN is a static model<sup>2</sup> and looks at the economy as a snapshot based on 1997 data. A newer data set will be available for use sometime in 2001. This software estimates the direct effects, indirect effects, and induced effects of an economic activity. Direct effect refers to a production change associated with a change in demand for the good itself. It is the initial impact to the economy. The indirect effect refers to secondary impact caused by changing input needs of directly affected industries (e.g., additional input purchases to produce additional output). Induced effects are caused by changes in household spending due to the additional employment generated by direct and indirect effects.

The IMPLAN model also estimates economic multipliers such as those used for output and employment. Output multipliers relate the changes in output in one industry to total changes in output by all industries within a region. Similarly, employment multipliers relate the changes in direct employment to changes in total employment within a specified economy.

Following are descriptions of the data sources used by IMPLAN.

### Output<sup>3</sup>

IMPLAN presents agricultural output as gross sales by commodity group by county within the state. The gross sales figure is derived from the National Agricultural Statistical Service (NASS) annual surveys of cash receipts integrated with 1997 and Census of Agriculture figures. The census figures help to generate estimates of missing data as well as to form the county production estimates. IMPLAN covers 528 industries, not all of which may be represented in any one county. There are nine livestock sectors: Dairy; Poultry; Ranch Fed Cattle; Range Fed Cattle; Cattle Feedlots; Sheep, Lambs and Goats; Hogs, Pigs, and Swine; Other Livestock Products (wool and mohair); and Miscellaneous Meat Animal Products (which includes such industries as aquaculture, bees and honey, and horses). For the purposes of this research we have combined the cattle industries into one beef sector and combined the Other Livestock Products and Miscellaneous Livestock Products into one category called nontraditionally commercial (NTC). Therefore the focus of this research

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<sup>1</sup> IMPLAN was only partially used in this study.

<sup>2</sup> The IMPLAN model, similar to other input-output models, is based on several assumptions (Miller and Blair, 1985), such as the following:

- a. The output of each sector is produced with a unique set of inputs (no substitution among inputs).
- b. The amount of input purchased by a sector is determined solely by its level of output (no price effects, changing technology, or economies of scale).
- c. No external economies of scale exist; the effect of additional types of production is additive only.
- d. The in-state and out-of-state distribution of purchases and sales is fixed.
- e. There are no constraints on resources (supply is infinite and perfectly elastic).
- f. Local resources are efficiently employed (no underemployment of resources).
- g. In short, this model assumes that market structure, state of technology, relative prices, and geographic distribution of economic interaction are fixed and that the supply of inputs and demand for output are unit elastic. These assumptions make input-output modeling very functional and provide a holistic picture of the overall economy. On the other hand, the assumptions are quite restrictive, affecting the validity of the results.

<sup>3</sup> This is in part drawn from Lindall, 1998.

comprises the economic data represented in a matrix (7 x 95) of six species groups plus a category aggregating all the species and the ninety-five rural counties in the state of Illinois.

### Employment<sup>4</sup>

A significant part of the economic impact of an industry is its employment impact. Secondary economic activity occurs as a result of the jobs created by an industry. Thus an industry that creates either a large quantity of jobs or high-paying jobs can be a significant contributor to the economic activity of a region. Even though employment is an important component of economic activity, data is not available at the national level disaggregated by livestock species group. For most industries, IMPLAN derives its labor figures from the Bureau of Labor Statistics (BLS) ES 202 data from unemployment insurance. As MIG notes, agricultural labor data is “pesky” (Lindall, 1998), thus other means are used to estimate the employment data. MIG also suggests researchers calculate their own employment estimates if possible (MIG, 2000). We have formulated such estimates and they are discussed below.

Notwithstanding the employment data problems, IMPLAN divides the species group cash receipts by the sum of proprietor and nonproprietor employment to create a ratio of output per employee. These ratios are adjusted based on the changes in output for the intercensus years. From this, an estimate is created of wage and salary employment for each dollar of output. The output value for each sector is multiplied by the proprietor ratio and wage and salary ratio to form state or county vectors of estimated employment. The Bureau of Economic Analysis's (BEA) Regional Economic Information System (REIS) data, which provide total farm employment data at the state level, are then distributed to the twenty-three agricultural sectors by counties based on the estimated vectors of employment just described.

In the census data, each farm is assumed to have one proprietor (Olson, 2001). Also, and very importantly, the agricultural census defines a livestock farm for each species in inventory. Therefore if a proprietor had one cow and one pig, the census, and subsequently IMPLAN, would assume there are two farms present, each with an employee. Therefore, in terms of proprietor employment, IMPLAN overestimates the level of employment on livestock farms and underestimates the output per proprietor.

On the other hand the opposite is true for nonproprietor farm labor. The BLS ES 202 data is generated at the county level and provides information for covered wage and salary employment. The problem with agricultural employment is that much of it is self-employment or informal employment where much goes unreported. This leads IMPLAN to underestimate the level of farm employment and overestimate the economic output per employee.

When we validated the IMPLAN labor estimates for the Illinois livestock industry, we found that the output per full-time equivalent (FTE) worker was more than double the estimates from University of Illinois Farm Business Farm Management (FBFM) data. This FBFM data represent 6,808 farms in the State of Illinois. Additionally, the confidential<sup>5</sup> data

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<sup>4</sup> This is in part drawn from Lindall, 1998, and the Illinois Agricultural Statistics Service.

<sup>5</sup> The authors do not know the identity of the farms whose data was used for the employment analysis.

are strictly monitored for accuracy and are a statistically valid sample of the major farm populations in the state (Lattz, 2001). By analyzing the average output per FTE, as reported in the FBFM dataset, we were able to validate the IMPLAN labor estimates and generate new and more accurate estimates for dairy, beef, and swine operations.

Our results indicated that either IMPLAN's labor level was too low or the output was too high. First, changing output figures has significant effects for a balanced input-output model. Thus unless there was significant cause pointing to output error this should remain untouched. Second, IMPLAN's output estimates closely mirror the Illinois Agricultural Statistical Service's<sup>6</sup> (IASS) data on estimated cash marketings by commodity group. Questioning IMPLAN's output estimates would be the same as questioning the official Department of Agriculture figures and thus would begin a slippery-slope process, calling into question most if not all macroeconomic data. We are aware of no indication that the IASS estimates are not valid estimates of livestock commodity group marketings. Third, IMPLAN estimated total direct labor in Illinois livestock to be approximately 13,000. The IMPLAN estimate seems inaccurate based on simple rules of thumb. According to the IASS, there are more than 7,000 commercial units alone. Conservatively assuming 1.5 FTEs per commercial farm, there would be 10,000 FTEs in commercial-scale animal agriculture. Plus there are more than 65,000 NTC species and small farms. Given that most NTC farms are part-time and using a "rule of thumb" that such farms expend 30% of an FTE (weekends)<sup>7</sup> would amount to an estimate of more than 19,000 FTEs for NTC and small-farm labor. Combining the rough labor estimates for commercial, small, and non-traditionally commercial farms provides an estimate of 29,000 FTEs of direct livestock labor in Illinois, which is significantly more than IMPLAN's figure. Therefore, for these three reasons we decided to more formally estimate the direct labor utilization for the Illinois livestock sector.

### Labor Estimates

To estimate the direct labor in the Livestock sector we calculated the output per FTE from the FBFM farm-level data disaggregated by species group (dairy, pork, and beef<sup>8</sup>). This data was then integrated into the IMPLAN model. When this was done, direct employment in Illinois livestock rose from 13,000 to 28,384 (close to our "rule of thumb" estimate). The revised IMPLAN estimate for output per FTE fell dramatically (>50%)<sup>9</sup> because, as noted above, direct livestock output was left unchanged whereas total labor was increased.

### Taxes<sup>9</sup> and Personal Consumption

Following are the general sources for tax and personal consumption data:

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<sup>6</sup> A division of the National Agricultural Statistical Service (NASS), an agency of the USDA.

<sup>7</sup> 1.5/7 versus 5/7. This also raises the legitimate question of the use of FTE for farm labor when 40-hour/5-day weeks are not the norm. Also, there is the additional technical question of the distinction between leisure-related livestock labor and commercial livestock. Where does labor for leisure purposes end and where does such labor for commercial purposes begin?

<sup>8</sup> The output per FTE in a beef operation was used for the sheep and NTC sectors. The swine output per FTE was used for the poultry sector.

<sup>9</sup> This is in part drawn from Olson, 1999.

- NIPA: All IMPLAN tax impact data is controlled by the National Income and Product Accounts (NIPA) data published in the Survey of Current Business (SCB) by the BEA.
- REIS (Regional Economic Information System): The BEA collects and reports income, wealth, tax, and employment data on a regional (state and county) basis. The data used to distribute the US NIPA values to states and counties come from the BEA's REIS table.
- CES: The Bureau of the Census annually conducts a Consumer Expenditure Survey (CES) of household expenditure patterns. It is from these surveys that the BEA benchmarks the personal consumption expenditure portion of NIPA.
- Annual Survey of State and Local Government Finances (SLGF): The Bureau of the Census also collects annual state and local government receipts and expenditure data. This data acts as preliminary control for state-level values (subject to controlling to national NIPA values).

## II. Statewide Impact of the Livestock Sector

### A: General Industry Overview

Over the last twenty years the trend of the dollar value of the state's livestock industry's marketings has been negative (Appendix Figure A). This decline has been particularly acute in the last ten years. In 1979 the state ranked tenth nationally in terms of livestock receipts and by 1999 Illinois ranked twenty-fifth (Appendix Figure B). All major species groups have fallen similarly (Appendix Figure C). These numbers mirror the overall decline in animal agriculture in the Midwest and Northeast. In terms of the national rankings of the state's livestock sectors since 1991, the state's beef, hog, and dairy sectors have all contracted in terms of total cash receipts (Appendix Figure D) relative to other states' sectors. The state's hog sector is now the fourth largest in the country, dairy is eighteenth, beef nineteenth, and sheep twenty-fourth.

Relative to the overall Illinois economy, a similar relationship appears. In 1979, livestock accounted for 1.68% of the gross state product (Appendix Figure E). By 1999, it had fallen to .37%, a decline of nearly 4% per year. This dramatic shift has been due to the combined effects of the decline of the livestock sector and the expansion of the state's economy over the twenty-year span. In terms of the nominal value of livestock marketings, the volume of business has decreased 36% or 1.8% per year. That is an annual contraction of \$42 million per year. Again it is important to note that most of the decline has occurred in the last ten years.

### B: Definition and Number of Commercial Livestock Farms in Illinois

According to the Illinois Agricultural Statistics Service (IASS) office there are 73,051 farms with livestock present (Table 1). Within the agricultural census and other IASS survey

methodologies, a livestock “farm” is defined as a location with at least one animal present (Kestle, 2001). Thus a farm that had, for example, a 50-cow dairy and a 50-cow cow-calf operation would signify two units, one representing each species. When the official state estimates of livestock farms are analyzed in detail, 43,919 (60.12%) of the farms do not contain the traditional commercial species.<sup>10</sup> Of the remaining farms, 21,614 (29.59%) are classified as small commercial livestock<sup>11</sup> enterprises and 7,518 (10.29%) are classified as commercial enterprises. Of these commercial operations, 45% contain a swine unit, 21% operate a dairy unit, 22% operate a cow-calf unit, and 12% a fed cattle unit (Figure 1).

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<sup>10</sup> Dairy, cattle feedlot, swine, sheep, or beef cow-calf.

<sup>11</sup> Utilizing the IASS classification system, we define “small commercial” as <300 sheep, <200 fed cattle, <100 hogs, and <50 brood cows in inventory. All farms with dairy cows are considered commercial.

**Table 1. Illinois Livestock Farms and Units**

<b>All Farms</b>	<b>73,051</b>	
NTC Farms	43,919	60.12%
Small Farms	21,614	29.59%
<i>Total NTC/Small farms</i>	65,533	89.71%
Commercial Farms	7,518	10.29%
<b>Commercial Units</b>		
Hogs	4717	44.72%
Dairy	2238	21.22%
Cow-Calf	2331	22.10%
Fed Cattle	1255	11.90%
Sheep	8	0.08%
<i>Total Commercial Units</i>	10,549	

Source: Census of Agriculture (1997), IASS data, and authors' calculations.

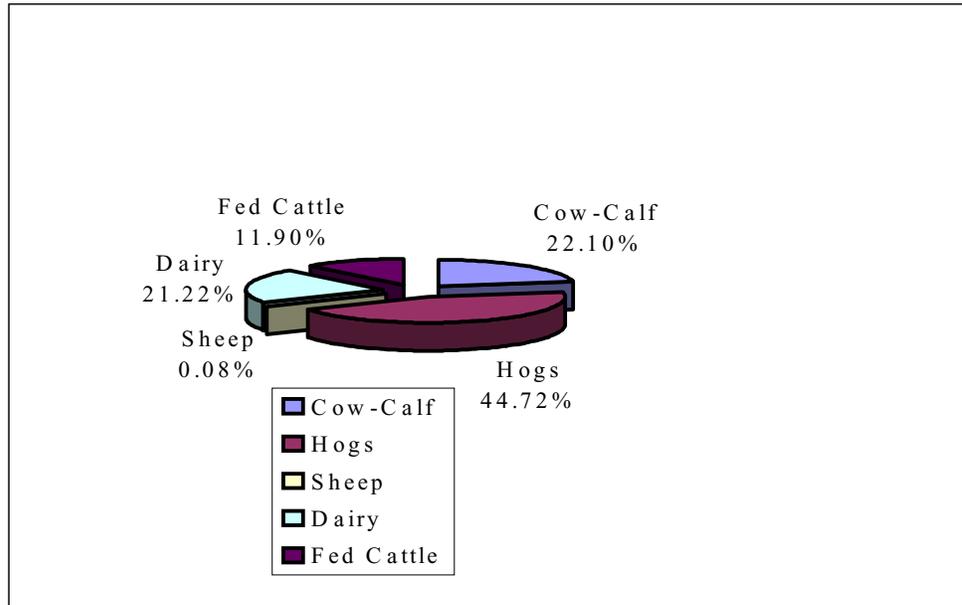
**Table 2. Illinois Livestock Units: Detail**

<b>Species</b>	<b>Category*</b>	<b># of Units</b>	<b>Unit Type**</b>
Cow-Calf	1-49	2,801	
Cow-Calf	50-499	2,146	CU
Cow-Calf	500+	185	CU
<i>Cow-Calf Total</i>		<i>5,132</i>	
Hogs	1-99	2,451	
Hogs	100-999	3,560	CU
Hogs	1000-4999	1,043	CU
Hogs	5000+	114	CU
<i>Hogs Total</i>		<i>7,168</i>	
Sheep	1-24	1,346	
Sheep	25-299	909	
Sheep	300+	8	CU
<i>Sheep Total</i>		<i>2,263</i>	
Dairy	1-49	1,135	CU
Dairy	50-199	1,048	CU
Dairy	200+	55	CU
<i>Dairy Total</i>		<i>2,238</i>	
Fed Cattle	1-49	16,531	
Fed Cattle	50-199	6,666	
Fed Cattle	200-999	1,212	CU
Fed Cattle	1000+	43	CU
<i>Fed Cattle Total</i>		<i>24,452</i>	

Source: IASS data and author's calculations.

\* IASS statistical categories for number of head of livestock.

\*\* Commercial-scale unit.

**Figure 1. Illinois Commercial Livestock Units, by Species**

Source: IASS data and authors' calculations.

### C. Economic Impact of Livestock

In terms of economic impact, the livestock industry is a \$3.4-billion industry (Table 3). In terms of direct output, a measure of the gross sales receipts, the industry sold almost \$2 billion worth of goods. The industry directly employs 28,384 people with a total employment impact of 43,509. The industry annually contributes more than \$330 million in taxes. Total output (direct, indirect, and induced) for livestock comprises 23% of agriculture as a whole. Compared to other selected industries, livestock's total output is 74% of the mining industry (though employing more), fourteen times larger than the forestry industry, and 4% of the state's construction industry (Table 4).

Whereas swine operations make up 45% of the commercial livestock businesses, they contribute 53% of livestock's total cash receipts (Figure 2). There are more than 18,000 jobs associated with the state's swine industry (Table 3). The second largest livestock sector is the beef sector, directly employing more than 14,000 full-time equivalents of labor. The state's beef industry generates more than \$800 million in total output. While the number of commercial units is comparable for beef and dairy, dairy produces half as much economic activity (\$486 million). This is because a large amount of beef production in the state occurs in operations that operate below commercial-scale levels.<sup>12</sup>

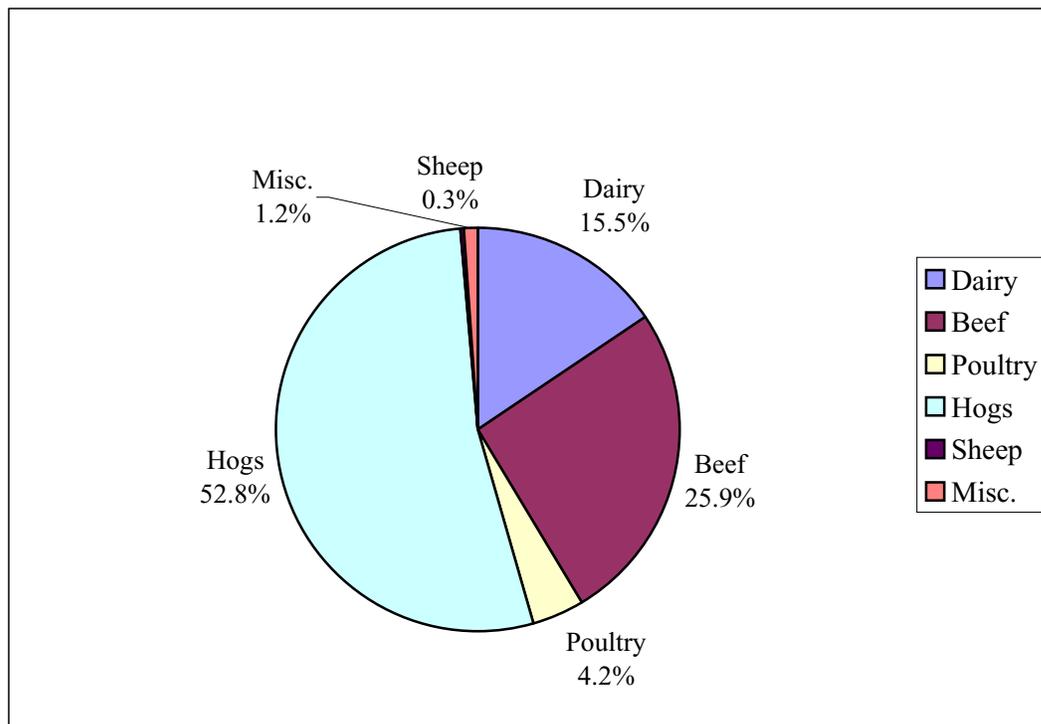
<sup>12</sup> < 200 head of fed cattle or < 50 brood cows.

**Table 3. Illinois Livestock Economic Impact, by Species**

Species Group	Employment Direct	Employment Total	Employment Multiplier	Output Direct (\$)	Output Total (\$)	Output Multiplier	Taxes (\$)
Dairy	2,967	5,000	1.69	301,565,000	492,375,879	1.64	57,266,842
Beef	14,138	17,694	1.25	502,978,340	816,030,098	1.62	84,966,585
Poultry	765	1,198	1.57	81,017,064	123,796,859	1.53	9,457,239
Hogs	9,684	18,599	1.92	1,025,075,632	1,943,955,377	1.90	177,002,646
Sheep	170	209	1.23	6,019,979	9,538,024	1.59	1,003,349
NTC	689	809	1.23	23,464,796	38,997,089	1.66	4,094,126
<b>All Livestock</b>	<b>28,384</b>	<b>43,509</b>	<b>1.53</b>	<b>1,940,120,811</b>	<b>3,424,693,326</b>	<b>1.77</b>	<b>333,790,787</b>
% of Illinois Economy	0.40%	0.61%		0.58%	1.03%		

Source: IMPLAN (1997), Bureau of Labor Statistics (2001), and authors' calculations.

