**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

| | | |
|---|---|---|
| IN THE MATTER OF: | ) | |
| | ) | |
| CONCENTRATED ANIMAL FEEDING | ) | R-2012-023 |
| OPERATIONS (CAFOS): PROPOSED | ) | |
| AMENDMENTS TO 35 ILL. ADM. CODE | ) | |
| 501, 502 AND 504 | ) | |

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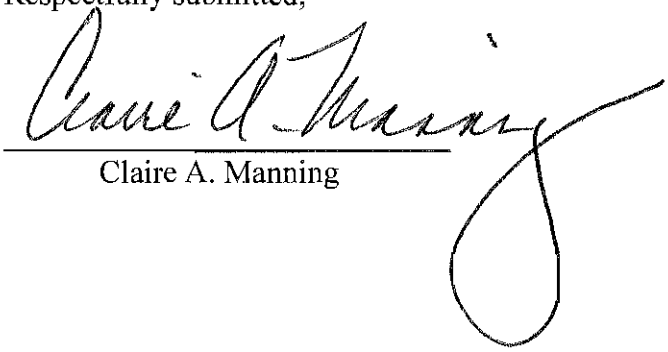
PLEASE TAKE NOTICE that I have electronically filed on November 7, 2012, with the Illinois Pollution Control Board, the pre-filed testimony of Peter Goldsmith, Ph.D. and David Trainor, P.E., P.G., copies of which are also herewith sent to the attached service list via CD.

Dated: November 7, 2012

Respectfully submitted,

By: 

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**PROOF OF SERVICE**

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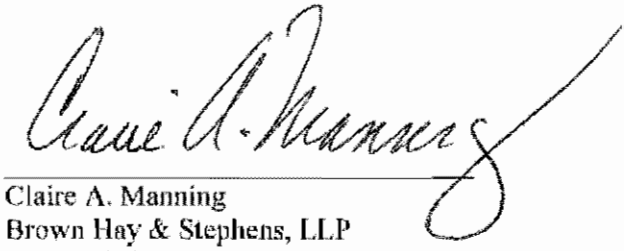
By: 

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**PRE-FILED TESTIMONY OF PETER GOLDSMITH, Ph.D.**

My name is Peter Goldsmith. I am an Associate Professor and Interim Director of the Food and Agribusiness Management Program ("FAM") at the College of Agricultural and Consumer Economics ("ACES"), University of Illinois, Urbana-Champaign. I am also Executive Editor of the International Food and Agribusiness Management Review (IFAMR), a publication of the International Food and Agribusiness Association.

I have a B.A. in Political Science from Kenyon College (1981), a B.S. in Dairy Science from Ohio State University (1983), an M.B.A. in Finance from Xavier University (1990), an M.A. in Economics from Ohio State University (1993) and a Ph.D. in Agricultural Economics, also from Ohio State University (1995). I have authored or co-authored various publications related to agricultural economics and have conducted related research.

I have been asked by the Illinois Agricultural Coalition to provide expert testimony to the Illinois Pollution Control Board as it relates to the economic value and importance of the Illinois livestock industry. I am particularly equipped to do so as this is one of my major topics of research and publication. See Attachment A, *The Economic Impact of Illinois' Livestock Industry*, December 2011, Peter Goldsmith and Miao Wang. Also see Attachment B, County-By-County Economic Analysis, 2009.

The Illinois livestock, meat and dairy processing sectors, which sectors are the subject of the underlying CAFO rulemaking, significantly contribute to the state's economy in three important ways:

- Significant economic activity in the form of output, jobs and taxes;
- Real growth for an overall declining Illinois economy;
- Important local impacts in key county and legislative regions.

This contribution becomes increasingly important when other sectors in the economy have shed jobs and declined in recent years.

Livestock contributes $3.5 billion of total impact and over 25,000 jobs to the Illinois economy. When combined with meat and dairy processing the entire complex produces $27

billion of total impact, or 5% of the state's economy, and 99,000 jobs, or 1.4% of the State's jobs.

The livestock industry continues to serve as an economic engine in both rural and urban areas of the state. Unfortunately, over the last thirty years there has been a steady decline in Illinois's livestock industry; relative to the rest of the country, in the industry in nominal terms, and relative to the rest of the State's economy. The State's industrial base has tended to focus on activities other than livestock and, within agriculture, the change in the industry has been greater specialization to crop production (corn and soybeans).

The trend since 2000 shows modest growth in the real value of products sold. In Illinois, pork and poultry lead with positive real growth, while dairy remains nominally flat and declined in real terms, and beef and sheep and lamb marketings decline both nominally and in real terms.

Yet, per capita meat consumption continues to expand worldwide as well as in the United States. Since mid-1990 to 2010, meat consumption world-wide increased 15%, with 80 lb/year of consumption in 1996 and 92 lb/year in 2010 respectively, or about 1.1% per year. (FAO Food Outlook 1997 & 2010). Since 1990, the U.S. consumption expanded 10%, from 180 lb/person in 1990 to 198 lb/person in 2008, or about 0.6% per year. (USDA, Economic Research Service 2010). U.S. consumers eat on average 1.9 times as much meat per capita as the rest of the world, though the gap has fallen from 2.2 to 1.9 in the last five years (FAO) Food Outlook 2010). Demand for meat and dairy products continues to expand rapidly among developing countries, while more slowly in the United States.

As a result, the livestock and meat and dairy sectors in the U.S. in general, and in Illinois in particular face several key strategic questions:

1. How to maintain profitability while servicing a mature domestic market;
2. How to leverage the industry's tremendous knowledge and asset base to service growing overseas markets; and
3. How to defend domestic markets simultaneously from both low cost and high quality imports.

The goal of this testimony is to provide the Pollution Control Board with an economic snapshot of the current state of the industry. My report, cited above, provides detailed analyses of the overall state of the State's meat and dairy complex, highlights of leading counties and leading legislative districts. Citizens, elected officials and industry members can see how and where the meat and dairy complex generates economic impact.

While the impact numbers are important to document, also critical is to understand the complementarity between livestock production and meat and dairy processing. Agglomeration economies are so important in industries dominated by low valued goods where transportation is costly. My research documents the extensive integration of Illinois livestock production with

Illinois processors. The domestic supply of livestock provides processors with a substantial base (25%) of supply. Without this base, processors would be less incented to remain in the state. Transportation costs for Illinois producers would rise, making it difficult to compete, if processors were to leave. Therefore good industrial policy is good livestock policy. Maintaining a strong processor base in the state (nearby) give Illinois farmers local markets for their products and competitive advantage compared with more distant producers. Processors too benefit from a large supply that may also be low cost due to minimal transportation.

Alternatively, good livestock siting policy is good industrial policy. That is local processors benefit if farmers are able to locate or expand in the state. Costs rise not only because of transport but also because of greater competition with other buyers when processors need to look further and further away for supply to keep their plants running. Therefore processors in the state have a stake in the success and viability of the State's livestock sector.

Working together on a favorable business environment in Illinois that is beneficial to both livestock production and meat and dairy processing would be invaluable to ensuring the future of this important agro-industrial complex.

Thus, when the Illinois Environmental Protection Agency and the Illinois Pollution Control Board adopt and implement the federal CAFO rules in Illinois, it is important that you do so with an understanding that each decision you make will have an economic impact. The United States Environmental Protection Agency ("USEPA") already addressed the economic impact of its proposed 2003 rules on the livestock industry as a whole. See *Federal Register*, Vol. 68, No. 29, February 12, 2003, at Section VIII. It is important that state policy makers realize that decisions which require stricter controls in Illinois than that required federally or by neighboring states will have a disproportionate adverse impact on the livestock industry here in Illinois.

November 7, 2012

# The Economic Impact of Illinois's Livestock Industry

## December 2011

By

Peter Goldsmith

and

Miao Wang

Peter Goldsmith is an associate professor of Agribusiness Management and the Director of the Food and Agribusiness Management Program at the University of Illinois. Miao Wang is a doctoral student and research assistant, in the Department of Agricultural and Consumer Economics, at the University of Illinois, Urbana-Champaign.

The authors would like to thank, Mark Schluesner of the Illinois Agricultural Statistics Service, Dwight Robb and Brad Zwilling of the Illinois Farm Business and Farm Management Records Program, and Linda Rhodes and Jim Larkin of the Illinois Department of Agriculture. Any omissions or errors are solely the responsibility of the authors.

This research was funded by the Illinois Livestock Development Group.

 

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## Executive Summary

The goal of this report is to provide the Illinois Livestock industry with an economic snapshot of the current state of the industry. The State's livestock and meat and dairy processing sectors significantly contribute to the state's economy in three important ways: 1) significant economic activity in the form of output, jobs and taxes; 2) real growth for an overall declining Illinois economy; and 3) important local impacts in key county and legislative regions. This contribution becomes increasingly important when other sectors in the economy have shed jobs and declined in recent years.

Livestock contributes $3.5B of total impact and over 25,000 jobs to the State's economy. When combined with meat and dairy processing the entire complex produces $27B of total impact, or 5% of the state's economy, and 99,000 jobs, or 1.4% of the State's jobs. The industry continues to serves as an economic engine in both rural and urban areas of the state. Since 2000, the trend in Illinois livestock output shows modest growth in the real value of products sold. Pork and poultry lead with positive real growth, dairy is nominally flat and declined in real terms, and beef and sheep and lamb marketings decline both nominally and in real terms.

## Section I

# 1 Introduction

Per capita meat consumption continues to expand worldwide as well as in the United States. Since mid-1990 to 2010, meat consumption world-wide increased 15%, with 80 lb/year of consumption in 1996 and 92 lb/year in 2010 respectively, or about 1.1% per year. (FAO Food Outlook 1997 & 2010). Since 1990, the U.S. consumption expanded 10%, from 180 lb/person in 1990 to 198 lb/person in 2008, or about 0.6% per year. (USDA, Economic Research Service 2010). U.S. consumers eat on average 1.9 times as much meat per capita as the rest of the world, though the gap has fallen from 2.2 to 1.9 in the last five years (FAO Food Outlook 2010). Demand for meat and dairy products continues to expand rapidly among developing countries, while more slowly in the United States.

As a result, the livestock and meat and dairy sectors in the U.S. in general, and in Illinois in particular face several key strategic questions: 1) how to maintain profitability while servicing a mature domestic market; 2) how to leverage the industry's tremendous knowledge and asset base to service growing overseas markets, and 3) how to defend domestic markets simultaneously from both low cost and high quality imports.

Meat imports have increased less than 1% per year since 1990, while exports have grown from 1.3 million tons to 7.2 million tons, or 25% a year (FAOStat, 2011). World imports of meat increased 24 million tons since 1990, about 9% per year. Therefore the United States has captured 30% of these new expanded import markets. This demonstrates that while relative currency valuations always play a significant role in trade, the U.S. meat complex continues to be globally very competitive.

Unfortunately over the last thirty years there has been a steady decline in Illinois's livestock industry; relative to the rest of the country, in the industry in nominal terms, and relative to the rest of the State's economy. The State's industrial base has tended to focus on activities other than livestock, and within agriculture, the change in the industry has been greater specialization to crop production (corn and soybeans).

Since 2000, the trend in Illinois livestock industry output though showed modest growth in the real value of products sold. Pork and poultry led with positive real growth, dairy was nominally flat and declined in real terms, and beef and sheep and lamb marketings declined both nominally and in real terms. The industry outpaced the overall Illinois economy, which with higher rates of inflation saw real declines in output since 2000. The State's livestock and meat and dairy processing sectors significantly contribute to the state's economy in three important ways: 1) significant

economic activity in the form of output, jobs and taxes; 2) real growth for an overall declining Illinois economy; and 3) important local impacts in key county and legislative regions.

This report serves as a touchstone for the industry, stakeholders, and policymakers to better understand the economic role of livestock production and meat and dairy processing in Illinois.

The most current data available, and the study period for this report, are from 2009. The report is structured as follows:

Section I contains an abstract, introduction, and overview of the methodology. Discussed is the approach used to assemble the labor and individual species group data.

Section II provides an overview of the livestock industry in Illinois.

Section III contains the economic impact analysis for livestock production and the meat and dairy complex.

Section IV shows the geography of meat processing.

Section V presents road and highway revenue impact

## 2 Methodology

Policy makers, 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 matrical 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 balanced model in that all supply must have an end destination, whether it is 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 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.

### 2.1 IMPLAN Database

To conduct our analysis we selected a software product and database called IMPLAN Pro, version 3.0 (2009). IMPLAN maintains and sells commercial I/O software for the U.S. economy. 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 livestock studies since early 1990s, such as Lawrence and Otto, 1994 (cattle); Morse, 1998 (poultry); Goldsmith and Hedi, 1999 (Livestock); Ferris, 2000 (all of agriculture, including livestock); Goldsmith and Kim, 2001 (Livestock, Meat and Dairy); Goldsmith and Saripally, 2007 (Livestock, Meat and Dairy), and Hansen, Dean, and Spurlock, 2009 (Aquaculture).

IMPLAN is a static model and looks at the economy as a snapshot based on 2009 data. 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 by all industries within a region from a marginal change in output by one industry. Similarly, employment multipliers relate the changes in direct employment to changes in total employment within a specified economy. The following sections describe the data sources used by IMPLAN.

There are four methodological areas that required special attention to complete our analysis; output and impact estimates by species group, labor productivity estimates, direct employment estimates, and tax flows from livestock that support transportation infrastructure.

### 2.1.1 Output

IMPLAN presents agricultural output as gross sales by commodity group by county within the state. The National Agricultural Statistics Service (NASS) annual surveys of cash receipts integrated with and validated by the 2009 and Census of Agriculture figures results in the gross sales figure by species group. The census figures help to generate estimates of missing data as well as to form the county production estimates. IMPLAN covers 509 industries, not all of which may be represented in any one county.

Unfortunately in 2009 IMPLAN increased its level of aggregation of species and reduced the number of categories dedicated to livestock. The previous nine categories were reduced to four. The livestock sectors now are; Cattle Ranching and farming (sector 11), Dairy cattle and milk production (sector 12), Poultry and egg production (sector 13); and Animal production, except cattle and poultry and egg (sector 14). While Ranch Fed Cattle, Range Fed Cattle and Cattle Feedlots comprise sector 11, Dairy is in sector 12, and Poultry is in sector 13. All The other livestock species, including sheep, lambs and goats, hogs, pigs, and swine, wool and mohair and other miscellaneous meat animal products, which includes such industries as aquaculture, bees and honey and horses, are combined in sector 14.

We do not present detail poultry data in this report. In prior years county level data were consistent between IMPLAN and NASS data. This consistency check, along with a third check using Census data, is very important to validate the internal consistency among the counties within a reporting year, and across Livestock Impact reports. This year, poultry data validation failed on both accounts; at the county level for 2009 and with respect to poultry values in previous reports. The county level data reported by IMPLAN for 2009 are only estimates, and bad estimates at that. They do not reflect actual NASS values and often counties were given the same poultry output value. Total values for the state though are accurate.

Part of the challenge for IMPLAN and NASS are the small number problems

associated with the minor commercial species, such as poultry, where there are few flocks. Small numbers at the county level creates disclosure problems as individual farm values may be revealed. NASS does not report egg and turkey sales vales for most counties either because sales are zero or there are too few farms in the county. We do know that there are over $40 million in turkey sales in Illinois. NASS does not report broiler sales numbers at all for the State.

An objective of this study was to look at individual species. Disaggregating the three livestock categories into relevant species groups was a unique problem and the most challenging and time consuming aspect of this report. The three livestock sectors had to be disaggregated in order to conduct the analysis at the species level. To this end, the old production functions for each of the species (the production function used before 2009), obtained from MIG, were used to estimate economic impacts. The older production functions were then matched with 2009 levels of direct output.

A second estimation was required because the impact of the disposable portion (net of taxes and saving) of the labor income was not fully captured. A second impact analysis was conducted on the household sector with the disposable income as the driver for each of the species in all the counties to fully capture the economic impact of the sectors under study. This second step was essential for accurately estimating the tax impacts of the species groups.

The 2009 IMPLAN-based labor productivity estimates were significantly higher than one might expect, for poultry, dairy, and beef, and lower for pork (Appendix A). Previous research has discussed the problem with agricultural data that leads to high estimates of labor productivity. A number of factors explain the deviation. IMPLAN uses significantly higher values for output per worker. Since the output per worker, the denominator is large in the calculation, direct employment or the number of employee falls. As a feedback effect, the lower direct employment number generates a smaller induced effect, and hence a low labor economic impact multiplier.

### 2.1.2 Labor Productivity

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. Data are not available at the national level disaggregated by livestock species group even though employment is an important component of economic activity,. 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 follow, and discuss below, MIG’s advice and construct our own employment

estimates.

Notwithstanding the employment data problems, IMPLAN divides the species group cash receipts by the sum of proprietor and non-proprietor employment to create a ratio of output per employee. These ratios are adjusted based on the changes in output for the inter-census 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.

The Census process assumes each farm has 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 non-proprietor 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.

Therefore either IMPLAN's labor level is too low or the output is 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 Statistics Service's (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.

The IMPLAN labor productivity estimates for beef and dairy were over four times, those derived from the University of Illinois Farm Business Farm Management (FBFM) data of pure livestock farms (Appendix 1). The low labor estimates created output for full time dairy and beef worker in excess of $300,000. Government data estimates output per worker in Illinois poultry sector to be $1.25m per worker. One of the explanations for the discrepancy between the two estimates is that IMPLAN

does not account for the unpaid labor or management. The low estimate for pork producers created an output (revenue) per full time worker in the pork sector at only $100,000. It is hard to explain the governments low productivity estimates for pork production. The IMPLAN/Government estimates for total direct labor in Illinois livestock are 12,134.

We used the output per worker obtained using pure species farms from the FBFM dataset instead of the IMPLAN estimates. The FBFM data represent 5,540 farms in Illinois, are confidential, and are strictly monitored for accuracy. They are a statistically valid sample of the major farm populations in the state (Lattz, 2001). By analyzing the average output per full time equivalent (FTE), as reported in the FBFM dataset, new and more accurate estimates for dairy, beef, and pork operations were generated. The output per FTE for beef, dairy and hog farms are $78,903, $75,344 and $165,634 respectively. The beef number was used as a proxy for "other" types of livestock and the pork estimate was used for "poultry." The "other" and "poultry" types of farms are not represented in the FBFM dataset.

#### 2.1.3 Employment

The output per FTE is considerably higher in 2009 when compared to those in 1997 even when FBFM calculations were utilized. A higher output per FTE implies that there has been a decrease in the number of people employed in the livestock industry. When compared to the data in 1997, while the industry output remained almost the same at $1.9 billion of direct sales, the direct employment has fallen significantly, indicating increases in industry labor productivity.

From the above labor productivity estimates, the results indicated that either IMPLAN's employment estimate is too low or the output was too high. First, as noted above 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. Third,

The IMPLAN estimate seems inaccurate based on simple rules of thumb. According to the IASS, there are 10,218 commercial units alone. Conservatively assuming 1.5 FTEs per commercial farm, there would be 15,237 FTEs in commercial-scale animal agriculture. Plus there are more than 29,000 non-commercial farms. Given that most NTC farms are part-time and using a "rule of thumb" that such farms expend 29 percent of an FTE (weekends), would amount to an estimate of close to an additional 9,000 FTEs. Combining the rough labor estimates for commercial and non-commercial farms provides an estimate of 24,000 FTEs of direct livestock labor in Illinois, which is significantly more than IMPLAN's figure. The true labor number for the state probably lies somewhere between 12,134 (IMPLAN) and 24,000 (rule of thumb). Therefore, for these three reasons, we more formally estimated the direct labor utilization for the Illinois livestock sector using the FBFM estimates of labor

productivity. Those estimates are shown in Section III.

#### 2.1.4 Taxes and Personal Consumption

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

- 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).

#### 2.1.5 Other Important Methodological Notes

1) We use personal income as a measure of the State's economy whenever we need to compare or highlight the amount of economic activity in the state. The reason we choose personal over the more common gross state product is because personal income disaggregates well at the county level. Personal income reflects the earnings of those people who reside in the county. Clearly different from a gross county product, it does provide an accurate measure of economic size at the county level. The gross state product for Illinois in 2009 was $631B while personal income, which we use, was $535B. We answer the important question in this study as to how significant an industry or species group is to a particular geographic unit, such as a county. We would be inconsistent if we used gross state product for discussions at the state level and personal income when discussing counties and political districts. The concept of gross county product is flawed because very little of an industry's trade is in actuality limited to a particular county. Limiting trade at the state level too is flawed for similar reasons, but much less so. Input-output analysis employs regional production coefficients to estimate the geographic flows into and out of an industry. These coefficients are fixed for each industry in the state for a particular commodity. Modelers ensure the balance of inputs and outputs across geographies by assuming fixed coefficients. One direct drawback of our use of personal income over gross county product is that we overestimate the percent that livestock contributes to a local economy, because personal income is always less than the gross product. We feel the tradeoff is worthwhile, because the county level personal income is much more precise

than the estimate of overall economic activity.

2) We estimate total economic impact for the meat and dairy complex using two different methodologies. The essential question for those interested in understanding economic impact is: if industry B, the downstream industry, were to disappear (appear), would industry A, the upstream industry, too disappear (appear). This is a classic question of an industry's impact. For how many upstream jobs, for example, should and industry receive credit? Is the new industry bringing new jobs or would those jobs have been there anyway? Or if the downstream industry were to close, would those upstream workers leave the state? In this study we take a conservative approach and assume that livestock's jobs are not being created by the meat and dairy processing sector. That is to say, meat and dairy's jobs impact does not include livestock's jobs.

## Section II

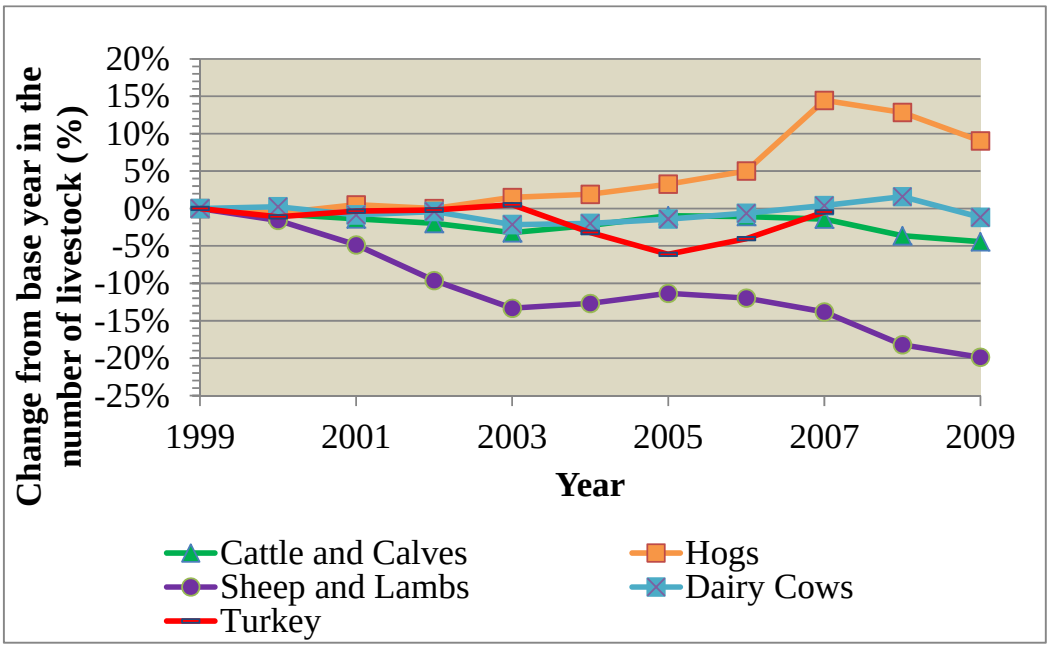
## 1. Livestock Industry Overview

Hog numbers in the United States grew over the study period while beef, dairy, and sheep and lamb declined (Figure 1). Illinois looks similar, except hog numbers grew at half the rate of the national average, and beef and dairy declines significantly outpaced the U.S. as a whole (Figure 2). Illinois was able to hold its national position (#4) in hog production but slipped compared with other states in the other species categories (Figure 3). The growth trend of the livestock industry expansion in the United States continued in the south and the west (Figures 4-7). Illinois livestock farm numbers continue to decline due to the economic effects of scale economies (Figure 8). In nominal terms the share of the State's gross state product, at .32%, continues to drift downward (Figure 9). Real revenue, which removes the effects of rising/falling prices, has grown 3.7% or .41% per year since 2000 (Figure 10). That compares with State growth of 1.8% per year over the same period. Pork production provides the source for growth in Illinois' livestock sector. The industry has grown 14.4% or 1.6% per year since 2000, compared with real declines in milk, beef, sheep, and lamb gross receipts. Poultry meat and eggs have grown substantially in percentage terms from a very low base.

There are over 30,000 livestock farms in Illinois, with almost half being cow calf operations (Table 1). Commercial operations, 26% of all herds and 7,811 in number, require at least one full time equivalent of labor (Table 2). Almost all of the commercial herds are found in four species groups, dairy, fed cattle, cow-calf and hogs.

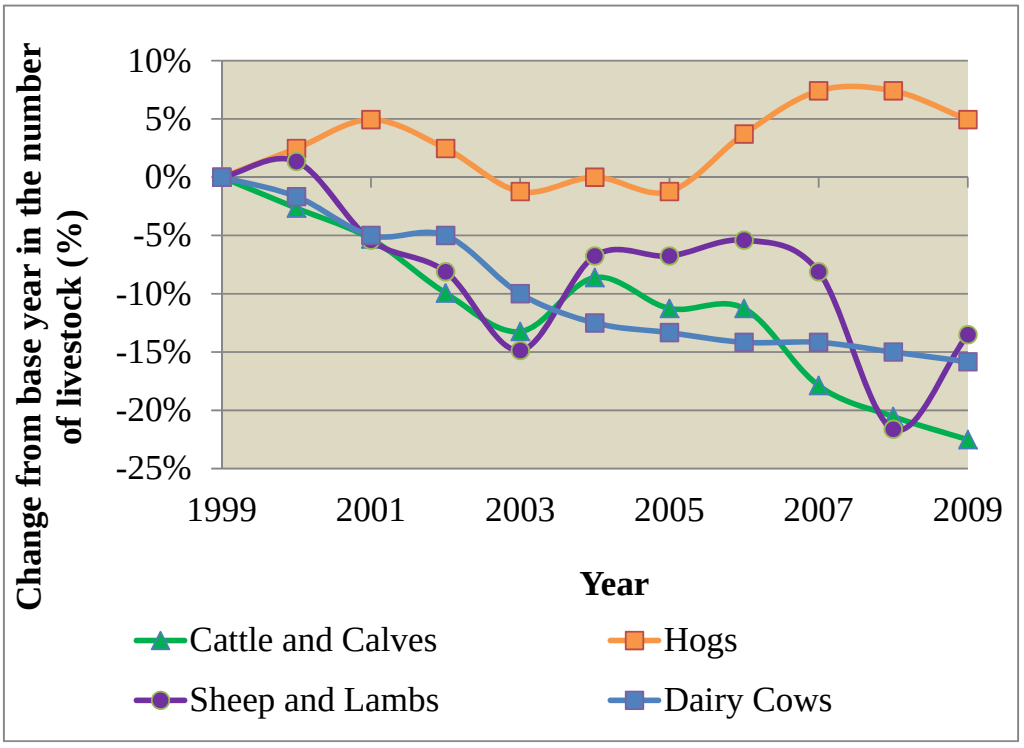
 

**Figure 1: United States Livestock Index (base year 1998)**




Source: National Agricultural Statistics Service, Annual Statistics Bulletin

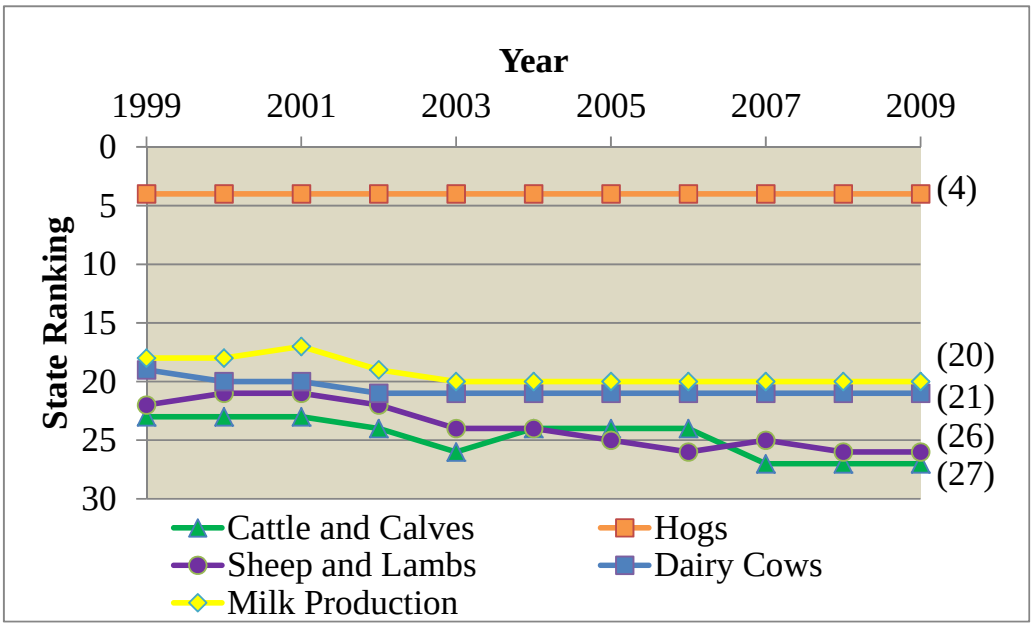
**Figure 2: Illinois Livestock Index (base year 1999)**




Source: National Agricultural Statistics Service, Illinois Annual Statistics Bulletin

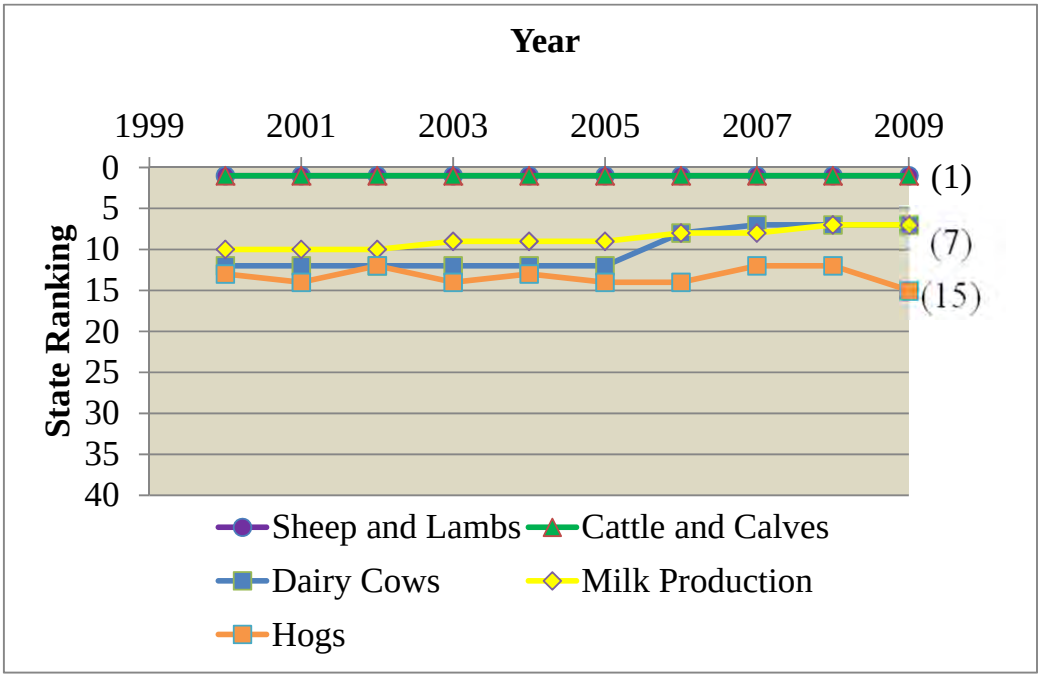
 

**Figure 3: Illinois National Rank for Livestock Production (1999-2009)**




Source: National Agricultural Statistics Service, Illinois Annual Statistics Bulletin

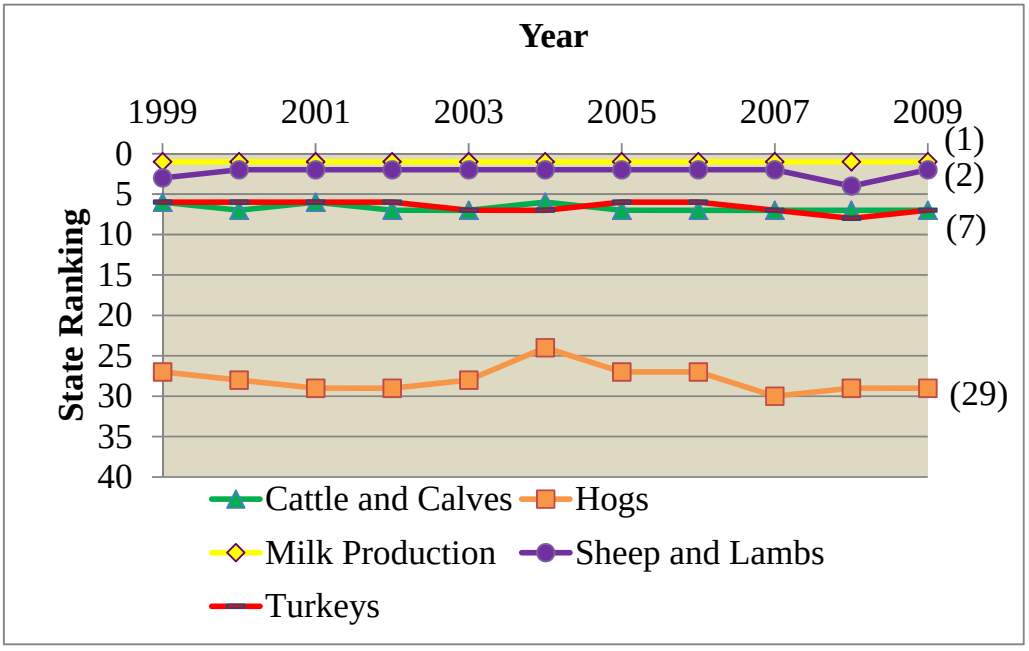
**Figure 4: Texas Rank for Livestock Production (2000-2009)**




Source: National Agricultural Statistics Service, Texas Annual Statistics Bulletin

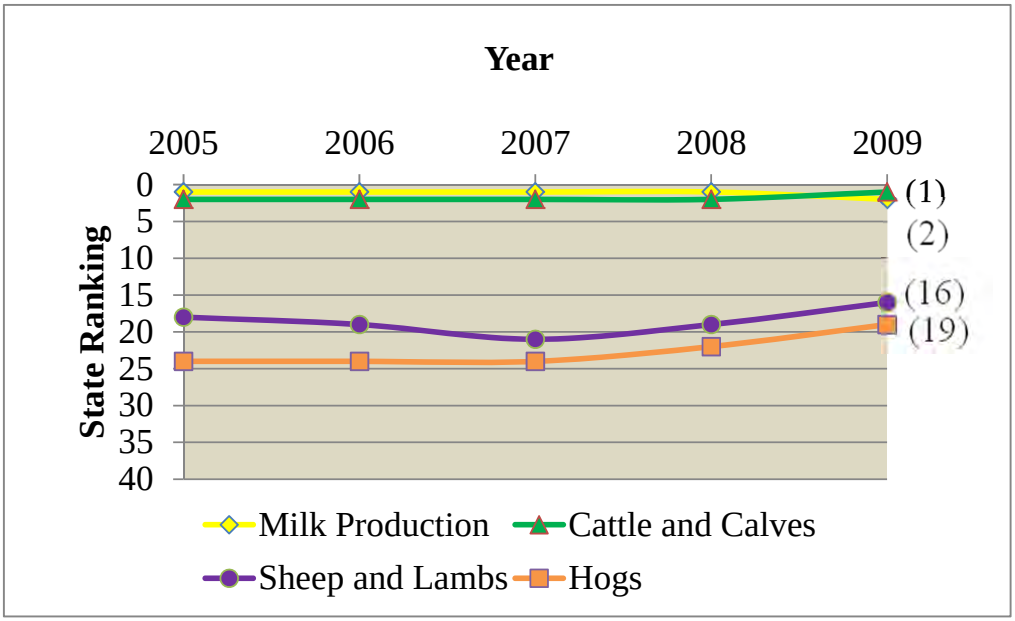
 

**Figure 5: California Rank for Livestock Production* (1999-2009)**




Source: National Agricultural Statistics Service, California Annual Statistics Bulletin

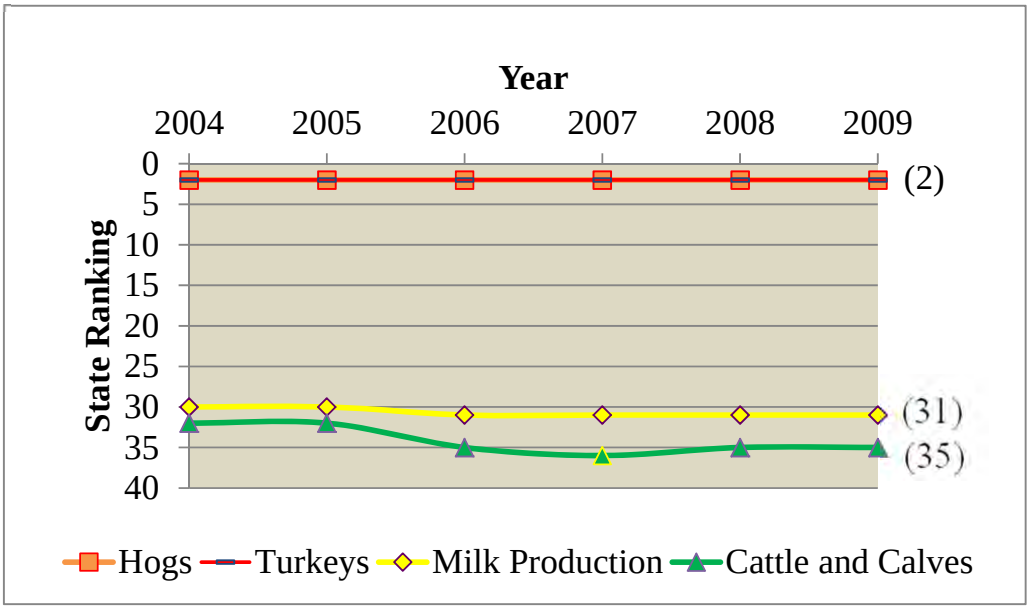
**Figure 6: New Mexico Rank for Livestock Production* (2005-2009)**




Source: United States Department of Agriculture, Leading Commodities by States

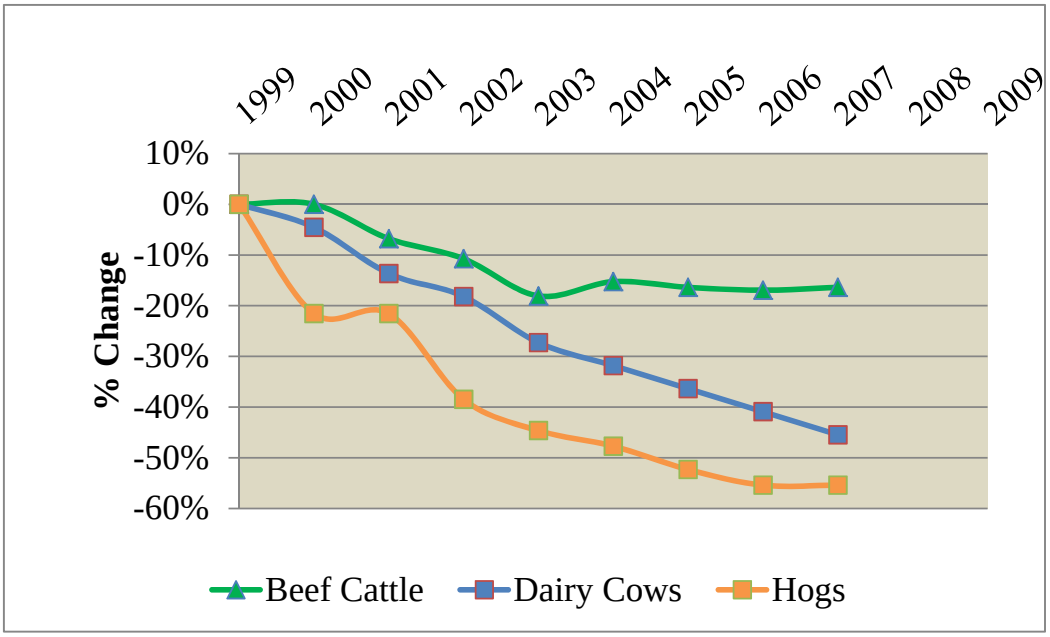
 

**Figure 7: North Carolina Rank for Livestock Production* (2004-2009)**




Source: National Agricultural Statistics Service, North Carolina Annual Statistics Bulletin

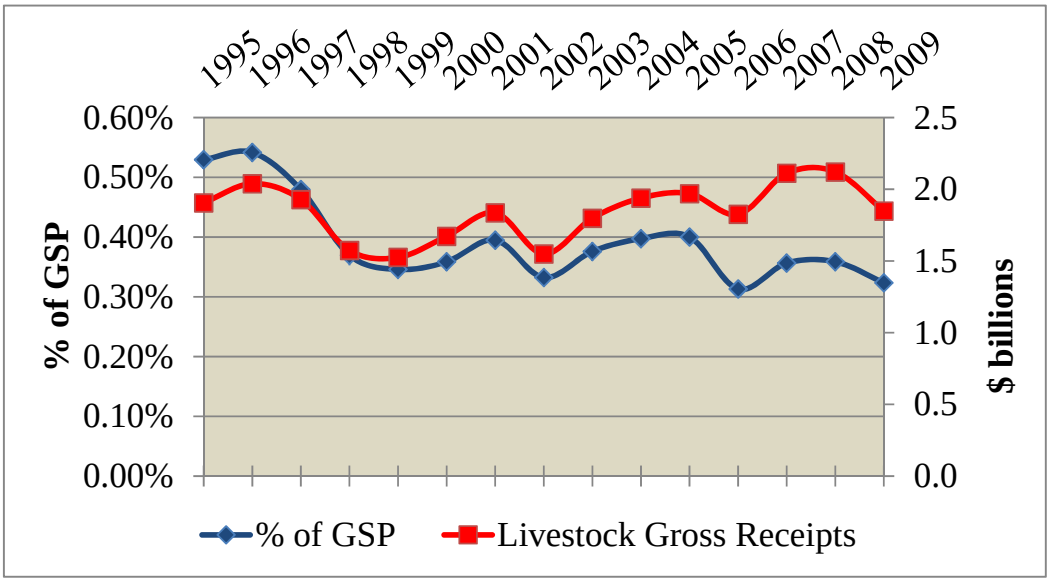
**Figure 8: Change in Number of Illinois Farms since 1999: Selected Species**




Source: National Agricultural Statistics Service, absence of data in 2008 and 2009

**Figure 9: Illinois Gross Livestock Receipts as a Percentage of the Gross State Product (1999-2009)**




Source: National Agricultural Statistics Service, Illinois Annual Statistics Bulletin, Bureau of Economic Analysis

**Figure 10. Real Change in Illinois Livestock Marketing Revenue Since 2000**

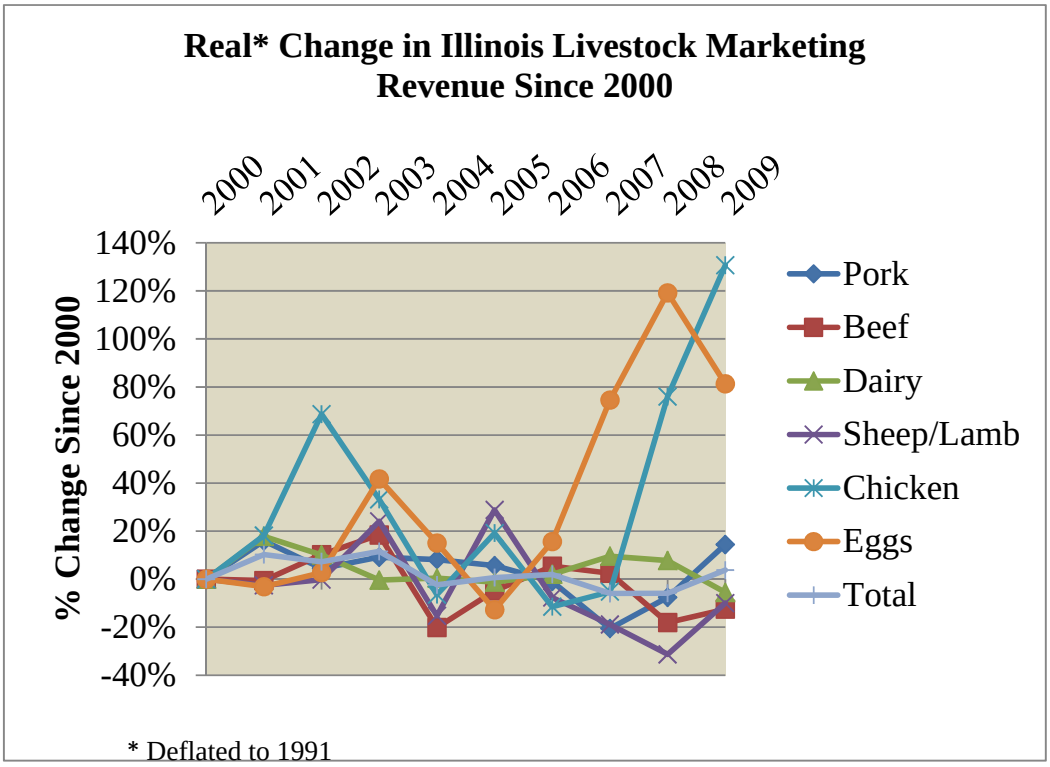



**Table 1: Number of Livestock Farms in Illinois, 2007**

| All Livestock Farms | Number | % of Total |
|---|---|---|
| **Cow-Calf** | 14,800 | 49% |
| **Fed Cattle** | 3,700 | 12% |
| **Dairy Cattle** | 1,200 | 4% |
| **Hogs** | 2,900 | 10% |
| **Sheep** | 1,900 | 6% |
| **Goats** | 470 | 2% |
| **Poultry** | 938 | 3% |
| **Mink** | 7 | 0% |
| **Aquaculture** | 29 | 0% |
| **Horses** | 3,071 | 10% |
| **Other** | 1,079 | 4% |
| **Total** | 30,094 | |

Source: National Agricultural Statistics Service, 2007Agricultural Census, and authors' calculations

**Table 2: Number of Commercial Livestock Farms in Illinois, 2007**

| All Livestock Farms | Number | % of Species | % of Total |
|---|---|---|---|
| **Beef Cattle (>49hd)** | 2,400 | 16% | 31% |
| **Cattle Feedlots(>100 head)** | 2,340 | 63% | 30% |
| **Dairy Cattle** | 1,200 | 100% | 15% |
| **Hogs (>99 head)** | 1,700 | 59% | 22% |
| **Sheep (>$50k sales)** | 8 | 0% | 0% |
| **Goats (>$50k sales)** | NA | NA | NA |
| **Poultry (>$50k sales)** | 85 | 9% | 1% |
| **Mink** | 0 | 0% | 0% |
| **Aquaculture (>$50k sales)** | 11 | 38% | 0% |
| **Horses (>$50K sales)** | 45 | 1% | 1% |
| **Other (>$50k sales)** | 22 | 2% | 0% |
| **Total** | 7,811 | 26% | |

Source: National Agricultural Statistics Service, 2007Agricultural Census, and authors' calculations

## Section III

# I. Statewide Impact of the livestock Sector

## I.1. Economic Impact of Livestock

In terms of economic impact, the livestock industry is a $3.5 billion industry (Table 3). The industry sold about $1.9 billion worth of goods as measured by cash receipts. The industry directly employs 16,739 people with a total impact of 25,385 full time job equivalents. The industry annually contributes almost $292 million in local, state and federal taxes (NASS 2009 and IMPLAN, 2009). The hog industry provides over 10,000 jobs and $170 million in taxes,, the highest among the State's leading livestock species groups. The industry directly provides .35% to the Illinois economy (measured in terms of the state's total personal income) and .23% of the employment (Figure 4). The Hogs, dairy, and beef production contribute 91% of the State's livestock output, and 94% of the jobs (Figures 10 and 11).

**Table 3: Economic Impact of Livestock in Illinois in 2009**

| | Output | | | Employment | | | Taxes | Share of State Total | |
|---|---|---|---|---|---|---|---|---|---|
| | Direct | Total | Multipl. | Direct | Total | Multipl. | Total | | |
| | Mill. $ | | | Mill. $ | | | Mill. $ | % PI | % Empl. |
| Beef | 496 | 870 | 1.75 | 6,286 | 8,264 | 1.31 | 63 | 0.09% | 0.09% |
| Dairy | 260 | 529 | 2.04 | 3,451 | 4,639 | 1.34 | 36 | 0.05% | 0.05% |
| Hog | 972 | 1,797 | 1.85 | 5,868 | 10,533 | 1.79 | 170 | 0.18% | 0.08% |
| Poultry | 129 | 290 | 2.24 | 779 | 1,459 | 1.87 | 19 | 0.02% | 0.01% |
| Others | 28 | 52 | 1.85 | 355 | 491 | 1.38 | 5 | 0.01% | 0.00% |
| Livestock | 1,886 | 3,538 | 1.88 | 16,739 | 25,385 | 1.52 | 292 | 0.35% | 0.23% |

Source: National Agricultural Statistics Service, Illinois Annual Bulletin 2009, IMPLAN 2009, FBFM and authors' calculation

**Table 4: Illinois Industry Comparison**

| | Output* | | | Employment** | | |
|---|---|---|---|---|---|---|
| | **Direct** | **Total** | **Multiplier** | **Direct** | **Total** | **Multiplier** |
| **State Total** | 534,639*** | | | 7,223 | | |
| Livestock | 1,886 | 3,538 | 1.88 | 17 | 25 | 1.52 |
| % share@ | 0.35% | 0.66% | | 0.23% | 0.35% | |
| Agriculture | 14,664 | 29,023 | 1.98 | 96 | 185 | 1.92 |
| % share@ | 2.74% | 5.43% | | 1.33% | 2.56% | |
| Mining | 6,778 | 12,556 | 1.85 | 24 | 59 | 2.46 |
| % share@ | 1.27% | 2.35% | | 0.33% | 0.81% | |
| Construction | 38,204 | 78,016 | 2.04 | 277 | 554 | 2.00 |
| % share@ | 7.15% | 14.59% | | 3.83% | 7.66% | |
| Forestry | 47 | 85 | 1.82 | .2 | .6 | 2.50 |
| % share@ | 0.01% | 0.02% | | 0.00% | 0.01% | |

* in million dollars

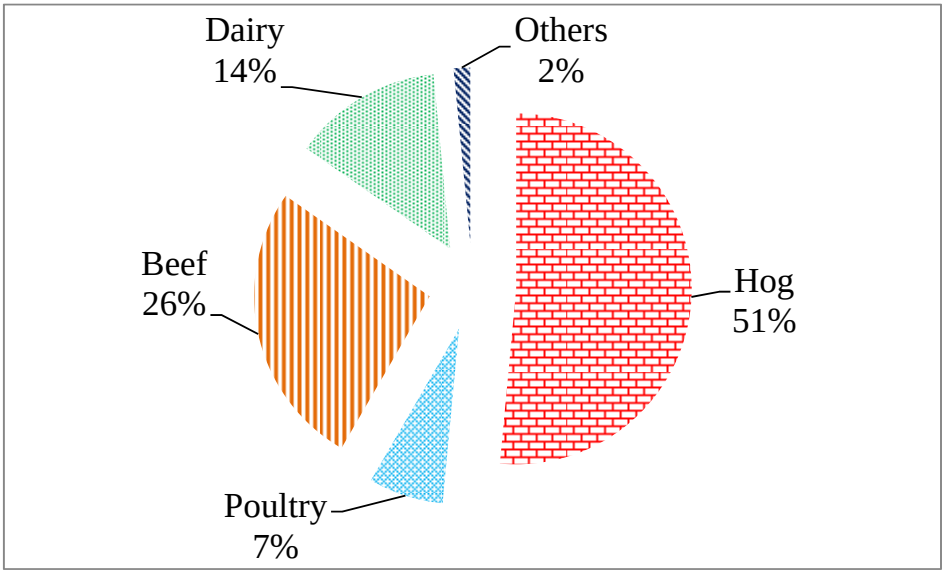
** in thousands

*** Total Personal Income (2009 Illinois Gross State Product = $635B)

@: share of total state personal income. We use total personal income here because it provides a more consistent variable for county level analyses. Gross county product, being difficult to measure, has less relevance as a metric of economic activity.

Source: IMPLAN (2009), authors' calculations

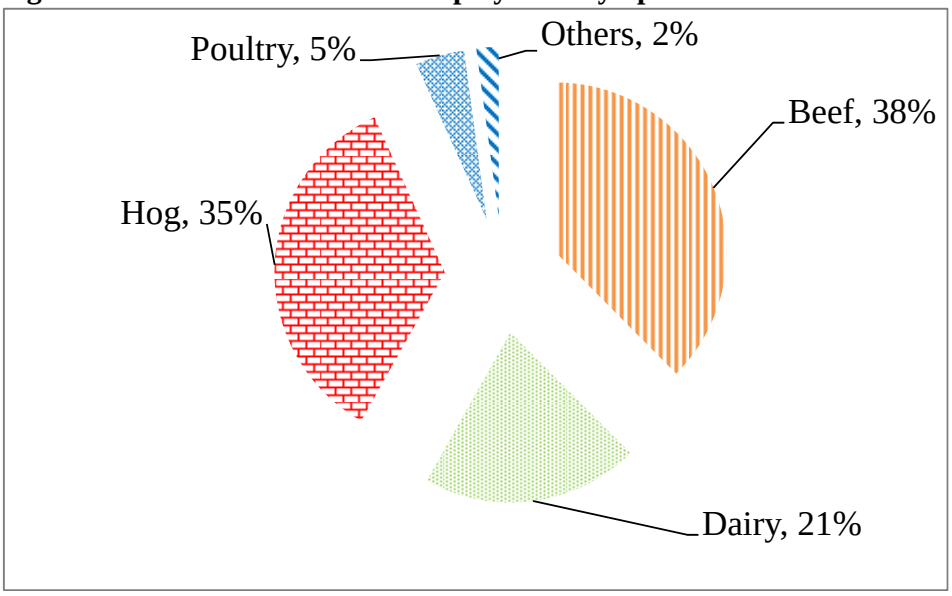
**Figure 10: Distribution of Total Output by Species in Illinois in 2009**




Source: National Agricultural Statistics Service, Illinois Annual Bulletin 2009 and authors' calculations

**Figure 11: Distribution of Total Employment by Species in Illinois in 2009**




Source: National Agricultural Statistics Service, Illinois Annual Bulletin 2009 and authors' calculations

## I.2. 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 non-livestock economic activity created by one unit of livestock activity.

The state's livestock industry has an output multiplier of 1.88, meaning that for each dollar of output created, 88 cents of additional economic activity is created outside the industry (Table 3). Of our selected industries, construction has the highest output multiplier at 2.04 and the lowest is forestry at 1.82 (Table 4). Such a difference is significant on a percentage basis, for example: construction has 22% more impact on the economy than forestry, and 16% more than livestock. Construction is also a much larger industry. So its total impact is quite large; justifying its importance in the political economy and policy discussions of the State.

In terms of the employment multiplier, the poultry industry has the highest multiplier at 1.87 jobs created outside the industry for every job within the industry. However, the size of the poultry industry is small in the state, with only 26 counties having any activity. Livestock as a whole in Illinois has an employment multiplier of 1.52. Mining and forestry, with employment multipliers of 2.46 and 2.5, respectively, are over 58 percent more influential on the economy than livestock.

## I.3. Investment Analysis: Estimated impact of Additional Livestock Farm

**Table 5: Effects of adding a 2,400-sow-Farrow-to-finish operation**

| | | Direct Output | Indirect Output | % Share | Induced Output | % Share | Total Output | % Share |
|---|---|---|---|---|---|---|---|---|
| | **Total** | 4,867,145 | 2,541,810 | | 1,586,625 | | 8,995,580 | |
| | Animal production except cattle and poultry | 4,867,145 | 130,775 | 5.1% | 606 | 0.0% | 4,998,526 | 55.6% |
| | **External** | | | | | | | |
| 1 | Wholesale trade | 0 | 207,133 | 8.1% | 71,305 | 4.5% | 278,438 | 3.1% |
| 2 | Real estate | 0 | 225,177 | 8.9% | 99,423 | 6.3% | 324,600 | 3.6% |
| 3 | Petroleum refineries | 0 | 163,393 | 6.4% | 20,744 | 1.3% | 184,137 | 2.0% |
| 4 | Owner-occupied dwellings | 0 | 0 | 0.0% | 185,668 | 11.7% | 185,668 | 2.1% |
| 5 | Truck transportation | 0 | 106,138 | 4.2% | 13,544 | 0.9% | 119,682 | 1.3% |
| 6 | Oil and gas extraction | 0 | 21,703 | 0.9% | 3,460 | 0.2% | 25,163 | 0.3% |
| 7 | Grain farming | 0 | 92,383 | 3.6% | 674 | 0.0% | 93,057 | 1.0% |
| 8 | Other animal food manufacturing | 0 | 494,555 | 19.5% | 1,120 | 0.1% | 495,676 | 5.5% |
| 9 | Power generation and supply | 0 | 93,922 | 3.7% | 22,938 | 1.4% | 116,860 | 1.3% |
| 10 | Insurance carriers | 0 | 26,266 | 1.0% | 64,432 | 4.1% | 90,698 | 1.0% |
| 11 | All other crop farming | 0 | 13,039 | 0.5% | 45 | 0.0% | 13,084 | 0.1% |
| 12 | Monetary authorities and depository credit | 0 | 83,878 | 3.3% | 53,136 | 3.3% | 137,014 | 1.5% |
| 13 | Farm machinery and equipment manufacturing | 0 | 35,925 | 1.4% | 50 | 0.0% | 35,974 | 0.4% |
| 14 | Food services and drinking places | 0 | 12,222 | 0.5% | 74,436 | 4.7% | 86,657 | 1.0% |
| 15 | Hospitals | 0 | 0 | 0.0% | 97,559 | 6.1% | 97,560 | 1.1% |
| 16 | Offices of physicians- dentists- and other health | 0 | 0 | 0.0% | 75,232 | 4.7% | 75,233 | 0.8% |
| 17 | Pharmaceutical and medicine manufacturing | 0 | 157 | 0.0% | 24 | 0.0% | 182 | 0.0% |
| 18 | Rail transportation | 0 | 28,613 | 1.1% | 2,520 | 0.2% | 31,133 | 0.3% |
| 19 | Commercial machinery repair and maintenance | 0 | 8,991 | 0.4% | 1,778 | 0.1% | 10,769 | 0.1% |
| 20 | Veterinary services | 0 | 474 | 0.0% | 2,559 | 0.2% | 3,033 | 0.0% |
| | **Tax Impact:** Total tax impact | | 851,284 | | | | | |
| | **Tax Impact:** State/Local Govt. Non-Education | | 393,902 | | | | | |

Source: IMPLAN (2009), authors' calculations

**Table 6: Effects of adding a 400-cow Dairy operation**

| | | Direct Output | Indirect Output | % Share | Induced Output | % Share | Total Output | % Share |
|---|---|---|---|---|---|---|---|---|
| | **Total** | 1,025,814 | 829,847 | | 233,775 | | 2,089,436 | |
| | Cattle ranching and farming | 0 | 3,132.3 | 0.4% | 51.8 | 0.0% | 3,184.0 | 0.2% |
| | **External** | | | | | | | |
| 1 | Real estate | 0 | 58,080.6 | 7.0% | 14,804.9 | 6.3% | 72,885.5 | 3.5% |
| 2 | Wholesale trade | 0 | 95,266.3 | 11.5% | 10,608.8 | 4.5% | 105,875.1 | 5.1% |
| 3 | Petroleum refineries | 0 | 40,347.5 | 4.9% | 3,072.6 | 1.3% | 43,420.1 | 2.1% |
| 4 | Veterinary services | 0 | 20.1 | 0.0% | 374.3 | 0.2% | 394.4 | 0.0% |
| 5 | Oil and gas extraction | 0 | 5,434.5 | 0.7% | 512.8 | 0.2% | 5,947.3 | 0.3% |
| 6 | Owner-occupied dwellings | 0 | 0.0 | 0.0% | 27,106.7 | 11.6% | 27,106.7 | 1.3% |
| 7 | All other crop farming | 0 | 4,445.3 | 0.5% | 6.6 | 0.0% | 4,451.9 | 0.2% |
| 8 | Power generation and supply | 0 | 27,980.5 | 3.4% | 3,408.4 | 1.5% | 31,388.9 | 1.5% |
| 9 | Truck transportation | 0 | 26,744.0 | 3.2% | 1,988.0 | 0.9% | 28,732.0 | 1.4% |
| 10 | Grain farming | 0 | 27,442.9 | 3.3% | 99.5 | 0.0% | 27,542.5 | 1.3% |
| 11 | Monetary authorities and depository credit | 0 | 23,469.1 | 2.8% | 7,866.9 | 3.4% | 31,336.0 | 1.5% |
| 12 | Insurance carriers | 0 | 4,927.2 | 0.6% | 9,440.9 | 4.0% | 14,368.2 | 0.7% |
| 13 | Agriculture and forestry support activities | 0 | 9,369.0 | 1.1% | 10.5 | 0.0% | 9,379.5 | 0.4% |
| 14 | Pharmaceutical and medicine manufacturing | 0 | 110.5 | 0.0% | 2,015.3 | 0.9% | 2,125.7 | 0.1% |
| 15 | Food services and drinking places | 0 | 3,625.8 | 0.4% | 10,976.4 | 4.7% | 14,602.2 | 0.7% |
| 16 | Hospitals | 0 | 0.1 | 0.0% | 14,437.9 | 6.2% | 14,438.0 | 0.7% |
| 17 | Farm machinery, equipment manufacturing | 0 | 6,877.9 | 0.8% | 7.3 | 0.0% | 6,885.3 | 0.3% |
| 18 | Offices of physicians-dentists- and other health | 0 | 0.0 | 0.0% | 11,128.5 | 4.8% | 11,128.6 | 0.5% |
| 19 | Warehousing and storage | 0 | 3,035.4 | 0.4% | 472.8 | 0.2% | 3,508.2 | 0.2% |
| 20 | Commercial machinery repair and maintenance | 0 | 3,267.3 | 0.4% | 262.1 | 0.1% | 3,529.5 | 0.2% |
| | **Tax Impact:** | | | | | | | |
| | Total tax impact | | | 140,741 | | | | |
| | State/Local Govt. Non-Education | | | 68,203 | | | | |

Source: IMPLAN (2009), authors' calculations

**Table 7: Effects of adding a 2,400-head Feeder operation**

| | | Direct Output | Indirect Output | % Share | Induced Output | % Share | Total Output | % Share |
|---|---|---|---|---|---|---|---|---|
| | **Total** | 2,445,171 | 1,349,915 | | 492,631 | | 4,287,718 | |
| | Cattle ranching and farming | 2,445,171 | 110,029 | 8.2% | 109 | 0.0% | 2,555,309 | 59.6% |
| | **External** | | | 0.0% | | 0.0% | | 0.0% |
| 1 | Real estate | 0 | 193,752 | 14.4% | 31,242 | 6.3% | 224,994 | 5.2% |
| 2 | Wholesale trade | 0 | 134,827 | 10.0% | 22,385 | 4.5% | 157,212 | 3.7% |
| 3 | Petroleum refineries | 0 | 102,941 | 7.6% | 6,480 | 1.3% | 109,421 | 2.6% |
| 4 | Veterinary services | 0 | 82 | 0.0% | 788 | 0.2% | 870 | 0.0% |
| 5 | Oil and gas extraction | 0 | 13,718 | 1.0% | 1,081 | 0.2% | 14,800 | 0.3% |
| 6 | Owner-occupied dwellings | 0 | 0 | 0.0% | 57,051 | 11.6% | 57,051 | 1.3% |
| 7 | All other crop farming | 0 | 19,603 | 1.5% | 14 | 0.0% | 19,617 | 0.5% |
| 8 | Power generation and supply | 0 | 38,514 | 2.9% | 7,190 | 1.5% | 45,704 | 1.1% |
| 9 | Truck transportation | 0 | 66,785 | 4.9% | 4,187 | 0.8% | 70,972 | 1.7% |
| 10 | Grain farming | 0 | 54,906 | 4.1% | 210 | 0.0% | 55,116 | 1.3% |
| 11 | Monetary authorities and depository credit | 0 | 119,172 | 8.8% | 16,588 | 3.4% | 135,760 | 3.2% |
| 12 | Insurance carriers | 0 | 8,358 | 0.6% | 19,880 | 4.0% | 28,238 | 0.7% |
| 13 | Agriculture and forestry support activities | 0 | 14,936 | 1.1% | 22 | 0.0% | 14,958 | 0.3% |
| 14 | Pharmaceutical and medicine manufacturing | 0 | 9,261 | 0.7% | 4,256 | 0.9% | 13,517 | 0.3% |
| 15 | Food services and drinking places | 0 | 6,685 | 0.5% | 23,133 | 4.7% | 29,818 | 0.7% |
| 16 | Hospitals | 0 | 0 | 0.0% | 30,443 | 6.2% | 30,443 | 0.7% |
| 17 | Farm machinery, equipment manufacturing | 0 | 3,765 | 0.3% | 15 | 0.0% | 3,781 | 0.1% |
| 18 | Offices of physicians-dentists- and other health | 0 | 0 | 0.0% | 23,463 | 4.8% | 23,463 | 0.5% |
| 19 | Warehousing and storage | 0 | 9,149 | 0.7% | 997 | 0.2% | 10,146 | 0.2% |
| 20 | Commercial machinery repair and maintenance | 0 | 4,805 | 0.4% | 552 | 0.1% | 5,357 | 0.1% |
| | **Tax Impact:** | | | | | | | |
| | Total tax impact | | | | 309,650 | | | |
| | State/Local Govt. Non-Education | | | | 159,199 | | | |

Source: IMPLAN (2009), authors' calculations

## I.4. Illinois Livestock Product: Supply-Demand Situation

### I.4.1. Supply-Demand of Livestock Products

Illinois is a high population state with a large demand for meat and dairy products. Producers export 3% of their products outside the country and 36% to other states (Table 8). Livestock producers theoretically would supply 38% of the State's $4.6B demand, but with exports supply only 23% of the State's needs for meat and dairy products.