**Figure 2. Direct Output of Illinois Livestock, by Species**



Source: IMPLAN, 1997 data, and authors' calculations.

**Table 4. Illinois Industry Comparison**

	<b>Employment Direct</b>	<b>Employment Total</b>	<b>Employment Multiplier</b>	<b>Output Impact Direct (\$)</b>	<b>Output Impact Total (\$)</b>	<b>Tax Impact (\$)</b>	<b>Output Multiplier</b>
Illinois Economy		7,110,843			331,965,600,000 (personal income)		
<u>Industry</u> Livestock	28,384 <i>0.40%</i>	43,509 <i>0.61%</i>	1.53	1,940,120,811 <i>0.58%</i>	3,424,693,326 <i>1.02%</i>	333,790,787	1.77
Agriculture	113,241 <i>1.59%</i>	173,574 <i>2.44%</i>	1.53	8,958,160,953 <i>2.70%</i>	14,993,230,039 <i>4.52%</i>	1,888,776,115	1.67
Mining	17,095 <i>0.24%</i>	36,294 <i>0.51%</i>	2.12	2,664,938,490 <i>0.80%</i>	4,581,660,546 <i>1.38%</i>	773,556,383	1.72
Textiles	17,010 <i>0.24%</i>	28,712 <i>0.40%</i>	1.69	1,748,383,586 <i>0.53%</i>	2,823,908,597 <i>0.85%</i>	352,697,463	1.62
Construction	379,085 <i>5.33%</i>	821,185 <i>11.55%</i>	2.17	36,012,580,864 <i>10.85%</i>	78,971,863,304 <i>23.79%</i>	11,689,298,277	2.19
Forestry	1,186 <i>0.02%</i>	2,189 <i>0.03%</i>	1.85	163,435,024 <i>0.05%</i>	238,418,305 <i>0.07%</i>	29,173,095	1.46

Source: IMPLAN, 1997 data, and authors' calculations.

## **D. Inter-Industry Economic Impact: Multipliers**

One useful application of input-output modeling is to better understand the interrelationship between the industry under study and other components of the economy. One important statistic concerning an industry's economic impact is its multiplying effect. The multiplier indicates how much extra-industry economic activity is generated by the industry under study. Such activity comprises two key effects: indirect effects and induced effects. Indirect effects are the ancillary purchases of goods and services, such as inputs. Induced effects are the additional purchases and economic activity contributed by employees of the industry. The livestock's multiplier effect then is the nonlivestock economic activity created by one unit of livestock activity. The state's livestock industry has an output multiplier of 1.77, meaning that for each dollar of output created, \$.77 of additional economic activity is created outside the industry (Table 4). Of our selected industries, construction has the highest output multiplier at 2.19 and the lowest is forestry at 1.46. Such a difference is significant on a percentage basis, for example: Construction influences the economy at a rate 1.5 times that of forestry and 1.2 times that of livestock.

In terms of the employment multiplier, the swine sector has the highest multiplier at 1.9 jobs created outside the industry for every job within the industry (Table 3). Livestock as a whole in Illinois has an employment multiplier of 1.53, which is comparable to agriculture as a whole (Table 4). However, mining and construction, with employment multipliers of 2.12 and 2.19, respectively, are over 38% more influential on the economy than is livestock.

## **E. Investment Analysis: Estimated Impact of an Additional Livestock Farm**

Of interest to the industry is the question of how new livestock investments impact the rest of the economy. We looked at three scenarios in order to provide some insight into siting facilities in the state: a 2400-sow farrow-to-finish operation; a 400-cow dairy; and a 2,400-head cattle-feeding operation. The first analysis is an overview of the indirect and induced effects for each scenario. Following this we simulated the relative impact of locating each facility in two high-impact counties.

As discussed previously, the economic impact of siting a swine farrow-to-finish operation has significant direct, indirect, and induced impacts. The output multiplier is high, at 1.9. Locating the operation would directly generate more than \$5 million in sales (Table 5). As shown in Table 5, 35% of the indirect output is internal to the hog operation. This reflects the production function model that the USDA uses when modeling a swine operation. Their model attempts to reflect the reality that a significant component of the transactions may be internalized; for example, the feeder pigs are supplied by the farrowing component. One could imagine other swine business models that might be more or less "integrated." The importance of this is not that 35% is internalized but that swine production has an indirect multiplier of over 1.7. Those impacts can occur internal to the business or external to the business, depending on the business model. Industries outside

the swine operation that are most affected by indirect impacts are wholesale trade, real estate, feed grains, and transport.

The 400-cow dairy not only has less total impact, but also fewer of its indirect impacts are internal to the operation (Table 6). The indirect and induced effects are more balanced in the dairy operation than in the swine operation. This reflects the higher labor demand in the dairy operation, which would generate relatively greater induced effects (18% of total output versus 10% in the swine operation). One point of note is that a weakness of input-output modeling is the assumption of constant returns to scale, thus IMPLAN cannot capture the subtle effects on indirect and induced output as scale is changed and labor is used more efficiently.

Siting a 2400-head feeder operation contributes almost \$2.5 million in total output to a local economy and has an output multiplier of 1.63 (Table 7). Whereas the ratio of indirect to induced effects in the swine operation is 3.7 and 1.2 for the dairy, the feedlot falls in between at 1.9. A higher ratio is associated with a business that is more integrated and/or less labor-intensive. The industries outside of the feeder operation most affected would be wholesale trade, real estate, transport, and feed grains.

A second analysis looks at the likely impact of siting new facilities in the most livestock-dependent counties. Livestock-dependent counties are not necessarily the most active livestock counties, but the impact is significant relative to the size of the county economy. For example, an impact analysis revealed that the Washington County economy was relatively the most impacted by the dairy industry. If a 400-cow dairy were to locate in Washington County, it would directly add 9 full-time equivalents to a current dairy workforce of 190 (Table 8). Total new jobs added to the county would be less than .1%. The \$1.5 million of total economic activity would be less than .5% of the county's economy. Overall, dairy's impact in the county would be increased close to 6%.

The 2,400-head feeder operation is about double the dairy enterprise in terms of impact. Carroll County is the county most impacted by beef production and adding a feeding operation would increase the number of jobs by .25% and augment the economy an estimated .72%. Beef output in the county would expand 4.09%. If an operation were sited in Whiteside County, the impact on the county economy would be much less (.19%) because the overall county economy is much larger. On the other hand because the beef industry in the county is smaller, beef output would be increased more than 12%.

A 2,400-head farrow-to-finish operation would contribute close to fifty jobs and \$5.1 million to Greene County and the surrounding communities. The local industry would expand by more than 10% and add more than 3% to the size of the county's economy. For Greene County, the siting of such an operation would therefore constitute a major expansion of the economy, complementing the existing swine industry and infrastructure.

**Table 5. Effects of Adding a 2,400-Sow Farrow-to-Finish Operation**

	Industry	Direct Output (\$)	Indirect Output (\$)	Indirect Output (%)	Induced Output (\$)	Induced Output (%)	Total Output (\$)	Total Output (%)
	Total for 2,400 Sow Unit		3,622,533		974,697		9,697,229	
<b>Internal</b>	Hogs: Pigs and Swine	5,100,000	1,301,114	35.92%	1,828	0.19%	6,402,941	66.03%
<b>External</b>								
1	Wholesale Trade		472,577	13.05%	57,411	5.89%	529,988	5.47%
2	Real Estate		328,629	9.07%	46,841	4.81%	375,470	3.87%
3	Feed Grains		221,607	6.12%	211	0.02%	221,818	2.29%
4	Motor Freight Transport and Warehousing		201,233	5.56%	15,417	1.58%	216,650	2.23%
5	Maintenance and Repair Other Facilities		118,079	3.26%	10,986	1.13%	129,066	1.33%
6	Owner-Occupied Dwellings		0	0.00%	92,661	9.51%	92,661	0.96%
7	Petroleum Refining		62,138	1.72%	16,036	1.65%	78,174	0.81%
8	Railroads and Related Services		75,911	2.10%	1,871	0.19%	77,782	0.80%
9	Banking		41,096	1.13%	34,345	3.52%	75,440	0.78%
10	Electric Services		43,264	1.19%	17,506	1.80%	60,771	0.63%
11	Insurance Carriers		27,236	0.75%	29,707	3.05%	56,944	0.59%
12	Soybean Oil Mills		54,299	1.50%	708	0.07%	55,007	0.57%
13	Doctors and Dentists		0	0.00%	51,839	5.32%	51,839	0.53%
14	Eating/Drinking		3,134	0.09%	46,250	4.75%	49,385	0.51%
15	Hospitals		35	0.00%	46,453	4.77%	46,487	0.48%
16	Communications- Except Radio and TV		28,530	0.79%	16,508	1.69%	45,038	0.46%
17	Prepared Feeds- N.E.C		44,953	1.24%	60	0.01%	45,013	0.46%
18	Drugs		32,663	0.90%	10,560	1.08%	43,223	0.45%
19	Computer and Data Processing Services		30,173	0.83%	11,620	1.19%	41,793	0.43%
20	Other Medical and Health Services		27,831	0.77%	12,115	1.24%	39,945	0.41%

Source: IMPLAN, 1997 data, and authors' calculations.

**Table 6. Effects of Adding a 400-Cow Dairy Operation**

	Industry	Direct Output (\$)	Indirect Output (\$)	Indirect Output (%)	Induced Output (\$)	Induced Output (%)	Total Output (\$)	Total Output (%)
	Total for 400-Cow Dairy	864,000	293,731		260,117		1,417,848	
<b>Internal</b>	Dairy Farm Products		39	0.01%	125	0.05%	864,165	60.95%
<b>External</b>								
1	Wholesale Trade	0	68,178	23.21%	15,277	5.87%	83,455	5.89%
2	Feed Grains	0	34,498	11.74%	56	0.02%	34,555	2.44%
3	Real Estate	0	19,776	6.73%	12,299	4.73%	32,076	2.26%
4	Motor Freight Transport and Warehousing	0	27,815	9.47%	4,126	1.59%	31,941	2.25%
5	Owner-Occupied Dwellings	0	0	0.00%	25,131	9.66%	25,131	1.77%
6	Electric Services	0	10,218	3.48%	4,630	1.78%	14,847	1.05%
7	Maintenance and Repair Other Facilities	0	11,832	4.03%	2,943	1.13%	14,776	1.04%
8	Petroleum Refining	0	10,039	3.42%	4,254	1.64%	14,293	1.01%
9	Doctors and Dentists	0	0	0.00%	13,827	5.32%	13,827	0.98%
10	Banking	0	4,629	1.58%	9,076	3.49%	13,705	0.97%
11	Railroads and Related Services	0	13,105	4.46%	501	0.19%	13,607	0.96%
12	Eating/Drinking	0	386	0.13%	12,386	4.76%	12,773	0.90%
13	Soybean Oil Mills	0	12,359	4.21%	187	0.07%	12,546	0.88%
14	Hospitals	0	4	0.00%	12,217	4.70%	12,221	0.86%
15	Insurance Carriers	0	2,805	0.95%	8,019	3.08%	10,824	0.76%
16	Agricultural-Forestry- Fishery Services	0	8,401	2.86%	21	0.01%	8,422	0.59%
17	Communications-Except Radio and TV	0	2,962	1.01%	4,375	1.68%	7,336	0.52%
18	Miscellaneous Retail	0	186	0.06%	6,683	2.57%	6,869	0.48%
19	Automotive Dealers & Service Stations	0	52	0.02%	6,781	2.61%	6,833	0.48%
20	Computer and DPS	0	3,697	1.26%	3,103	1.19%	6,800	0.48%

Source: IMPLAN, 1997 data, and authors' calculations.

**Table 7. Effects of Adding a 2,400-Head Feeder Operation**

	Industry	Direct Output (\$)	Indirect Output (\$)	Indirect Output (%)	Induced Output (\$)	Induced Output (%)	Total Output (\$)	Total Output (%)
	Total for 2,400-Head Feedlot		625,776		326,081		2,451,857	
<b>Internal</b>	Cattle Feedlots	1,500,000	71,892	11.49%	219	0.07%	1,572,111	64.12%
<b>External</b>								
1	Wholesale Trade	0	112,696	18.01%	19,172	5.88%	131,868	5.38%
2	Real Estate	0	78,369	12.52%	15,513	4.76%	93,882	3.83%
3	Motor Freight Transport and Warehousing	0	47,988	7.67%	5,166	1.58%	53,155	2.17%
4	Feed Grains	0	52,859	8.45%	70	0.02%	52,929	2.16%
5	Maintenance and Repair Other Facilities	0	28,158	4.50%	3,684	1.13%	31,843	1.30%
6	Owner-occupied Dwellings	0	0	0.00%	31,313	9.60%	31,313	1.28%
7	Banking	0	9,800	1.57%	11,420	3.50%	21,220	0.87%
8	Petroleum Refining	0	14,819	2.37%	5,345	1.64%	20,163	0.82%
9	Railroads and Related Services	0	18,103	2.89%	627	0.19%	18,730	0.76%
10	Doctors and Dentists	0	0	0.00%	17,337	5.32%	17,337	0.71%
11	Insurance Carriers	0	6,495	1.04%	10,010	3.07%	16,505	0.67%
12	Eating/Drinking	0	747	0.12%	15,506	4.76%	16,254	0.66%
13	Electric Services	0	10,317	1.65%	5,824	1.79%	16,141	0.66%
14	Hospitals	0	8	0.00%	15,400	4.72%	15,408	0.63%
15	Soybean Oil Mills	0	12,949	2.07%	235	0.07%	13,185	0.54%
16	Communications- Except Radio and TV	0	6,804	1.09%	5,498	1.69%	12,302	0.50%
17	Drugs	0	7,789	1.24%	3,498	1.07%	11,287	0.46%
18	Computer and Data Processing Services	0	7,195	1.15%	3,889	1.19%	11,084	0.45%
19	Prepared Feeds- N.E.C	0	10,720	1.71%	20	0.01%	10,740	0.44%
20	Other Medical and Health Services	0	6,637	1.06%	4,039	1.24%	10,676	0.44%

Source: IMPLAN, 1997 data, and authors' calculations.

**Table 8. Illinois Investment Impact Analysis: Highly Impacted Counties**

	<b>Employment Direct</b>	<b>Employment Total</b>	<b>Output Direct (\$)</b>	<b>Output Total (\$)</b>	<b>Taxes Total (\$)</b>
<b><u>400-Cow Dairy</u></b>	9	14	864,000	1,417,848	165,327
<b>#1 Washington</b>	190	258	19,313,570	24,174,243	1,988,358
Commodity Impact	4.74%	5.43%	4.47%	5.87%	8.31%
County		9,650		335,953,000	
County Impact	0.09%	0.15%	0.26%	0.42%	
<b>#10 Fayette</b>	43	66	4,402,561	5,592,368	664,143
Commodity Impact	20.93%	21.21%	19.62%	25.35%	24.89%
County		10,730		371,319,000	
County Impact	0.08%	0.13%	0.23%	0.38%	
<b><u>2,400-Head Feedlot</u></b>	14	24	1,500,000	2,451,857	250,871
<b>#1 Carroll</b>	1,029	1,391	36,648,345	54,702,234	3,711,980
Commodity Impact	1.36%	1.73%	4.09%	4.48%	6.76%
County		9,773		342,224,000	
County Impact	0.14%	0.25%	0.44%	0.72%	
<b>#10 Whiteside</b>	338	458	12,021,909	18,072,732	1,759,547
Commodity Impact	4.14%	5.24%	12.48%	13.57%	14.26%
County		32,711		1,323,184,000	
County Impact	0.04%	0.07%	0.11%	0.19%	
<b><u>2,400-Sow</u></b>					
<b><u>Farrow-to-Finish</u></b>					
<b>#1 Greene</b>	48	93	5,100,000	9,697,229	885,151
Commodity Impact	10.60%	11.07%	10.63%	12.33%	15.17%
County		6,128		254,770,000	
County Impact	0.78%	1.52%	2.00%	3.81%	
<b>#10 Carroll</b>	280	373	29,664,758	36,265,470	2,197,479
Commodity Impact	17.14%	24.93%	17.19%	26.74%	40.28%
County		9,773		342,224,000	
County Impact	0.49%	0.95%	1.49%	2.83%	

Source: IMPLAN, 1997 data, and authors' calculations.

## F. Illinois Livestock Product: Supply-Demand Situation

The final analysis of inter-industry effects is the state's meat supply-demand situation. This analysis compares the quantity of livestock commodities demanded in the state and the state's supply of those commodities. For example, in 1997 there was close to \$1 billion worth of pork sold at the production stage. One million dollars was exported out of the country and \$100 million was exported out of state, leaving \$890 million for in-state consumption (Table 9). In-state demand was \$960 million. Therefore in this particular one-year snapshot, the supply situation in the state for pork was positive (+3.61%). For all of livestock, the state produces only 37% of the livestock products it demands.

Most of the demands of the state are being met by livestock producers outside the state and outside the country. While at first glance this seems to portend great opportunities for local producers, that conclusion would not be entirely correct. This is because the supply-demand matrix in the modern food industry is not dominated, as it once was, by location. There are many ways for firms to compete, only one of which is location. Historically, land quality has also been a source of comparative advantage for Midwestern farmers. Technology has advanced and the manufacture and distribution of food has changed, making our land base relatively less a source of value. Competitiveness now is much more a function of intangible assets such as human, organizational, and social capital. Therefore, while opportunities abound in the meat industry, location and land are only two of many criteria for competitiveness in the new agricultural economy.

**Table 9. Illinois Livestock Supply-Demand Situation**

<b>Commodity Group</b>	<b>Local Supply</b> (\$millions)	<b>Exports-Foreign</b> (\$millions)	<b>Exports-States</b> (\$millions)	<b>In-State Availability</b> (\$millions)	<b>State Imports</b> (\$millions)	<b>Total Demand</b> (\$millions)	<b>Local Supply</b> (%)	<b>State Imports</b> (%)
	a	b	c	d=a-b-c	e	f=d+e	a/f	e/f
Dairy	287.27	0.64	0.00	286.63	1,270.45	1,557.09	18.45	81.59
Poultry	80.51	1.07	48.72	30.73	220.43	251.16	32.06	87.76
Cattle	490.45	4.23	0.00	486.22	1,679.88	2,166.10	22.64	77.55
Sheep	5.89	0.79	0.00	5.10	35.55	40.65	14.48	87.46
Hogs	994.27	1.29	101.47	891.51	68.08	959.59	103.61	7.09
NTC	21.01	4.66	0.01	16.34	122.90	139.24	15.09	88.27
ALL	1,879.40	12.68	150.20	1,716.53	3,397.29	5,113.83	36.75	66.43

Source: IMPLAN, 1997 data, and authors' calculations.

## **G. Leading Political Units: Livestock Sector by County, State Senate District, and State Representative District**

There are 102 counties in the state of Illinois. We analyzed livestock's economic impact in the 95 rural counties and their associated legislative districts. Areas close to Chicago and St. Louis were excluded. In this report, we present the top ten counties in which total economic impact of the livestock industry was greatest and for which livestock was most important to a county's economy. However, analysis was completed on all the rural counties. County analyses not reported here can be requested directly from the authors.

The leading counties in terms of total livestock impact<sup>13</sup> are Henry, Stephenson, De Kalb, and Clinton (Figure 3; Table 10). Each contributes more than \$100 million to the economy. The counties most dependent on livestock agriculture are Carroll, Jasper, Greene, and Pike, each with livestock comprising more than 22% of their respective county's economy (Figure 4; Table 11).