**Table 8: Illinois Livestock Supply-Demand Situation**

| | Local Supply* A | Foreign Exports* B | Domestic Exports* C | In-state Availability* D=A-B-C | Total Imports* E | Total Demand* F=D+E | Local Supply A/F | State Imports E/F |
|---|---|---|---|---|---|---|---|---|
| Beef and Dairy | 729.33 | 2.12 | 97.44 | 629.77 | 2,511.39 | 3,141.16 | 23% | 80% |
| Poultry and Egg Production | 125.62 | 1.00 | 111.96 | 12.66 | 356.16 | 368.82 | 34% | 97% |
| All Other Animal Production | 919.30 | 45.99 | 436.16 | 437.15 | 699.21 | 1,136.36 | 81% | 62% |
| All Livestock | 1,774.25 | 49.11 | 645.56 | 1,079.59 | 3,566.76 | 4,646.34 | 38% | 77% |

*: in million dollars

Source: IMPLAN (2009), authors' calculations

## II. The Meat and Dairy Complex

Illinois' meat and dairy processing sector generates $12.8B in direct sales (Table 9). Its total impact excluding the Illinois livestock sector is 16.4B. The sector directly employs 23,043 jobs, and has a total employment impact of 49,685. Combining both the livestock and processing sectors creates the Meat and Dairy Complex. The Complex in Illinois generates $14.6B in direct economic impact, $27.1 in total impacts (5% of the state's economy), and 98,762 jobs. The jobs impact amounts to 1.37% of Illinois' workforce.

When measured in terms of direct output, processing comprises 87% of the complex's output while livestock production contributes the remaining 13%. Over 64% of the complex's direct output originates from animal slaughter, making it the largest sub sector, more than four times larger than livestock production.

Illinois Livestock production and meat and dairy processing share tight linkages with 69% of the State's production being processed in-state (Table 10). The State's processors process over 86% of the beef and dairy production, over 50% of the hogs, but only 10% of the poultry and eggs. But Illinois processes many more meat and dairy products than can be supplied by local producers. Thus the processors have strong external linkages as they import into the State 75% of the $4B of raw material they require (Table 11). Pork processors import the lowest percentage of their needs at 59%, while poultry and egg processors import 96%. Therefore there appears to be capacity for Illinois processors to utilize additional in-state raw materials supplied by local producers.

**Table 9: Meat and Dairy Complex Overview**

| | Output | | | Employment | | |
|---|---|---|---|---|---|---|
| | Direct* | Total* | Multiplier | Direct* | Total | Multiplier |
| Fluid milk and creamery butter | 1,686.17 | 3,455.51 | 2.05 | 2,361 | 11,441 | 4.85 |
| Cheese manufacturing | 979.27 | 1,905.05 | 1.95 | 1,003 | 5,649 | 5.63 |
| Condensed and evaporated milk | 500.26 | 1,037.64 | 2.07 | 439 | 3,017 | 6.87 |
| Ice cream and frozen dessert | 171.38 | 366.06 | 2.14 | 407 | 1,413 | 3.47 |
| Animal slaughtering - except poultry | 8,222.54 | 16,053.19 | 1.95 | 17,970 | 62,666 | 3.49 |
| Animal Fats and oils | 1,158.65 | 2,529.77 | 2.18 | 501 | 5,198 | 10.37 |
| Poultry processing | 86.42 | 146.05 | 1.69 | 361 | 732 | 2.03 |
| All Processing | 12,804.69 | 25,493.27 | 1.99 | 23,043 | 90,116 | 3.91 |
| % share of state | 2.40% | 4.77% | | 0.32% | 1.25% | |
| **Adjusted M&D Processing**** | | **16,357** | 1.11 | | **49,685** | 1.25 |
| Beef | 495.88 | 869.55 | 1.75 | 6,286 | 8,264 | 1.31 |
| Dairy | 259.90 | 529.39 | 2.04 | 3,451 | 4,639 | 1.34 |
| Pork | 972.47 | 1,797.34 | 1.85 | 5868 | 10,533 | 1.79 |
| Poultry | 129.37 | 289.70 | 2.24 | 779 | 1,459 | 1.87 |
| Sheep and Others | 28.31 | 52.32 | 1.85 | 355 | 491 | 1.38 |
| All Livestock | 1,885.94 | 3,538.30 | 1.88 | 16,739 | 25,385 | 1.52 |
| **% share of state** | 0.35% | 0.66% | | 0.23% | 0.35% | |
| Unadjusted Meat and Dairy Complex Total | 14,691 | 29,032 | 1.98 | 39,782 | 115,501 | 2.90 |
| **Adjusted M&D Complex***** | | **27,146** | | | **98,762** | |
| **% share of state** | | **5.08%** | | | **1.37%** | |
| Illinois | 534,638 | | | 7,222,842 | | |

Source: IMPLAN (2009), authors' calculations *: in million dollars. **The adjusted M&D Processing assumes that the livestock industry would exist regardless of the presence of the meat and dairy processing sectors. ***The adjusted M&D Complex assumes livestock and processing are link, thus there is no double counting.

## II.1. Industry Linkages

**Table 10: Illinois Livestock and Milk Processed In-State**

| | Industry output* A | Total exports* B | Processed in-state* C=A-B | % processed in-state C/A |
|---|---|---|---|---|
| Beef and Dairy | 739.75 | 101.45 | 638.30 | 86.3% |
| Poultry and Egg production | 126.63 | 112.97 | 13.66 | 10.8% |
| All other Animal production (mostly pork production) | 979.54 | 483.36 | 496.18 | 50.7% |
| All Livestock | 2,585.66 | 799.22 | 1,786.45 | 69.1% |

*: in million dollars

Source: IMPLAN (2009), author's calculation

**Table 11: Industry-Linkage: Livestock and Meat and Dairy Processing**

| | INPUTS | All Livestock* | | Beef & Dairy* | | Poultry* | | Pork & Others* | |
|---|---|---|---|---|---|---|---|---|---|
| Fluid milk & Creamery butter manufacturing | Total | 459.15 | | 459.15 | | | | | |
| | Local | 119.06 | 26% | 119.06 | 26% | | | | |
| | Foreign | 340.08 | 74% | 340.08 | 74% | | | | |
| Cheese manufacturing | Total | 240.90 | | 240.90 | | | | | |
| | Local | 62.47 | 26% | 62.47 | 26% | | | | |
| | Foreign | 178.43 | 74% | 178.43 | 74% | | | | |
| Dry-condensed-and evaporated dairy products | Total | 89.94 | | 89.94 | | | | | |
| | Local | 23.32 | 26% | 23.32 | 26% | | | | |
| | Foreign | 66.62 | 74% | 66.62 | 74% | | | | |
| Ice cream and frozen dessert manufacturing | Total | 9.73 | | 4.75 | | 4.99 | | | |
| | Local | 1.42 | 15% | 1.23 | 26% | 0.18 | 4% | | |
| | Foreign | 8.32 | 85% | 3.52 | 74% | 4.80 | 96% | | |
| Animal-except poultry-processing | Total | 3,076.21 | | 2,198.62 | | | | 877.59 | |
| | Local | 756.76 | 25% | 398.15 | 18% | | | 358.61 | 41% |
| | Foreign | 2,319.45 | 75% | 1,800.46 | 82% | | | 518.98 | 59% |
| Poultry processing | Total | 34.19 | | | | 34.04 | | 0.15 | |
| | Local | 1.32 | 4% | | | 1.26 | 4% | 0.06 | 41% |
| | Foreign | 32.87 | 96% | | | 32.79 | 96% | 0.09 | 59% |
| All Processing | Total | 3,910.13 | | 2,993.36 | | 39.03 | | 877.74 | |
| | Local | 964.36 | 25% | 604.24 | 20% | 1.44 | 4% | 358.67 | 41% |
| | Foreign | 2,945.78 | 75% | 2,389.12 | 80% | 37.59 | 96% | 519.07 | 59% |

*: in million dollars

Source: IMPLAN (2009), author's calculation

# III. Analysis of Leading Political Units

## III.1. Regional Livestock Production

Clinton County, located in south central Illinois, produces the most livestock products of any county in Illinois. It produces $123m in direct output and $169M in total output (Table 12). The industry generates annual taxes of $13m and total employment of 1,443 full time workers. The livestock industry in Jasper County, in southeastern Illinois ranks highest in terms of the share of a county's economic activity (Table 13). The industry equals 9.9% of all the personal income generated in the county.

The 93rd state legislative district, located in western Illinois, produces the most livestock products of any district in Illinois. It produces $135m in direct output and $182M in total output (Table 14). The industry generates annual taxes of $13.4m and total employment of 1,310 full time workers. The livestock industry in the 93rd district ranks highest in terms of the share of a district's economic activity (Table 15). The industry equals 3.5% of all the personal income generated in the district.

The 47th state senate district, located in western Illinois, produces the most livestock products of any district in Illinois. It produces $242m in direct output and $348M in total output (Table 16). The industry generates annual taxes of $24m and total employment of 2,389 full time workers. The livestock industry in the 47th district ranks highest in terms of the share of a district's economic activity (Table 17). The industry equals 3.5% of all the personal income generated in the county.

The 15th congressional district, located in east central and southern Illinois, produces the most livestock products of any district in Illinois. It produces $471m in direct output and $662m in total output (Table 18). The industry generates annual taxes of $46m and total employment of 5,531 full time workers. The livestock industry in the 15th district ranks highest in terms of the share of a district's economic activity (Table 19). The industry equals 2.11% of all the personal income generated in the county.

**Table 12 Top 10 Livestock Counties**

Ranked by Output

| | | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % of PI | Direct | Total | % Total | |
| 1 | Clinton | 122,696 | 168,873 | 8.81% | 1,089 | 1,443 | 6.54% | 13,136 |
| 2 | DeKalb | 74,725 | 98,823 | 2.57% | 663 | 839 | 1.46% | 7,322 |
| 3 | Stephenson | 71,743 | 94,125 | 4.48% | 637 | 768 | 2.71% | 5,261 |
| 4 | Henry | 55,804 | 75,246 | 2.97% | 495 | 647 | 2.63% | 5,178 |
| 5 | Hancock | 49,774 | 65,014 | 9.08% | 442 | 570 | 6.64% | 5,808 |
| 6 | Whiteside | 47,387 | 68,221 | 2.44% | 421 | 565 | 1.53% | 6,121 |
| 7 | Jo Daviess | 47,136 | 68,315 | 5.33% | 418 | 625 | 3.40% | 6,061 |
| 8 | Knox | 45,268 | 54,647 | 2.65% | 402 | 488 | 1.58% | 4,270 |
| 9 | Livingston | 45,135 | 59,163 | 3.20% | 401 | 480 | 2.13% | 4,055 |
| 10 | Carroll | 43,136 | 68,926 | 8.93% | 383 | 543 | 5.26% | 4,289 |

*: in thousands of dollars

Source: National Agricultural Statistics Service, IMPLAN (2009), authors' calculations

**Table 13: Top 10 Livestock Counties**

Ranked by Share in Total County Personal Income

| | | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % of PI | Direct | Total | % Total | |
| 1 | Jasper | 31,835 | 38,346 | 9.93% | 232 | 287 | 5.10% | 2,807 |
| 2 | Hancock | 49,774 | 65,014 | 9.08% | 442 | 570 | 6.64% | 5,808 |
| 3 | Carroll | 43,136 | 68,926 | 8.93% | 383 | 543 | 5.26% | 4,289 |
| 4 | Clinton | 122,696 | 168,873 | 8.81% | 1,089 | 1,443 | 6.54% | 13,136 |
| 5 | Schuyler | 17,861 | 26,614 | 8.38% | 148 | 217 | 3.53% | 2,192 |
| 6 | Washington | 40,629 | 50,852 | 7.88% | 190 | 265 | 2.58% | 3,153 |
| 7 | Pike | 35,559 | 49,029 | 6.97% | 349 | 477 | 4.92% | 4,262 |
| 8 | Greene | 26,961 | 36,211 | 6.77% | 196 | 273 | 4.63% | 2,615 |
| 9 | Cass | 24,041 | 34,087 | 5.40% | 187 | 243 | 2.28% | 2,474 |
| 10 | Cumberland | 18,776 | 25,059 | 5.12% | 150 | 197 | 3.32% | 1,641 |

*: in thousands of dollars

Source: National Agricultural Statistics Service, IMPLAN (2009), authors' calculations

**Figure 12 Top Ten Livestock Counties**
Rank by Output

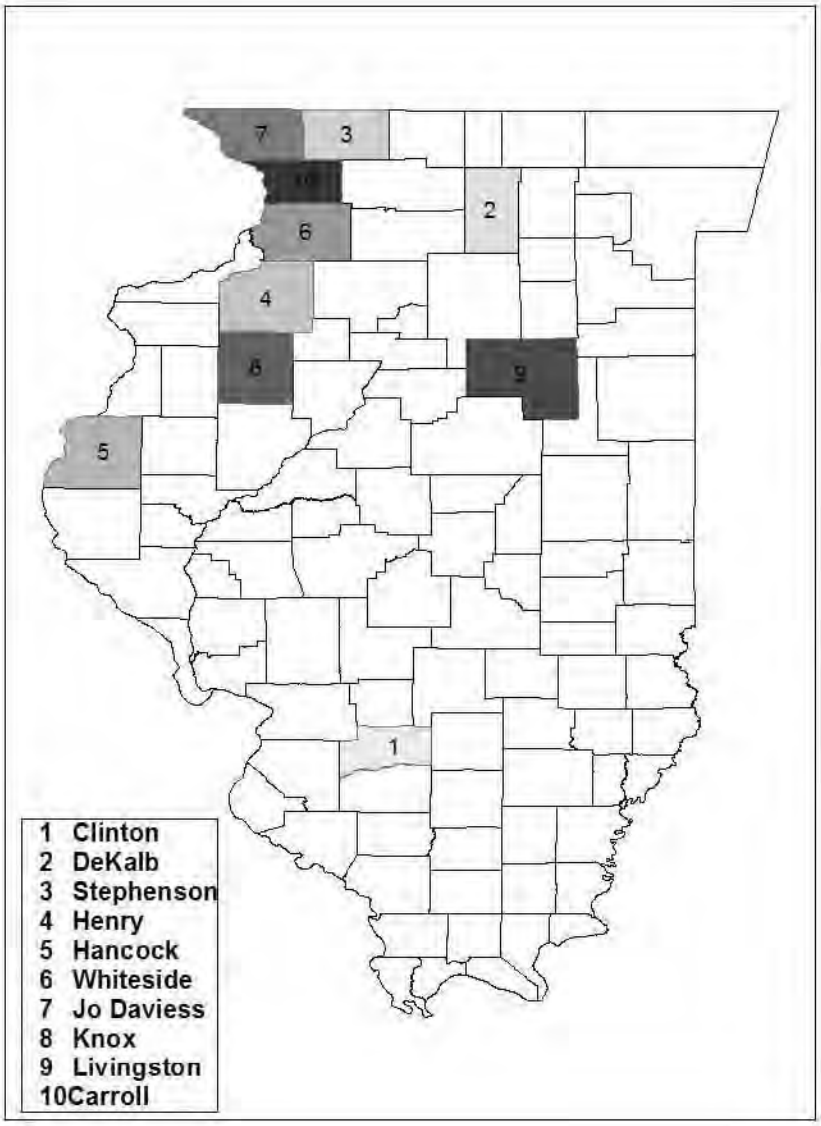


**Figure 13: Top 10 Livestock Counties**
Rank by share in total county personal income

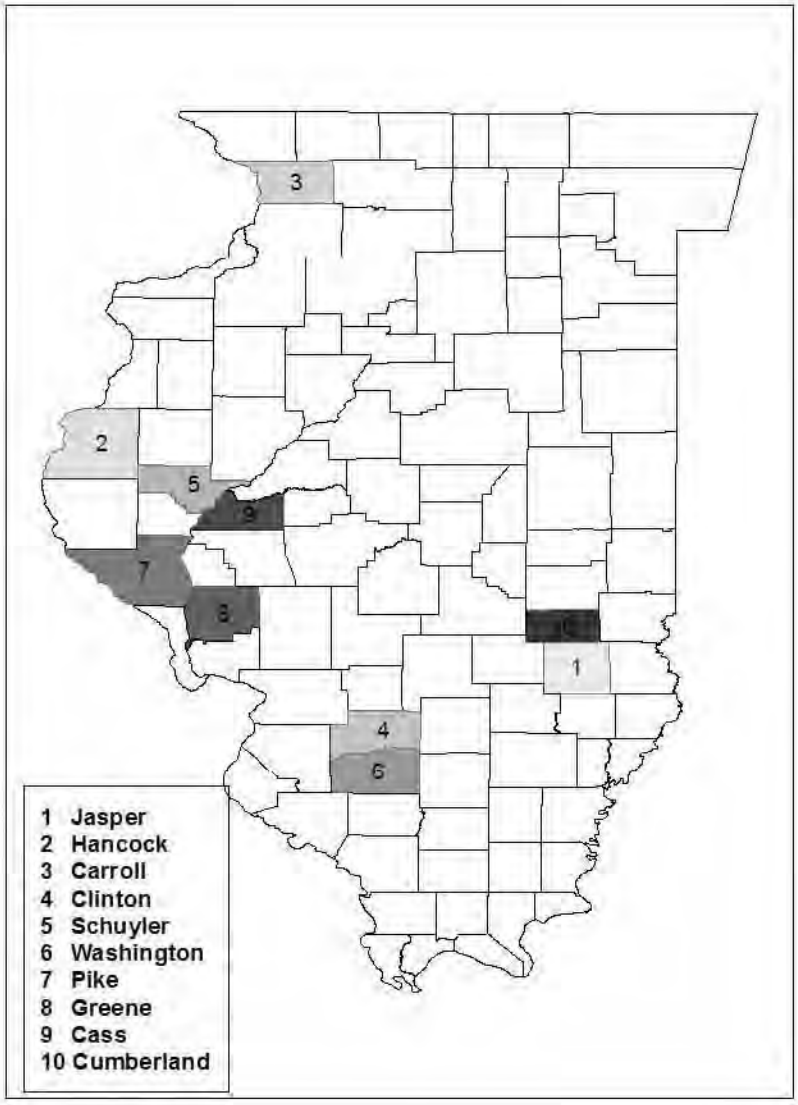


**Table 14: Top 10 Livestock Representative* Districts**

Ranked by Output

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | RD-93 | 134,837 | 182,295 | 3.45% | 980 | 1,310 | 1.62% | 13,398 |
| 2 | RD-74 | 109,884 | 150,525 | 2.90% | 799 | 1,128 | 1.89% | 12,049 |
| 3 | RD-89 | 109,364 | 164,696 | 2.25% | 795 | 1,124 | 1.09% | 10,170 |
| 4 | RD-94 | 107,266 | 165,686 | 3.05% | 780 | 1,079 | 1.40% | 10,399 |
| 5 | RD-71 | 106,583 | 150,770 | 2.04% | 489 | 738 | 0.63% | 9,038 |
| 6 | RD-107 | 105,662 | 145,809 | 2.91% | 768 | 1,066 | 1.46% | 10,394 |
| 7 | RD-109 | 103,185 | 137,710 | 3.25% | 750 | 1,010 | 1.63% | 9,735 |
| 8 | RD-90 | 103,107 | 149,361 | 1.82% | 750 | 1,023 | 0.96% | 10,470 |
| 9 | RD-100 | 99,855 | 140,161 | 1.65% | 726 | 1,012 | 0.90% | 10,937 |
| 10 | RD-106 | 83,103 | 108,484 | 2.09% | 604 | 771 | 1.25% | 7,984 |

* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

**Table 15: Top 10 Livestock Representative* Districts**

Rank by share in total county personal income

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | RD-93 | 134,837 | 182,295 | 3.45% | 980 | 1,310 | 1.62% | 13,398 |
| 2 | RD-109 | 103,185 | 137,710 | 3.25% | 750 | 1,010 | 1.63% | 9,735 |
| 3 | RD-94 | 107,266 | 165,686 | 3.05% | 780 | 1,079 | 1.40% | 10,399 |
| 4 | RD-107 | 105,662 | 145,809 | 2.91% | 768 | 1,066 | 1.46% | 10,394 |
| 5 | RD-74 | 109,884 | 150,525 | 2.90% | 799 | 1,128 | 1.89% | 12,049 |
| 6 | RD-89 | 109,364 | 164,696 | 2.25% | 795 | 1,124 | 1.09% | 10,170 |
| 7 | RD-106 | 83,103 | 108,484 | 2.09% | 604 | 771 | 1.25% | 7,984 |
| 8 | RD-71 | 106,583 | 150,770 | 2.04% | 489 | 738 | 0.63% | 9,038 |
| 9 | RD-90 | 103,107 | 149,361 | 1.82% | 750 | 1,023 | 0.96% | 10,470 |
| 10 | RD-115 | 30,833 | 40,324 | 1.75% | 224 | 298 | 0.77% | 2,615 |

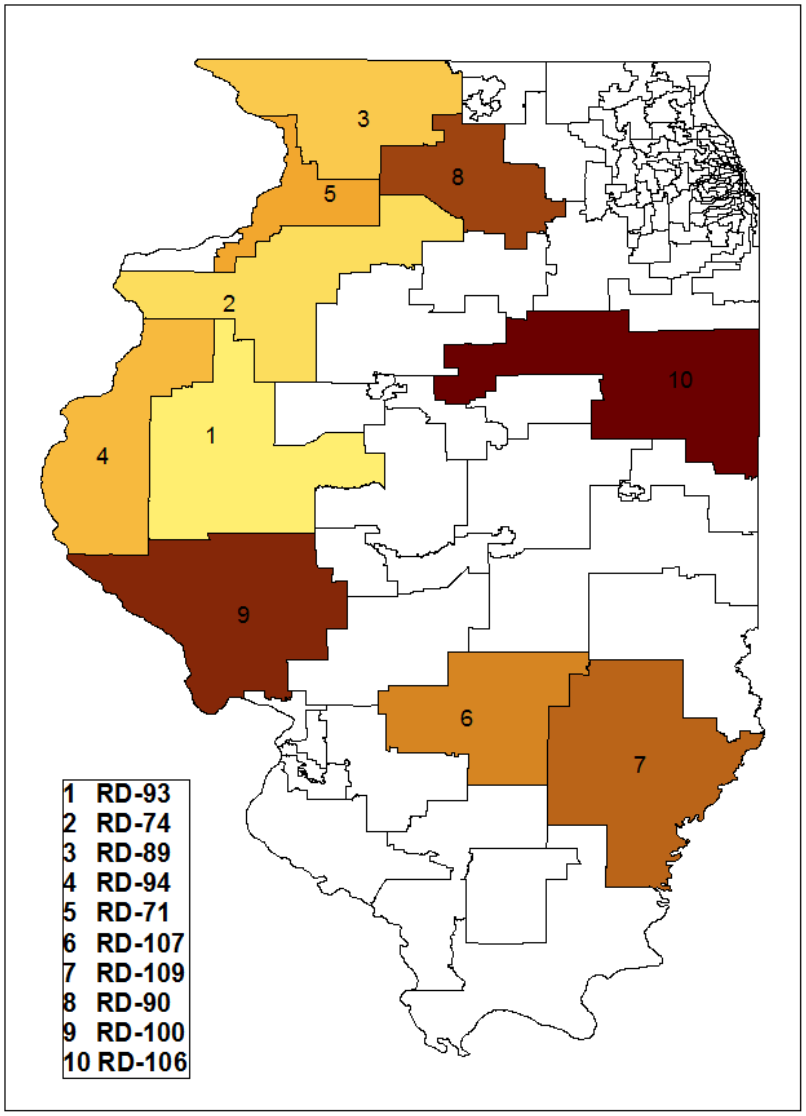
* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

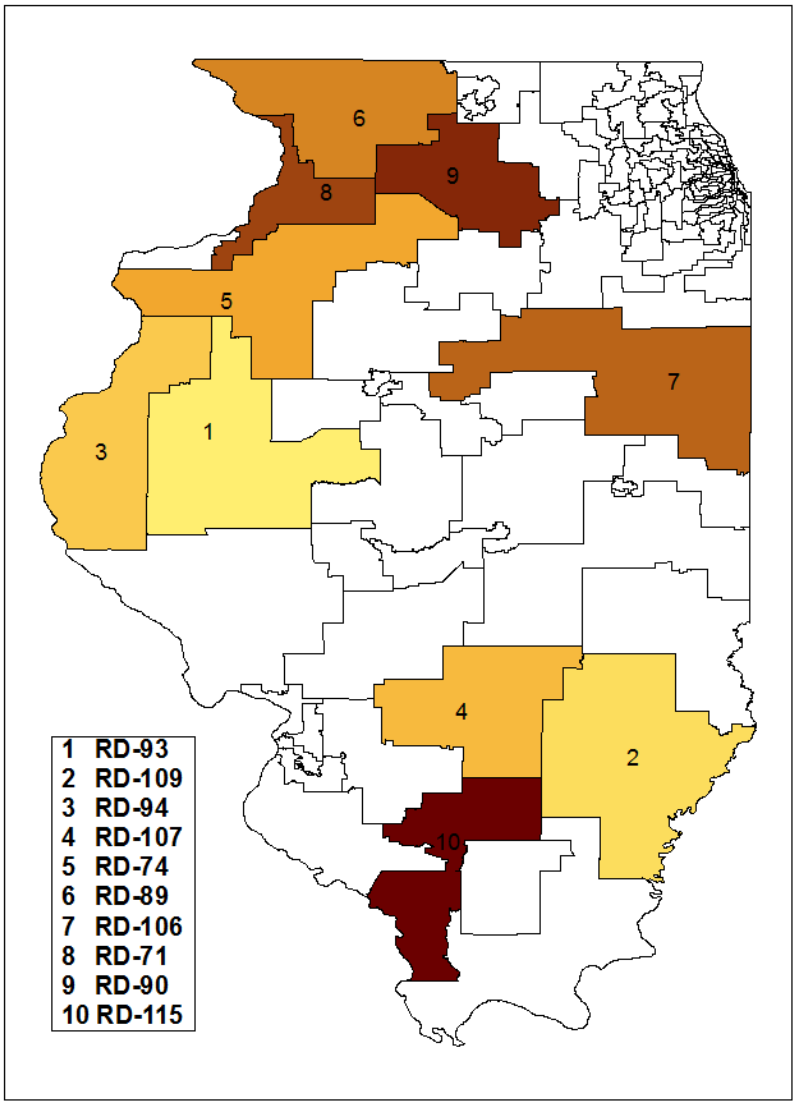
**Figure 14: Top 10 Livestock Representative* Districts**
Rank by Output




* 2011 political districts

**Figure 15: Top 10 Livestock Representative* Districts**
Rank by share in total county personal income




* 2011 political districts

**Table 16: Top 10 Livestock Senate* Districts**

Ranked by Output

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | SD-47 | 242,104 | 347,981 | 3.26% | 1,760 | 2,389 | 1.51% | 23,796 |
| 2 | SD-45 | 212,470 | 314,057 | 2.02% | 1,545 | 2,146 | 1.02% | 20,640 |
| 3 | SD-54 | 181,850 | 274,411 | 2.04% | 1,322 | 1,913 | 1.13% | 19,740 |
| 4 | SD-55 | 157,512 | 206,293 | 2.29% | 1,145 | 1,503 | 1.13% | 14,353 |
| 5 | SD-37 | 141,546 | 200,704 | 1.70% | 1,036 | 1,494 | 1.01% | 16,522 |
| 6 | SD-53 | 118,580 | 157,126 | 1.71% | 862 | 1,107 | 0.93% | 11,496 |
| 7 | SD-36 | 113,013 | 158,311 | 1.41% | 532 | 788 | 0.44% | 9,497 |
| 8 | SD-50 | 104,644 | 146,278 | 1.30% | 761 | 1,056 | 0.67% | 11,384 |
| 9 | SD-51 | 74,878 | 98,706 | 0.63% | 545 | 681 | 0.31% | 6,311 |
| 10 | SD-58 | 71,539 | 103,531 | 0.96% | 520 | 737 | 0.50% | 7,019 |

* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

**Table 17: Top 10 Livestock Senate* Districts**

Rank by share in total county personal income

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | SD-47 | 242,104 | 347,981 | 3.26% | 1,760 | 2,389 | 1.51% | 23,796 |
| 2 | SD-55 | 157,512 | 206,293 | 2.29% | 1,145 | 1,503 | 1.13% | 14,353 |
| 3 | SD-54 | 181,850 | 274,411 | 2.04% | 1,322 | 1,913 | 1.13% | 19,740 |
| 4 | SD-45 | 212,470 | 314,057 | 2.02% | 1,545 | 2,146 | 1.02% | 20,640 |
| 5 | SD-53 | 118,580 | 157,126 | 1.71% | 862 | 1,107 | 0.93% | 11,496 |
| 6 | SD-37 | 141,546 | 200,704 | 1.70% | 1,036 | 1,494 | 1.01% | 16,522 |
| 7 | SD-36 | 113,013 | 158,311 | 1.41% | 532 | 788 | 0.44% | 9,497 |
| 8 | SD-50 | 104,644 | 146,278 | 1.30% | 761 | 1,056 | 0.67% | 11,384 |
| 9 | SD-58 | 71,539 | 103,531 | 0.96% | 520 | 737 | 0.50% | 7,019 |
| 10 | SD-59 | 60,063 | 86,354 | 0.93% | 437 | 654 | 0.49% | 5,436 |

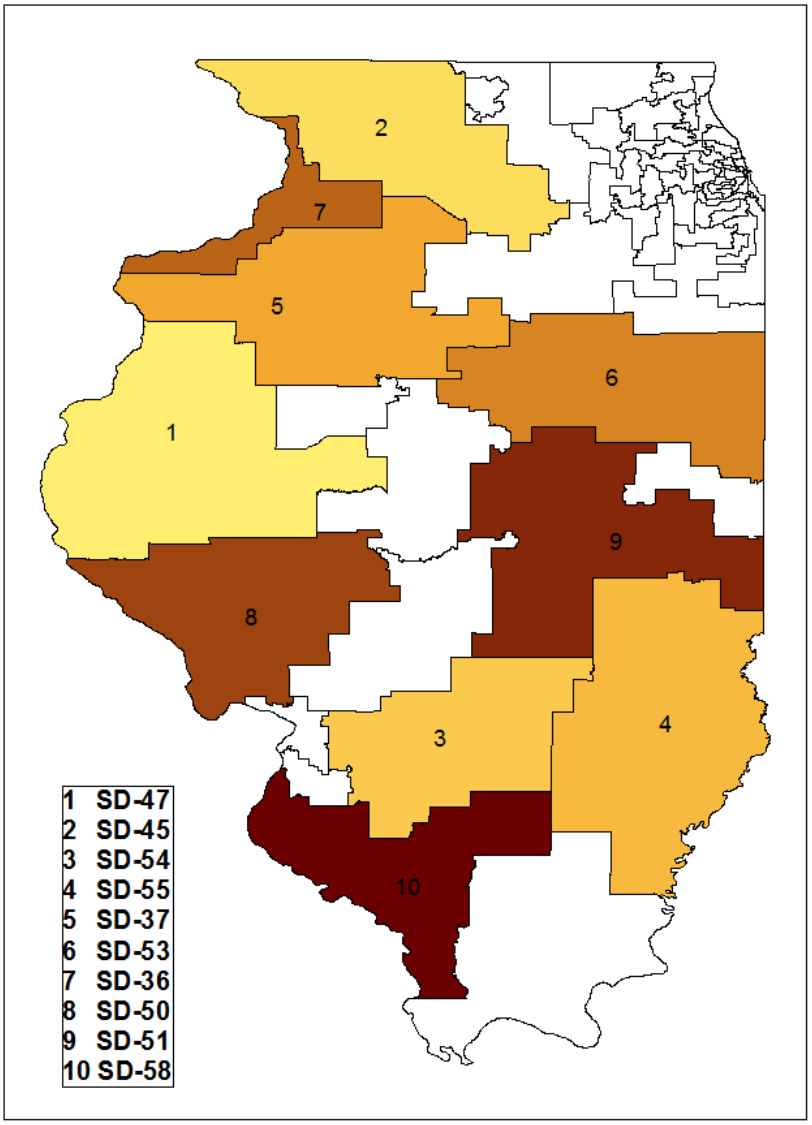
* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

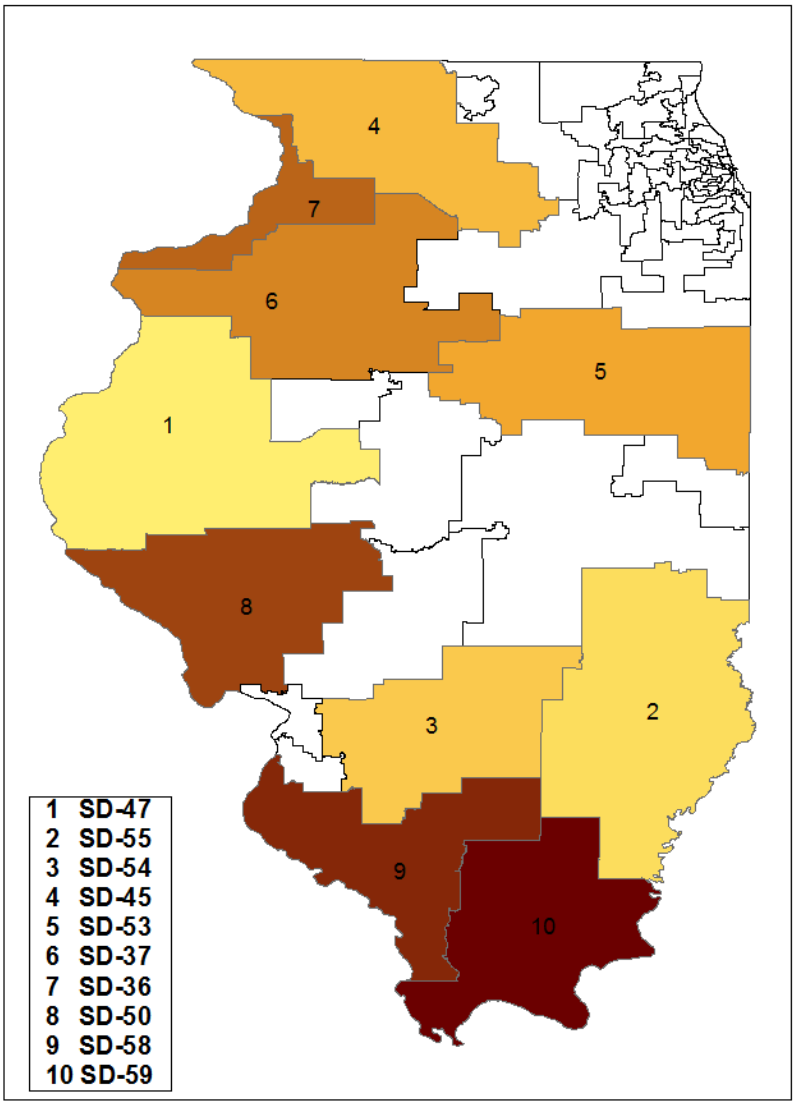
**Figure 16: Top 10 Livestock Senate* Districts**
Rank by Output




* 2011 political districts

**Figure 17: Top 10 Livestock Senate* Districts**
Rank by share in total county personal income




* 2011 political districts

**Table 18: Top 10 Livestock Congressional* Districts**

Ranked by Output

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | CD-15 | 470,923 | 662,230 | 2.11% | 4,290 | 5,531 | 1.16% | 46,287 |
| 2 | CD-17 | 415,182 | 608,006 | 1.63% | 3,949 | 5,135 | 1.09% | 40,840 |
| 3 | CD-18 | 307,155 | 504,291 | 1.24% | 2,433 | 3,493 | 0.67% | 36,551 |
| 4 | CD-16 | 257,533 | 370,447 | 1.16% | 2,152 | 2,841 | 0.70% | 27,477 |
| 5 | CD-13 | 140,943 | 193,649 | 0.65% | 1,239 | 1,563 | 0.00% | 13,673 |
| 6 | CD-12 | 97,713 | 164,161 | 0.43% | 917 | 1,302 | 0.26% | 10,816 |
| 7 | CD-14 | 60,530 | 82,606 | 0.16% | 504 | 644 | 0.17% | 6,424 |
| 8 | CD-2 | 9,815 | 16,696 | 0.03% | 124 | 159 | 0.03% | 1,372 |
| 9 | CD-6 | 8,691 | 15,321 | 0.01% | 110 | 144 | 0.01% | 1,240 |
| 10 | CD-11 | 6,954 | 10,075 | 0.03% | 88 | 107 | 0.03% | 817 |

* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

**Table 19: Top 10 Livestock Congressional* Districts**

Rank by share in total county personal income

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | CD-15 | 470,923 | 662,230 | 2.11% | 4,290 | 5,531 | 1.16% | 46,287 |
| 2 | CD-17 | 415,182 | 608,006 | 1.63% | 3,949 | 5,135 | 1.09% | 40,840 |
| 3 | CD-18 | 307,155 | 504,291 | 1.24% | 2,433 | 3,493 | 0.67% | 36,551 |
| 4 | CD-16 | 257,533 | 370,447 | 1.16% | 2,152 | 2,841 | 0.70% | 27,477 |
| 5 | CD-13 | 140,943 | 193,649 | 0.65% | 1,239 | 1,563 | 0.00% | 13,673 |
| 6 | CD-12 | 97,713 | 164,161 | 0.43% | 917 | 1,302 | 0.26% | 10,816 |
| 7 | CD-14 | 60,530 | 82,606 | 0.16% | 504 | 644 | 0.17% | 6,424 |
| 8 | CD-1 | 2,420 | 3,294 | 0.04% | 31 | 37 | 0.05% | 245 |
| 9 | CD-11 | 6,954 | 10,075 | 0.03% | 88 | 107 | 0.03% | 817 |
| 10 | CD-2 | 9,815 | 16,696 | 0.03% | 124 | 159 | 0.03% | 1,372 |

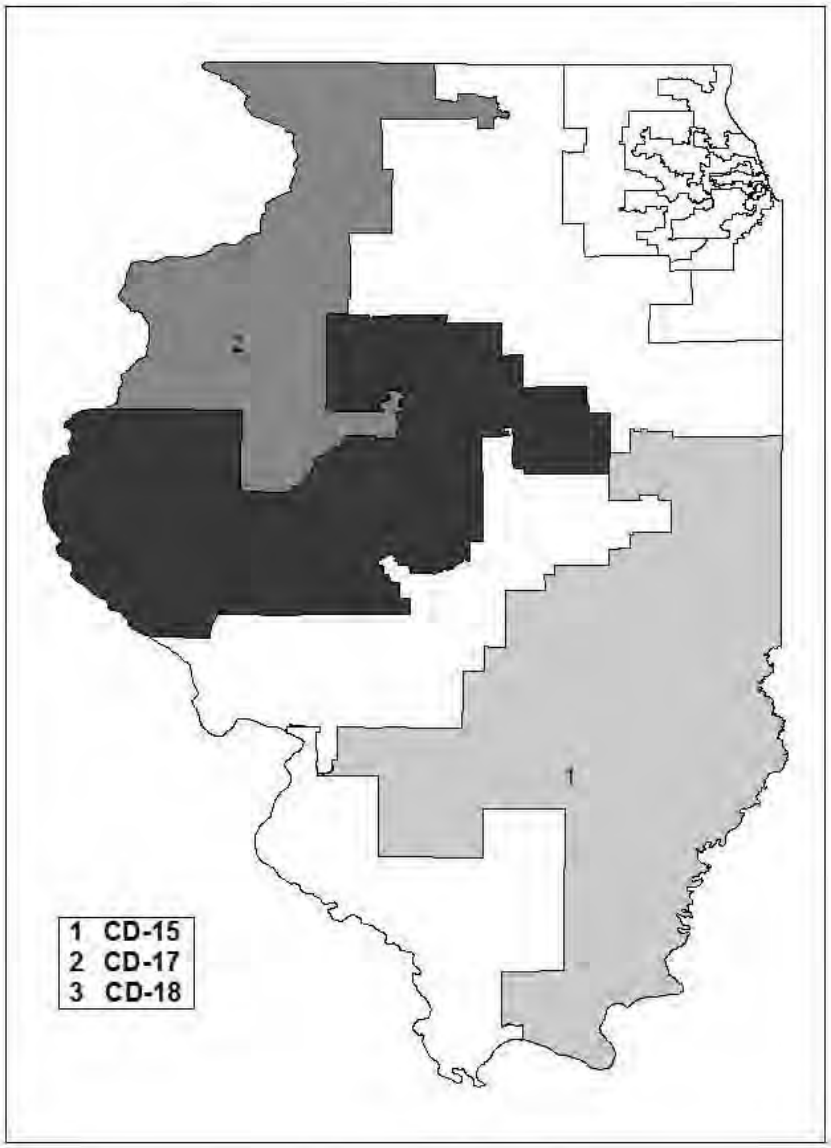
* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

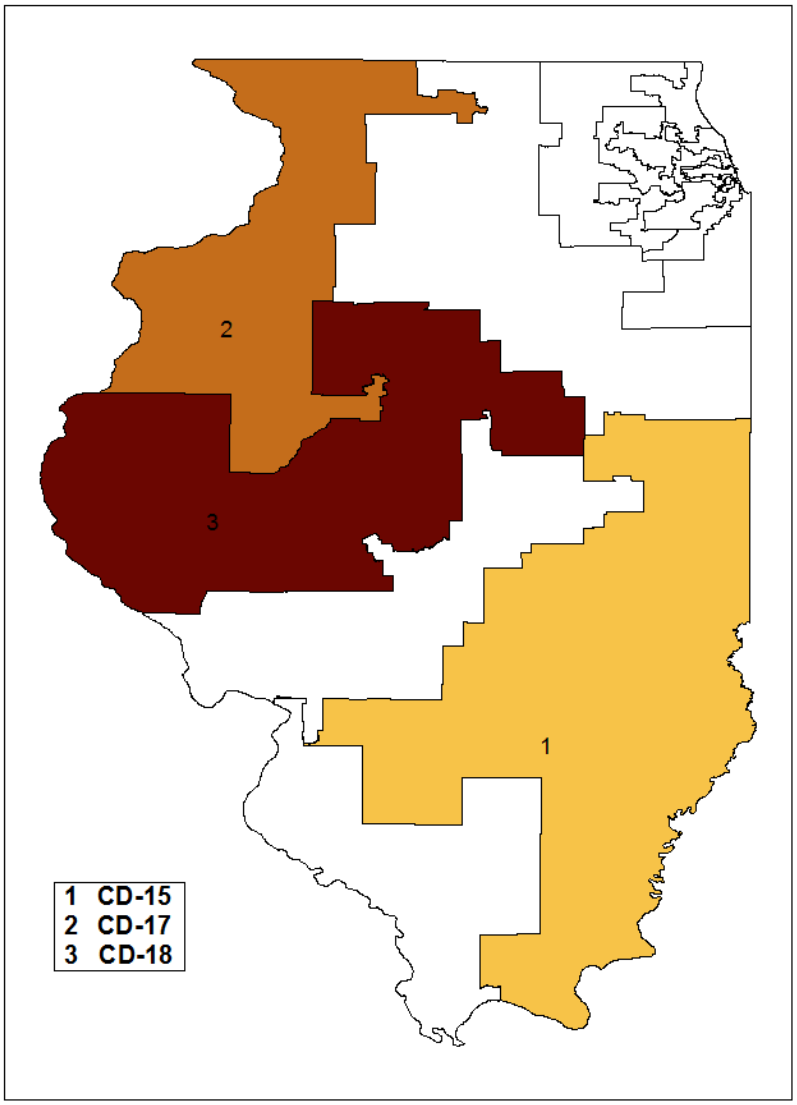
**Figure 18: Top 10 Livestock Congressional* Districts**
Rank by Output




* 2011 political districts

**Figure 19: Top 10 Livestock Congressional* Districts**
Rank by share in total county personal income




* 2011 political districts

## III.2. Beef Sector

**Table 20: Top 10 Beef Counties**

Ranked by Output

| | | Output* | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | DeKalb | 23,734 | 34,570 | 0.82% | 45 | 105 | 0.10% | 1,909 |
| 2 | Carroll | 23,639 | 42,331 | 4.89% | 300 | 400 | 4.12% | 2,386 |
| 3 | Jo Daviess | 21,641 | 36,148 | 2.45% | 274 | 378 | 2.23% | 1,995 |
| 4 | Henry | 21,360 | 33,960 | 1.14% | 271 | 340 | 1.44% | 1,725 |
| 5 | Whiteside | 20,266 | 36,040 | 1.04% | 257 | 325 | 0.93% | 1,699 |
| 6 | Ogle | 17,753 | 22,870 | 1.05% | 225 | 255 | 1.01% | 1,268 |
| 7 | Stephenson | 15,664 | 23,941 | 0.98% | 199 | 243 | 0.85% | 1,288 |
| 8 | Adams | 15,474 | 26,872 | 0.65% | 196 | 260 | 0.47% | 1,338 |
| 9 | Knox | 12,436 | 15,171 | 0.73% | 158 | 178 | 0.62% | 809 |
| 10 | Fulton | 11,346 | 20,389 | 0.93% | 144 | 187 | 1.18% | 1,071 |

*: in thousands of dollars

Source: National Agricultural Statistics Service, IMPLAN (2009), authors' calculations

**Table 21: Top 10 Beef Counties**

Ranked by Share in Total County Personal Income

| | | Output* | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | Carroll | 23,639 | 42,331 | 4.89% | 300 | 400 | 4.12% | 2,386 |
| 2 | Jo Daviess | 21,641 | 36,148 | 2.45% | 274 | 378 | 2.23% | 1,995 |
| 3 | Henderson | 4,729 | 7,573 | 1.67% | 60 | 79 | 1.97% | 482 |
| 4 | Hancock | 9,101 | 14,699 | 1.66% | 176 | 203 | 2.64% | 695 |
| 5 | Brown | 2,746 | 4,311 | 1.52% | 35 | 43 | 0.81% | 212 |
| 6 | Schuyler | 3,219 | 5,235 | 1.51% | 41 | 56 | 0.97% | 351 |
| 7 | Scott | 2,091 | 3,753 | 1.45% | 27 | 34 | 1.36% | 204 |
| 8 | Washington | 7,108 | 10,381 | 1.38% | 90 | 108 | 1.23% | 561 |
| 9 | Jasper | 4,300 | 6,237 | 1.34% | 55 | 63 | 1.20% | 291 |
| 10 | Pope | 1,447 | 2,166 | 1.33% | 18 | 33 | 1.62% | 90 |

*: in thousands of dollars

Source: National Agricultural Statistics Service, IMPLAN (2009), authors' calculations

**Figure 20: Top 10 Beef Counties**
Rank by Output

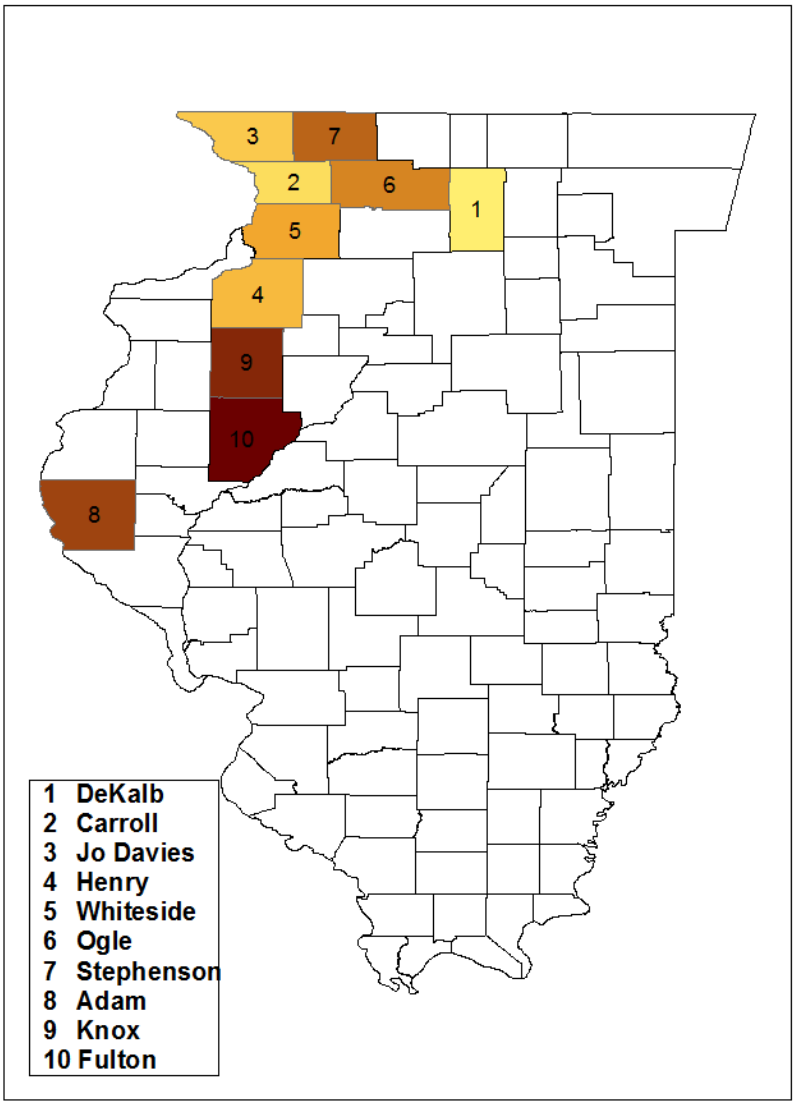


**Figure 21: Top 10 Beef Counties**
Ranked by Share in Total County Personal Income

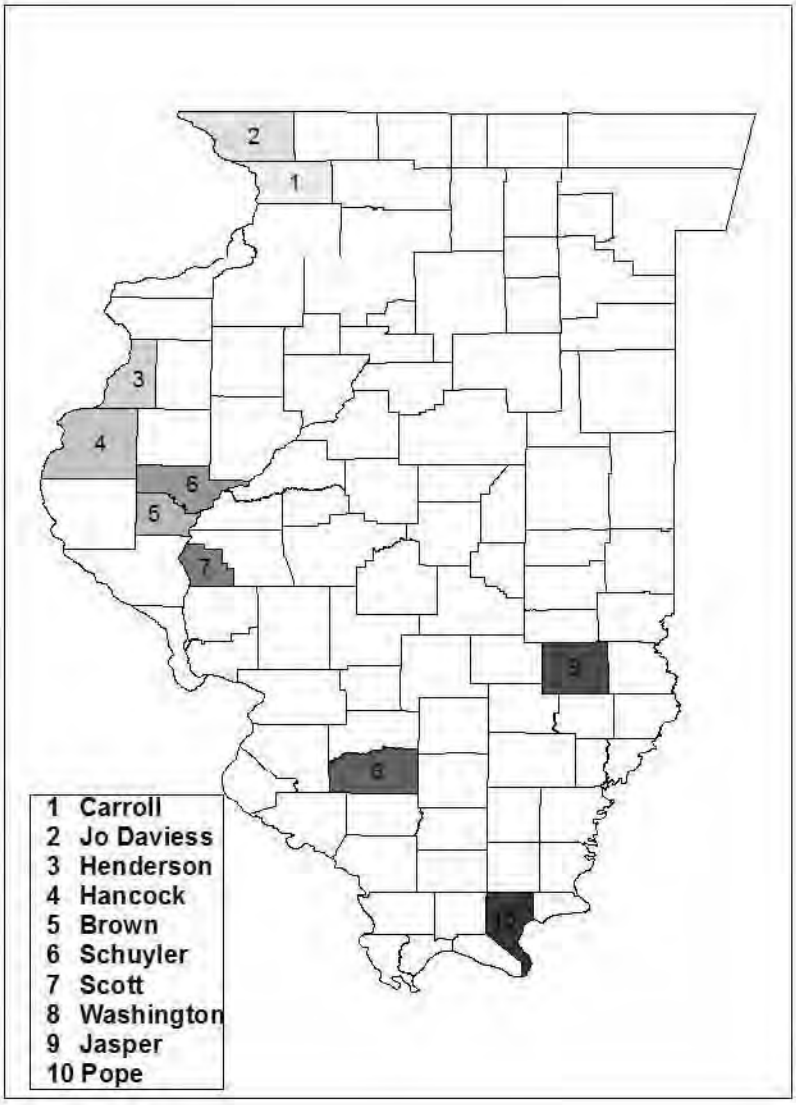


**Table 22: Top 10 Beef Representative* Districts**

Ranked by Output

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | RD-71 | 48,180 | 68,055 | 0.92% | 611 | 723 | 0.79% | 3,491 |
| 2 | RD-90 | 36,793 | 53,717 | 0.65% | 466 | 561 | 0.59% | 3,048 |
| 3 | RD-89 | 36,517 | 63,924 | 0.75% | 463 | 623 | 0.63% | 3,928 |
| 4 | RD-93 | 32,145 | 43,646 | 0.82% | 407 | 483 | 0.67% | 2,393 |
| 5 | RD-74 | 31,299 | 48,343 | 0.83% | 397 | 494 | 0.94% | 2,646 |
| 6 | RD-94 | 29,833 | 40,737 | 0.85% | 378 | 447 | 0.68% | 2,014 |
| 7 | RD-100 | 28,499 | 46,051 | 0.47% | 361 | 458 | 0.45% | 2,753 |
| 8 | RD-107 | 22,640 | 36,243 | 0.62% | 287 | 365 | 0.55% | 2,033 |
| 9 | RD-109 | 17,950 | 27,620 | 0.57% | 227 | 279 | 0.49% | 1,426 |
| 10 | RD-118 | 17,784 | 30,366 | 0.62% | 225 | 336 | 0.56% | 1,624 |

* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

**Table 23: Top 10 Beef Representative* Districts**

Rank by share in total county personal income

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | RD-71 | 48,180 | 68,055 | 0.92% | 611 | 723 | 0.79% | 3,491 |
| 2 | RD-94 | 29,833 | 40,737 | 0.85% | 378 | 447 | 0.68% | 2,014 |
| 3 | RD-74 | 31,299 | 48,343 | 0.83% | 397 | 494 | 0.94% | 2,646 |
| 4 | RD-93 | 32,145 | 43,646 | 0.82% | 407 | 483 | 0.67% | 2,393 |
| 5 | RD-89 | 36,517 | 63,924 | 0.75% | 463 | 623 | 0.63% | 3,928 |
| 6 | RD-90 | 36,793 | 53,717 | 0.65% | 466 | 561 | 0.59% | 3,048 |
| 7 | RD-107 | 22,640 | 36,243 | 0.62% | 287 | 365 | 0.55% | 2,033 |
| 8 | RD-118 | 17,784 | 30,366 | 0.62% | 225 | 336 | 0.56% | 1,624 |
| 9 | RD-109 | 17,950 | 27,620 | 0.57% | 227 | 279 | 0.49% | 1,426 |
| 10 | RD-115 | 8,851 | 13,685 | 0.50% | 112 | 141 | 0.38% | 763 |

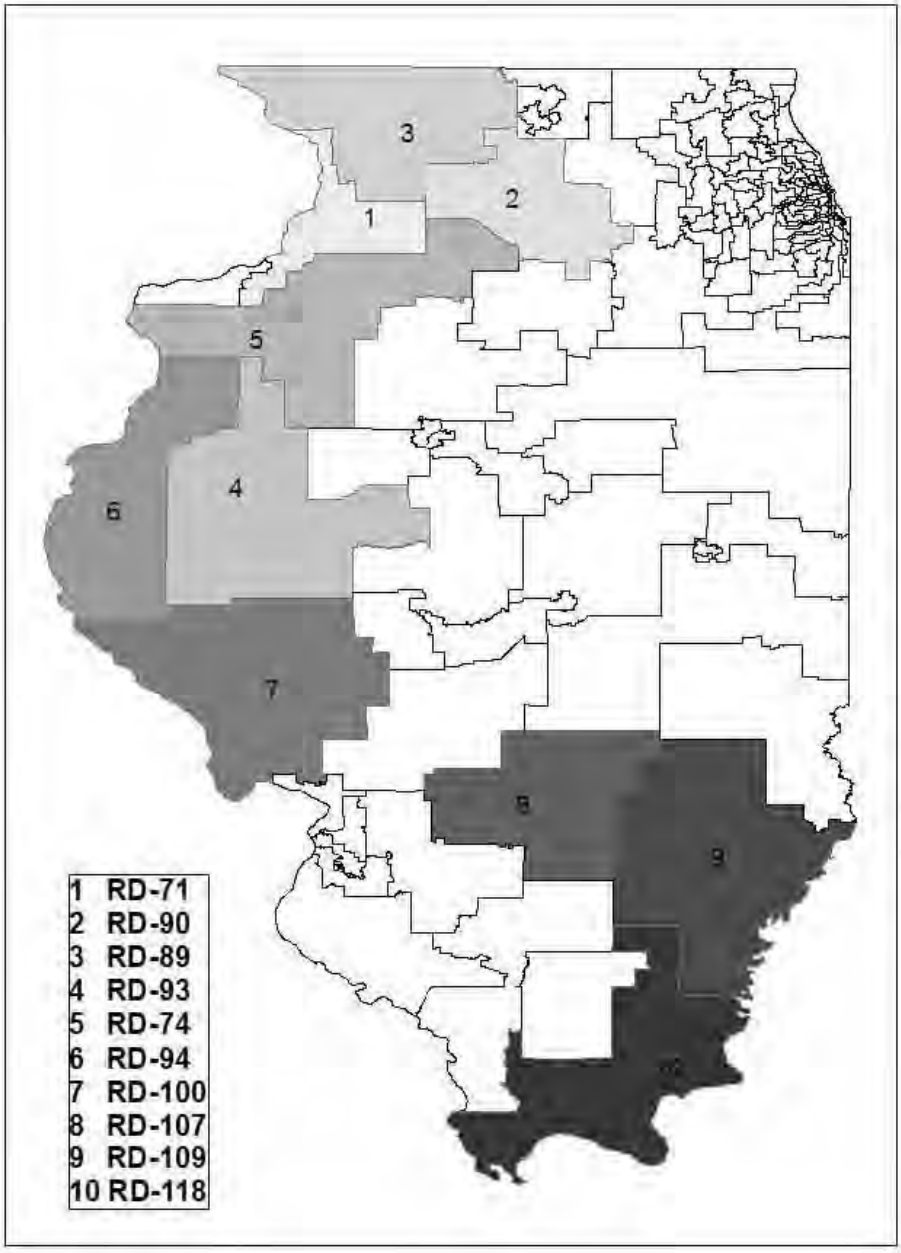
* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

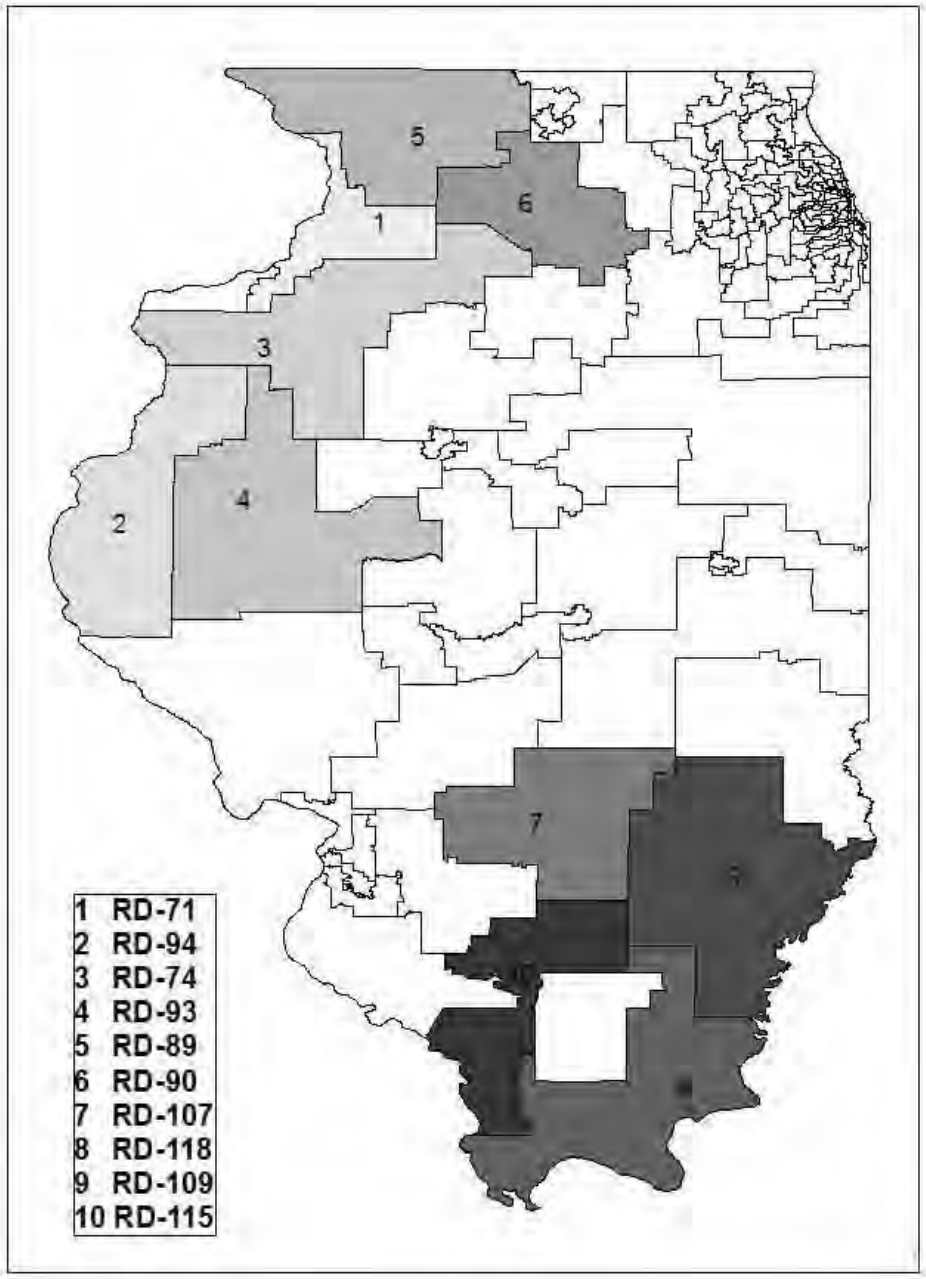
**Figure 22: Top 10 Beef Representative* Districts**
Rank by Output




* 2011 political districts

**Figure 23: Top 10 Beef Representative* Districts**
Rank by share in total county personal income




* 2011 political districts

**Table 24: Top 10 Beef Senate* Districts**

Ranked by Output

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | SD-45 | 73,311 | 117,641 | 0.70% | 929 | 1,185 | 0.61% | 6,976 |
| 2 | SD-47 | 61,978 | 84,383 | 0.83% | 785 | 930 | 0.67% | 4,407 |
| 3 | SD-36 | 49,612 | 69,760 | 0.62% | 629 | 743 | 0.52% | 3,567 |
| 4 | SD-37 | 37,698 | 59,084 | 0.45% | 478 | 601 | 0.47% | 3,352 |
| 5 | SD-54 | 32,485 | 52,619 | 0.36% | 412 | 526 | 0.35% | 3,068 |
| 6 | SD-50 | 29,812 | 47,895 | 0.37% | 378 | 477 | 0.33% | 2,854 |
| 7 | SD-55 | 27,821 | 41,215 | 0.40% | 352 | 423 | 0.35% | 2,082 |
| 8 | SD-59 | 24,240 | 40,147 | 0.37% | 307 | 440 | 0.35% | 2,120 |
| 9 | SD-58 | 21,753 | 34,361 | 0.29% | 276 | 353 | 0.27% | 2,068 |
| 10 | SD-51 | 19,327 | 24,419 | 0.16% | 245 | 277 | 0.14% | 1,328 |

* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

**Table 25: Top 10 Beef Senate* Districts**

Rank by share in total county personal income

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | SD-47 | 61,978 | 84,383 | 0.83% | 785 | 930 | 0.67% | 4,407 |
| 2 | SD-45 | 73,311 | 117,641 | 0.70% | 929 | 1,185 | 0.61% | 6,976 |
| 3 | SD-36 | 49,612 | 69,760 | 0.62% | 629 | 743 | 0.52% | 3,567 |
| 4 | SD-37 | 37,698 | 59,084 | 0.45% | 478 | 601 | 0.47% | 3,352 |
| 5 | SD-55 | 27,821 | 41,215 | 0.40% | 352 | 423 | 0.35% | 2,082 |
| 6 | SD-59 | 24,240 | 40,147 | 0.37% | 307 | 440 | 0.35% | 2,120 |
| 7 | SD-50 | 29,812 | 47,895 | 0.37% | 378 | 477 | 0.33% | 2,854 |
| 8 | SD-54 | 32,485 | 52,619 | 0.36% | 412 | 526 | 0.35% | 3,068 |
| 9 | SD-40 | 5,989 | 7,435 | 0.36% | 75 | 86 | 0.37% | 410 |
| 10 | SD-58 | 21,753 | 34,361 | 0.29% | 276 | 353 | 0.27% | 2,068 |

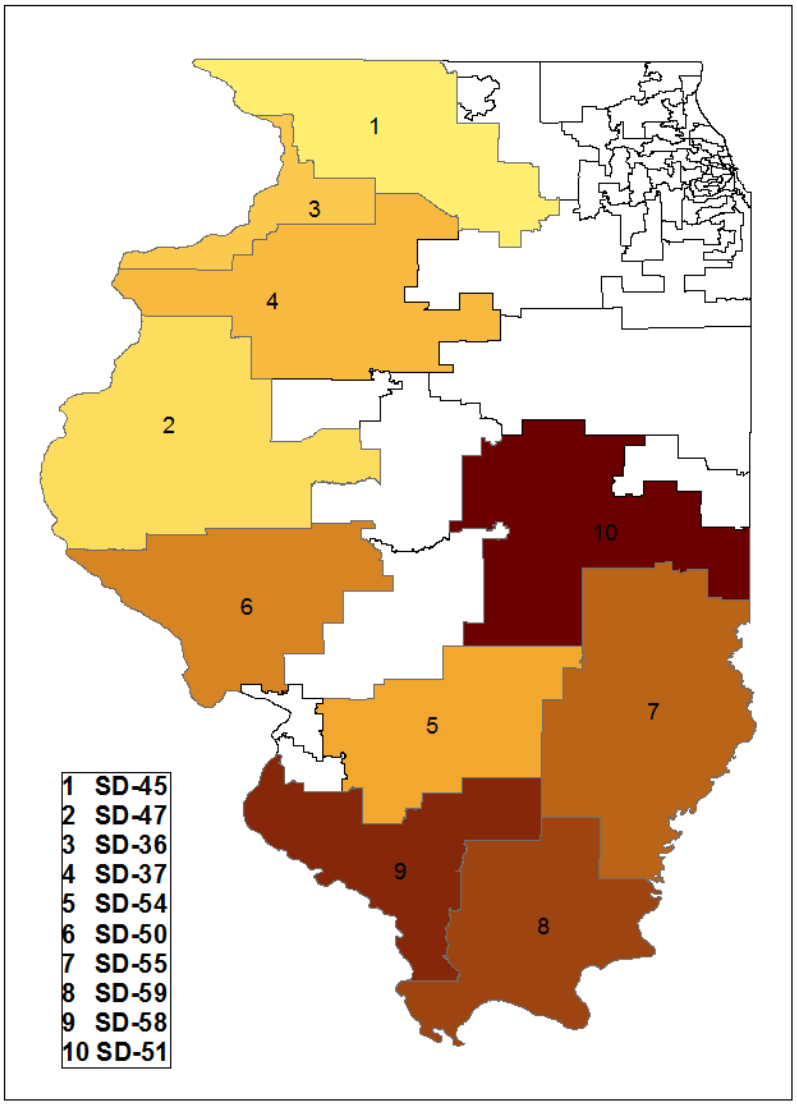
* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

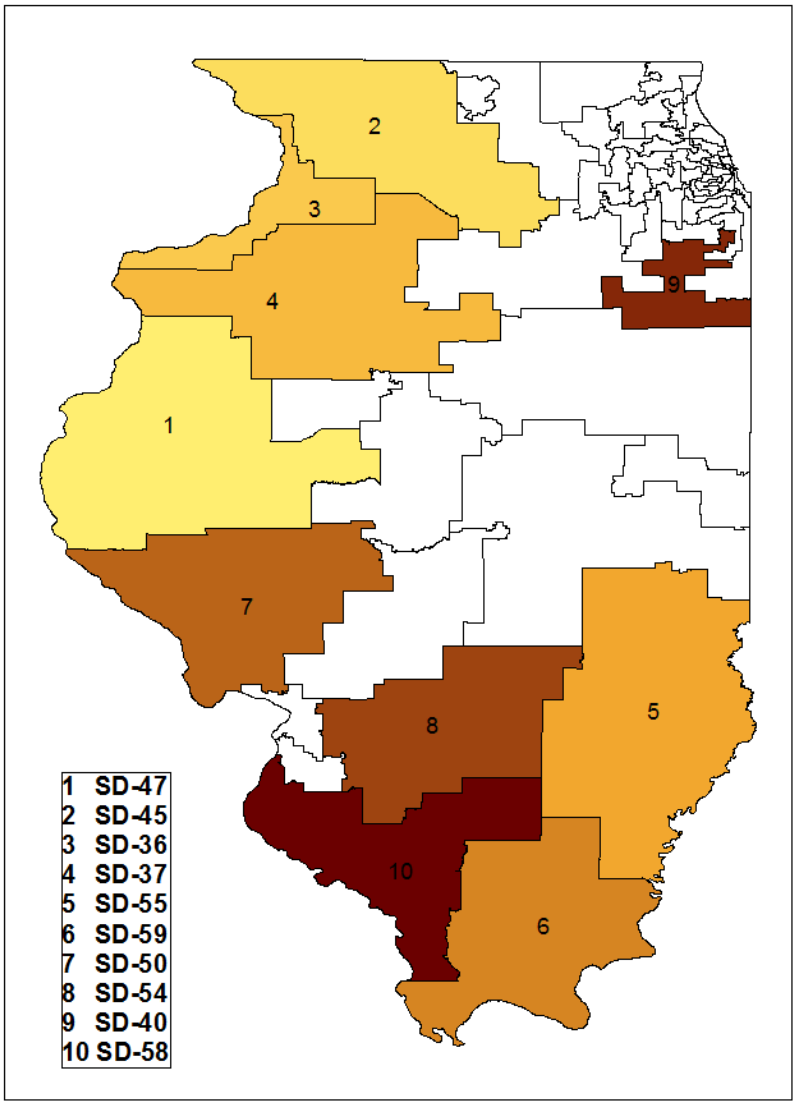
**Figure 24: Top 10 Beef Senate* Districts**
Rank by Output




* 2011 political districts

**Figure 25: Top 10 Beef Senate* Districts**
Rank by share in total county personal income




* 2011 political districts

**Table 26: Congressional* Districts—Beef**
Ranked by Output

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | CD-17 | 148,246 | 216,724 | 0.58% | 1,879 | 2,295 | 0.52% | 12,505 |
| 2 | CD-15 | 101,446 | 142,645 | 0.46% | 1,286 | 1,536 | 0.35% | 7,909 |
| 3 | CD-16 | 69,478 | 99,050 | 0.31% | 881 | 1,049 | 0.29% | 5,595 |
| 4 | CD-18 | 68,110 | 101,785 | 0.28% | 863 | 1,059 | 0.24% | 5,960 |
| 5 | CD-13 | 39,208 | 58,556 | 0.18% | 497 | 595 | 0.00% | 3,293 |
| 6 | CD-12 | 33,097 | 56,123 | 0.15% | 419 | 558 | 0.12% | 3,410 |
| 7 | CD-14 | 13,819 | 19,121 | 0.04% | 175 | 208 | 0.06% | 1,226 |
| 8 | CD-6 | 4,437 | 7,311 | 0.01% | 56 | 72 | 0.01% | 551 |
| 9 | CD-11 | 1,333 | 1,951 | 0.01% | 17 | 21 | 0.01% | 135 |
| 10 | CD-2 | 1,327 | 2,129 | 0.00% | 17 | 21 | 0.00% | 150 |

* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

**Table 27: Congressional* Districts—Beef**
Rank by share in total county personal income

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | CD-17 | 148,246 | 216,724 | 0.58% | 1,879 | 2,295 | 0.52% | 12,505 |
| 2 | CD-15 | 101,446 | 142,645 | 0.46% | 1,286 | 1,536 | 0.35% | 7,909 |
| 3 | CD-16 | 69,478 | 99,050 | 0.31% | 881 | 1,049 | 0.29% | 5,595 |
| 4 | CD-18 | 68,110 | 101,785 | 0.28% | 863 | 1,059 | 0.24% | 5,960 |
| 5 | CD-13 | 39,208 | 58,556 | 0.18% | 497 | 595 | 0.00% | 3,293 |
| 6 | CD-12 | 33,097 | 56,123 | 0.15% | 419 | 558 | 0.12% | 3,410 |
| 7 | CD-14 | 13,819 | 19,121 | 0.04% | 175 | 208 | 0.06% | 1,226 |
| 8 | CD-6 | 4,437 | 7,311 | 0.01% | 56 | 72 | 0.01% | 551 |
| 9 | CD-11 | 1,333 | 1,951 | 0.01% | 17 | 21 | 0.01% | 135 |
| 10 | CD-1 | 335 | 462 | 0.01% | 4 | 5 | 0.01% | 28 |

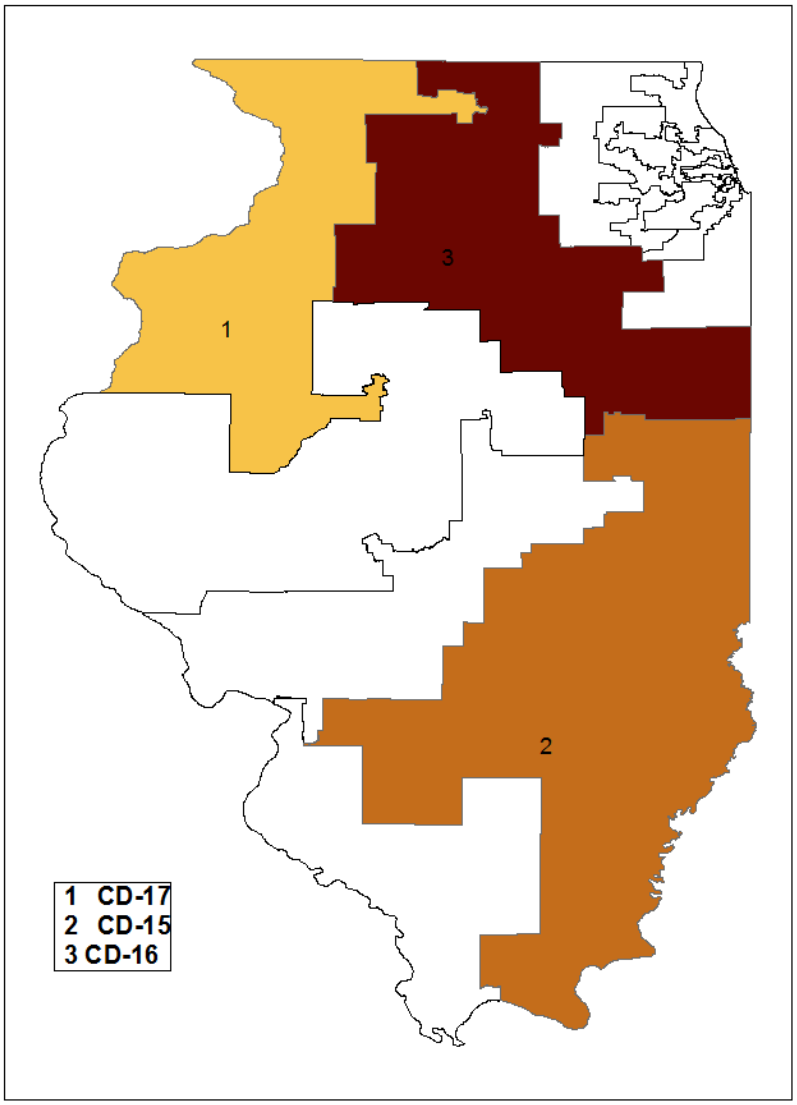
* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

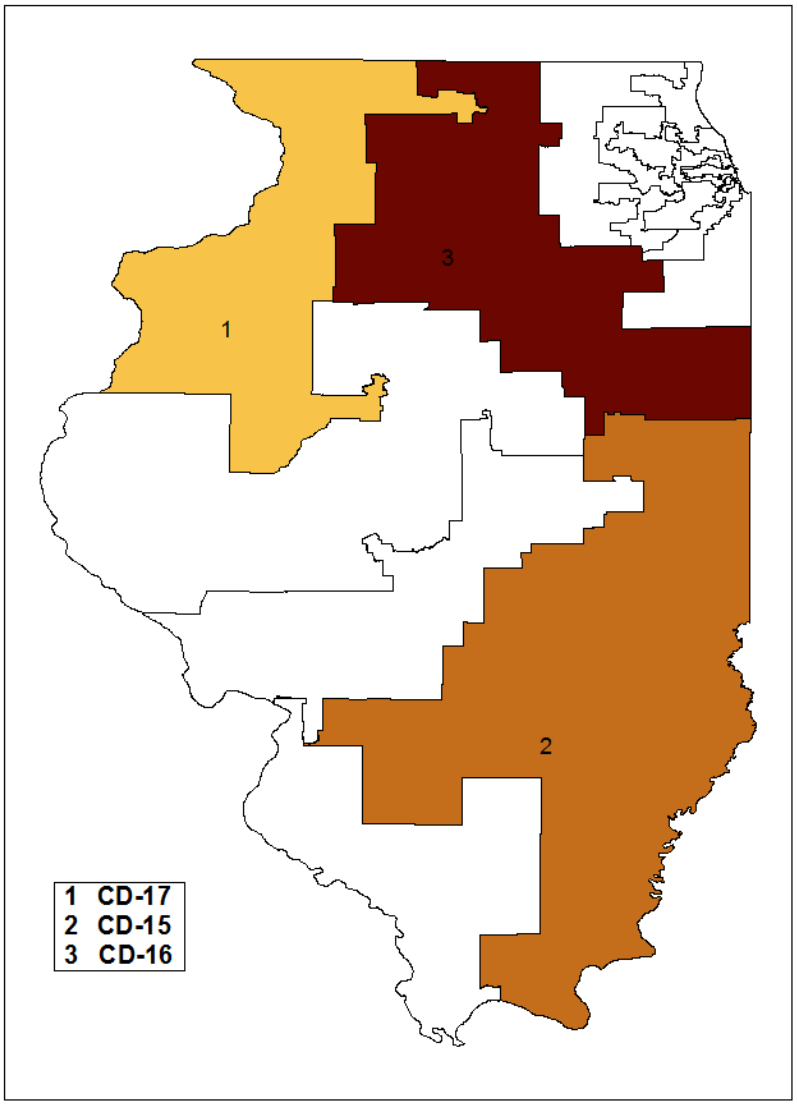
**Figure 26: Top 3 Beef Congressional* Districts**
Rank by Output




* 2011 political districts

**Figure 27: Top 3 Beef Congressional* Districts**
Rank by share in total county personal income




* 2011 political districts

## III.3. Dairy

**Table 28: Top 10 Dairy Counties**

Ranked by Output

| | | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | |
| 1 | Stephenson | 43,488 | 56,649 | 2.71% | 577 | 646 | 2.45% | 2,537 |
| 2 | Clinton | 42,788 | 55,841 | 3.07% | 556 | 644 | 3.34% | 3,040 |
| 3 | Jo Daviess | 24,306 | 34,840 | 3.90% | 323 | 413 | 3.40% | 1,907 |
| 4 | Washington | 22,286 | 26,156 | 4.32% | 296 | 326 | 4.03% | 1,244 |
| 5 | McLean | 19,743 | 25,024 | 0.29% | 262 | 294 | 0.25% | 1,290 |
| 6 | Effingham | 16,753 | 20,832 | 1.42% | 222 | 251 | 0.92% | 1,045 |
| 7 | Carroll | 13,177 | 20,375 | 2.73% | 175 | 215 | 2.40% | 1,003 |
| 8 | McHenry | 11,014 | 13,398 | 0.10% | 143 | 161 | 0.12% | 734 |
| 9 | Shelby | 8,188 | 9,322 | 1.15% | 109 | 117 | 1.47% | 372 |
| 10 | Bond | 7,198 | 8,401 | 1.25% | 96 | 105 | 1.39% | 410 |

*: in thousands of dollars

Source: National Agricultural Statistics Service, IMPLAN (2009), authors' calculations

**Table 29: Top 10 Dairy Counties (change format)**

Ranked by Share in Total County Personal Income

| | | Output | | | Employment | | | Tax Impact |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % of PI | Direct | Total | % Total | |
| 1 | Washington | 22,286 | 26,156 | 4.32% | 296 | 326 | 4.03% | 1,244 |
| 2 | Jo Daviess | 24,306 | 34,840 | 3.90% | 323 | 413 | 3.40% | 1,907 |
| 3 | Clinton | 42,788 | 55,841 | 3.07% | 556 | 644 | 3.34% | 3,040 |
| 4 | Carroll | 13,177 | 20,375 | 2.73% | 175 | 215 | 2.40% | 1,003 |
| 5 | Stephenson | 43,488 | 56,649 | 2.71% | 577 | 646 | 2.45% | 2,537 |
| 6 | Cumberland | 6,884 | 9,154 | 1.88% | 91 | 105 | 2.02% | 432 |
| 7 | Effingham | 16,753 | 20,832 | 1.42% | 222 | 251 | 0.92% | 1,045 |
| 8 | Bond | 7,198 | 8,401 | 1.25% | 96 | 105 | 1.39% | 410 |
| 9 | Shelby | 8,188 | 9,322 | 1.15% | 109 | 117 | 1.47% | 372 |
| 10 | Jasper | 2,201 | 2,512 | 0.69% | 29 | 31 | 0.64% | 111 |

*: in thousands of dollars

Source: National Agricultural Statistics Service, IMPLAN (2009), authors' calculations

**Figure 28: Top 10 Dairy Counties**
Rank by Output

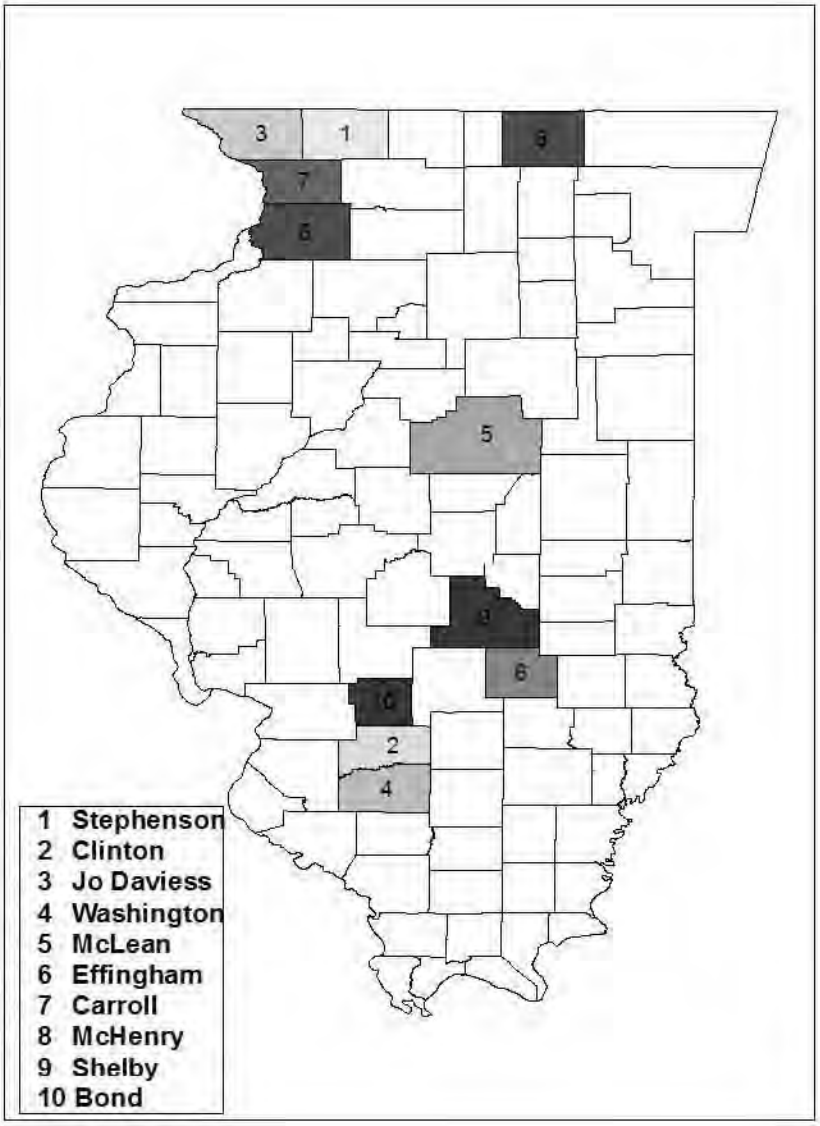


**Figure 29: Top 10 Dairy Counties**
Ranked by Share in Total County Personal Income

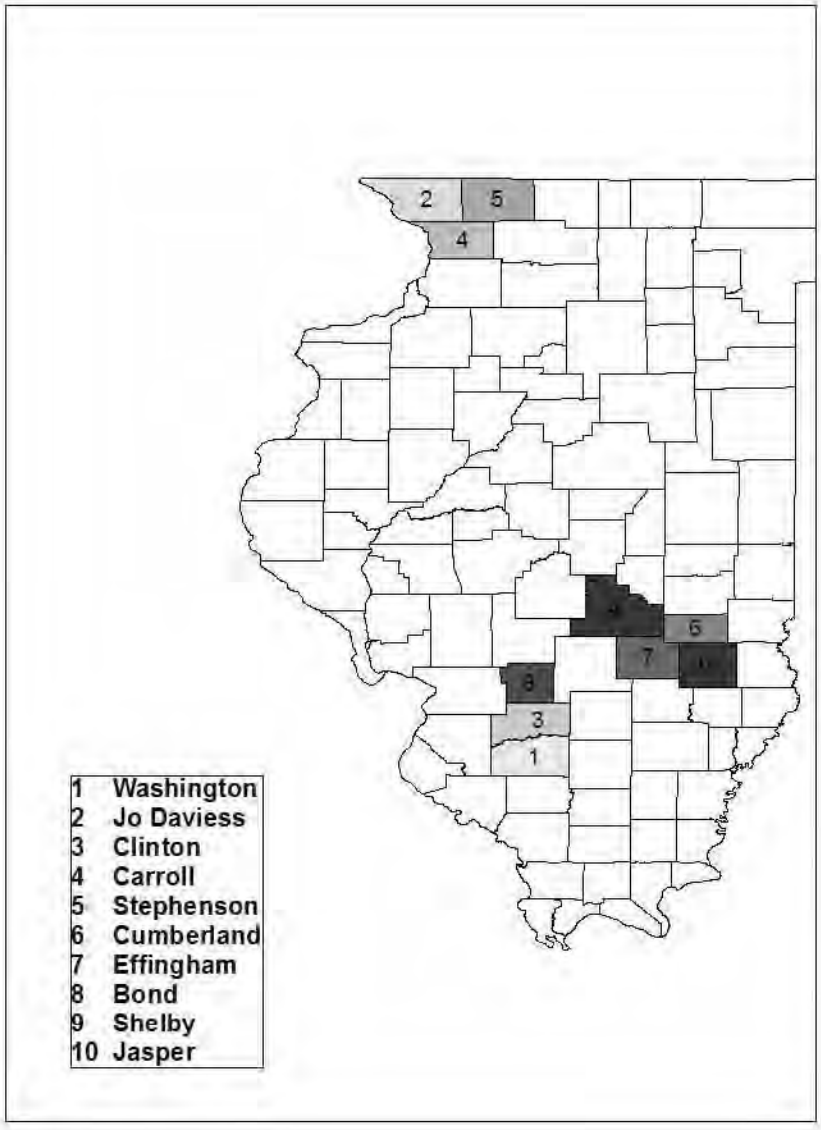


**Table 30: Top 10 Dairy Representative* Districts**

Ranked by Output

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | RD-89 | 49,088 | 75,633 | 1.01% | 622 | 763 | 0.85% | 4,107 |
| 2 | RD-107 | 35,889 | 47,230 | 0.99% | 455 | 528 | 0.87% | 2,521 |
| 3 | RD-108 | 30,701 | 51,215 | 0.58% | 389 | 486 | 0.60% | 2,856 |
| 4 | RD-102 | 11,920 | 15,525 | 0.23% | 151 | 168 | 0.20% | 691 |
| 5 | RD-71 | 10,734 | 16,217 | 0.21% | 136 | 162 | 0.18% | 738 |
| 6 | RD-115 | 9,424 | 11,564 | 0.53% | 125 | 141 | 0.43% | 602 |
| 7 | RD-116 | 7,272 | 11,472 | 0.13% | 92 | 115 | 0.12% | 648 |
| 8 | RD-110 | 6,508 | 8,071 | 0.18% | 83 | 91 | 0.15% | 341 |
| 9 | RD-109 | 6,079 | 7,832 | 0.19% | 77 | 87 | 0.17% | 372 |
| 10 | RD-105 | 5,775 | 7,919 | 0.20% | 73 | 84 | 0.16% | 400 |

* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

**Table 31: Top 10 Dairy Representative* Districts**

Rank by share in total county personal income

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | RD-89 | 49,088 | 75,633 | 1.01% | 622 | 763 | 0.85% | 4,107 |
| 2 | RD-107 | 35,889 | 47,230 | 0.99% | 455 | 528 | 0.87% | 2,521 |
| 3 | RD-108 | 30,701 | 51,215 | 0.58% | 389 | 486 | 0.60% | 2,856 |
| 4 | RD-115 | 9,424 | 11,564 | 0.53% | 125 | 141 | 0.43% | 602 |
| 5 | RD-102 | 11,920 | 15,525 | 0.23% | 151 | 168 | 0.20% | 691 |
| 6 | RD-71 | 10,734 | 16,217 | 0.21% | 136 | 162 | 0.18% | 738 |
| 7 | RD-105 | 5,775 | 7,919 | 0.20% | 73 | 84 | 0.16% | 400 |
| 8 | RD-109 | 6,079 | 7,832 | 0.19% | 77 | 87 | 0.17% | 372 |
| 9 | RD-110 | 6,508 | 8,071 | 0.18% | 83 | 91 | 0.15% | 341 |
| 10 | RD-94 | 5,139 | 8,823 | 0.15% | 65 | 81 | 0.12% | 383 |