The state senatorial districts with the most livestock activity are the 37<sup>th</sup> and 54<sup>th</sup>, each with livestock sectors greater than \$300 million (Figure 5; Table 12). The livestock sector in the 37<sup>th</sup> district comprises more than 16% of the economy (Figure 6; Table 13). In the 54<sup>th</sup> district the livestock sector is less than half as significant, comprising less than 8% of the economy.

Finally, when looking at state representative districts, the district with the greatest concentration of livestock is the 74<sup>th</sup> district, with more \$250 million of impact (Figure 7; Table 14). The district most dependent on the livestock industry is the 110<sup>th</sup>, where livestock production comprises more than 13% of the district's economy (Figure 8; Table 15).

## **H. Summary and Conclusion**

The evidence is clear that based on economic data alone Illinois's livestock industry is not as vibrant as it once was. While relative impact on the state's economy has declined, livestock still has significant impact on certain regions within the state. Our analysis also sheds light on opportunities, where livestock enterprises can serve as significant economic engines for a community. Also, the supply-demand situation indicates significant imports of livestock products are needed to meet the state's demand.

For this industry at a crossroads, there are two possible strategies. The first would be to continue operating as has been done in the past. The result would be a continuation of the current trends. The second strategy values livestock agriculture as an economic engine and would seek to reinvigorate the industry. This strategy is complex and would contain new tactics and business practices. In this vein, as a next step we would recommend addressing two complementary issues: the state's livestock business environment and the livestock industry's legitimacy. The business environment issue involves policy development to create an environment hospitable to livestock enterprises as is done with other industries in the

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<sup>13</sup> County rankings for individual species are presented in the appendix.

economy; for example, the creation of tax incentives, infrastructure improvements, and access to state contracts. Complementary to creating a hospitable business environment is a need for the industry to engage in a legitimizing process. This process recognizes that stakeholders outside the industry are impacted directly and indirectly by the industry. Their needs, such as preserving the environment, animal welfare, and food safety, have to be addressed. Unless these needs are addressed, pro-business policies will be difficult to formulate, or if formulated, will be difficult to implement. Thus both approaches complement each other. Exploring how to go about this process is obviously beyond the scope of this study but would be a valuable next step for the industry.

Figure 3. All Livestock Economic Impact (\$): Top 10 Counties

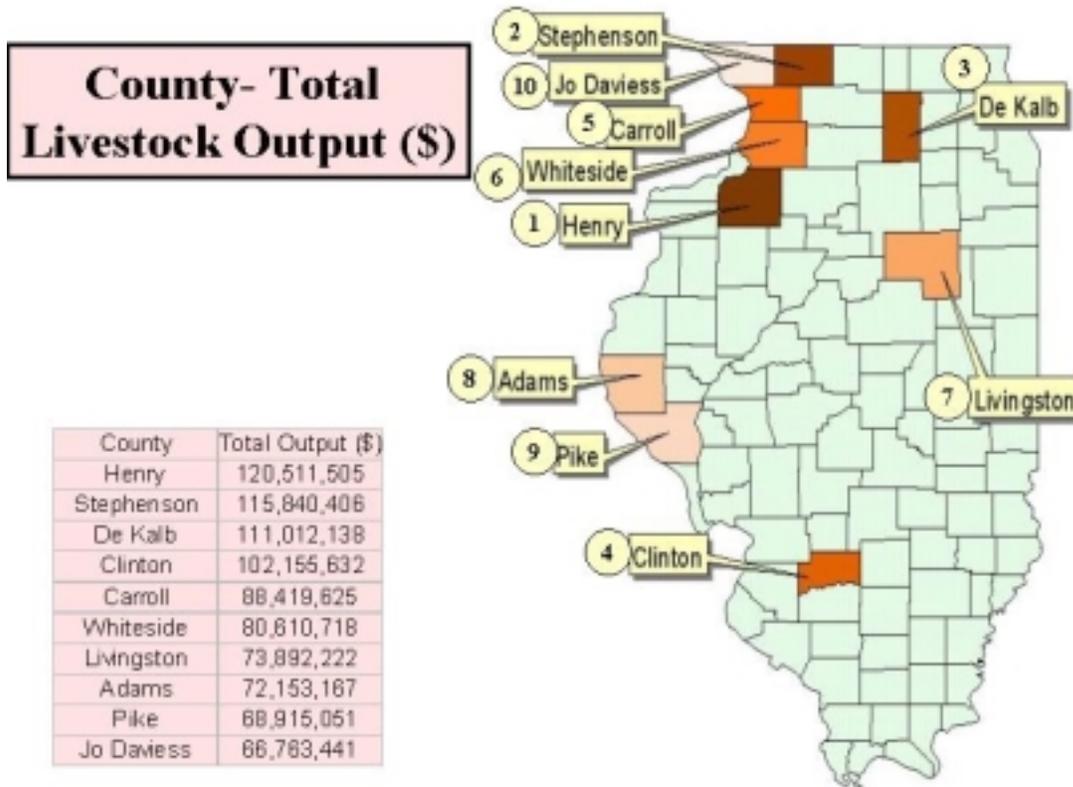


Table 10. All Livestock Economic Impact (\$): Top 10 Counties

County Rank	County	Employment Direct	Employment Total	Output Direct (\$)	Output Total (\$)	Tax (\$)	Employment (%)	Percentage Income (%)
	Illinois	28,160	43,198	1,921,773,811	3,400,338,929	332,040,536	0.61%	1.02%
1	Henry	1,186	1,863	74,971,483	120,511,505	9,515,715	8.23%	10.98%
2	Stephenson	1,065	1,597	82,308,996	115,840,406	9,719,031	5.48%	9.91%
3	De Kalb	1,159	1,738	69,411,072	111,012,138	7,532,125	3.86%	5.77%
4	Clinton	792	1,273	71,369,295	102,155,632	9,329,681	7.39%	13.50%
5	Carroll	1,253	1,745	59,649,077	88,419,625	5,884,491	17.86%	25.84%
6	Whiteside	1,069	1,492	55,111,292	80,610,718	5,733,121	4.56%	6.09%
7	Livingston	519	816	49,402,646	73,892,222	4,464,755	3.85%	8.31%
8	Adams	662	1,008	48,007,378	72,153,167	6,135,431	2.40%	4.85%
9	Pike	544	888	43,372,410	68,915,051	5,663,636	10.38%	22.92%
10	Jo Daviess	739	1,060	48,106,749	66,763,441	6,464,203	7.36%	12.74%

Figure 4. All Livestock Economic Impact (%): Top 10 Counties

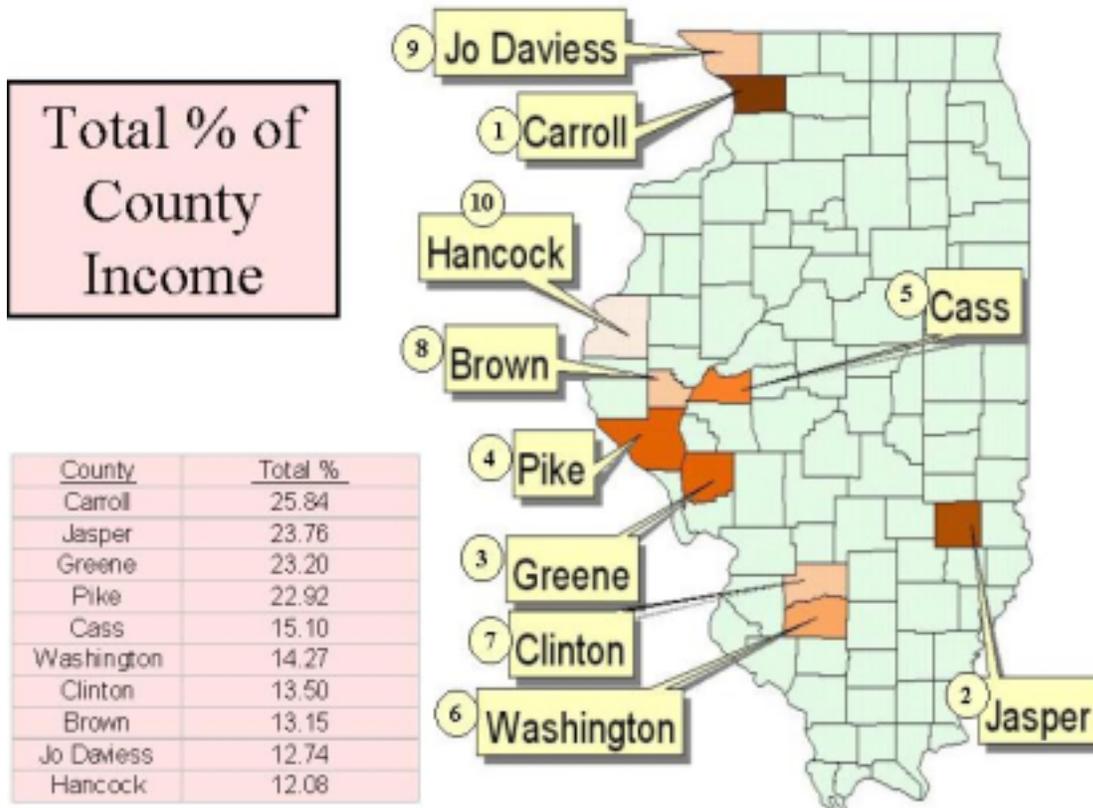
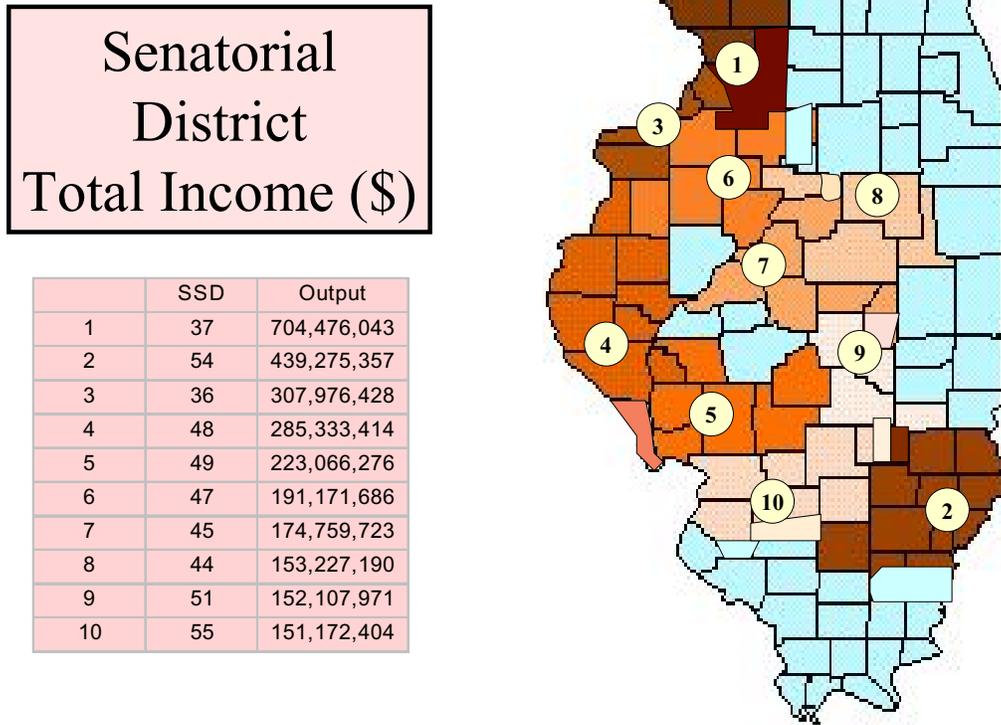


Table 11. All Livestock Economic Impact (%): Top 10 Counties

County Rank	County	Employment Direct	Employment Total	Output Direct (\$)	Output Total (\$)	Tax (\$)	Employment (%)	Percentage Income (%)
1	Carroll	1,253	1,745	59,649,077	88,419,625	5,884,491	17.86%	25.84%
2	Jasper	377	569	34,128,512	49,902,382	3,267,777	10.10%	23.76%
3	Greene	456	698	39,991,423	59,106,305	3,598,120	11.39%	23.20%
4	Pike	544	888	43,372,410	68,915,051	5,663,636	10.38%	22.92%
5	Cass	368	472	33,020,982	40,302,462	2,491,675	5.43%	15.10%
6	Washington	417	589	34,989,505	47,930,081	3,516,056	6.10%	14.27%
7	Clinton	792	1,273	71,369,295	102,155,632	9,329,681	7.39%	13.50%
8	Brown	153	209	9,310,500	13,092,268	1,196,162	5.48%	13.15%
9	Jo Daviess	739	1,060	48,106,749	66,763,441	6,464,203	7.36%	12.74%
10	Hancock	514	752	34,872,992	52,066,160	3,818,343	7.22%	12.08%

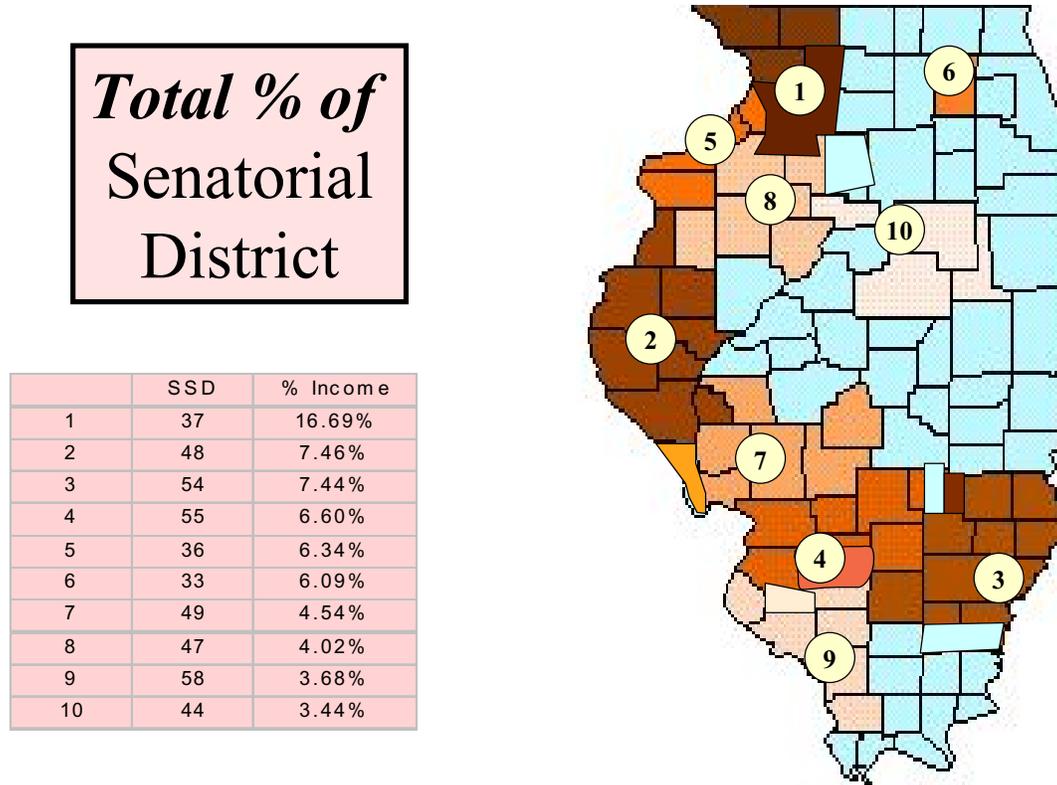
**Figure 5. All Livestock Economic Impact (\$): Top 10 State Senatorial Districts**



**Table 12. All Livestock Economic Impact (\$): Top 10 State Senatorial Districts**

District Rank	State Senate District	Employment Direct	Employment Total	Output Direct (\$)	Output Total (\$)	Tax (\$)	Employment Percentage (%)	Percentage Income (%)
1	37SSD	4,441	7,285	486,826,950	704,476,043	56,846,334	7.03%	16.69%
2	54SSD	2,815	4,513	314,320,292	439,275,357	30,528,599	2.63%	7.44%
3	36SSD	1,691	2,808	208,894,614	307,976,428	21,930,517	1.60%	6.34%
4	48SSD	3,815	5,431	202,631,539	285,333,414	22,976,247	4.80%	7.46%
5	49SSD	2,396	3,654	178,097,857	223,066,276	18,800,028	3.10%	4.54%
6	47SSD	1,864	2,779	126,250,237	191,171,686	14,573,394	2.21%	4.02%
7	45SSD	1,191	1,943	112,851,394	174,759,723	12,117,332	1.15%	2.46%
8	44SSD	1,283	1,962	100,777,576	153,227,190	10,075,331	1.73%	3.44%
9	51SSD	1,253	1,889	106,762,981	152,107,971	12,354,450	1.62%	3.30%
10	55SSD	1,303	2,018	105,887,170	151,172,404	14,032,396	3.41%	6.60%

**Figure 6. All Livestock Economic Impact (%): Top 10 State Senatorial Districts**



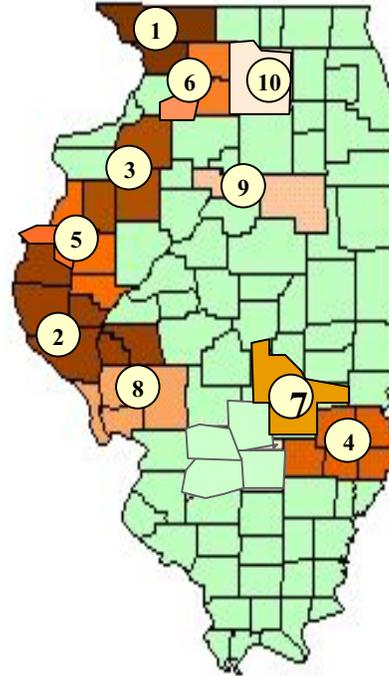
**Table 13. All Livestock Economic Impact (%): Top 10 State Senatorial Districts**

District Rank	State Senate District	Employment Direct	Employment Total	Output Direct (\$)	Output Total (\$)	Tax (\$)	Employment Percentage (%)	Percentage Income (%)
1	37SSD	4,441	7,285	486,826,950	704,476,043	56,846,334	7.03%	16.69%
2	48SSD	3,815	5,431	202,631,539	285,333,414	22,976,247	4.80%	7.46%
3	54SSD	2,815	4,513	314,320,292	439,275,357	30,528,599	2.63%	7.44%
4	55SSD	1,303	2,018	105,887,170	151,172,404	14,032,396	3.41%	6.60%
5	36SSD	1,691	2,808	208,894,614	307,976,428	21,930,517	1.60%	6.34%
6	33SSD	580	879	37,000,256	58,606,078	3,991,688	3.91%	6.09%
7	49SSD	2,396	3,654	178,097,857	223,066,276	18,800,028	3.10%	4.54%
8	47SSD	1,864	2,779	126,250,237	191,171,686	14,573,394	2.21%	4.02%
9	58SSD	1,213	1,710	82,819,072	116,151,019	8,898,442	1.98%	3.68%
10	44SSD	1,283	1,962	100,777,576	153,227,190	10,075,331	1.73%	3.44%

**Figure 7. All Livestock Economic Impact (\$): Top 10 State Representative Districts**

Representative  
District  
Total Income (\$)