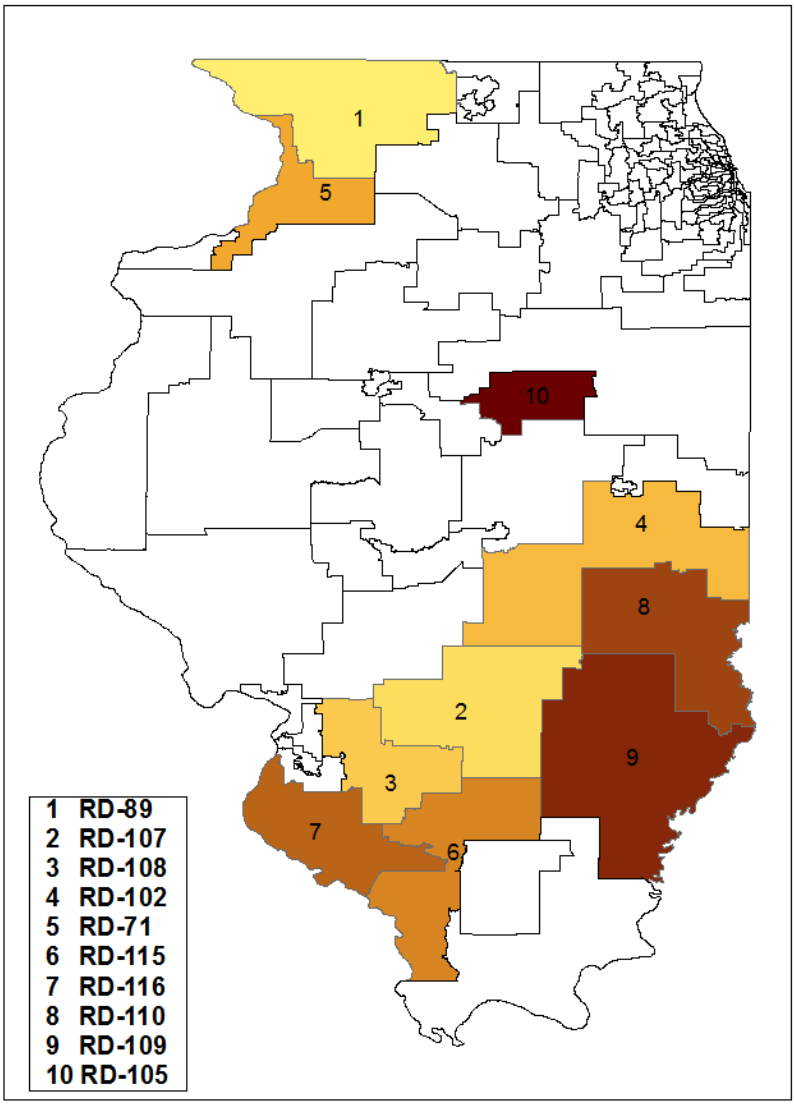
* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

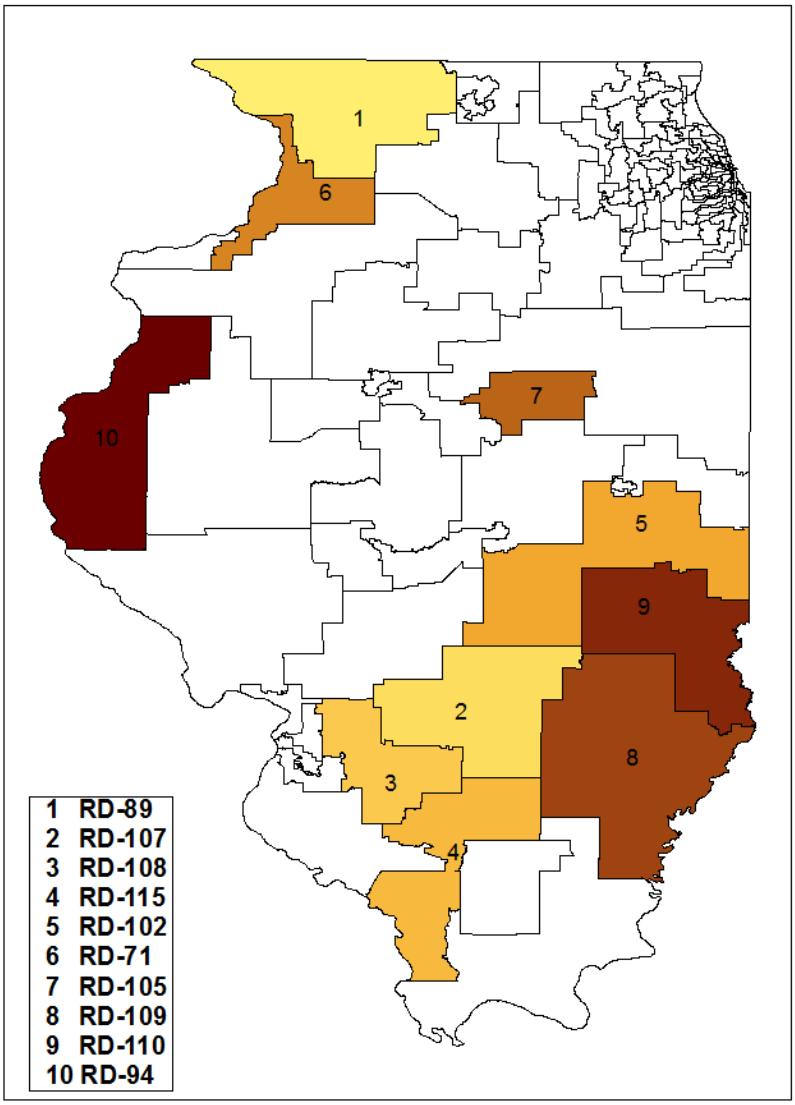
**Figure 30: Top 10 Dairy Representative* Districts**
Rank by Output




* 2011 political districts

**Figure 31: Top 10 Dairy Representative* Districts**
Rank by share in total county personal income




* 2011 political districts

**Table 32: Top 10 Dairy Senate* Districts**

Ranked by Output

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | SD-54 | 66,589 | 98,445 | 0.75% | 844 | 1,015 | 0.72% | 5,377 |
| 2 | SD-45 | 54,562 | 83,939 | 0.52% | 692 | 846 | 0.46% | 4,541 |
| 3 | SD-51 | 17,004 | 22,457 | 0.14% | 215 | 241 | 0.12% | 1,047 |
| 4 | SD-58 | 16,696 | 23,036 | 0.22% | 217 | 257 | 0.21% | 1,250 |
| 5 | SD-55 | 12,587 | 15,903 | 0.18% | 160 | 178 | 0.16% | 713 |
| 6 | SD-36 | 11,047 | 16,581 | 0.14% | 140 | 166 | 0.12% | 753 |
| 7 | SD-53 | 9,984 | 13,372 | 0.14% | 127 | 144 | 0.14% | 648 |
| 8 | SD-47 | 9,402 | 14,797 | 0.13% | 119 | 144 | 0.10% | 667 |
| 9 | SD-44 | 5,880 | 7,464 | 0.06% | 75 | 85 | 0.06% | 384 |
| 10 | SD-35 | 5,235 | 7,923 | 0.08% | 66 | 80 | 0.07% | 429 |

* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

**Table 33: Top 10 Dairy Senate* Districts**

Rank by share in total county personal income

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | SD-54 | 66,589 | 98,445 | 0.75% | 844 | 1,015 | 0.72% | 5,377 |
| 2 | SD-45 | 54,562 | 83,939 | 0.52% | 692 | 846 | 0.46% | 4,541 |
| 3 | SD-58 | 16,696 | 23,036 | 0.22% | 217 | 257 | 0.21% | 1,250 |
| 4 | SD-55 | 12,587 | 15,903 | 0.18% | 160 | 178 | 0.16% | 713 |
| 5 | SD-53 | 9,984 | 13,372 | 0.14% | 127 | 144 | 0.14% | 648 |
| 6 | SD-51 | 17,004 | 22,457 | 0.14% | 215 | 241 | 0.12% | 1,047 |
| 7 | SD-36 | 11,047 | 16,581 | 0.14% | 140 | 166 | 0.12% | 753 |
| 8 | SD-47 | 9,402 | 14,797 | 0.13% | 119 | 144 | 0.10% | 667 |
| 9 | SD-35 | 5,235 | 7,923 | 0.08% | 66 | 80 | 0.07% | 429 |
| 10 | SD-34 | 4,103 | 6,381 | 0.08% | 52 | 63 | 0.06% | 336 |

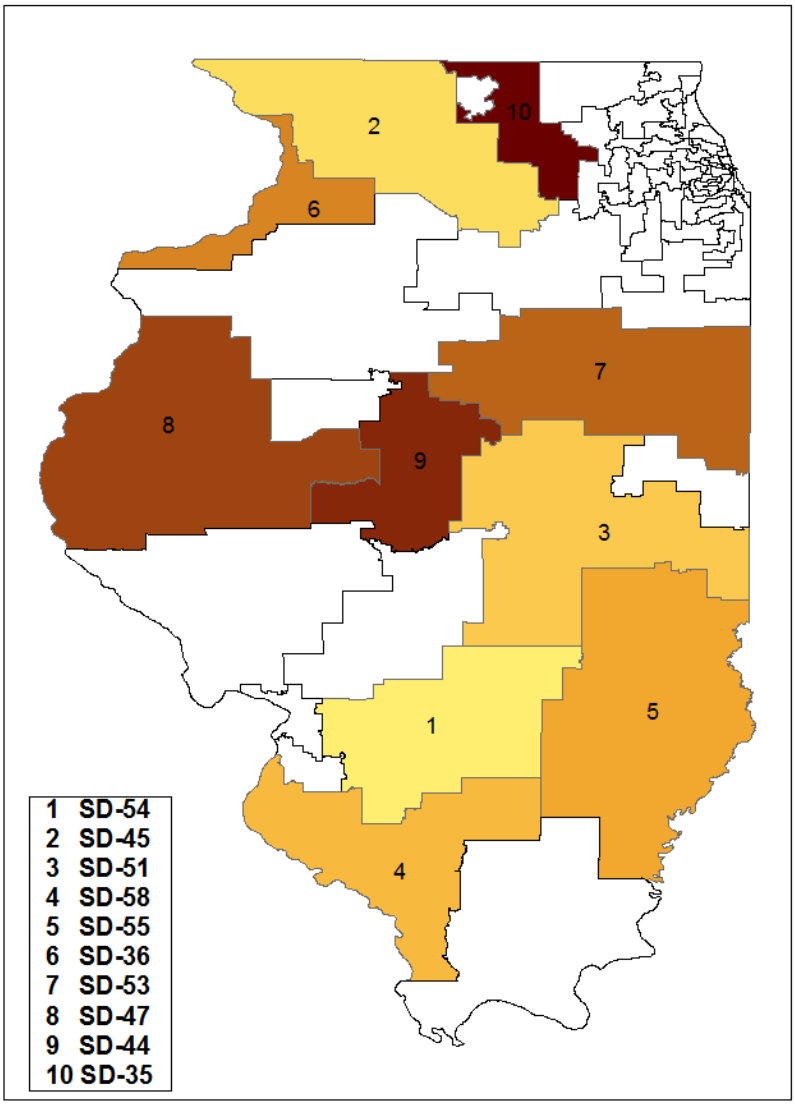
* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

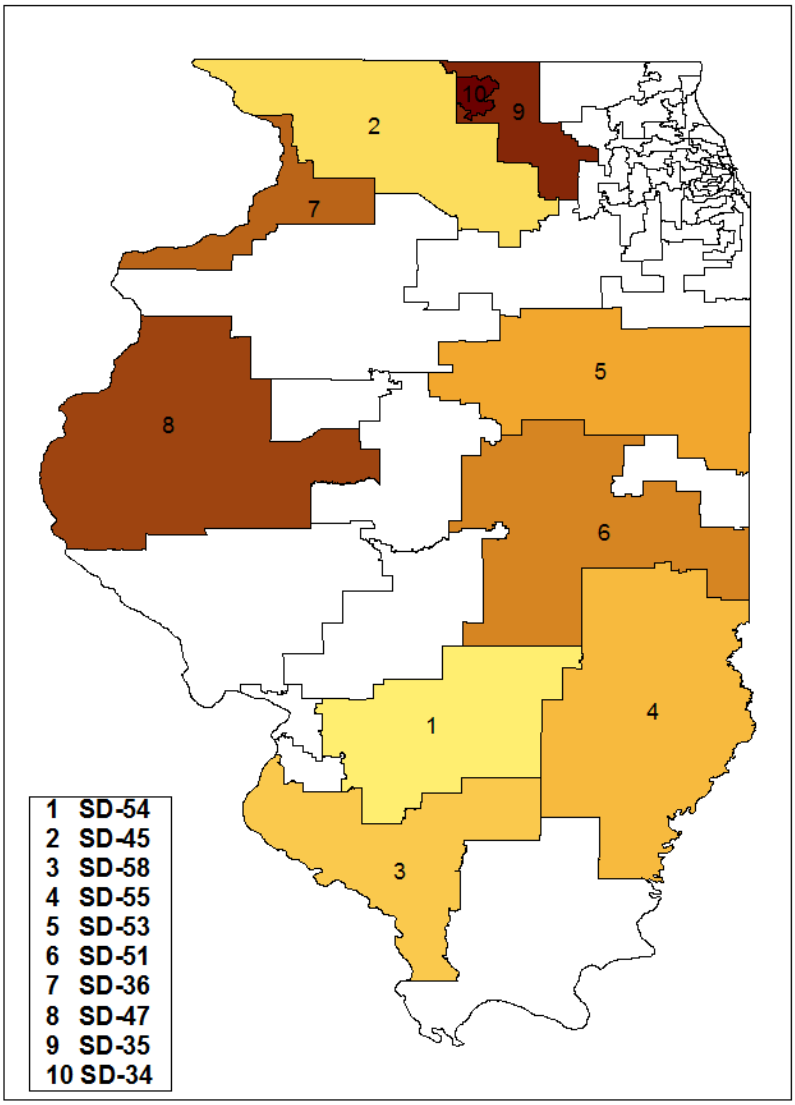
**Figure 32: Top 10 Dairy Senate* Districts**
Rank by Output




* 2011 political districts

**Figure 33 : Top 10 Dairy Senate* Districts**
Rank by share in total county personal income




* 2011 political districts

**Table 34: Congressional* Districts—Dairy**
Ranked by Output

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | CD-15 | 103,384 | 144,661 | 0.46% | 1,372 | 1,593 | 0.37% | **7,383** |
| 2 | CD-17 | 63,346 | 96,923 | 0.25% | 841 | 1,020 | 0.23% | 5,186 |
| 3 | CD-16 | 18,852 | 27,957 | 0.08% | 250 | 294 | 0.08% | 1,423 |
| 4 | CD-18 | 17,510 | 31,056 | 0.07% | 232 | 292 | 0.06% | 1,637 |
| 5 | CD-13 | 16,358 | 21,768 | 0.08% | 217 | 246 | 0.00% | 1,115 |
| 6 | CD-12 | 14,904 | 25,229 | 0.07% | 198 | 249 | 0.06% | 1,345 |
| 7 | CD-14 | 6,537 | 9,121 | 0.02% | 87 | 102 | 0.03% | 534 |
| 8 | CD-2 | 5,636 | 10,296 | 0.02% | 71 | 91 | 0.02% | 657 |
| 9 | CD-6 | 4,553 | 8,594 | 0.01% | 58 | 77 | 0.01% | 595 |
| 10 | CD-11 | 993 | 1,466 | 0.00% | 13 | 15 | 0.00% | 94 |

* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

**Table 35: Congressional Districts—Dairy**
Rank by share in total county personal income

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | CD-15 | 103,384 | 144,661 | 0.46% | 1,372 | 1,593 | 0.37% | 7,383 |
| 2 | CD-17 | 63,346 | 96,923 | 0.25% | 841 | 1,020 | 0.23% | 5,186 |
| 3 | CD-16 | 18,852 | 27,957 | 0.08% | 250 | 294 | 0.08% | 1,423 |
| 4 | CD-13 | 16,358 | 21,768 | 0.08% | 217 | 246 | 0.00% | 1,115 |
| 5 | CD-18 | 17,510 | 31,056 | 0.07% | 232 | 292 | 0.06% | 1,637 |
| 6 | CD-12 | 14,904 | 25,229 | 0.07% | 198 | 249 | 0.06% | 1,345 |
| 7 | CD-14 | 6,537 | 9,121 | 0.02% | 87 | 102 | 0.03% | 534 |
| 8 | CD-2 | 5,636 | 10,296 | 0.02% | 71 | 91 | 0.02% | 657 |
| 9 | CD-6 | 4,553 | 8,594 | 0.01% | 58 | 77 | 0.01% | 595 |
| 10 | CD-1 | 335 | 462 | 0.01% | 4 | 5 | 0.01% | 28 |

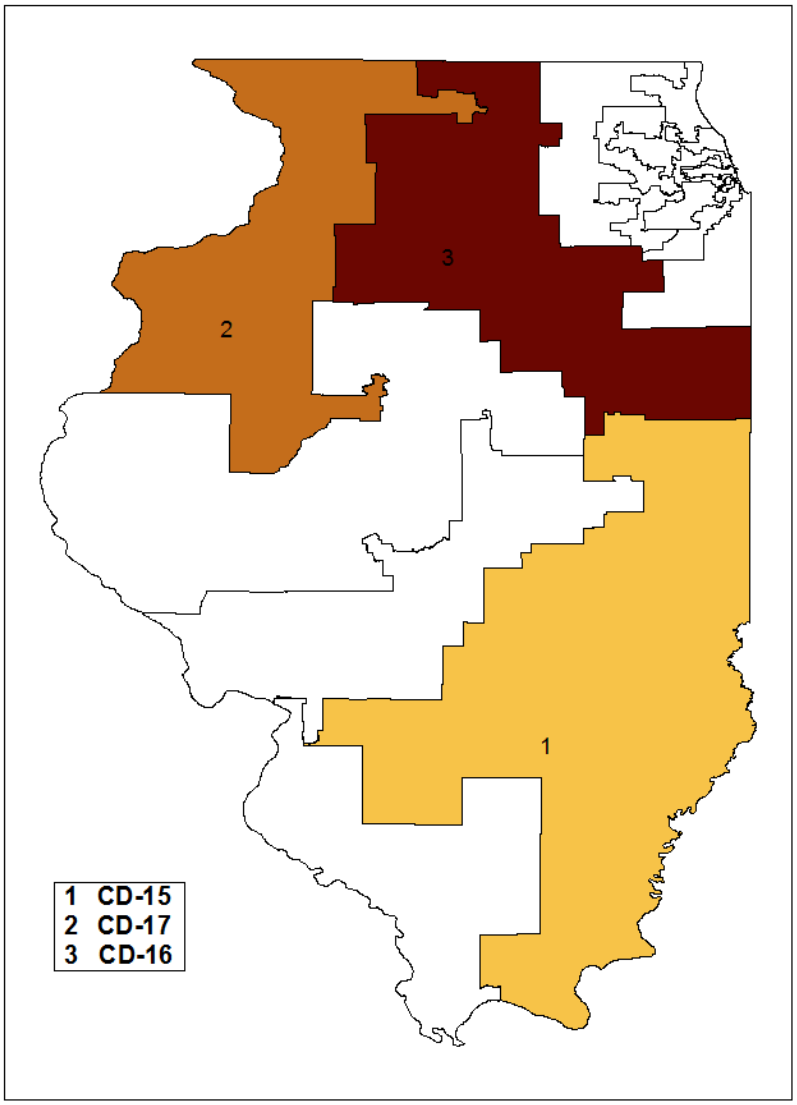
* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

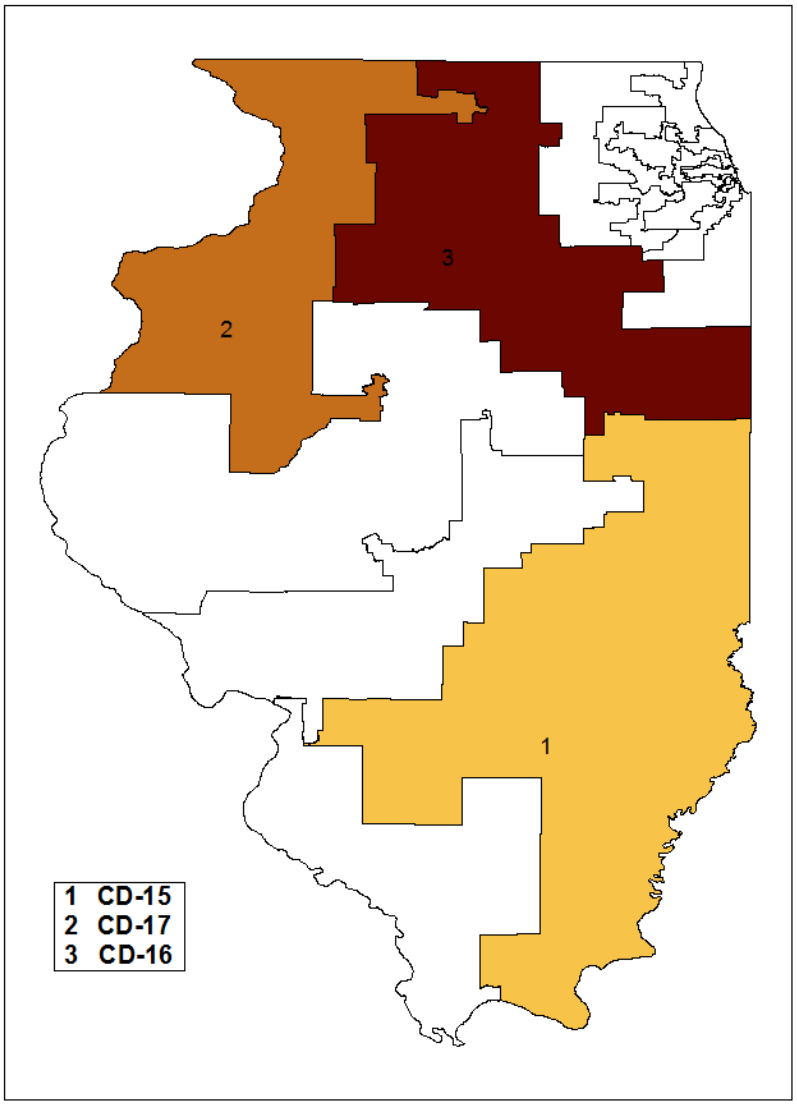
**Figure 34: Top 3 Dairy Congressional* Districts**
Rank by Output




* 2011 political districts

**Figure 35: Top 3 Dairy Congressional* Districts**
Rank by share in total county personal income




* 2011 political districts

## III.4. Hogs

**Table 36: Top 10 Hog Counties**

Ranked by Output

| | | Output* | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | Clinton | 61,701 | 86,050 | 4.43% | 696 | 913 | 4.18% | 8,888 |
| 2 | DeKalb | 49,588 | 64,749 | 1.71% | 337 | 459 | 0.74% | 5,569 |
| 3 | Livingston | 38,042 | 48,230 | 2.69% | 204 | 268 | 1.08% | 3,659 |
| 4 | Hancock | 35,013 | 49,000 | 6.39% | 228 | 318 | 3.43% | 3,350 |
| 5 | Henry | 30,946 | 40,065 | 1.65% | 225 | 307 | 1.19% | 3,195 |
| 6 | Knox | 30,756 | 37,674 | 1.80% | 237 | 304 | 0.93% | 3,425 |
| 7 | Pike | 28,580 | 38,740 | 5.60% | 341 | 443 | 4.80% | 3,678 |
| 8 | Jasper | 25,740 | 30,432 | 8.03% | 259 | 299 | 5.70% | 2,472 |
| 9 | Greene | 22,807 | 28,882 | 5.72% | 275 | 331 | 6.50% | 2,427 |
| 10 | Cass | 21,860 | 30,679 | 4.91% | 181 | 235 | 2.20% | 2,338 |

*: in thousands of dollars

Source: National Agricultural Statistics Service (2009), IMPLAN (2009), authors' calculations

**Table 37: Top 10 Hog Counties**

Ranked by Share in Total County Personal Income

| | | Output* | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | Jasper | 25,740 | 30,432 | 8.03% | 259 | 299 | 6.60% | 2,472 |
| 2 | Hancock | 35,013 | 49,000 | 6.39% | 228 | 318 | 3.43% | 3,350 |
| 3 | Schuyler | 12,690 | 18,553 | 5.95% | 77 | 126 | 1.83% | 1,708 |
| 4 | Greene | 22,807 | 28,882 | 5.72% | 275 | 331 | 6.50% | 2,427 |
| 5 | Pike | 28,580 | 38,740 | 5.60% | 341 | 443 | 4.80% | 3,678 |
| 6 | Cass | 21,860 | 30,679 | 4.91% | 181 | 235 | 2.20% | 2,338 |
| 7 | Clinton | 61,701 | 86,050 | 4.43% | 696 | 913 | 4.18% | 8,888 |
| 8 | Clay | 17,602 | 23,245 | 4.24% | 106 | 147 | 1.53% | 1,924 |
| 9 | Edgar | 20,193 | 24,136 | 3.32% | 122 | 156 | 1.41% | 2,068 |
| 10 | Mercer | 19,729 | 23,392 | 3.17% | 119 | 147 | 2.40% | 1,726 |

*: in thousands of dollars

Source: National Agricultural Statistics Service (2009), IMPLAN (2009), authors' calculations

**Figure 36: Top 10 Hog Counties**
Rank by Output

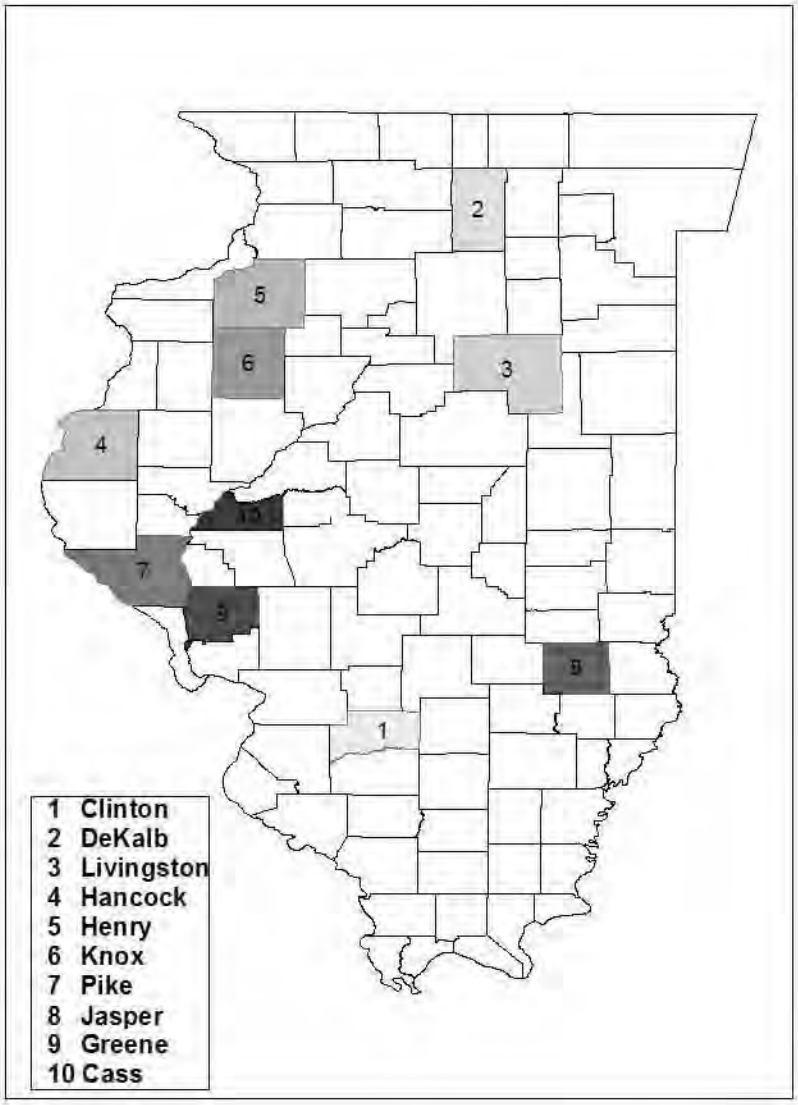


**Figure 37: Top 10 Hog Counties**
Ranked by Share in Total County Personal Income

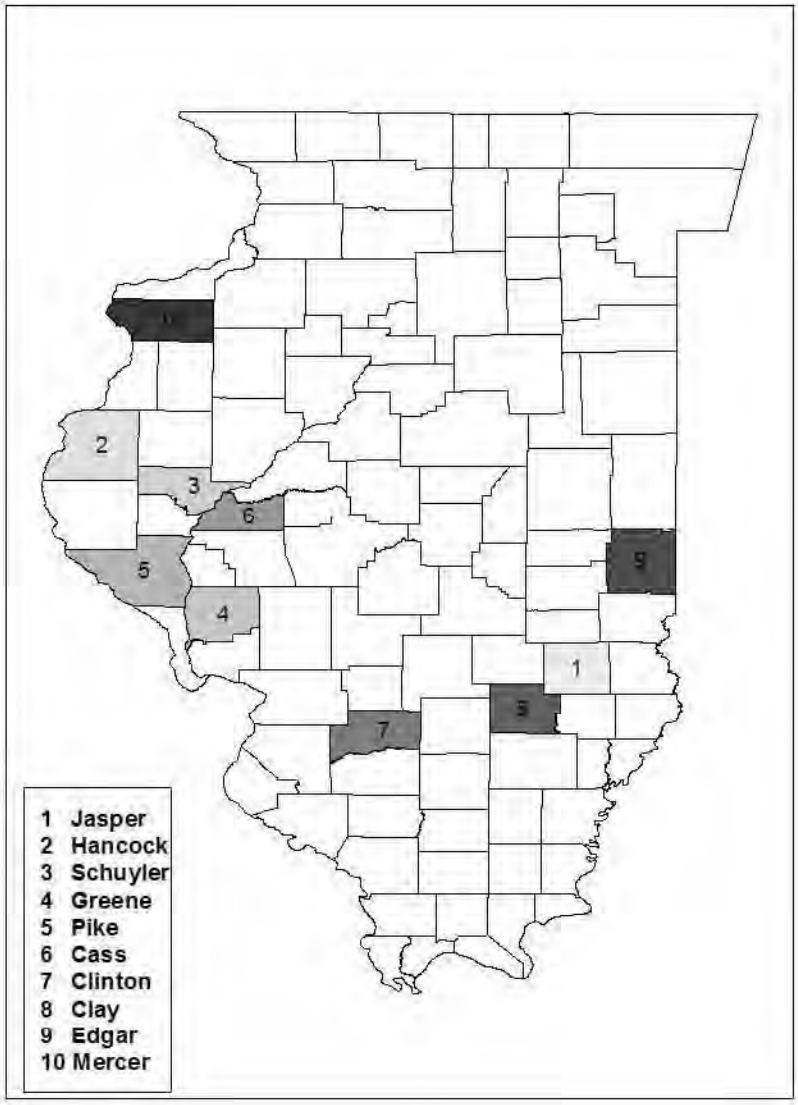


**Table 38: Top 10 Hog Representative* Districts**

Ranked by Output

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | RD-93 | 94,359 | 127,605 | 2.41% | 570 | 824 | 0.94% | 10,665 |
| 2 | RD-74 | 74,251 | 99,986 | 1.96% | 448 | 677 | 1.06% | 9,154 |
| 3 | RD-109 | 73,819 | 96,120 | 2.32% | 447 | 628 | 0.97% | 7,982 |
| 4 | RD-94 | 70,027 | 104,346 | 1.99% | 423 | 633 | 0.76% | 7,699 |
| 5 | RD-100 | 61,826 | 86,817 | 1.02% | 373 | 570 | 0.46% | 7,938 |
| 6 | RD-106 | 58,018 | 74,498 | 1.46% | 350 | 469 | 0.73% | 6,217 |
| 7 | RD-90 | 53,033 | 74,826 | 0.94% | 320 | 467 | 0.41% | 6,331 |
| 8 | RD-71 | 43,732 | 60,840 | 0.84% | 264 | 373 | 0.34% | 4,641 |
| 9 | RD-107 | 39,928 | 53,453 | 1.10% | 241 | 371 | 0.46% | 5,121 |
| 10 | RD-108 | 33,274 | 55,056 | 0.63% | 201 | 347 | 0.31% | 5,247 |

* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

**Table 39: Top 10 Hog Representative* Districts**

Rank by share in total county personal income

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | RD-93 | 94,359 | 127,605 | 2.41% | 570 | 824 | 0.94% | 10,665 |
| 2 | RD-109 | 73,819 | 96,120 | 2.32% | 447 | 628 | 0.97% | 7,982 |
| 3 | RD-94 | 70,027 | 104,346 | 1.99% | 423 | 633 | 0.76% | 7,699 |
| 4 | RD-74 | 74,251 | 99,986 | 1.96% | 448 | 677 | 1.06% | 9,154 |
| 5 | RD-106 | 58,018 | 74,498 | 1.46% | 350 | 469 | 0.73% | 6,217 |
| 6 | RD-107 | 39,928 | 53,453 | 1.10% | 241 | 371 | 0.46% | 5,121 |
| 7 | RD-100 | 61,826 | 86,817 | 1.02% | 373 | 570 | 0.46% | 7,938 |
| 8 | RD-90 | 53,033 | 74,826 | 0.94% | 320 | 467 | 0.41% | 6,331 |
| 9 | RD-110 | 33,011 | 41,051 | 0.89% | 199 | 260 | 0.36% | 3,347 |
| 10 | RD-71 | 43,732 | 60,840 | 0.84% | 264 | 373 | 0.34% | 4,641 |

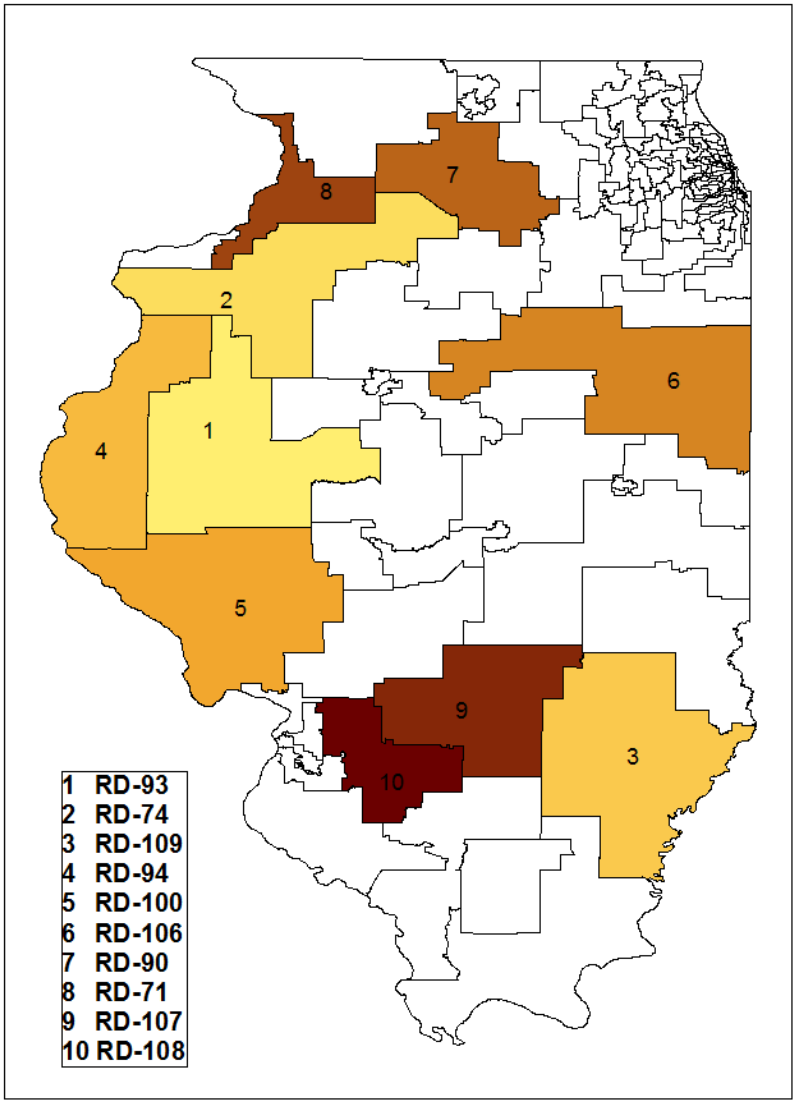
* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

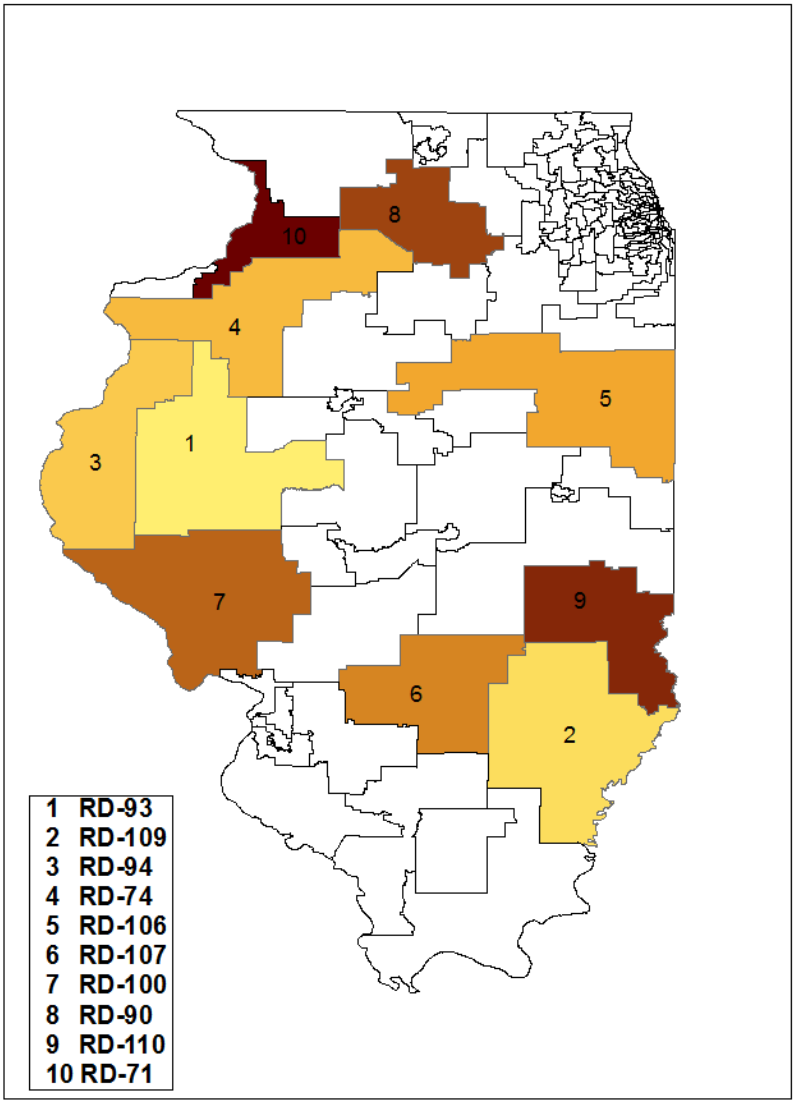
**Figure 38: Top 10 Hog Representative* Districts**
Rank by Output




* 2011 political districts

**Figure 39: Top 10 Hog Representative* Districts**
Rank by share in total county personal income




* 2011 political districts

**Table 40: Top 10 Hog Senate* Districts**

Ranked by Output

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | SD-47 | 164,386 | 231,952 | 2.21% | 993 | 1,457 | 0.85% | 18,364 |
| 2 | SD-55 | 106,830 | 137,172 | 1.55% | 646 | 888 | 0.63% | 11,329 |
| 3 | SD-37 | 95,883 | 135,201 | 1.15% | 579 | 910 | 0.57% | 12,791 |
| 4 | SD-53 | 81,552 | 106,094 | 1.18% | 492 | 667 | 0.53% | 8,920 |
| 5 | SD-54 | 73,202 | 108,509 | 0.82% | 442 | 718 | 0.38% | 10,368 |
| 6 | SD-45 | 71,743 | 102,879 | 0.68% | 433 | 650 | 0.29% | 8,929 |
| 7 | SD-50 | 64,680 | 90,464 | 0.80% | 391 | 594 | 0.35% | 8,250 |
| 8 | SD-36 | 47,683 | 65,530 | 0.60% | 288 | 402 | 0.24% | 4,983 |
| 9 | SD-44 | 40,069 | 51,758 | 0.44% | 242 | 334 | 0.19% | 4,365 |
| 10 | SD-48 | 37,852 | 52,146 | 0.43% | 229 | 327 | 0.19% | 4,543 |

* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

**Table 41: Top 10 Hog Senate* Districts**

Rank by share in total county personal income

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | SD-47 | 164,386 | 231,952 | 2.21% | 993 | 1,457 | 0.85% | 18,364 |
| 2 | SD-55 | 106,830 | 137,172 | 1.55% | 646 | 888 | 0.63% | 11,329 |
| 3 | SD-53 | 81,552 | 106,094 | 1.18% | 492 | 667 | 0.53% | 8,920 |
| 4 | SD-37 | 95,883 | 135,201 | 1.15% | 579 | 910 | 0.57% | 12,791 |
| 5 | SD-54 | 73,202 | 108,509 | 0.82% | 442 | 718 | 0.38% | 10,368 |
| 6 | SD-50 | 64,680 | 90,464 | 0.80% | 391 | 594 | 0.35% | 8,250 |
| 7 | SD-45 | 71,743 | 102,879 | 0.68% | 433 | 650 | 0.29% | 8,929 |
| 8 | SD-36 | 47,683 | 65,530 | 0.60% | 288 | 402 | 0.24% | 4,983 |
| 9 | SD-44 | 40,069 | 51,758 | 0.44% | 242 | 334 | 0.19% | 4,365 |
| 10 | SD-48 | 37,852 | 52,146 | 0.43% | 229 | 327 | 0.19% | 4,543 |

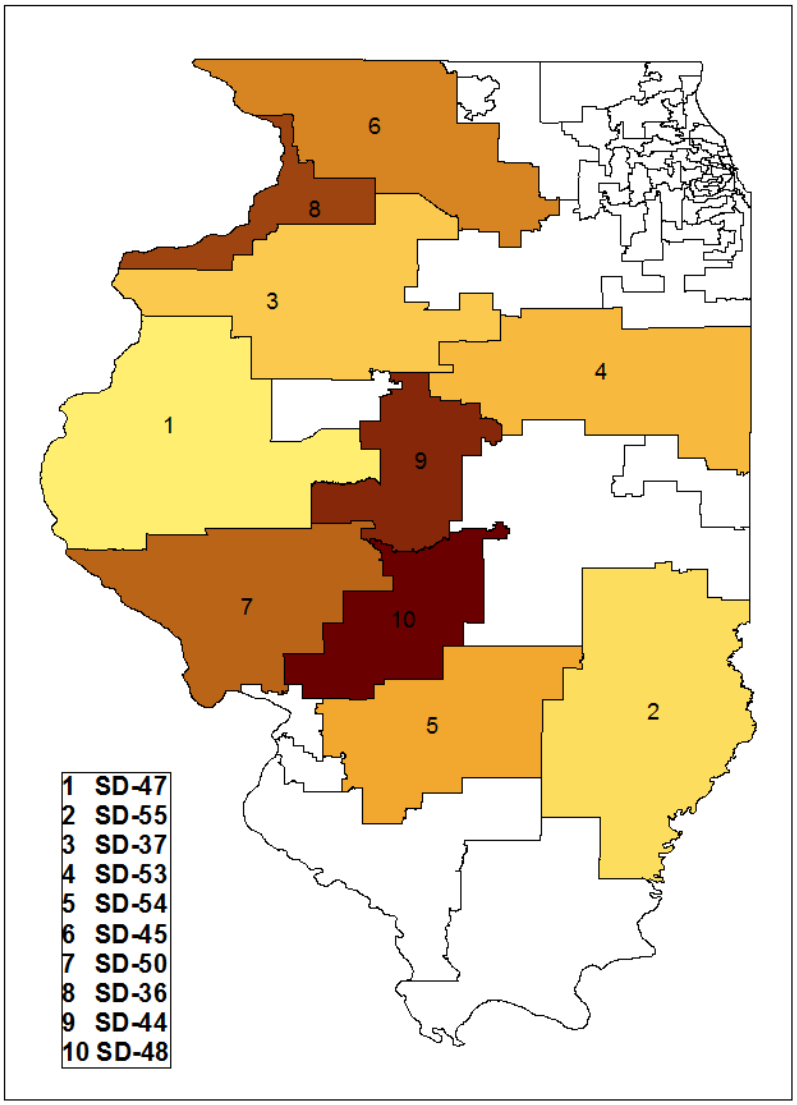
* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

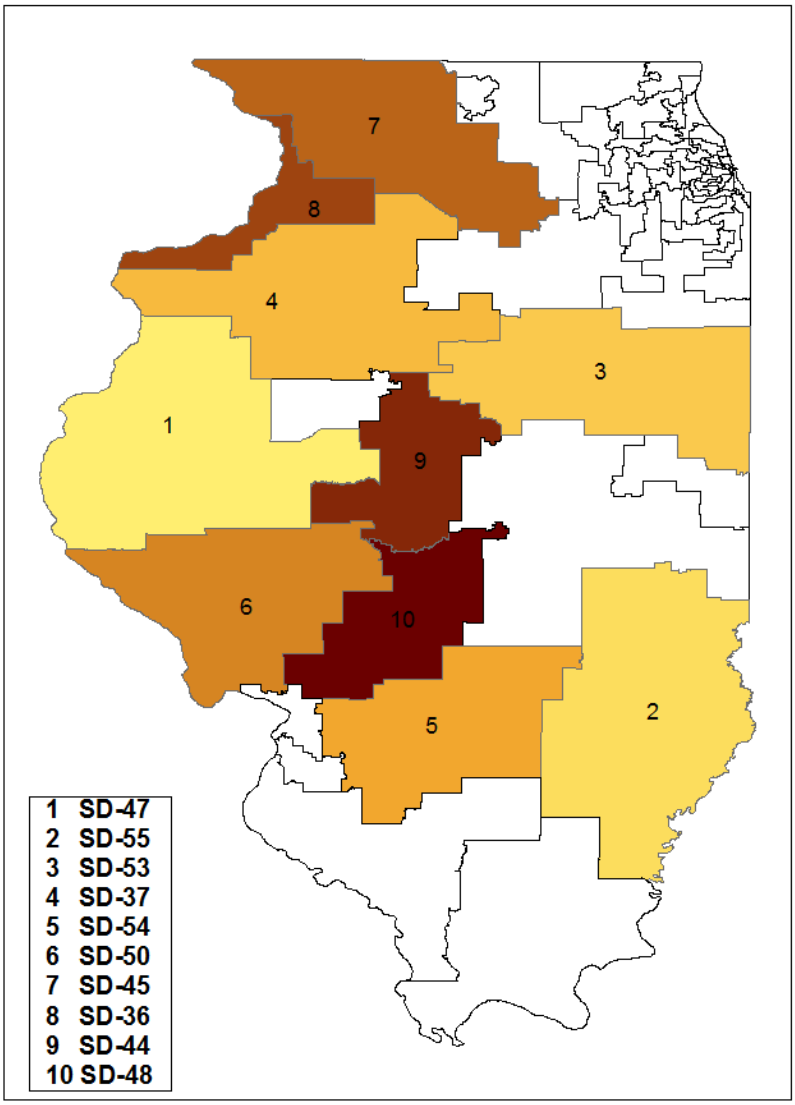
**Figure 40: Top 10 Hog Senate* Districts**
Rank by Output




* 2011 political districts

**Figure 41: Top 10 Hog Senate* Districts**
Rank by share in total county personal income




* 2011 political districts

**Table 42: Congressional* Districts—Hogs**

Ranked by Output

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | CD-15 | 238,704 | 333,309 | 1.07% | 1,441 | 2,145 | 0.39% | 29,445 |
| 2 | CD-18 | 207,390 | 333,786 | 0.84% | 1,252 | 2,030 | 0.35% | 28,029 |
| 3 | CD-17 | 185,910 | 270,606 | 0.73% | 1,122 | 1,712 | 0.31% | 22,743 |
| 4 | CD-16 | 148,320 | 209,490 | 0.67% | 895 | 1,327 | 0.29% | 19,136 |
| 5 | CD-13 | 76,168 | 105,306 | 0.35% | 460 | 663 | 0.00% | 9,373 |
| 6 | CD-12 | 35,079 | 56,013 | 0.15% | 212 | 354 | 0.06% | 4,819 |
| 7 | CD-14 | 35,069 | 47,786 | 0.09% | 212 | 303 | 0.07% | 4,394 |
| 8 | CD-6 | 6,192 | 10,720 | 0.01% | 78 | 105 | 0.01% | 1,063 |
| 9 | CD-2 | 5,636 | 9,537 | 0.02% | 71 | 93 | 0.02% | 905 |
| 10 | CD-11 | 2,991 | 4,407 | 0.01% | 38 | 47 | 0.01% | 433 |

* 2011 political districts

**in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

**Table 43: Congressional* Districts—Hogs**

Rank by share in total county personal income

| | | Output** | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | CD-15 | 238,704 | 333,309 | 1.07% | 1,441 | 2,145 | 0.39% | 29,445 |
| 2 | CD-18 | 207,390 | 333,786 | 0.84% | 1,252 | 2,030 | 0.35% | 28,029 |
| 3 | CD-17 | 185,910 | 270,606 | 0.73% | 1,122 | 1,712 | 0.31% | 22,743 |
| 4 | CD-16 | 148,320 | 209,490 | 0.67% | 895 | 1,327 | 0.29% | 19,136 |
| 5 | CD-13 | 76,168 | 105,306 | 0.35% | 460 | 663 | 0.00% | 9,373 |
| 6 | CD-12 | 35,079 | 56,013 | 0.15% | 212 | 354 | 0.06% | 4,819 |
| 7 | CD-14 | 35,069 | 47,786 | 0.09% | 212 | 303 | 0.07% | 4,394 |
| 8 | CD-2 | 5,636 | 9,537 | 0.02% | 71 | 93 | 0.02% | 905 |
| 9 | CD-11 | 2,991 | 4,407 | 0.01% | 38 | 47 | 0.01% | 433 |
| 10 | CD-1 | 734 | 1,018 | 0.01% | 10 | 12 | 0.02% | 95 |

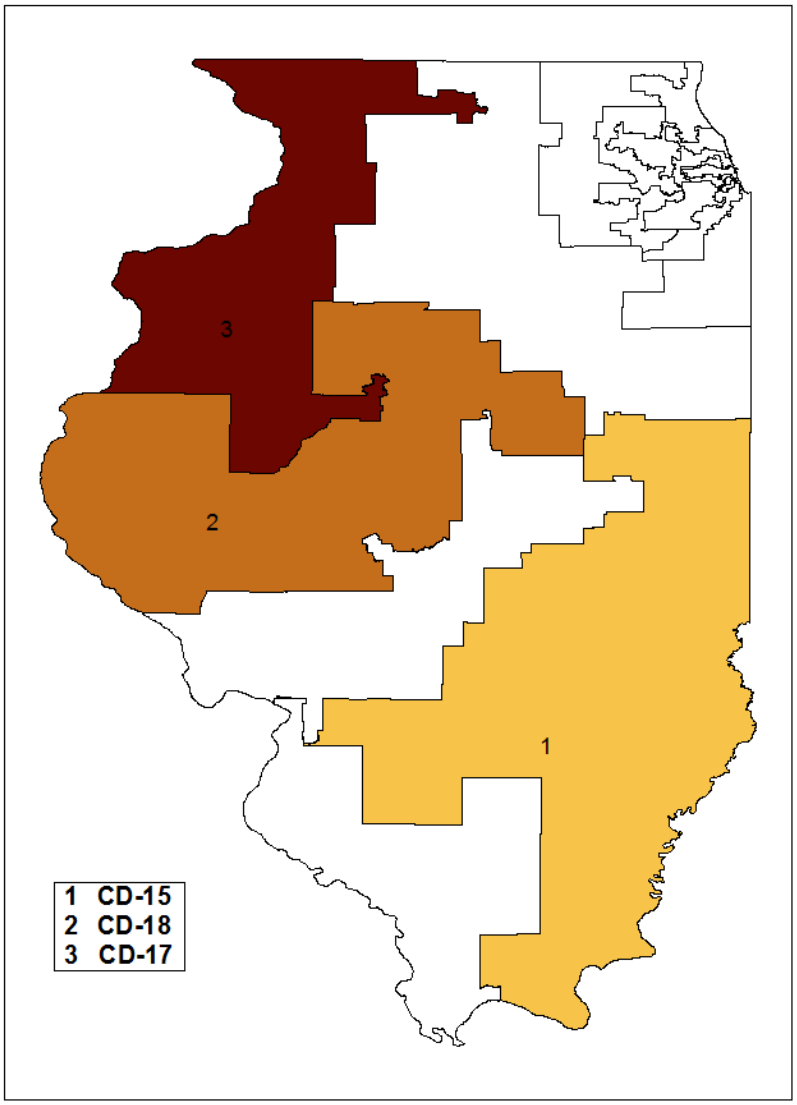
* 2011 political districts

**: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

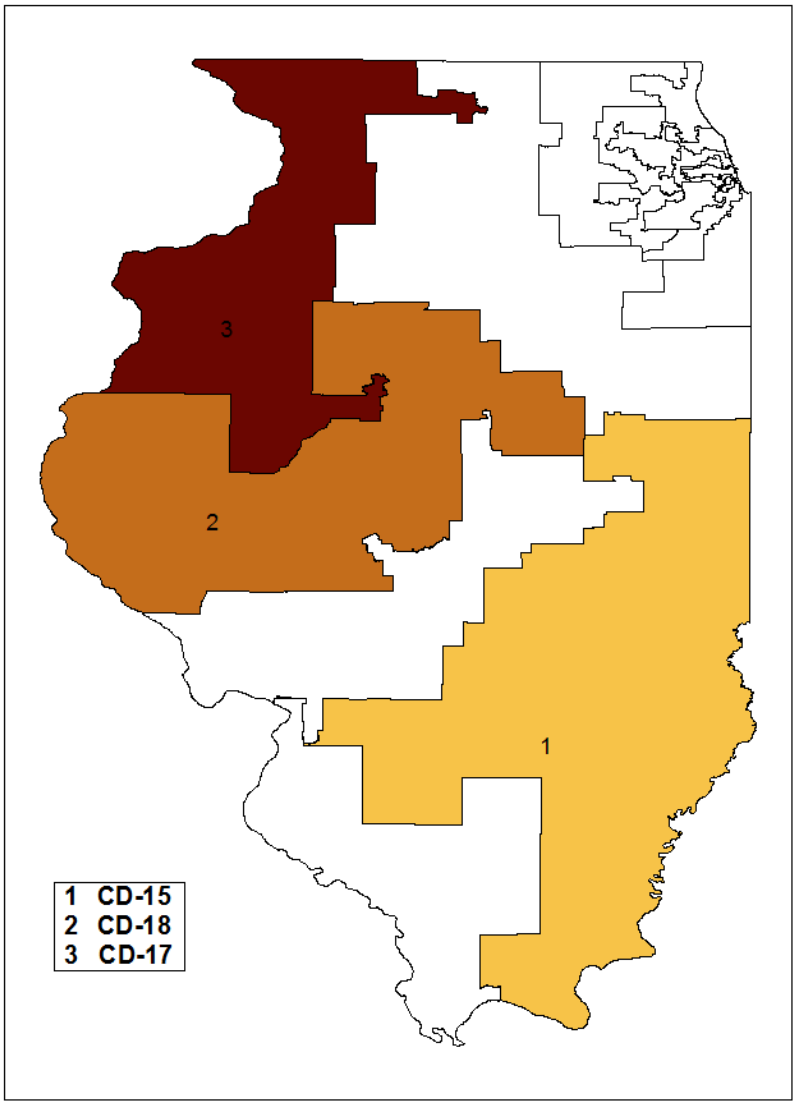
**Figure 42: Top 3 Hog Congressional* Districts**
Rank by Output




* 2011 political districts

**Figure 43: Top 3 Hog Congressional* Districts**
Rank by share in total county personal income




* 2011 political districts

## IV. Geography of Meat and Dairy Processing

There are 249 inspected meat processing firms in Illinois generating about $10 billion in direct sales and a total of $19.7 billion in 2009. Cook County is the home to 40% (99) of the meat processing firms (Figures 43). Sangamon, Champaign, DuPage, Madison, McHenry and Macoupin and Randolph are the next most active with 6, 5, 5, 5, 5,5, 5 plants respectively.

**Table 44: Meat Processing Plants (Adams to Hamilton)**

| | Number | Share of State Total |
|---|---|---|
| | Meat | Meat |
| State Total | 249 | |
| Adams | 3 | 1% |
| Bond | 1 | 0% |
| Brown | 1 | 0% |
| Bureau | 3 | 1% |
| Calhoun | 1 | 0% |
| Carroll | 3 | 1% |
| Cass | 1 | 0% |
| Champaign | 5 | 2% |
| Clark | 1 | 0% |
| Clay | 2 | 1% |
| Clinton | 4 | 2% |
| Coles | 2 | 1% |
| Cook | 99 | 40% |
| Crawford | 1 | 0% |
| DeKalb | 1 | 0% |
| Dewitt | 1 | 0% |
| Douglas | 3 | 1% |
| DuPage | 5 | 2% |
| Edgar | 1 | 0% |
| Edwards | 1 | 0% |
| Effingham | 2 | 1% |
| Fayette | 2 | 1% |
| Franklin | 1 | 0% |
| Fulton | 1 | 0% |
| Greene | 1 | 0% |
| Grundy | 1 | 0% |
| Hamilton | 1 | 0% |

**Table 45: Meat Processing Plants (Hancock to Perry)**

| | Number | Share of State Total |
|---|---|---|
| | Meat | Meat |
| State Total | 249 | |
| Hancock | 1 | 0% |
| Henderson | 1 | 0% |
| Henry | 4 | 2% |
| Iroquois | 3 | 1% |
| Jasper | 1 | 0% |
| Jersey | 1 | 0% |
| Kane | 4 | 2% |
| Kankakee | 1 | 0% |
| Kendall | 2 | 1% |
| Knox | 3 | 1% |
| La Salle | 3 | 1% |
| Lee | 2 | 1% |
| Livingston | 2 | 0% |
| Logan | 1 | 0% |
| Macon | 2 | 1% |
| Macoupin | 5 | 2% |
| Madison | 5 | 2% |
| Marion | 1 | 0% |
| McDonough | 1 | 0% |
| McHenry | 5 | 2% |
| McLean | 3 | 1% |
| Menard | 1 | 0% |
| Monroe | 1 | 0% |
| Montgomery | 1 | 0% |
| Morgan | 1 | 0% |
| Moultrie | 1 | 0% |
| Ogle | 1 | 0% |
| Peoria | 4 | 2% |
| Perry | 1 | 0% |

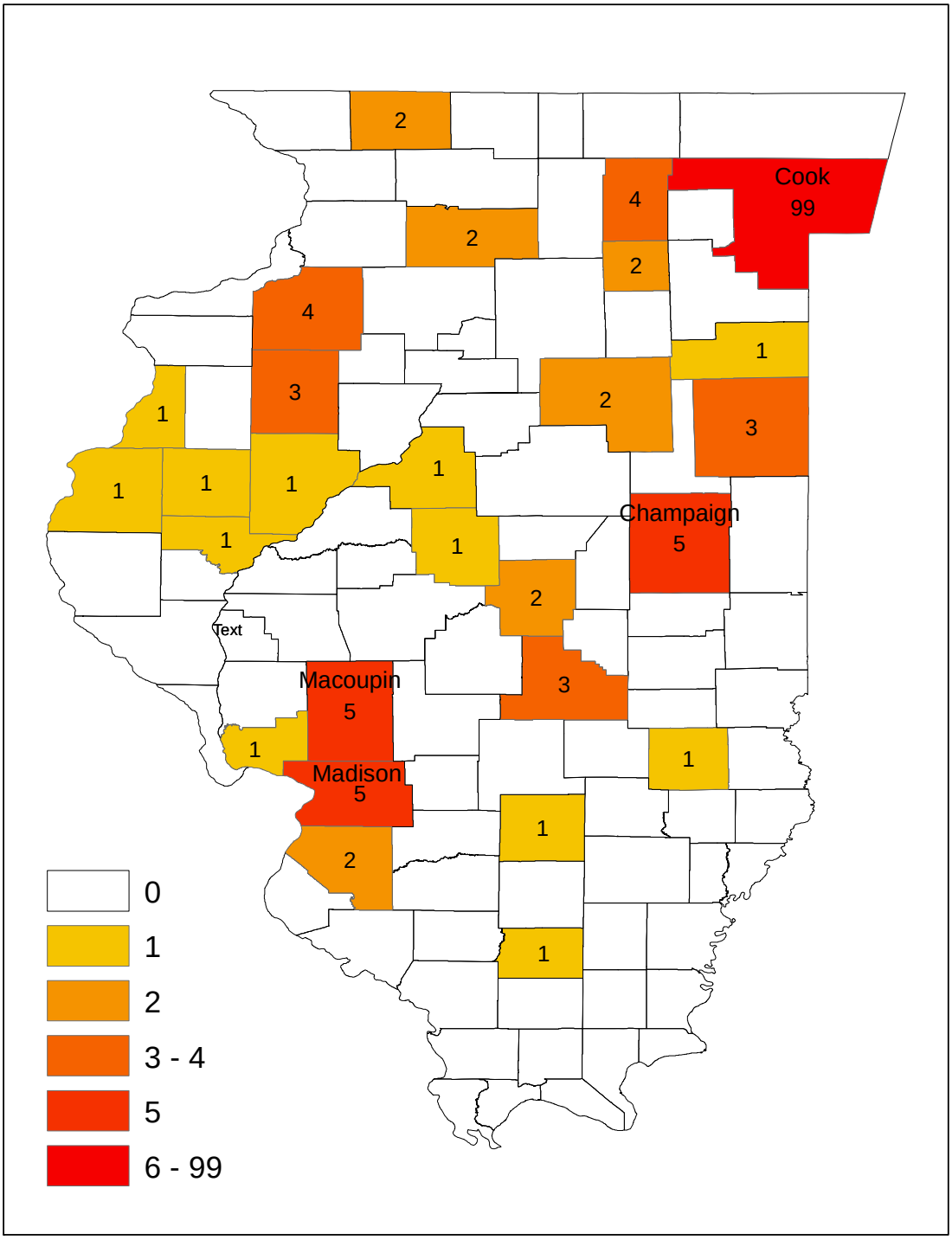
**Table 46 Meat Processing Plants (Randolph to Woodford)**

| | Number | Share of State Total |
|---|---|---|
| | Meat | Meat |
| State Total | 249 | |
| Randolph | 5 | 2% |
| Rock Island | 3 | 1% |
| Sangamon | 6 | 2% |
| Schuyler | 1 | 0% |
| Shelby | 3 | 1% |
| St. Clair | 2 | 1% |
| Stephenson | 2 | 1% |
| Tazewell | 1 | 0% |
| Union | 1 | 0% |
| Vermilion | 2 | 1% |
| Washington | 1 | 0% |
| White | 1 | 0% |
| Whiteside | 4 | 2% |
| Williamson | 1 | 0% |
| Winnebago | 4 | 2% |
| Woodford | 2 | 1% |

Source: Illinois Department of Agriculture (2009) and authors' calculations

**Figure 44: Spatial distribution of meat processing plants**



## V. Road and Highway Revenue Impact

The Illinois Department of Revenue reported that local communities collected $25 billion of property taxes in 2009 across Illinois. Residential property owners contributed most of property taxes, accounting for 65 percent of all property tax collections (Figure 45). Commercial property owners generated 24 percent of the property tax revenue. Industrial properties and farm, railroads and mineral property owners contributed the remaining. All livestock farms are considered commercial establishments. Transportation usages diverted about 4 percent, or $943 million, from the $25 billion of property taxes collected throughout the state. This amounts to 37 percent of the $2.6 billion of transportation funds at the disposal of local governments. No property taxes went towards funding state highway needs.