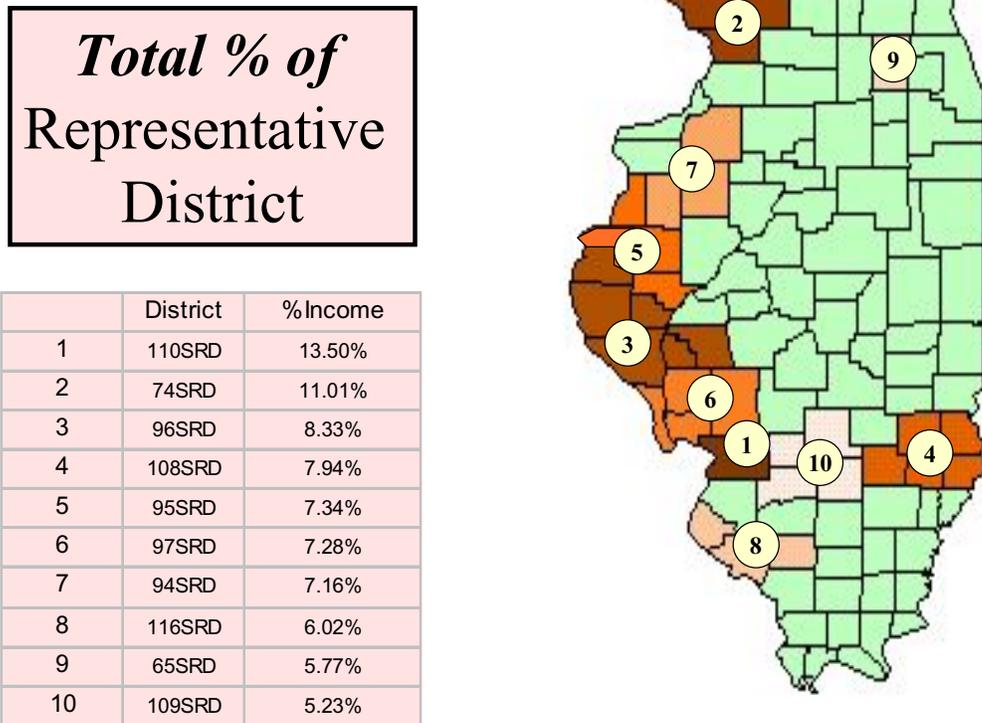
	District	Output
1	74SRD	253,415,196
2	96SRD	167,101,298
3	94SRD	161,027,954
4	108SRD	154,515,524
5	95SRD	133,615,173
6	73SRD	126,136,789
7	102SRD	122,645,370
8	97SRD	121,990,720
9	87SRD	120,122,012
10	70SRD	113,791,840



**Table 14. All Livestock Economic Impact (\$): Top 10 State Representative Districts**

District Rank	State Rep. District	Employment Direct	Employment Total	Output Direct (\$)	Output Total (\$)	Tax (\$)	Employment Percentage (%)	Percentage Income (%)
1	74SRD	2,783	4,022	178,427,010	253,415,196	21,017,409	6.79%	11.01%
2	96SRD	1,463	2,272	108,816,284	167,101,298	13,708,239	4.07%	8.33%
3	94SRD	1,608	2,394	106,346,480	161,027,954	12,385,040	4.10%	7.16%
4	108SRD	1,224	1,820	109,189,693	154,515,524	10,373,541	3.16%	7.94%
5	95SRD	1,473	2,057	93,815,255	133,615,173	10,096,506	3.64%	7.34%
6	73SRD	1,421	2,084	82,462,201	126,136,789	9,854,805	2.10%	3.28%
7	102SRD	1,011	1,525	85,501,746	122,645,370	9,981,258	2.01%	4.13%
8	97SRD	1,103	1,663	81,978,661	121,990,720	9,631,611	4.50%	7.28%
9	87SRD	1,025	1,552	79,931,706	120,122,012	7,614,004	2.31%	4.55%
10	70SRD	1,358	1,859	77,451,738	113,791,840	8,154,186	2.11%	3.26%

**Figure 8. All Livestock Economic Impact (%): Top 10 State Representative Districts**



**Table 15. All Livestock Economic Impact (%): Top 10 State Representative Districts**

District Rank	State Rep. District	Employment		Output		Tax	Employment	Percentage
		Direct	Total	Direct (\$)	Total (\$)	(\$)	(%)	Income (%)
1	110SRD	396	637	35,684,648	51,077,816	4,664,841	7.39%	13.50%
2	74SRD	2,783	4,022	178,427,010	253,415,196	21,017,409	6.79%	11.01%
3	96SRD	1,463	2,272	108,816,284	167,101,298	13,708,239	4.07%	8.33%
4	108SRD	1,224	1,820	109,189,693	154,515,524	10,373,541	3.16%	7.94%
5	95SRD	1,473	2,057	93,815,255	133,615,173	10,096,506	3.64%	7.34%
6	97SRD	1,103	1,663	81,978,661	121,990,720	9,631,611	4.50%	7.28%
7	94SRD	1,608	2,394	106,346,480	161,027,954	12,385,040	4.10%	7.16%
8	116SRD	859	1,229	67,176,915	94,075,185	7,715,223	3.35%	6.02%
9	65SRD	580	869	34,705,536	55,506,069	3,766,063	3.86%	5.77%
10	109SRD	907	1,382	70,202,523	100,094,588	9,367,556	2.73%	5.23%

## Glossary

**commercial farm:** Has at least commercial scale (derived from Illinois Agricultural Statistic Service statistics) of a traditionally commercial species (beef, pork, dairy, poultry, wool/lamb). Other livestock may be on the farm.

**commercial unit:** Management of a commercial species needing at least one full-time equivalent employee. Derived from Illinois Agricultural Statistic Service categorical breakdown by size and species.

**direct effect:** The direct economic effects from the production of the good or the delivery of the service by the specific industry.

**employment multiplier:** The change in total employment in the economy from a unit increase in the economic activity of a specified industry.

**FBFM:** Farm Business Farm Management record-keeping and tax preparation service. <http://web.aces.uiuc.edu/fbfm/>

**FTE:** Full-time equivalent. Labor required to employ one person full time for a year. The standard definition of 1 FTE is 40 hours per week, 52 weeks a year, or 2080 total hours of labor.

**IMPLAN:** Economic input-output (I/O) modeling software and database. Developed and managed by Minnesota IMPLAN Group, Inc. <http://www.mig-inc.com/>

**I/O:** Economic input-output (I/O) analysis traces the flow of goods, services, and employment among related sectors of the economy.

**indirect effect:** The additional economic impacts from producing an additional unit of output in a specified industry.

**induced effect:** The additional economic demand effects from the specified industry's employees.

**NASS:** National Agricultural Statistics Service, part of the USDA; collects data on the agriculture sector. Illinois Agricultural Statistic Service (IASS) is the local representative of the NASS system.

**NTC:** Nontraditionally commercial, or referring to livestock species such as horses, llamas, bees and honey, fish, and other species with cash receipts that are not traditionally counted (as determined by IMPLAN) as livestock marketings.

**Output multiplier:** Changes in total economic output by increasing output one unit in a specified industry.

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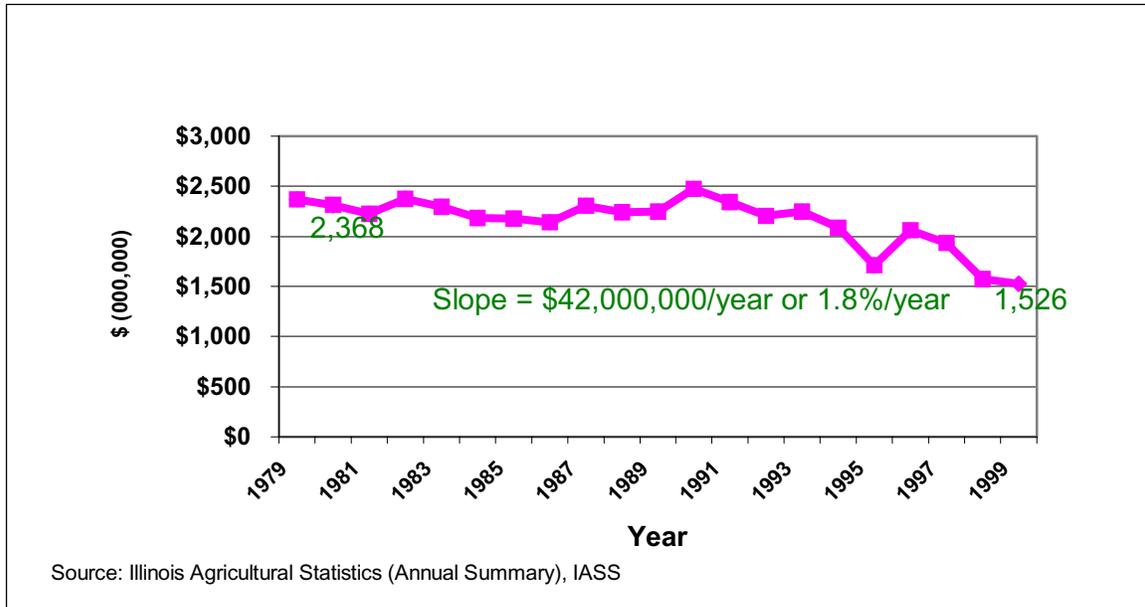


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**Figure A. Annual Change in Illinois Livestock Cash Receipts from Marketing**



**Figure B. Annual Change in National Ranking of Illinois Livestock Cash Receipts from Marketing**

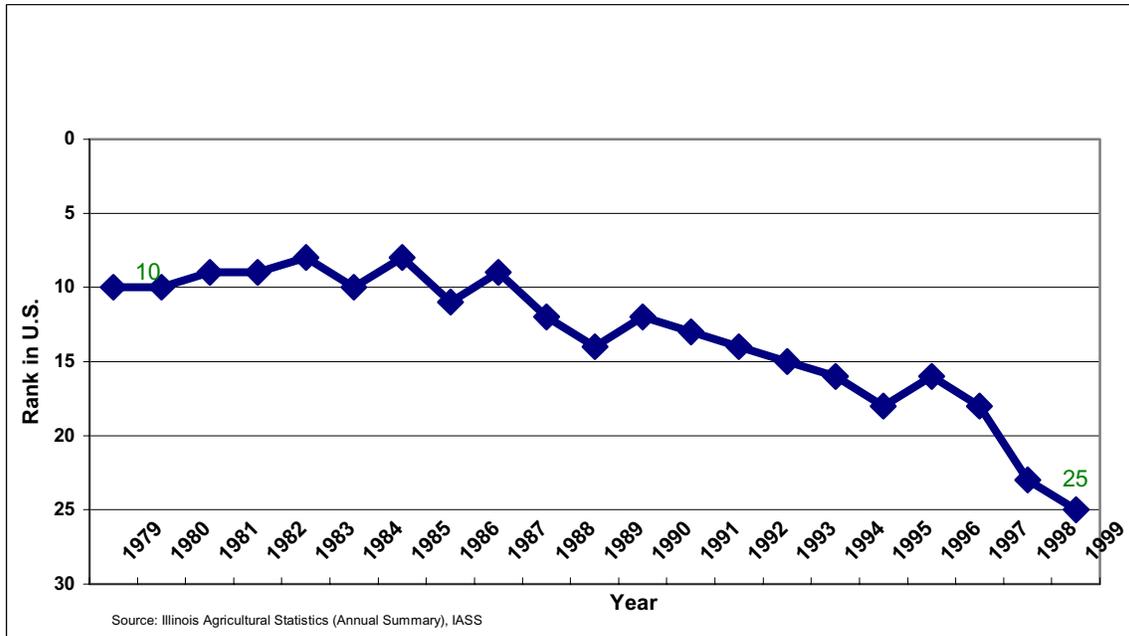


Figure C. Illinois Livestock Species National Rankings

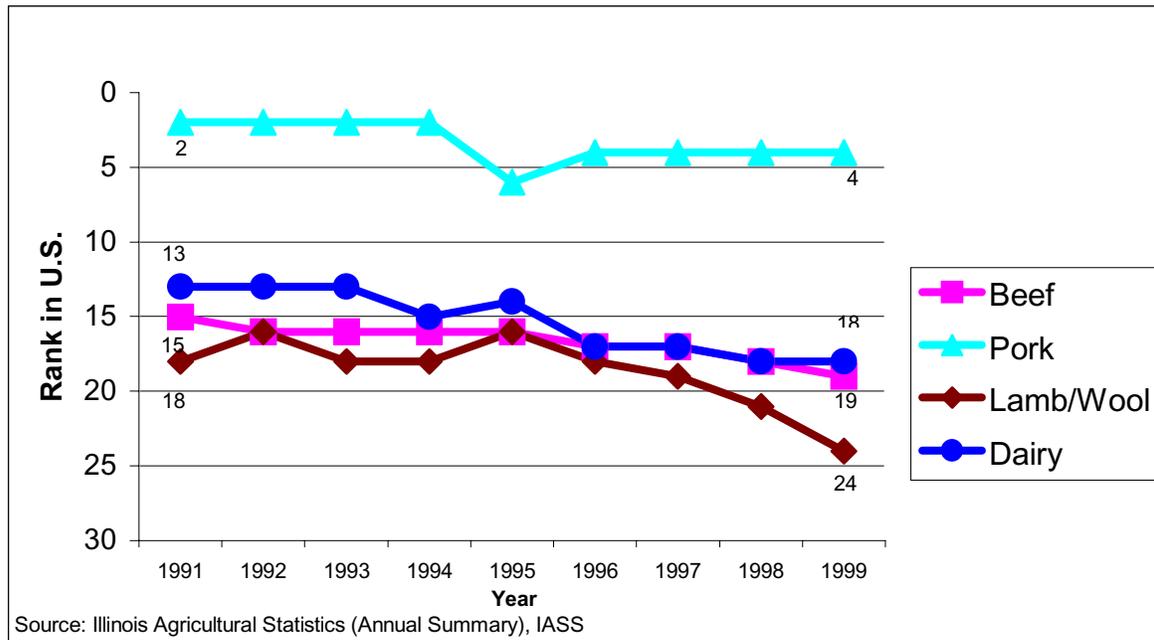


Figure D. Illinois Livestock Marketing and Dairy Production

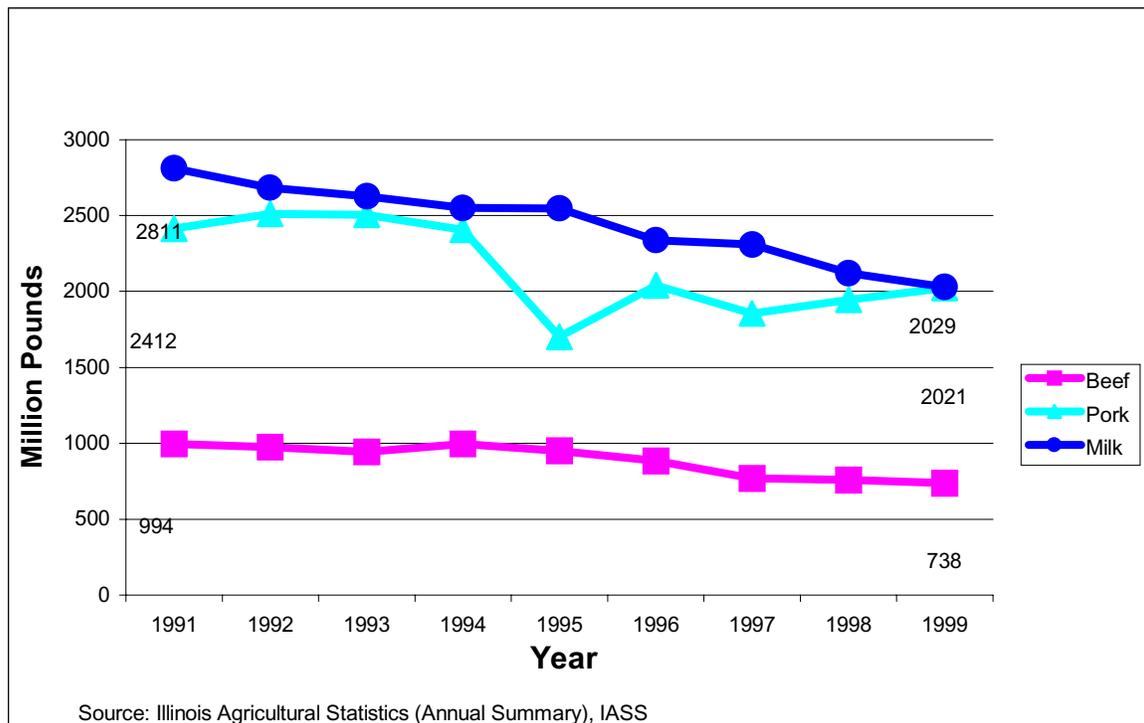
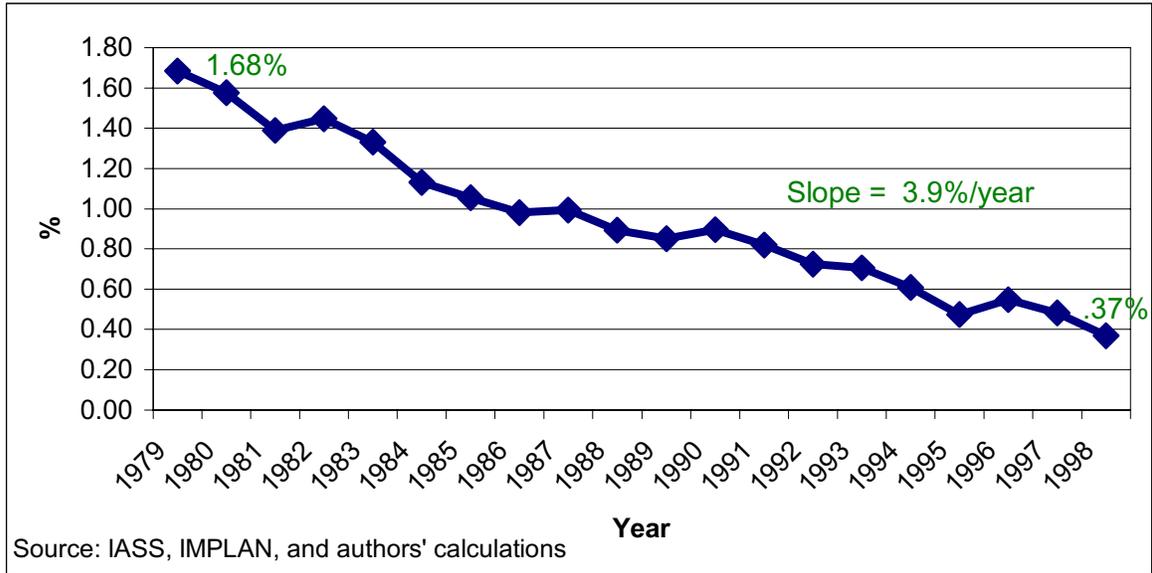


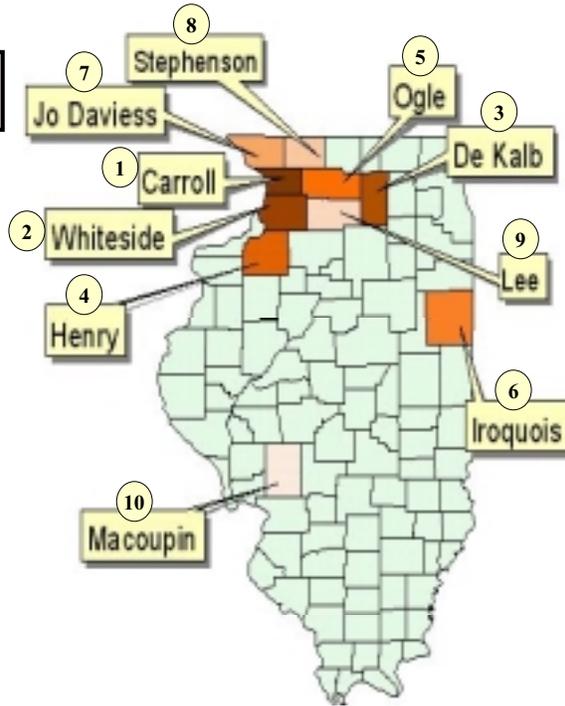
Figure E. Livestock as a Percent of Gross State Product (GSP)



**Beef Maps: Counties**

**Beef Output (\$)**

County	Beef Output (\$)
Carroll	54,702,234
Whiteside	42,631,180
De Kalb	41,543,509
Henry	38,919,957
Ogle	28,556,522
Iroquois	23,118,907
Jo Daviess	21,556,411
Stephenson	21,281,077
Lee	18,343,596
Macoupin	18,072,732



**Beef % of County Income**

County	Beef %
Carroll	15.98%
Henderson	5.23%
Brown	4.67%
Jo Daviess	4.11%
Hancock	3.82%
Iroquois	3.61%
Pike	3.59%
Henry	3.54%
Schuyler	3.28%
Whiteside	3.22%



## Appendix Beef Tables: Counties

<b>Beef Income Rank</b>	<b>County</b>	<b>Employment Direct</b>	<b>Employment Total</b>	<b>Output Direct (\$)</b>	<b>Output Total (\$)</b>	<b>Tax (\$)</b>	<b>Employment</b>	<b>PI</b>
1	Carroll	1,029	1,391	36,648,345	<b>54,702,234</b>	3,711,980	14.23%	15.98%
2	Whiteside	819	1,095	29,140,301	<b>42,631,180</b>	3,245,658	3.35%	3.22%
3	De Kalb	748	1,022	26,628,439	<b>41,543,509</b>	3,071,044	2.27%	2.16%
4	Henry	699	975	24,874,726	<b>38,919,957</b>	3,398,394	4.31%	3.54%
5	Ogle	615	707	21,875,839	<b>28,556,522</b>	2,233,680	2.83%	2.61%
6	Iroquois	428	579	15,207,823	<b>23,118,907</b>	1,824,533	3.74%	3.61%
7	Jo Daviess	405	548	14,414,810	<b>21,556,411</b>	2,018,070	3.81%	4.11%
8	Stephenson	397	540	14,179,405	<b>21,281,077</b>	1,748,551	1.85%	1.82%
9	Lee	374	461	13,315,148	<b>18,343,596</b>	1,399,859	2.48%	2.62%
10	Macoupin	338	458	12,021,909	<b>18,072,732</b>	1,759,547	2.36%	1.70%

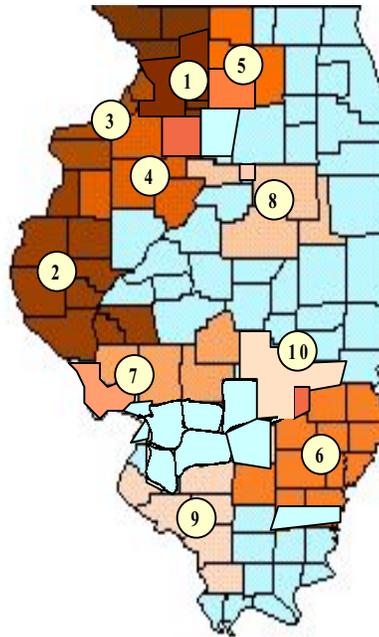
  

<b>Beef % Rank</b>	<b>County</b>	<b>Employment Direct</b>	<b>Employment Total</b>	<b>Output Direct (\$)</b>	<b>Output Total (\$)</b>	<b>Tax (\$)</b>	<b>Employment</b>	<b>PI</b>
1	Carroll	1,029	1,391	36,648,345	54,702,234	3,711,980	14.23%	<b>15.98%</b>
2	Henderson	171	223	6,094,647	8,503,935	603,651	6.63%	<b>5.23%</b>
3	Brown	94	121	3,343,302	4,648,346	458,393	3.17%	<b>4.67%</b>
4	Jo Daviess	405	548	14,414,810	21,556,411	2,018,070	3.81%	<b>4.11%</b>
5	Hancock	318	423	11,310,614	16,468,894	1,351,428	4.06%	<b>3.82%</b>
6	Iroquois	428	579	15,207,823	23,118,907	1,824,533	3.74%	<b>3.61%</b>
7	Pike	197	271	7,004,699	10,790,772	1,010,106	3.17%	<b>3.59%</b>
8	Henry	699	975	24,874,726	38,919,957	3,398,394	4.31%	<b>3.54%</b>
9	Schuyler	86	106	3,077,849	4,171,283	410,223	2.65%	<b>3.28%</b>
10	Whiteside	819	1,095	29,140,301	42,631,180	3,245,658	3.35%	<b>3.22%</b>

### Beef Maps: Senatorial Districts

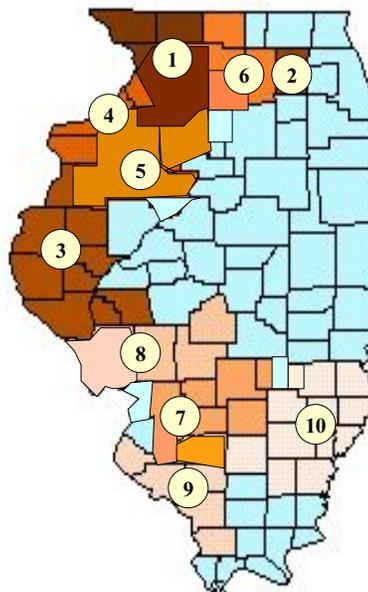
**Senatorial District  
Beef Income (\$)**

	SSD	Output
1	37	140,298,847
2	48	74,787,238
3	36	62,204,474
4	47	52,637,935
5	35	49,460,935
6	54	45,706,415
7	49	44,571,451
8	44	28,825,313
9	58	24,803,120
10	51	22,717,037



***Beef % of  
Senatorial  
District***

	SSD	% Income
1	37	3.32%
2	33	2.16%
3	48	1.95%
4	36	1.28%
5	47	1.11%
6	35	0.97%
7	55	0.94%
8	49	0.91%
9	58	0.79%
10	54	0.77%



## Beef Tables: Senatorial Districts

<b>Beef Income Rank</b>	<b>District</b>	<b>Employment Direct</b>	<b>Employment Total</b>	<b>Output Direct (\$)</b>	<b>Output Total (\$)</b>	<b>Tax (\$)</b>	<b>Employment</b>	<b>PI</b>
1	37SSD	2,677	3,552	95,338,061	<b>140,298,847</b>	11,311,880	3.40%	3.32%
2	48SSD	1,525	2,009	54,238,013	<b>74,787,238</b>	6,567,863	1.77%	1.95%
3	36SSD	1,202	1,581	42,777,420	<b>62,204,474</b>	4,769,111	0.90%	1.28%
4	47SSD	1,003	1,328	35,704,999	<b>52,637,935</b>	4,549,130	1.05%	1.11%
5	35SSD	961	1,220	34,201,579	<b>49,460,935</b>	3,838,062	0.92%	0.97%
6	54SSD	879	1,171	31,294,207	<b>45,706,415</b>	4,100,350	0.68%	0.77%
7	49SSD	1,065	1,425	37,816,583	<b>44,571,451</b>	4,323,985	1.21%	0.91%
8	44SSD	535	721	19,036,730	<b>28,825,313</b>	2,254,203	0.63%	0.65%
9	58SSD	491	642	17,412,574	<b>24,803,120</b>	1,921,138	0.74%	0.79%
10	51SSD	447	577	15,961,597	<b>22,717,037</b>	1,951,912	0.48%	0.47%

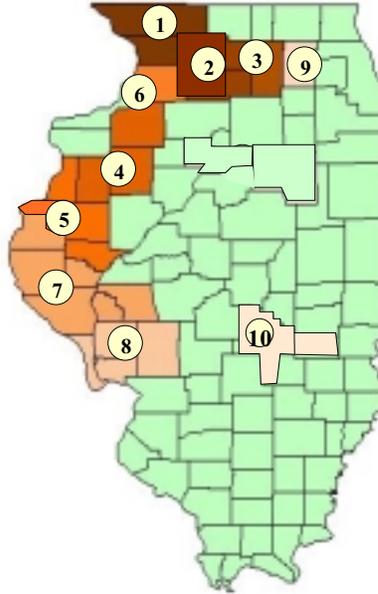
  

<b>Beef % Rank</b>	<b>District</b>	<b>Employment Direct</b>	<b>Employment Total</b>	<b>Output Direct (\$)</b>	<b>Output Total (\$)</b>	<b>Tax (\$)</b>	<b>Employment</b>	<b>PI</b>
1	37SSD	2,677	3,552	95,338,061	140,298,847	11,311,880	3.40%	<b>3.32%</b>
2	33SSD	374	511	13,314,220	20,771,755	1,535,522	2.27%	<b>2.16%</b>
3	48SSD	1,525	2,009	54,238,013	74,787,238	6,567,863	1.77%	<b>1.95%</b>
4	36SSD	1,202	1,581	42,777,420	62,204,474	4,769,111	0.90%	<b>1.28%</b>
5	47SSD	1,003	1,328	35,704,999	52,637,935	4,549,130	1.05%	<b>1.11%</b>
6	35SSD	961	1,220	34,201,579	49,460,935	3,838,062	0.92%	<b>0.97%</b>
7	55SSD	406	549	14,457,666	21,529,238	2,077,545	0.93%	<b>0.94%</b>
8	49SSD	1,065	1,425	37,816,583	44,571,451	4,323,985	1.21%	<b>0.91%</b>
9	58SSD	491	642	17,412,574	24,803,120	1,921,138	0.74%	<b>0.79%</b>
10	54SSD	879	1,171	31,294,207	45,706,415	4,100,350	0.68%	<b>0.77%</b>

### Beef Maps: Representative Districts

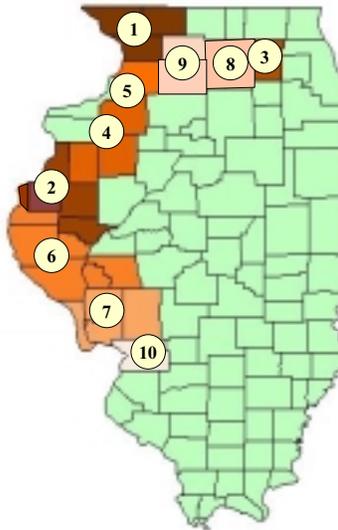
**Representative District Beef Income (\$)**

	District	Output
1	74SRD	84,256,894
2	73SRD	50,103,850
3	70SRD	46,841,374
4	94SRD	46,213,091
5	95SRD	43,992,397
6	71SRD	43,991,388
7	96SRD	34,525,852
8	97SRD	25,124,875
9	65SRD	20,771,755
10	102SRD	19,928,049



**Beef % of Representative District**

	District	% Income
1	74SRD	3.66%
2	95SRD	2.42%
3	65SRD	2.16%
4	94SRD	2.05%
5	71SRD	1.81%
6	96SRD	1.72%
7	97SRD	1.50%
8	70SRD	1.34%
9	73SRD	1.30%
10	110SRD	1.11%



**Beef Tables: Representative Districts**

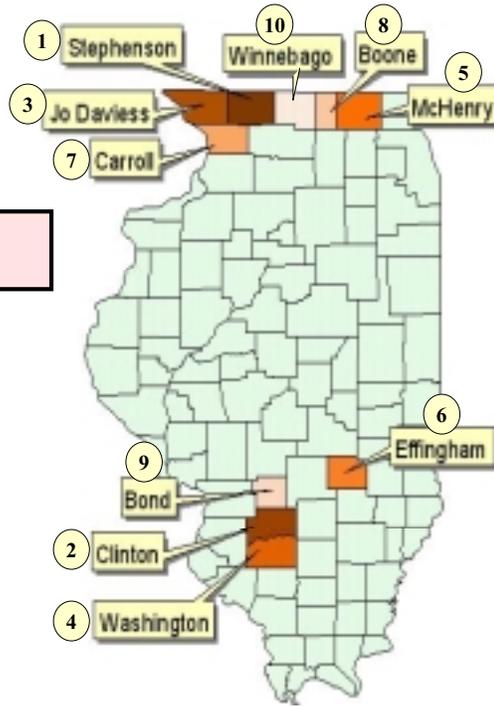
<b>Beef Income Rank</b>	<b>District</b>	<b>Employment Direct</b>	<b>Employment Total</b>	<b>Output Direct (\$)</b>	<b>Output Total (\$)</b>	<b>Tax (\$)</b>	<b>Employment</b>	<b>PI</b>
1	74SRD	1,587	2,145	56,534,687	<b>84,256,894</b>	6,693,678	3.62%	3.66%
2	73SRD	946	1,263	33,663,521	<b>50,103,850</b>	4,203,688	1.27%	1.30%
3	70SRD	915	1,157	32,555,646	<b>46,841,374</b>	3,595,177	1.31%	1.34%
4	94SRD	881	1,168	31,338,840	<b>46,213,091</b>	3,968,760	2.00%	2.05%
5	95SRD	878	1,135	31,228,201	<b>43,992,397</b>	3,691,786	2.01%	2.42%
6	71SRD	837	1,118	29,786,580	<b>43,991,388</b>	3,206,391	1.25%	1.81%
7	96SRD	647	875	23,009,812	<b>34,525,852</b>	3,156,974	1.57%	1.72%
8	97SRD	482	646	17,131,192	<b>25,124,875</b>	2,402,873	1.75%	1.50%
9	65SRD	374	511	13,314,220	<b>20,771,755</b>	1,535,522	2.27%	2.16%
10	102SRD	391	507	13,982,887	<b>19,928,094</b>	1,736,945	0.67%	0.67%

<b>Beef % Rank</b>	<b>District</b>	<b>Employment Direct</b>	<b>Employment Total</b>	<b>Output Direct (\$)</b>	<b>Output Total (\$)</b>	<b>Tax (\$)</b>	<b>Employment</b>	<b>PI</b>
1	74SRD	1,587	2,145	56,534,687	84,256,894	6,693,678	3.66%	<b>3.62%</b>
2	95SRD	878	1,135	31,228,201	43,992,397	3,691,786	2.42%	<b>2.01%</b>
3	65SRD	374	511	13,314,220	20,771,755	1,535,522	2.16%	<b>2.27%</b>
4	94SRD	881	1,168	31,338,840	46,213,091	3,968,760	2.05%	<b>2.00%</b>
5	71SRD	837	1,118	29,786,580	43,991,388	3,206,391	1.81%	<b>1.25%</b>
6	96SRD	647	875	23,009,812	34,525,852	3,156,974	1.72%	<b>1.57%</b>
7	97SRD	482	646	17,131,192	25,124,875	2,402,873	1.50%	<b>1.75%</b>
8	70SRD	915	1,157	32,555,646	46,841,374	3,595,177	1.34%	<b>1.31%</b>
9	73SRD	946	1,263	33,663,521	50,103,850	4,203,688	1.30%	<b>1.27%</b>
10	110SRD	76	106	2,719,163	4,214,202	387,100	1.11%	<b>1.22%</b>

### Dairy Maps: Counties

#### Dairy Output (\$)

County	Dairy Output (\$)
Stephenson	59,029,416
Clinton	50,075,714
Jo Daviess	33,037,762
Washington	24,174,243
Mc Henry	17,617,291
Effingham	16,642,683
Carroll	10,299,776
Boone	9,111,072
Bond	8,307,556
Winnebago	8,291,858



#### Dairy % of County Income

County	Dairy %
Washington	7.20%
Clinton	6.16%
Jo Daviess	6.31%
Stephenson	5.05%
Jasper	3.07%
Carroll	3.01%
Cumberland	2.65%
Bond	2.64%
Effingham	2.23%
Shelby	1.58%



**Dairy Tables: Counties**

<b>Dairy</b>	<b>County</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>Income</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	Stephenson	443	674	45,032,328	<b>59,029,416</b>	5,545,164	2.31%	5.05%
2	Clinton	362	582	36,747,964	<b>50,075,714</b>	5,289,205	3.38%	6.62%
3	Jo Daviess	252	376	25,617,450	<b>33,037,762</b>	3,499,924	2.52%	6.31%
4	Washington	190	258	19,313,570	<b>24,174,243</b>	1,988,358	2.67%	7.20%
5	Mc Henry	128	193	13,057,726	<b>17,617,291</b>	2,023,715	0.18%	0.25%
6	Effingham	119	191	12,109,576	<b>16,642,683</b>	1,893,682	0.71%	2.23%
7	Carroll	79	112	7,998,584	<b>10,299,776</b>	814,887	1.22%	3.01%
8	Boone	72	95	7,402,676	<b>9,111,072</b>	796,933	0.54%	0.98%
9	Bond	62	97	6,254,208	<b>8,307,556</b>	915,407	1.28%	2.64%
10	Winnebago	58	88	5,924,606	<b>8,291,858</b>	857,628	0.05%	0.13%

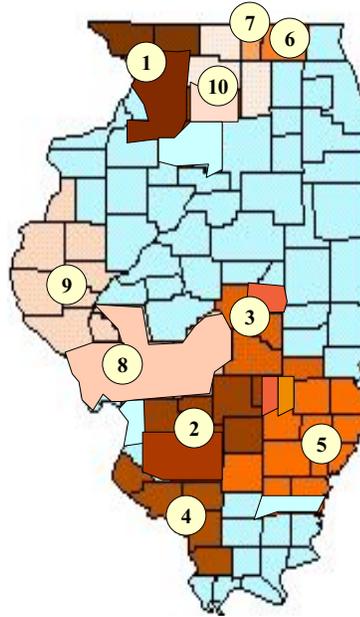
  

<b>Dairy</b>	<b>County</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>%</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	Washington	190	258	19,313,570	24,174,243	1,988,358	2.67%	<b>7.20%</b>
2	Clinton	362	582	36,747,964	50,075,714	5,289,205	3.38%	<b>6.62%</b>
3	Jo Daviess	252	376	25,617,450	33,037,762	3,499,924	2.52%	<b>6.31%</b>
4	Stephenson	443	674	45,032,328	59,029,416	5,545,164	2.31%	<b>5.05%</b>
5	Jasper	51	69	5,172,316	6,448,376	553,152	1.23%	<b>3.07%</b>
6	Carroll	79	112	7,998,584	10,299,776	814,887	1.22%	<b>3.01%</b>
7	Cumberland	48	64	4,949,000	5,620,822	509,009	1.54%	<b>2.65%</b>
8	Bond	62	97	6,254,208	8,307,556	915,407	1.28%	<b>2.64%</b>
9	Effingham	119	191	12,109,576	16,642,683	1,893,682	0.71%	<b>2.23%</b>
10	Shelby	51	76	5,156,267	6,712,769	653,742	0.74%	<b>1.58%</b>

### Dairy Maps: Senatorial Districts

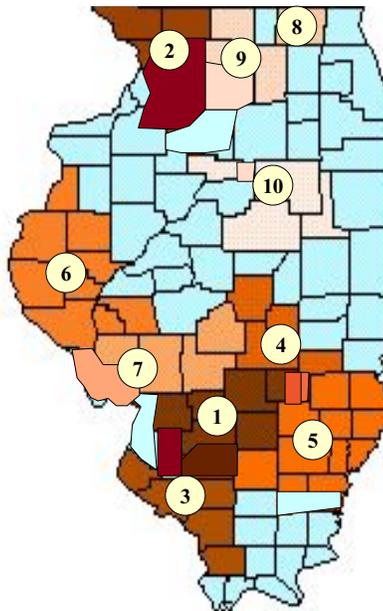
**Senatorial District Dairy Income (\$)**

	SSD	Output
1	37	105,952,363
2	55	64,750,964
3	51	40,742,700
4	58	37,110,839
5	54	27,972,568
6	32	17,617,291
7	34	13,257,001
8	49	13,178,070
9	48	11,838,110
10	35	10,342,712



***Dairy % of Senatorial District***

	SSD	% Income
1	55	2.83%
2	37	2.51%
3	58	1.17%
4	51	0.84%
5	54	0.47%
6	48	0.31%
7	49	0.27%
8	32	0.25%
9	35	0.20%
10	44	0.19%



## Dairy Tables: Senatorial Districts

<b>Dairy</b>	<b>District</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>Income</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	37SSD	799	1,203	81,257,091	<b>105,952,363</b>	10,248,305	1.15%	2.51%
2	55SSD	473	754	47,996,795	<b>64,750,964</b>	6,958,408	1.27%	2.83%
3	51SSD	236	383	32,023,560	<b>40,742,700</b>	4,072,611	0.33%	0.84%
4	58SSD	290	406	29,523,162	<b>37,110,839</b>	3,559,295	0.47%	1.17%
5	54SSD	212	316	21,371,436	<b>27,972,568</b>	2,839,013	0.18%	0.47%
6	32SSD	128	193	13,057,726	<b>17,617,291</b>	2,023,715	0.18%	0.25%
7	34SSD	101	139	10,364,979	<b>13,257,001</b>	1,225,747	0.13%	0.19%
8	49SSD	98	149	10,058,660	<b>13,178,070</b>	1,427,113	0.13%	0.27%
9	48SSD	89	136	8,943,474	<b>11,838,110</b>	1,278,018	0.12%	0.31%
10	35SSD	75	112	7,607,991	<b>10,342,712</b>	971,487	0.08%	0.20%

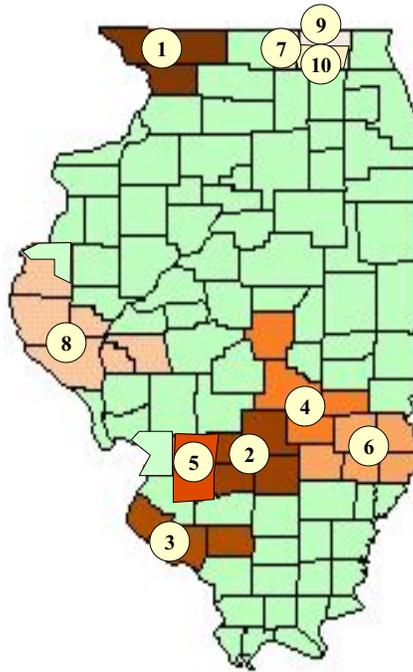
  

<b>Dairy</b>	<b>District</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>%</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	55SSD	473	754	47,996,795	64,750,964	6,958,408	1.27%	<b>2.83%</b>
2	37SSD	799	1,203	81,257,091	105,952,363	10,248,305	1.15%	<b>2.51%</b>
3	58SSD	290	406	29,523,162	37,110,839	3,559,295	0.47%	<b>1.17%</b>
4	51SSD	236	383	32,023,560	40,742,700	4,072,611	0.33%	<b>0.84%</b>
5	54SSD	212	316	21,371,436	27,972,568	2,839,013	0.18%	<b>0.47%</b>
6	48SSD	89	136	8,943,474	11,838,110	1,278,018	0.12%	<b>0.31%</b>
7	49SSD	98	149	10,058,660	13,178,070	1,427,113	0.13%	<b>0.27%</b>
8	32SSD	128	193	13,057,726	17,617,291	2,023,715	0.18%	<b>0.25%</b>
9	35SSD	75	112	7,607,991	10,342,712	971,487	0.08%	<b>0.20%</b>
10	44SSD	62	92	6,414,360	8,454,231	713,450	0.08%	<b>0.19%</b>

**Dairy Maps: Representative Districts**

**Representative District Dairy Income (\$)**

	District	Output
1	74SRD	98,761,305
2	109SRD	39,713,107
3	116SRD	33,361,328
4	102SRD	26,787,783
5	110SRD	25,037,857
6	108SRD	18,247,053
7	68SRD	11,184,037
8	96SRD	8,874,211
9	63SRD	8,808,646
10	64SRD	8,808,646



***Dairy % of Representative District***

	District	% Income
1	110SRD	6.62%
2	74SRD	4.29%
3	116SRD	2.14%
4	109SRD	2.08%
5	108SRD	0.94%
6	102SRD	0.90%
7	96SRD	0.44%
8	68SRD	0.44%
9	98SRD	0.34%
10	71SRD	0.29%



**Dairy Tables: Representative Districts**

<b>Dairy</b>	<b>District</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>Income</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	74SRD	746	1,123	75,872,005	<b>98,761,305</b>	9,586,513	1.90%	4.29%
2	109SRD	292	463	29,622,813	<b>39,713,107</b>	4,313,806	0.91%	2.08%
3	116SRD	261	361	26,601,636	<b>33,361,328</b>	3,046,768	0.98%	2.14%
4	102SRD	206	303	21,184,317	<b>26,787,783</b>	2,740,215	0.40%	0.90%
5	110SRD	181	291	18,373,982	<b>25,037,857</b>	2,644,603	3.38%	6.62%
6	108SRD	138	204	13,985,286	<b>18,247,053</b>	1,786,047	0.35%	0.94%
7	68SRD	87	117	8,883,828	<b>11,184,037</b>	1,011,340	0.19%	0.44%
8	96SRD	65	102	6,576,087	<b>8,874,211</b>	967,647	0.18%	0.44%
9	63SRD	64	97	6,528,863	<b>8,808,646</b>	1,011,858	0.18%	0.25%
10	64SRD	64	97	6,528,863	<b>8,808,646</b>	1,011,858	0.18%	0.25%

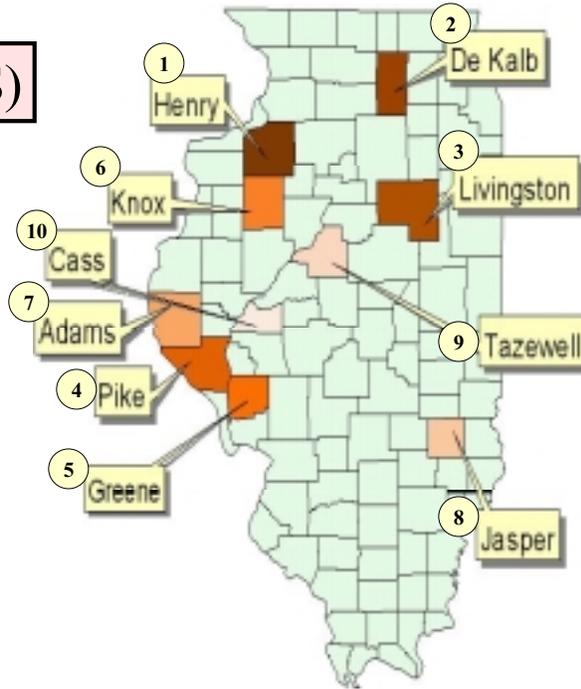
  

<b>Dairy</b>	<b>District</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>%</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	110SRD	181	291	18,373,982	25,037,857	2,644,603	3.38%	<b>6.62%</b>
2	74SRD	746	1,123	75,872,005	98,761,305	9,586,513	1.90%	<b>4.29%</b>
3	116SRD	261	361	26,601,636	33,361,328	3,046,768	0.98%	<b>2.14%</b>
4	109SRD	292	463	29,622,813	39,713,107	4,313,806	0.91%	<b>2.08%</b>
5	108SRD	138	204	13,985,286	18,247,053	1,786,047	0.35%	<b>0.94%</b>
6	102SRD	206	303	21,184,317	26,787,783	2,740,215	0.40%	<b>0.90%</b>
7	96SRD	65	102	6,576,087	8,874,211	967,647	0.18%	<b>0.44%</b>
8	68SRD	87	117	8,883,828	11,184,037	1,011,340	0.19%	<b>0.44%</b>
9	98SRD	38	58	3,887,724	5,101,538	522,438	0.16%	<b>0.34%</b>
10	71SRD	54	77	5,484,976	7,072,159	587,503	0.09%	<b>0.29%</b>

**Pork Maps: Counties**

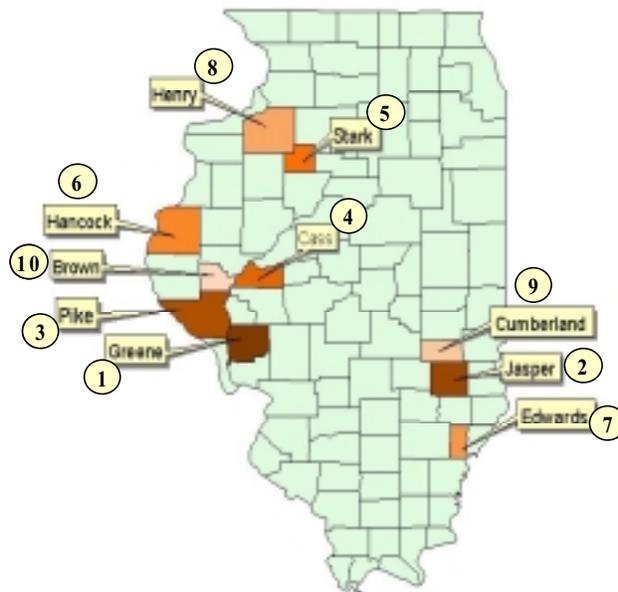
**Pork Output (\$)**

County	Hog Output \$
Henry	78,631,131
De Kalb	64,800,247
Livingston	59,741,348
Pike	56,151,460
Greene	53,077,323
Knox	46,098,063
Adams	45,093,455
Jasper	39,503,051
Tazewell	36,311,489
Cass	36,265,470



**Pork % of County Income**

County	Hogs %
Greene	20.83%
Jasper	18.81%
Pike	18.67%
Cass	13.59%
Stark	9.27%
Hancock	8.01%
Edwards	7.18%
Henry	7.16%
Cumberland	7.16%
Brown	6.93%



**Pork Tables: Counties**

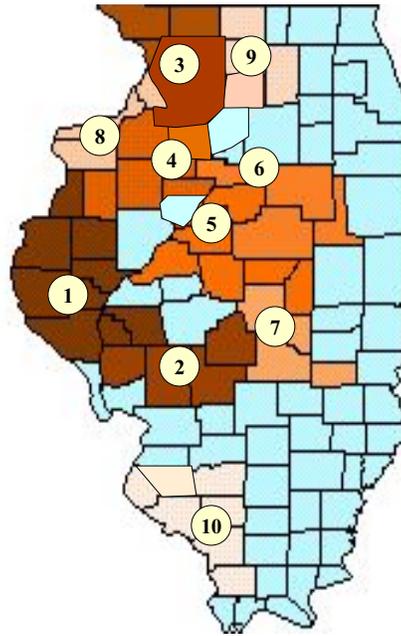
<b>Pork Income Rank</b>	<b>County</b>	<b>Employment Direct</b>	<b>Employment Total</b>	<b>Output Direct (\$)</b>	<b>Output Total (\$)</b>	<b>Tax (\$)</b>	<b>Employment</b>	<b>PI</b>
1	Henry	453	840	47,984,552	<b>78,631,131</b>	5,835,445	3.71%	7.16%
2	De Kalb	371	659	39,320,316	<b>64,800,247</b>	4,104,394	1.46%	3.37%
3	Livingston	363	604	38,468,004	<b>59,741,348</b>	3,534,028	2.85%	6.72%
4	Pike	329	592	34,872,020	<b>56,191,025</b>	4,500,066	6.92%	18.67%
5	Greene	337	542	35,724,340	<b>53,077,323</b>	3,160,030	8.84%	20.83%
6	Knox	275	474	29,103,652	<b>46,098,063</b>	3,355,738	1.44%	3.93%
7	Adams	275	471	29,067,124	<b>45,093,455</b>	3,517,044	1.12%	3.03%
8	Jasper	247	397	26,190,544	<b>39,503,051</b>	2,424,314	7.05%	18.81%
9	Tazewell	215	372	22,813,742	<b>36,311,489</b>	2,433,153	0.53%	1.19%
10	Cass	280	373	29,664,758	<b>36,265,470</b>	2,197,479	4.29%	13.59%

<b>Pork % Rank</b>	<b>County</b>	<b>Employment Direct</b>	<b>Employment Total</b>	<b>Output Direct (\$)</b>	<b>Output Total (\$)</b>	<b>Tax (\$)</b>	<b>Employment</b>	<b>PI</b>
1	Greene	337	542	35,724,340	53,077,323	3,160,030	8.84%	<b>20.83%</b>
2	Jasper	247	397	26,190,544	39,503,051	2,424,314	7.05%	<b>18.81%</b>
3	Pike	329	592	34,872,020	56,191,025	4,500,066	6.92%	<b>18.67%</b>
4	Cass	280	373	29,664,758	36,265,470	2,197,479	4.29%	<b>13.59%</b>
5	Stark	75	124	7,955,992	12,342,949	673,435	4.00%	<b>9.27%</b>
6	Hancock	184	314	22,734,188	34,526,522	2,369,091	3.01%	<b>8.01%</b>
7	Edwards	69	109	7,350,237	10,518,765	644,510	1.99%	<b>7.18%</b>
8	Henry	453	840	47,984,552	78,631,131	5,835,445	3.71%	<b>7.16%</b>
9	Cumberland	100	156	10,678,000	15,161,923	944,759	3.76%	<b>7.16%</b>
10	Brown	44	69	4,701,960	6,899,692	570,512	1.81%	<b>6.93%</b>

**Pork Maps: Senatorial Districts**

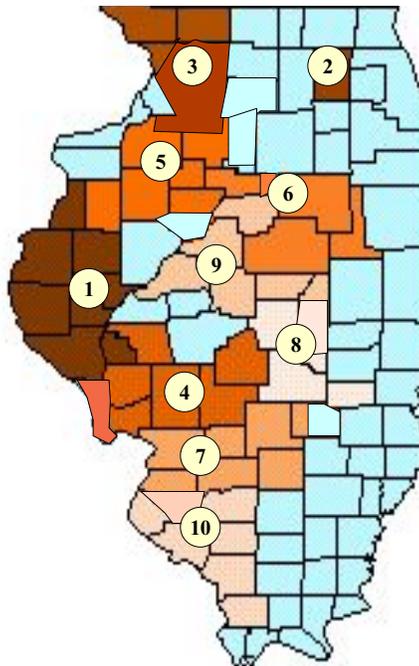
**Senatorial District Hog Income (\$)**

	SSD	Output
1	48	202,570,570
2	49	163,434,991
3	37	140,985,182
4	47	129,137,848
5	45	123,106,606
6	44	96,650,162
7	51	86,650,606
8	36	61,429,926
9	35	56,900,090
10	58	52,370,182



***Pork % of Senatorial District***

	SSD	% Income
1	48	5.29%
2	33	3.37%
3	37	3.34%
4	49	3.33%
5	47	2.71%
6	44	2.17%
7	55	2.14%
8	51	1.80%
9	45	1.73%
10	58	1.66%



**Pork Tables: Senatorial Districts**

<b>Hogs</b>	<b>District</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>Income</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	48SSD	1,230	2,061	133,466,663	<b>202,570,570</b>	15,097,820	1.83%	5.29%
2	49SSD	1,188	2,022	127,609,860	<b>163,434,991</b>	12,705,627	1.71%	3.33%
3	37SSD	857	1,477	90,824,656	<b>140,985,182</b>	9,862,422	1.43%	3.34%
4	47SSD	790	1,347	83,687,331	<b>129,137,848</b>	9,220,329	1.07%	2.71%
5	45SSD	729	1,257	77,285,453	<b>123,106,606</b>	8,308,981	0.75%	1.73%
6	44SSD	580	979	61,447,398	<b>96,650,162</b>	5,935,725	0.86%	2.17%
7	51SSD	530	885	57,199,042	<b>86,650,606</b>	6,177,667	0.73%	1.80%
8	36SSD	388	627	41,073,659	<b>61,429,926</b>	4,385,838	0.36%	1.26%
9	35SSD	350	576	37,038,335	<b>56,900,090</b>	3,727,221	0.44%	1.11%
10	58SSD	328	536	34,408,290	<b>52,370,182</b>	3,966,196	0.62%	1.66%

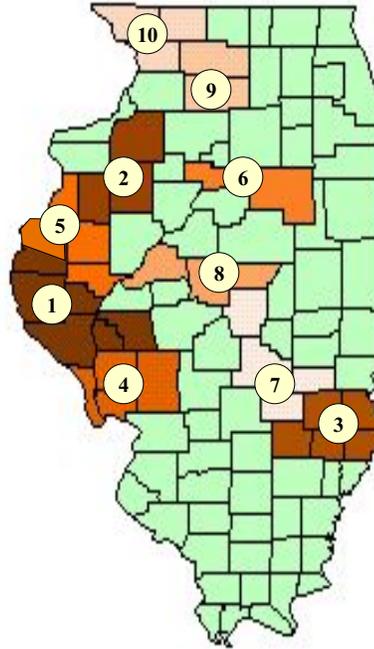
  

<b>Hogs</b>	<b>District</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>%</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	48SSD	1,230	2,061	133,466,663	202,570,570	15,097,820	1.83%	<b>5.29%</b>
2	33SSD	186	330	19,660,158	32,400,124	2,052,197	1.46%	<b>3.37%</b>
3	37SSD	857	1,477	90,824,656	140,985,182	9,862,422	1.43%	<b>3.34%</b>
4	49SSD	1,188	2,022	127,609,860	163,434,991	12,705,627	1.71%	<b>3.33%</b>
5	47SSD	790	1,347	83,687,331	129,137,848	9,220,329	1.07%	<b>2.71%</b>
6	44SSD	580	979	61,447,398	96,650,162	5,935,725	0.86%	<b>2.17%</b>
7	55SSD	292	518	30,986,946	48,930,415	3,883,700	0.87%	<b>2.14%</b>
8	51SSD	530	885	57,199,042	86,650,606	6,177,667	0.73%	<b>1.80%</b>
9	45SSD	729	1,257	77,285,453	123,106,606	8,308,981	0.75%	<b>1.73%</b>
10	58SSD	328	536	34,408,290	52,370,182	3,966,196	0.62%	<b>1.66%</b>

**Pork Maps: Representative Districts**

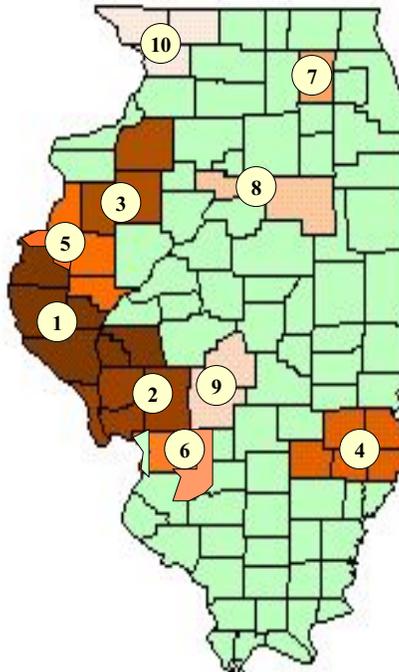
**Representative District Pork Income (\$)**

	District	Output
1	96SRD	118,547,741
2	94SRD	110,176,895
3	108SRD	91,893,216
4	97SRD	90,533,979
5	95SRD	84,022,829
6	87SRD	83,272,281
7	102SRD	74,926,108
8	90SRD	74,081,478
9	73SRD	68,331,841
10	74SRD	65,175,023



***Pork % of Representative District***

	District	%Income
1	96SRD	5.91%
2	97SRD	5.40%
3	94SRD	4.90%
4	108SRD	4.72%
5	95SRD	4.61%
6	110SRD	3.94%
7	65SRD	3.37%
8	87SRD	3.16%
9	98SRD	3.11%
10	74SRD	2.83%



**Pork Tables: Representative Districts**

<b>Pork</b>	<b>District</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>Income</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	96SRD	696	1,220	75,306,238	<b>118,547,741</b>	9,201,656	2.19%	5.91%
2	94SRD	676	1,155	71,569,766	<b>110,176,895</b>	7,977,003	1.98%	4.90%
3	108SRD	567	937	60,083,417	<b>91,893,216</b>	5,977,234	1.63%	4.72%
4	97SRD	566	937	60,000,798	<b>90,533,979</b>	6,507,615	2.53%	5.40%
5	95SRD	534	841	58,160,425	<b>84,022,829</b>	5,896,165	1.49%	4.61%
6	87SRD	503	843	53,274,220	<b>83,272,281</b>	4,997,688	1.25%	3.16%
7	102SRD	467	778	49,556,432	<b>74,926,108</b>	5,397,049	1.03%	2.52%
8	90SRD	440	752	46,622,397	<b>74,081,478</b>	4,767,408	0.73%	1.77%
9	73SRD	405	722	42,857,934	<b>68,331,841</b>	5,003,290	0.73%	1.78%
10	74SRD	396	679	41,824,675	<b>65,175,023</b>	4,400,435	1.15%	2.83%

<b>Pork</b>	<b>District</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>%</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	96SRD	696	1,220	75,306,238	118,547,741	9,201,656	2.19%	<b>5.91%</b>
2	97SRD	566	937	60,000,798	90,533,979	6,507,615	2.53%	<b>5.40%</b>
3	94SRD	676	1,155	71,569,766	110,176,895	7,977,003	1.98%	<b>4.90%</b>
4	108SRD	567	937	60,083,417	91,893,216	5,977,234	1.63%	<b>4.72%</b>
5	95SRD	534	841	58,160,425	84,022,829	5,896,165	1.49%	<b>4.61%</b>
6	110SRD	87	159	9,213,163	14,912,550	1,162,734	1.85%	<b>3.94%</b>
7	65SRD	186	330	19,660,158	32,400,124	2,052,197	1.46%	<b>3.37%</b>
8	87SRD	503	843	53,274,220	83,272,281	4,997,688	1.25%	<b>3.16%</b>
9	98SRD	284	491	30,062,079	46,968,387	3,492,761	1.41%	<b>3.11%</b>
10	74SRD	396	679	41,824,675	65,175,023	4,400,435	1.15%	<b>2.83%</b>

**Poultry Maps: Counties**

**Poultry Output (\$)**

County	Poultry \$
Lawrence	14,824,599
Clinton	13,705,024
Richland	9,422,188
Livingston	6,112,816
Crawford	5,733,745
Woodford	3,937,733
McLean	2,810,519
Adams	2,534,032
Whiteside	2,527,667
Lee	2,445,144



**Poultry % of County Income**

County	Poultry %
Lawrence	4.31%
Richland	2.65%
Clinton	1.81%
Crawford	1.50%
Hardin	0.96%
Livingston	0.69%
Wayne	0.56%
Woodford	0.49%
Pulaski	0.48%
Pike	0.40%



**Poultry Tables: Counties**

<b>Poultry</b>	<b>County</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>Income</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	Lawrence	119	149	12,551,965	<b>14,824,599</b>	614,746	1.99%	4.31%
2	Clinton	101	159	10,665,330	<b>13,705,024</b>	929,984	0.92%	1.81%
3	Richland	72	105	7,663,373	<b>9,422,188</b>	543,524	0.90%	2.65%
4	Livingston	47	67	4,975,134	<b>6,112,816</b>	325,152	0.32%	0.69%
5	Crawford	47	57	4,923,208	<b>5,733,745</b>	290,425	0.53%	1.50%
6	Woodford	28	49	2,916,773	<b>3,937,733</b>	287,952	0.35%	0.49%
7	Mc Lean	19	31	2,052,544	<b>2,810,519</b>	172,783	0.03%	0.08%
8	Adams	18	28	1,944,516	<b>2,534,032</b>	172,594	0.07%	0.17%
9	Whiteside	20	27	2,112,728	<b>2,527,667</b>	137,700	0.08%	0.19%
10	Lee	19	25	2,052,544	<b>2,445,144</b>	125,120	0.13%	0.35%

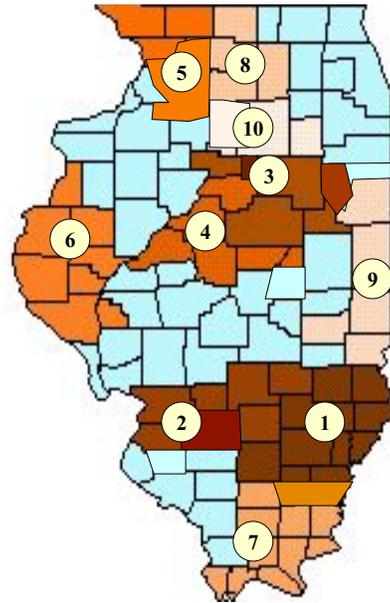
  

<b>Poultry</b>	<b>County</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>%</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	Lawrence	119	149	12,551,965	14,824,599	614,746	1.99%	<b>4.31%</b>
2	Richland	72	105	7,663,373	9,422,188	543,524	0.90%	<b>2.65%</b>
3	Clinton	101	159	10,665,330	13,705,024	929,984	0.92%	<b>1.81%</b>
4	Crawford	47	57	4,923,208	5,733,745	290,425	0.53%	<b>1.50%</b>
5	Hardin	6	8	648,172	748,061	107,586	0.32%	<b>0.96%</b>
6	Livingston	47	67	4,975,134	6,112,816	325,152	0.32%	<b>0.69%</b>
7	Wayne	14	20	1,452,839	1,830,212	127,133	0.22%	<b>0.56%</b>
8	Woodford	28	49	2,916,773	3,937,733	287,952	0.35%	<b>0.49%</b>
9	Pulaski	4	7	432,114	546,263	40,759	0.21%	<b>0.48%</b>
10	Pike	9	13	972,258	1,210,278	80,061	0.15%	<b>0.40%</b>

**Poultry Maps: Senatorial Districts**

**Senatorial District Poultry Income (\$)**

	SSD	Output
1	54	59,960,732
2	55	15,040,128
3	44	8,954,765
4	45	8,338,378
5	37	6,887,872
6	48	5,032,683
7	59	3,847,242
8	35	2,950,685
9	53	2,406,505
10	38	1,966,694



***Poultry % of Senatorial District***

	SSD	% Income
1	54	1.02%
2	55	0.66%
3	44	0.20%
4	37	0.16%
5	43	0.14%
6	48	0.13%
7	45	0.12%
8	59	0.11%
9	42	0.08%
10	33	0.07%



**Poultry Tables: Senatorial Districts**

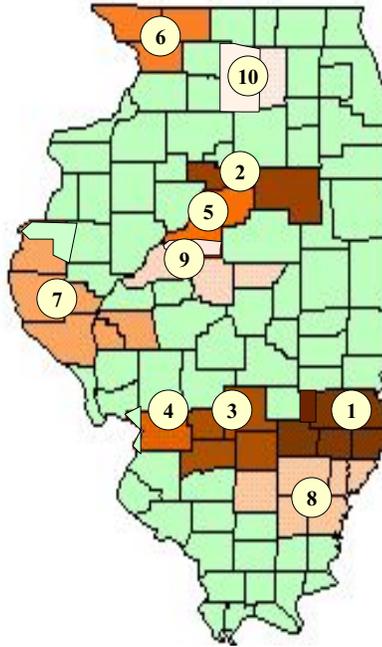
<b>Poultry Income Rank</b>	<b>District</b>	<b>Employment Direct</b>	<b>Employment Total</b>	<b>Output Direct (\$)</b>	<b>Output Total (\$)</b>	<b>Tax (\$)</b>	<b>Employment %</b>	<b>PI</b>
1	54SSD	473	627	49,934,313	<b>59,960,732</b>	3,021,188	0.36%	1.02%
2	55SSD	111	173	11,745,617	<b>15,040,128</b>	1,022,952	0.29%	0.66%
3	44SSD	67	98	7,159,892	<b>8,954,765</b>	488,156	0.09%	0.20%
4	45SSD	59	100	6,282,757	<b>8,338,378</b>	549,824	0.06%	0.12%
5	37SSD	53	74	5,620,557	<b>6,887,872</b>	397,882	0.07%	0.16%
6	48SSD	37	56	3,942,822	<b>5,032,683</b>	337,321	0.05%	0.13%
7	59SSD	30	44	3,180,024	<b>3,847,242</b>	328,707	0.05%	0.11%
8	35SSD	22	31	2,322,616	<b>2,950,685</b>	168,487	0.02%	0.06%
9	53SSD	18	26	1,927,364	<b>2,406,505</b>	145,188	0.02%	0.06%
10	38SSD	14	23	1,512,402	<b>1,966,694</b>	133,854	0.03%	0.05%

<b>Poultry % Rank</b>	<b>District</b>	<b>Employment Direct</b>	<b>Employment Total</b>	<b>Output Direct (\$)</b>	<b>Output Total (\$)</b>	<b>Tax (\$)</b>	<b>Employment %</b>	<b>PI</b>
1	54SSD	473	627	49,934,313	59,960,732	3,021,188	0.36%	<b>1.02%</b>
2	55SSD	111	173	11,745,617	15,040,128	1,022,952	0.29%	<b>0.66%</b>
3	44SSD	67	98	7,159,892	8,954,765	488,156	0.09%	<b>0.20%</b>
4	37SSD	53	74	5,620,557	6,887,872	397,882	0.07%	<b>0.16%</b>
5	43SSD	13	22	1,398,971	1,865,595	119,946	0.07%	<b>0.14%</b>
6	48SSD	37	56	3,942,822	5,032,683	337,321	0.05%	<b>0.13%</b>
7	45SSD	59	100	6,282,757	8,338,378	549,824	0.06%	<b>0.12%</b>
8	59SSD	30	44	3,180,024	3,847,242	328,707	0.05%	<b>0.11%</b>
9	42SSD	8	10	864,229	1,022,120	51,066	0.05%	<b>0.08%</b>
10	33SSD	5	7	486,129	652,814	40,481	0.03%	<b>0.07%</b>

**Poultry Maps: Representative Districts**

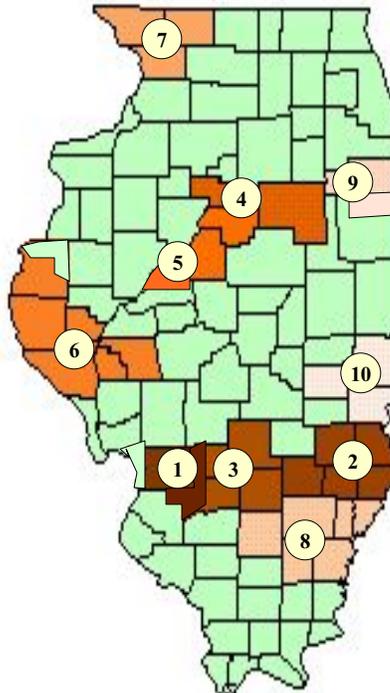
**Representative District Poultry Income (\$)**

	District	Output
1	108SRD	30,014,227
2	87SRD	8,349,287
3	109SRD	8,187,616
4	110SRD	6,852,512
5	89SRD	4,849,950
6	74SRD	4,123,072
7	96SRD	3,744,310
8	107SRD	3,039,708
9	90SRD	3,010,640
10	70SRD	2,950,685



***Poultry % of Representative District***

	District	% Income
1	110SRD	1.81%
2	108SRD	1.54%
3	109SRD	0.43%
4	87SRD	0.32%
5	89SRD	0.21%
6	96SRD	0.19%
7	74SRD	0.18%
8	107SRD	0.16%
9	85SRD	0.14%
10	106SRD	0.11%



**Poultry Tables: Representative Districts**

<b>Poultry</b>	<b>District</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>Income</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	108SRD	239	312	25,163,915	<b>30,014,227</b>	1,451,017	0.54%	1.54%
2	87SRD	63	91	6,709,077	<b>8,349,287</b>	452,719	0.14%	0.32%
3	109SRD	61	94	6,412,952	<b>8,187,616</b>	557,960	0.18%	0.43%
4	110SRD	51	80	5,332,665	<b>6,852,512</b>	464,992	0.92%	1.81%
5	89SRD	35	60	3,627,507	<b>4,849,950</b>	340,102	0.12%	0.21%
6	74SRD	32	45	3,397,917	<b>4,123,072</b>	243,787	0.08%	0.18%
7	96SRD	27	41	2,916,774	<b>3,744,310</b>	252,655	0.07%	0.19%
8	107SRD	23	33	2,439,461	<b>3,039,708</b>	216,978	0.06%	0.16%
9	90SRD	21	34	2,306,318	<b>3,010,640</b>	180,349	0.03%	0.07%
10	70SRD	22	31	2,322,616	<b>2,950,685</b>	168,487	0.03%	0.08%

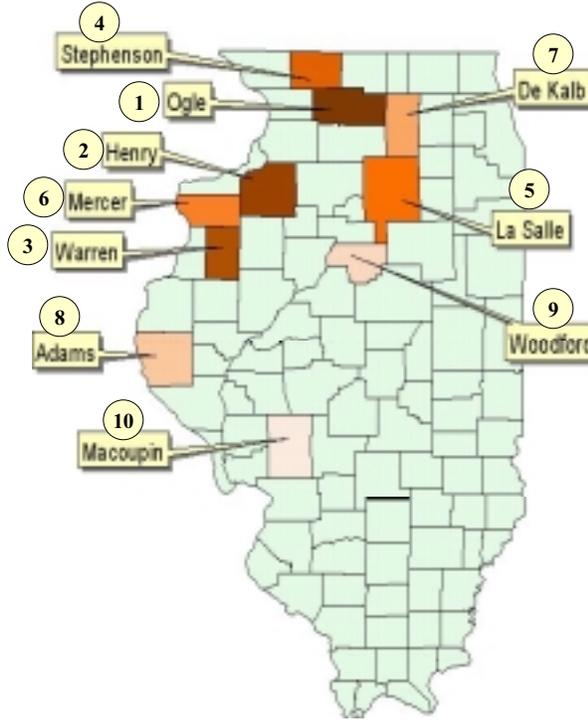
  

<b>Poultry</b>	<b>District</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>%</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	110SRD	51	80	5,332,665	6,852,512	464,992	0.92%	<b>1.81%</b>
2	108SRD	239	312	25,163,915	30,014,227	1,451,017	0.54%	<b>1.54%</b>
3	109SRD	61	94	6,412,952	8,187,616	557,960	0.18%	<b>0.43%</b>
4	87SRD	63	91	6,709,077	8,349,287	452,719	0.14%	<b>0.32%</b>
5	89SRD	35	60	3,627,507	4,849,950	340,102	0.12%	<b>0.21%</b>
6	96SRD	27	41	2,916,774	3,744,310	252,655	0.07%	<b>0.19%</b>
7	74SRD	32	45	3,397,917	4,123,072	243,787	0.08%	<b>0.18%</b>
8	107SRD	23	33	2,439,461	3,039,708	216,978	0.06%	<b>0.16%</b>
9	85SRD	13	22	1,398,971	1,865,595	119,946	0.07%	<b>0.14%</b>
10	106SRD	13	19	1,392,622	1,732,069	106,281	0.05%	<b>0.11%</b>

Lamb/Wool Maps: Counties

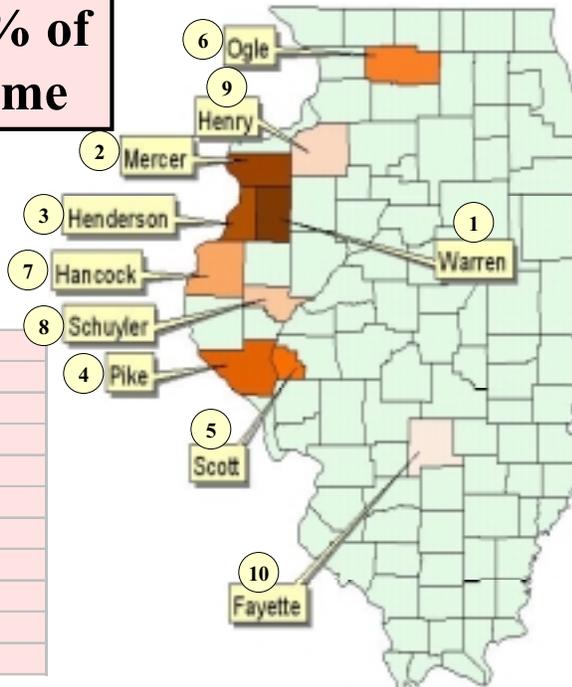
**Lamb/Wool Output (\$)**

County	Sheep (\$)
Ogle	504,691
Henry	419,883
Warren	354,571
Stephenson	335,729
La Salle	309,049
Mercer	305,499
De Kalb	279,578
Adams	261,884
Woodford	233,418
Macoupin	214,531



**Lamb/Wool % of County Income**

County	Sheep %
Warren	0.10%
Mercer	0.08%
Henderson	0.07%
Pike	0.06%
Scott	0.05%
Ogle	0.05%
Hancock	0.05%
Schuyler	0.04%
Henry	0.04%
Fayette	0.04%



**Lamb/Wool Tables: Counties**

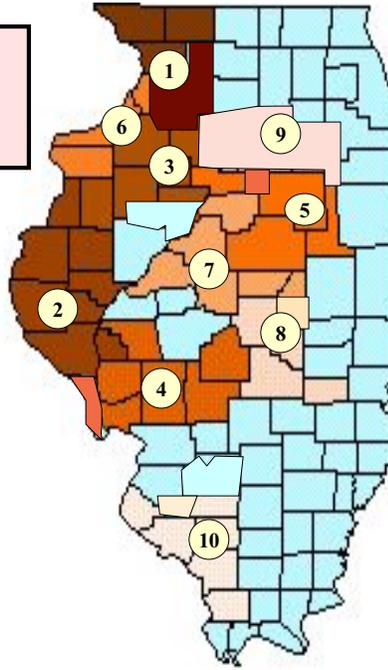
<b>Lamb/Wool</b>	<b>County</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>Income</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	Ogle	11	13	390,817	<b>504,691</b>	39,672	0.05%	0.05%
2	Henry	8	11	272,843	<b>419,883</b>	36,868	0.05%	0.04%
3	Warren	8	9	292,470	<b>354,571</b>	27,456	0.10%	0.10%
4	Stephenson	6	8	226,598	<b>335,729</b>	28,033	0.03%	0.03%
5	La Salle	6	8	197,516	<b>309,049</b>	28,729	0.01%	0.01%
6	Mercer	6	8	214,369	<b>305,499</b>	26,996	0.12%	0.08%
7	De Kalb	6	7	201,317	<b>279,578</b>	20,651	0.02%	0.01%
8	Adams	5	7	177,683	<b>261,884</b>	25,556	0.02%	0.02%
9	Woodford	4	5	156,718	<b>233,418</b>	21,535	0.04%	0.03%
10	Macoupin	4	5	145,825	<b>214,531</b>	21,265	0.03%	0.02%

<b>Lamb/Wool</b>	<b>County</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>%</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	Warren	8	9	292,470	354,571	27,456	0.10%	<b>0.10%</b>
2	Mercer	6	8	214,369	305,499	26,996	0.12%	<b>0.08%</b>
3	Henderson	2	3	83,035	113,922	8,217	0.09%	<b>0.07%</b>
4	Pike	4	5	126,196	191,374	18,294	0.06%	<b>0.06%</b>
5	Scott	1	1	31,960	44,749	3,865	0.03%	<b>0.05%</b>
6	Ogle	11	13	390,817	504,691	39,672	0.05%	<b>0.05%</b>
7	Hancock	4	5	135,445	193,924	16,139	0.05%	<b>0.05%</b>
8	Schuyler	1	1	39,051	51,216	5,128	0.03%	<b>0.04%</b>
9	Henry	8	11	272,843	419,883	36,868	0.05%	<b>0.04%</b>
10	Fayette	3	4	96,498	136,122	14,296	0.04%	<b>0.04%</b>

### Lamb/Wool Maps: Senatorial Districts

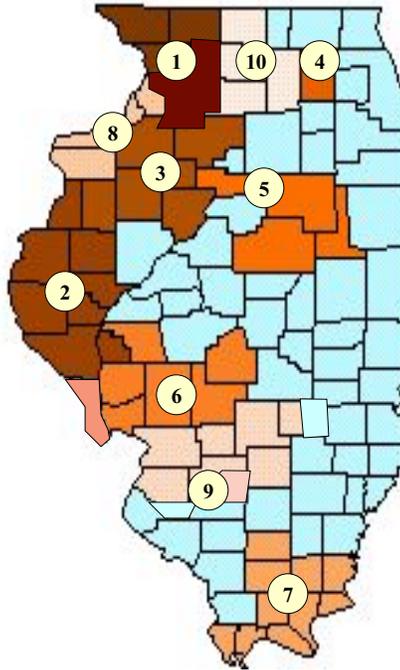
#### Senatorial District Lamb/Wool Income (\$)

	SSD	Output
1	37	1,230,085
2	48	1,106,809
3	47	853,258
4	49	559,938
5	44	535,327
6	36	519,860
7	45	496,378
8	51	286,252
9	38	270,811
10	58	241,998



#### *Lamb/Wool % of Senatorial District*

	SSD	% Income
1	37	0.03%
2	48	0.03%
3	47	0.02%
4	33	0.01%
5	44	0.01%
6	49	0.01%
7	59	0.01%
8	36	0.01%
9	55	0.01%
10	35	0.01%



**Lamb/Wool Tables: Senatorial Districts**

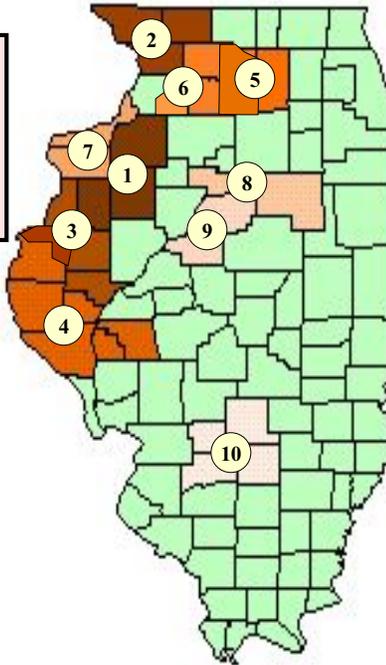
<b>Lamb/Wool Income Rank</b>	<b>District</b>	<b>Employment Direct</b>	<b>Employment Total</b>	<b>Output Direct (\$)</b>	<b>Output Total (\$)</b>	<b>Tax (\$)</b>	<b>Employment</b>	<b>PI</b>
1	37SSD	24	32	856,645	<b>1,230,085</b>	104,457	0.03%	0.03%
2	48SSD	23	29	769,551	<b>1,106,809</b>	98,660	0.03%	0.03%
3	47SSD	18	22	624,576	<b>853,258</b>	71,831	0.02%	0.02%
4	49SSD	11	13	390,341	<b>559,938</b>	51,486	0.01%	0.01%
5	44SSD	12	16	362,165	<b>535,327</b>	41,573	0.01%	0.01%
6	36SSD	11	14	365,445	<b>519,860</b>	46,503	0.01%	0.01%
7	45SSD	11	14	336,823	<b>496,378</b>	41,905	0.01%	0.01%
8	51SSD	8	9	204,445	<b>286,252</b>	24,271	0.01%	0.01%
9	38SSD	6	8	181,743	<b>270,811</b>	25,549	0.01%	0.01%
10	58SSD	6	7	173,254	<b>241,998</b>	24,973	0.01%	0.01%

<b>Lamb/Wool % Rank</b>	<b>District</b>	<b>Employment Direct</b>	<b>Employment Total</b>	<b>Output Direct (\$)</b>	<b>Output Total (\$)</b>	<b>Tax (\$)</b>	<b>Employment</b>	<b>PI</b>
1	37SSD	24	32	856,645	1,230,085	104,457	0.03%	<b>0.03%</b>
2	48SSD	23	29	769,551	1,106,809	98,660	0.03%	<b>0.03%</b>
3	47SSD	18	22	624,576	853,258	71,831	0.02%	<b>0.02%</b>
4	33SSD	3	4	100,659	139,789	10,326	0.02%	<b>0.01%</b>
5	44SSD	12	16	362,165	535,327	41,573	0.01%	<b>0.01%</b>
6	49SSD	11	13	390,341	559,938	51,486	0.01%	<b>0.01%</b>
7	59SSD	1	1	26,206	35,465	5,455	0.01%	<b>0.01%</b>
8	36SSD	11	14	365,445	519,860	46,503	0.01%	<b>0.01%</b>
9	55SSD	6	7	165,950	237,869	24,187	0.01%	<b>0.01%</b>
10	35SSD	1	1	44,189	56,090	4,311	0.01%	<b>0.01%</b>

### Lamb/Wool Maps: Representative Districts

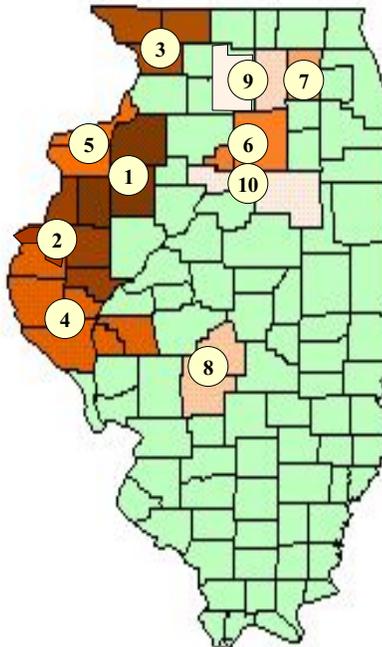
**Representative District  
Lamb/Wool Income (\$)**

	District	Output
1	94SRD	766,338
2	74SRD	660,100
3	95SRD	556,589
4	96SRD	550,220
5	70SRD	447,562
6	73SRD	368,595
7	72SRD	356,013
8	87SRD	332,720
9	89SRD	272,293
10	109SRD	224,141



***Lamb/Wool % of  
Representative  
District***

	District	% Income
1	94SRD	0.03%
2	95SRD	0.03%
3	74SRD	0.03%
4	96SRD	0.03%
5	72SRD	0.02%
6	76SRD	0.02%
7	65SRD	0.01%
8	98SRD	0.01%
9	70SRD	0.01%
10	87SRD	0.01%



**Lamb/Wool Tables: Representative Districts**

<b>Lamb/Wool</b>	<b>District</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>Income</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	94SRD	16	20	564,260	<b>766,338</b>	64,035	0.03%	0.03%
2	74SRD	13	18	449,056	<b>660,100</b>	56,959	0.03%	0.03%
3	95SRD	12	14	397,950	<b>556,589</b>	46,740	0.02%	0.03%
4	96SRD	11	15	371,602	<b>550,220</b>	51,920	0.03%	0.03%
5	70SRD	10	11	337,327	<b>447,562</b>	34,883	0.01%	0.01%
6	73SRD	7	9	248,678	<b>368,595</b>	32,654	0.01%	0.01%
7	72SRD	7	9	250,543	<b>356,013</b>	32,560	0.01%	0.02%
8	87SRD	8	11	230,925	<b>332,720</b>	23,797	0.02%	0.01%
9	89SRD	5	7	184,054	<b>272,293</b>	24,690	0.01%	0.01%
10	109SRD	6	7	156,817	<b>224,141</b>	22,905	0.01%	0.01%

<b>Lamb/Wool</b>	<b>District</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>%</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	94SRD	16	20	564,260	766,338	64,035	0.03%	<b>0.03%</b>
2	95SRD	12	14	397,950	556,589	46,740	0.02%	<b>0.03%</b>
3	74SRD	13	18	449,056	660,100	56,959	0.03%	<b>0.03%</b>
4	96SRD	11	15	371,602	550,220	51,920	0.03%	<b>0.03%</b>
5	72SRD	7	9	250,543	356,013	32,560	0.01%	<b>0.02%</b>
6	76SRD	4	5	112,067	169,302	16,389	0.02%	<b>0.02%</b>
7	65SRD	3	4	100,659	139,789	10,326	0.02%	<b>0.01%</b>
8	98SRD	4	5	147,058	210,146	19,509	0.01%	<b>0.01%</b>
9	70SRD	10	11	337,327	447,562	34,883	0.01%	<b>0.01%</b>
10	87SRD	8	11	230,925	332,720	23,797	0.02%	<b>0.01%</b>

### Nontraditionally Commercial (NTC) Maps: Counties

#### NTC Output (\$)

County	Misc \$
Mc Henry	4,502,417
Sangamon	1,854,414
Ogle	1,110,354
Livingston	794,939
Adams	694,743
Douglas	650,907
Winnebago	568,622
Henry	542,954
Kankakee	474,999
Peoria	400,974



#### NTC of County Income

County	Misc %
Scott	0.25
Douglas	0.15
Pope	0.14
Moultrie	0.13
Calhoun	0.10
Ogle	0.10
Clark	0.10
Livingston	0.09
Brown	0.08
Massac	0.08



**Nontraditionally Commercial (NTC) Tables: Counties**

<b>NTC</b>	<b>County</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>Income</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	Mc Henry	94	110	3,351,835	<b>4,502,417</b>	415,318	0.10%	0.06%
2	Sangamon	38	45	1,350,362	<b>1,854,414</b>	155,108	0.03%	0.04%
3	Ogle	21	26	770,670	<b>1,110,354</b>	81,547	0.10%	0.10%
4	Livingston	18	21	626,928	<b>794,939</b>	54,638	0.10%	0.09%
5	Adams	14	17	506,934	<b>694,743</b>	63,029	0.04%	0.05%
6	Douglas	14	17	490,316	<b>650,907</b>	54,314	0.15%	0.16%
7	Winnebago	12	14	418,987	<b>568,622</b>	49,100	0.01%	0.01%
8	Henry	11	13	402,951	<b>542,954</b>	46,154	0.06%	0.05%
9	Kankakee	10	12	350,000	<b>474,999</b>	38,101	0.02%	0.02%
10	Peoria	8	9	298,898	<b>400,974</b>	41,563	0.01%	0.01%

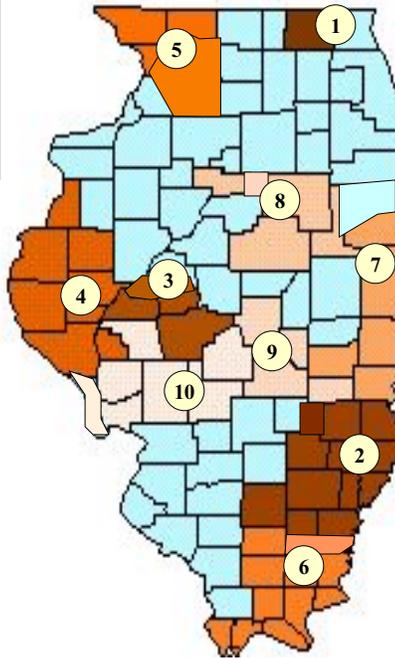
  

<b>NTC</b>	<b>County</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>%</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	Scott	5	6	189,872	232,805	19,263	0.18%	<b>0.25%</b>
2	Douglas	14	17	490,316	650,907	54,314	0.15%	<b>0.16%</b>
3	Pope	2	2	83,470	94,504	19,663	0.10%	<b>0.14%</b>
4	Moultrie	9	10	303,933	375,337	28,737	0.15%	<b>0.13%</b>
5	Calhoun	2	2	83,450	101,511	15,691	0.08%	<b>0.10%</b>
6	Ogle	21	26	770,670	1,110,354	81,547	0.10%	<b>0.10%</b>
7	Clark	7	8	248,490	308,923	25,754	0.09%	<b>0.10%</b>
8	Livingston	18	21	626,928	794,939	54,638	0.10%	<b>0.09%</b>
9	Brown	2	2	68,467	82,582	8,085	0.05%	<b>0.08%</b>
10	Massac	5	6	190,658	231,124	25,095	0.08%	<b>0.08%</b>

### Nontraditionally Commercial (NTC) Maps: Senatorial Districts

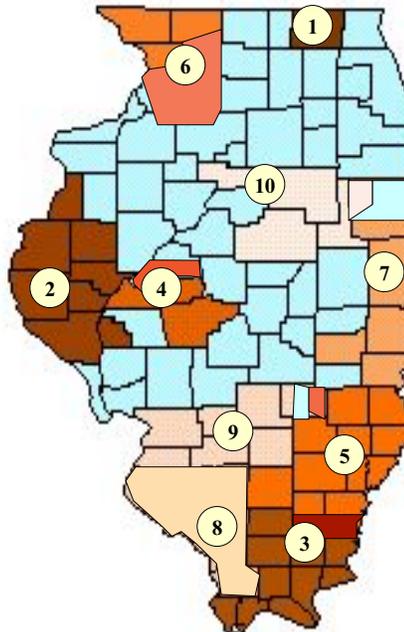
#### Senatorial District NTC Income (\$)

	SSD	Output
1	32	4,502,417
2	54	2,197,992
3	50	2,022,476
4	48	1,650,052
5	37	1,428,943
6	59	1,404,916
7	53	1,255,942
8	44	1,254,780
9	51	1,206,304
10	49	1,047,359



#### NTC % of Senatorial District

	SSD	% Income
1	32	0.06%
2	48	0.04%
3	59	0.04%
4	50	0.04%
5	54	0.04%
6	37	0.03%
7	53	0.03%
8	58	0.03%
9	55	0.03%
10	44	0.03%



**Nontraditionally Commercial (NTC) Tables: Senatorial Districts**

<b>NTC</b>	<b>District</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>Income</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	32SSD	94	110	3,351,835	<b>4,502,417</b>	415,318	0.10%	0.06%
2	54SSD	50	58	1,724,439	<b>2,197,992</b>	199,621	0.03%	0.04%
3	50SSD	42	50	1,482,525	<b>2,022,476</b>	168,462	0.03%	0.04%
4	48SSD	34	40	1,271,016	<b>1,650,052</b>	144,167	0.04%	0.04%
5	37SSD	29	35	1,061,634	<b>1,428,943</b>	113,686	0.03%	0.03%
6	59SSD	31	37	1,114,861	<b>1,404,916</b>	200,047	0.04%	0.04%
7	53SSD	27	32	973,233	<b>1,255,942</b>	102,029	0.03%	0.03%
8	44SSD	28	32	969,967	<b>1,254,780</b>	89,968	0.03%	0.03%
9	51SSD	28	31	960,833	<b>1,206,304</b>	98,647	0.03%	0.03%
10	49SSD	23	26	818,041	<b>1,047,359</b>	98,738	0.02%	0.02%

<b>NTC</b>	<b>District</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>%</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	32SSD	94	110	3,351,835	4,502,417	415,318	0.10%	<b>0.06%</b>
2	48SSD	34	40	1,271,016	1,650,052	144,167	0.04%	<b>0.04%</b>
3	59SSD	31	37	1,114,861	1,404,916	200,047	0.04%	<b>0.04%</b>
4	50SSD	42	50	1,482,525	2,022,476	168,462	0.03%	<b>0.04%</b>
5	54SSD	50	58	1,724,439	2,197,992	199,621	0.03%	<b>0.04%</b>
6	37SSD	29	35	1,061,634	1,428,943	113,686	0.03%	<b>0.03%</b>
7	53SSD	27	32	973,233	1,255,942	102,029	0.03%	<b>0.03%</b>
8	58SSD	22	25	761,649	954,274	95,563	0.03%	<b>0.03%</b>
9	55SSD	15	17	534,196	683,790	65,604	0.03%	<b>0.03%</b>
10	44SSD	28	32	969,967	1,254,780	89,968	0.03%	<b>0.03%</b>

### Nontraditionally Commercial (NTC) Maps: Representative Districts

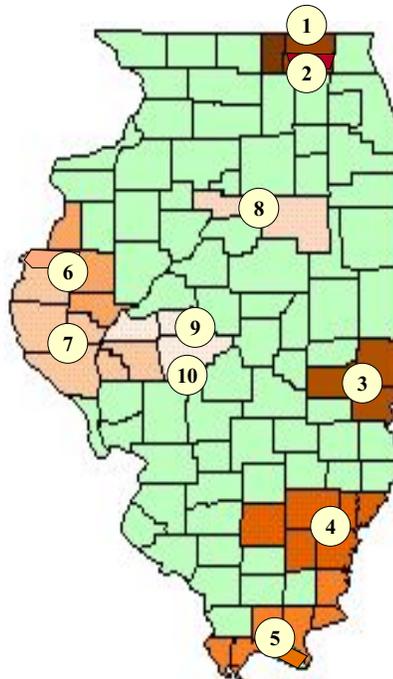
**NTC  
Income (\$)**

	District	Output
1	63SRD	2,251,209
2	64SRD	2,251,209
3	99SRD	1,095,269
4	87SRD	1,068,091
5	100SRD	927,207
6	106SRD	926,664
7	107SRD	871,867
8	96SRD	858,965
9	118SRD	856,846
10	70SRD	806,862



**NTC % of  
Representative  
District**

	District	% Income
1	63SRD	0.06%
2	64SRD	0.06%
3	106SRD	0.06%
4	107SRD	0.04%
5	118SRD	0.04%
6	95SRD	0.04%
7	96SRD	0.04%
8	87SRD	0.04%
9	99SRD	0.04%
10	100SRD	0.04%



**Nontraditionally Commercial (NTC) Tables: Representative Districts**

<b>NTC</b>	<b>District</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>Income</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	63SRD	47	55	1,675,918	<b>2,251,209</b>	207,659	0.10%	0.06%
2	64SRD	47	55	1,675,918	<b>2,251,209</b>	207,659	0.10%	0.06%
3	99SRD	23	27	807,344	<b>1,095,269</b>	90,908	0.04%	0.04%
4	87SRD	24	28	833,220	<b>1,068,091</b>	74,351	0.04%	0.04%
5	100SRD	19	23	675,181	<b>927,207</b>	77,554	0.03%	0.04%
6	106SRD	21	25	724,838	<b>926,664</b>	75,865	0.06%	0.06%
7	107SRD	19	23	682,459	<b>871,867</b>	81,796	0.04%	0.04%
8	96SRD	17	20	635,772	<b>858,965</b>	77,388	0.04%	0.04%
9	118SRD	20	23	694,732	<b>856,846</b>	132,924	0.05%	0.04%
10	70SRD	16	19	575,217	<b>806,862</b>	60,783	0.02%	0.02%

<b>NTC</b>	<b>District</b>	<b>Employment</b>	<b>Employment</b>	<b>Output</b>	<b>Output</b>	<b>Tax</b>	<b>Employment</b>	<b>PI</b>
<b>%</b>		<b>Direct</b>	<b>Total</b>	<b>Direct</b>	<b>Total</b>			
<b>Rank</b>				<b>(\$)</b>	<b>(\$)</b>	<b>(\$)</b>		
1	63SRD	47	55	1,675,918	2,251,209	207,659	0.10%	<b>0.06%</b>
2	64SRD	47	55	1,675,918	2,251,209	207,659	0.10%	<b>0.06%</b>
3	106SRD	21	25	724,838	926,664	75,865	0.06%	<b>0.06%</b>
4	107SRD	19	23	682,459	871,867	81,796	0.04%	<b>0.04%</b>
5	118SRD	20	23	694,732	856,846	132,924	0.05%	<b>0.04%</b>
6	95SRD	17	20	635,245	791,088	66,779	0.03%	<b>0.04%</b>
7	96SRD	17	20	635,772	858,965	77,388	0.04%	<b>0.04%</b>
8	87SRD	24	28	833,220	1,068,091	74,351	0.04%	<b>0.04%</b>
9	99SRD	23	27	807,344	1,095,269	90,908	0.04%	<b>0.04%</b>
10	100SRD	19	23	675,181	927,207	77,554	0.03%	<b>0.04%</b>