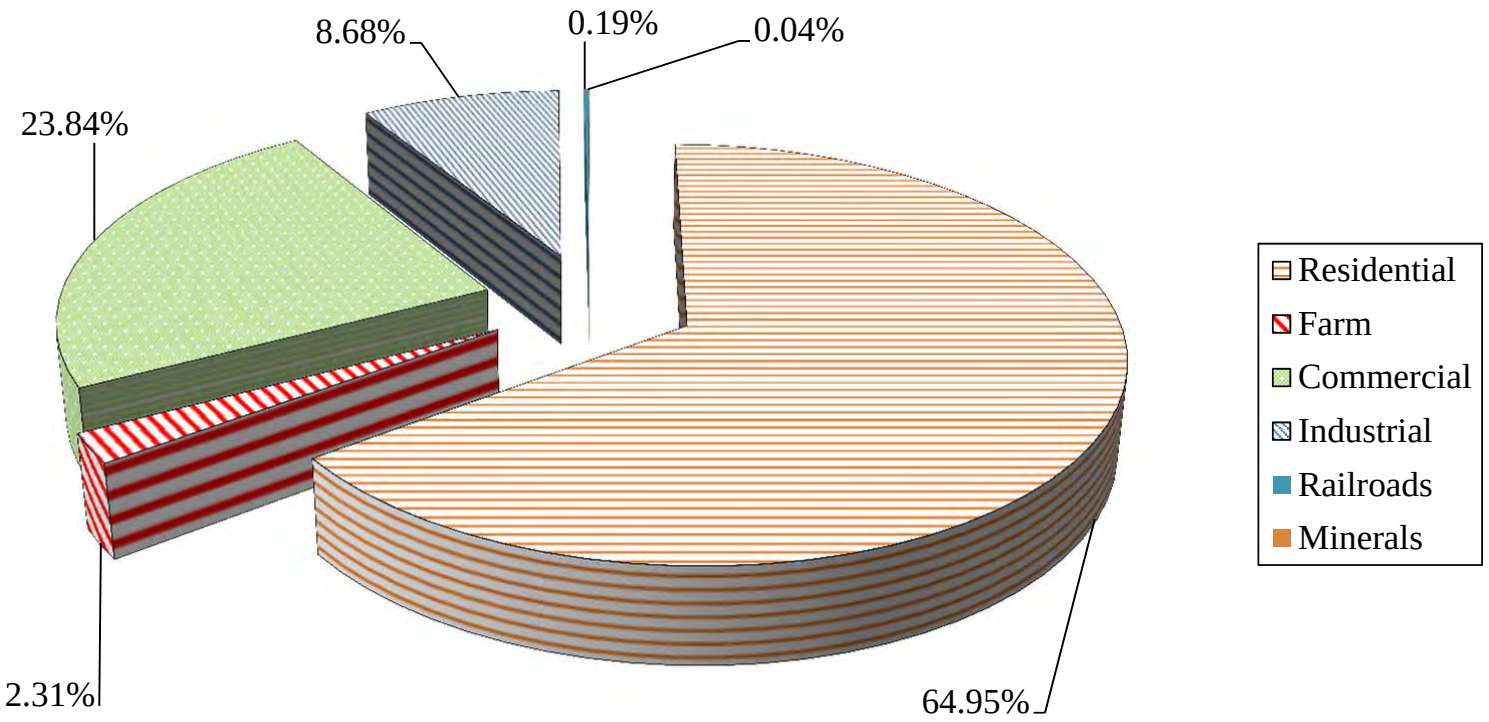
In 2009, the State of Illinois collected $9.3 billion in the form of sales taxes, which comprised 35 percent of the $27 billion of total state tax revenue. State agencies collected $1.4 billion in the form of motor fuel taxes, which all support transportation. Motor vehicle tax revenue amounted to $858 million, also a dedicated transportation source, of the $1.7 billion highway user revenue collected in 2009. In 2009, state transportation agencies additionally had $541 million drawn from the State's General Fund.

The livestock industry in Illinois paid $292 million in taxes in 2009, of that $138 million or 47% went to the state or local communities (Figure 46). Indirect business taxes, as opposed to corporate and personal income taxes, comprise a large portion of both the industry's state and local tax contribution and state and local road infrastructure. Indirect business taxes constitute 73% or $101 million of state and local taxes paid by the livestock industry. The most important indirect business taxes are property and sales taxes contributing 91% of indirect business taxes paid to the state. The remaining 9% of indirect business taxes come from motor vehicle tax (1%), state and local fees (4%), and miscellaneous (3%). The livestock industry paid $50 million in property taxes and $42 million in sales taxes. Of the $101 million of indirect business taxes, $7.9 million went for transportation. Of that, $7.9 million or 65.8% went to the State and 34.2% went to local communities.

Transportation funding from the livestock industry flows from six different sources; Indirect Business Taxes (Property Tax, Motor Vehicle Tax) and Motor Fuel Tax General Fund, Road Tolls and Fees, Miscellaneous. The majority of state spending on roads originates from Motor Fuel (26.42%) and Motor Vehicle (39.65%) taxes (Figure 47). While most of local spending originates from property taxes (64.11%) (Figure 48). Property taxes at 26.54% comprise the single largest source of state and local transportation revenue, followed by motor vehicle (24.13%), motor fuel (23.76%) and tolls and fees (18.75%) (Figure 49).

**Figure 45. Property Taxes Collected in Illinois**




Total state property taxes are $25 billion
Source: Illinois of Revenue 2009

**Figure 46. Tax Flows from the Illinois Livestock Industry to State and Local Transportation Budgets**

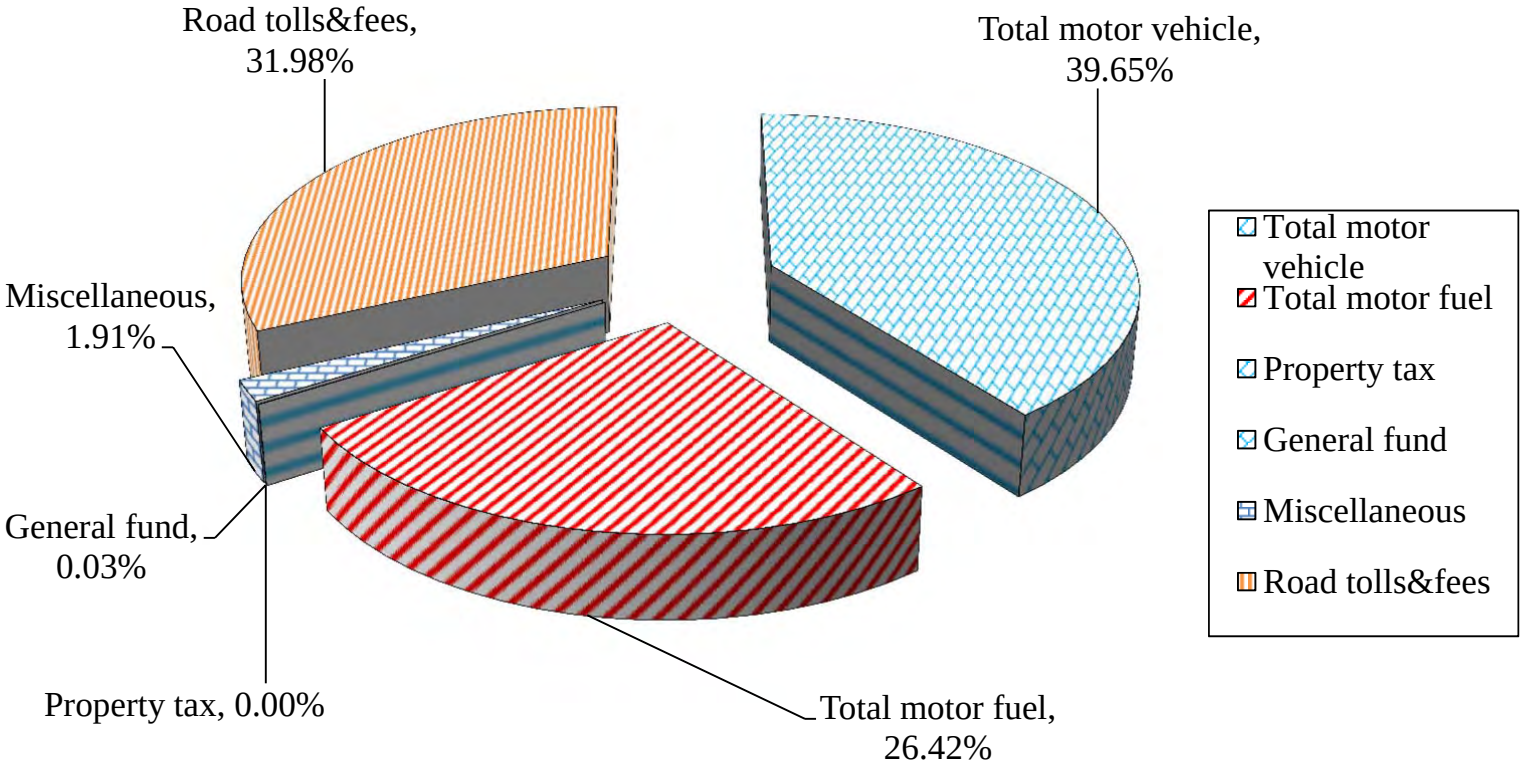

Note: *Indirect Business Taxes include all business taxes except: corporate income tax, benefits taxes, and personal income taxes paid by employees

**: percent share of total state and local IBT

Source: Federal Highway Administration, 2009; Illinois of Revenue, 2009; IMPLAN, 2009; National Agricultural Statistics Service, 2009; and authors' calculations

**Figure 47. State Transportation Revenue from the Illinois Livestock Industry**

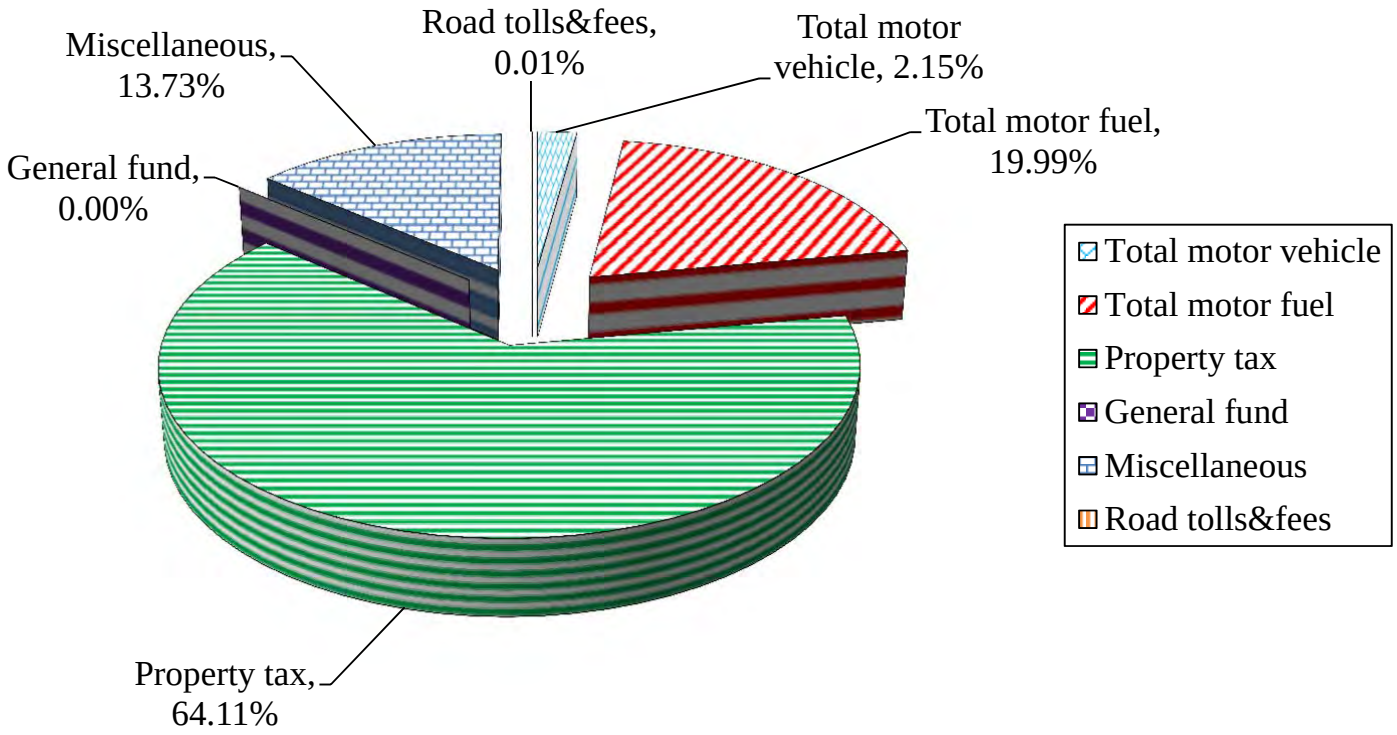



Note: Total State Transportation revenue from the Illinois Livestock industry = $5.2 Million

Source: Federal Highway Administration, 2009; Illinois of Revenue, 2009; IMPLAN, 2009; National Agricultural Statistics Service, 2009; and authors' calculations

**Figure 48. Local Transportation Revenue from the Illinois Livestock Industry**

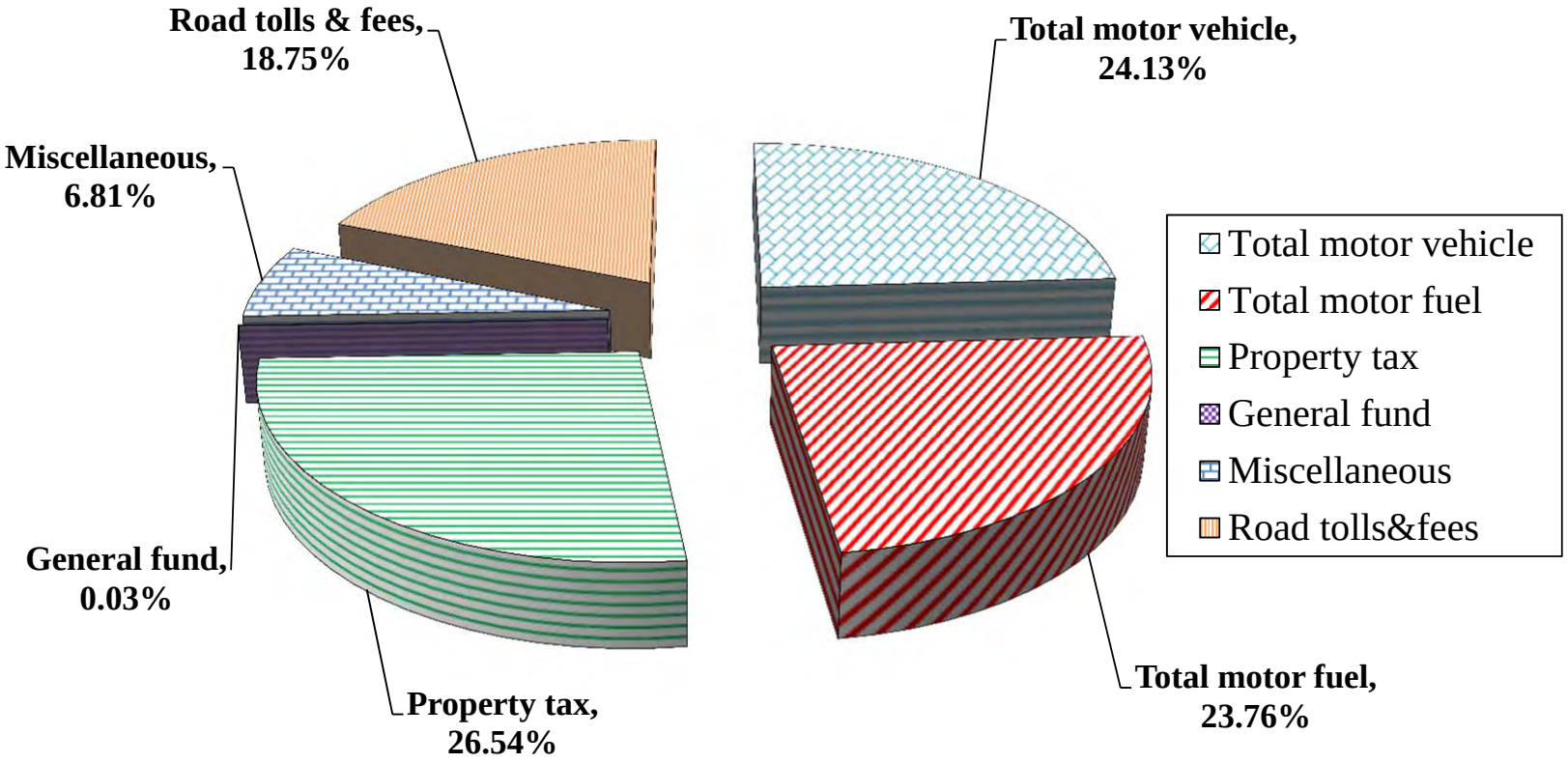



Total Local Transportation revenue from the Illinois Livestock industry = $2.7 Million

Source: Federal Highway Administration, 2009; Illinois of Revenue, 2009; IMPLAN, 2009; National Agricultural Statistics Service, 2009; and authors' calculations

**Figure 49. State and Local Transportation Revenue from the Illinois Livestock Industry**




Note: Total State and Local Transportation revenue from the Illinois Livestock industry = $7.9 Million

Source: Federal Highway Administration, 2009; Illinois of Revenue, 2009; IMPLAN, 2009; National Agricultural Statistics Service, 2009; and authors' calculations

**Table 47. Top 10 Counties Ranked by Transportation Revenue Generated**

| # | County | Total Livestock Output* | Livestock Taxes* | | | Transportation Revenue* | % share of estimated county | |
|---|---|---|---|---|---|---|---|---|
| | | | All | State-Local Non-Education | State-Local IBT** | IBT** | Transportation Revenue | Transportation IBT** |
| 1 | Clinton | 168,873 | 13,316 | 5,906 | 4,487 | **354** | 2.7% | 4.4% |
| 2 | DeKalb | 99,430 | 7,469 | 2,983 | 2,831 | **223** | 3.0% | 2.8% |
| 3 | Jo Daviess | 68,315 | 6,080 | 2,237 | 2,087 | **165** | 2.7% | 2.1% |
| 4 | Henry | 79,929 | 5,471 | 2,355 | 2,085 | **165** | 3.0% | 2.1% |
| 5 | Carroll | 77,961 | 4,841 | 1,908 | 1,945 | **154** | 3.2% | 1.9% |
| 6 | Whiteside | 85,256 | 4,907 | 2,104 | 1,915 | **151** | 3.1% | 1.9% |
| 7 | Hancock | 64,928 | 4,410 | 1,918 | 1,737 | **137** | 3.1% | 1.7% |
| 8 | Stephenson | 81,744 | 4,658 | 2,047 | 1,679 | **133** | 2.8% | 1.7% |
| 9 | Livingston | 63,625 | 4,376 | 1,888 | 1,644 | **130** | 3.0% | 1.6% |
| 10 | Pike | 52,560 | 4,548 | 1,965 | 1,518 | **120** | 2.6% | 1.5% |

* $1,000s; ** Indirect Business Taxes

Source: Federal Highway Administration, 2009; Illinois of Revenue, 2009; IMPLAN, 2009; National Agricultural Statistics Service, 2009; and Authors' calculation

**Figure 50. Top 10 Counties Ranked by Transportation Revenue Generated**

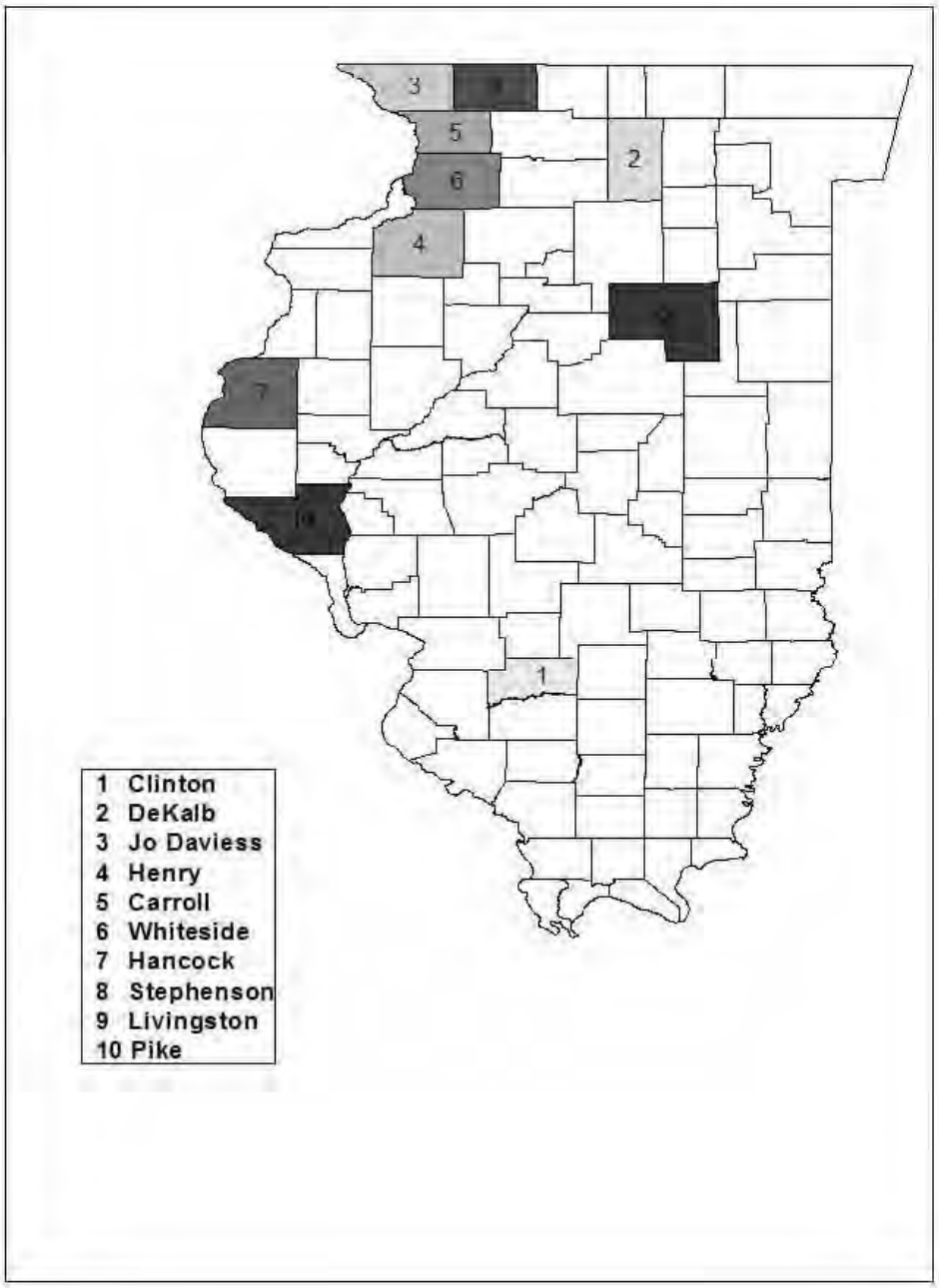


**Table 48. Top 10 Counties Ranked by Percent Contribution to Total County Transportation Revenue**

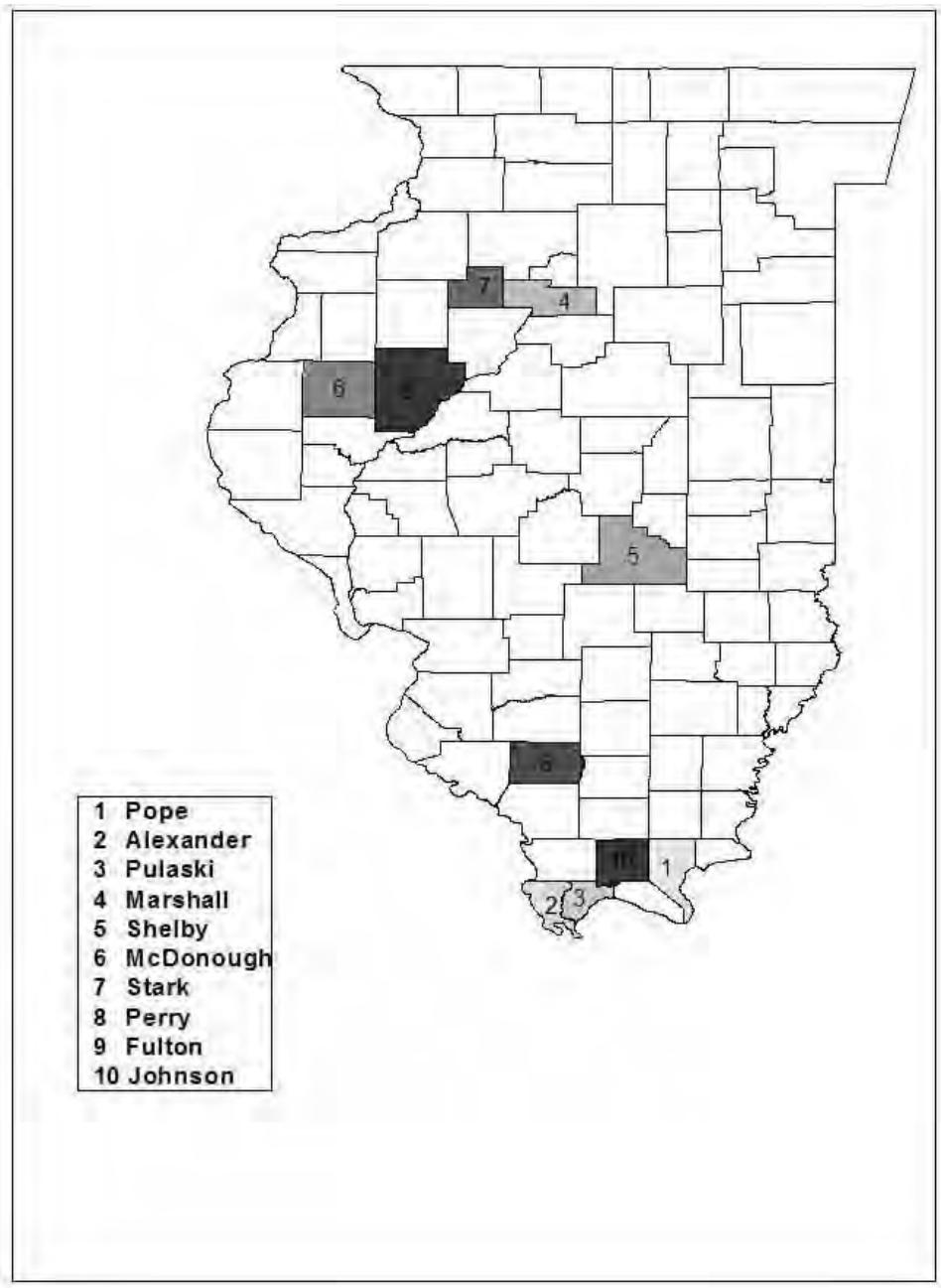
| # | County | Total Livestock Output* | Livestock Taxes* | | | Transportation Revenue* | % share of estimated county | |
|---|---|---|---|---|---|---|---|---|
| | | | All | State-Local Non-Education | State-Local IBT** | IBT** | Transportation Revenue | Transportation IBT** |
| 1 | Pope | 3,005 | 125 | 48 | 62 | 5 | **3.9%** | 0.1% |
| 2 | Alexander | 946 | 45 | 17 | 22 | 2 | **3.8%** | 0.0% |
| 3 | Pulaski | 2,715 | 147 | 59 | 69 | 5 | **3.7%** | 0.1% |
| 4 | Marshall | 5,577 | 287 | 113 | 132 | 10 | **3.6%** | 0.1% |
| 5 | Shelby | 36,507 | 2,067 | 1,150 | 927 | 73 | **3.5%** | 0.9% |
| 6 | McDonough | 11,296 | 671 | 262 | 300 | 24 | **3.5%** | 0.3% |
| 7 | Stark | 4,845 | 301 | 123 | 134 | 11 | **3.5%** | 0.1% |
| 8 | Perry | 6,601 | 314 | 127 | 139 | 11 | **3.5%** | 0.1% |
| 9 | Fulton | 39,128 | 2,402 | 935 | 1,067 | 84 | **3.5%** | 1.1% |
| 10 | Johnson | 9,331 | 526 | 211 | 232 | 18 | **3.5%** | 0.2% |

* $1,000s; ** Indirect Business Taxes

Source: Federal Highway Administration, 2009; Illinois of Revenue, 2009; IMPLAN, 2009; National Agricultural Statistics Service, 2009; and Authors' calculations

**Figure 51. Top 10 Counties Ranked by Percent Contribution to Total County Transportation Revenue**



## VI. Summary and Conclusion

The State's livestock and meat and dairy processing sectors significantly contribute to the state's economy in three important ways: 1) significant economic activity in the form of output, jobs and taxes; 2) real growth for an overall declining Illinois economy; and 3) important local impacts in key county and legislative regions. The goal of this report was to provide the Illinois livestock industry with an economic snapshot of the current state of the industry. Provided are detailed analyses of the overall state of the State's meat and dairy complex, highlights of leading counties and leading legislative districts. Citizens, elected officials, and industry members can see how and where the meat and dairy complex generates economic impact. Only the leading counties and districts are highlighted in this report. The data are available though to estimate the detailed economic impact of the meat and dairy complex for every county and legislative district in the state.

While the impact numbers are important to document, also critical is to understand the complementarity between livestock production and meat and dairy processing. Agglomeration economies are so important in industries dominated by low valued goods where transportation is costly. This report documents the extensive integration of Illinois livestock production with Illinois processors. The domestic supply of livestock

provides processors with a substantial base (25%) of supply. Without this base, processors would be less incented to remain in the state. Transportation costs for Illinois producers would rise, making it difficult to compete, if processors were to leave. Therefore good industrial policy is good livestock policy. Maintaining a strong processor base in the state (nearby) gives Illinois farmers local markets for their products and competitive advantage compared with more distant producers. Processors too benefit from a large supply that may also be low cost due to minimal transportation.

Alternatively, good livestock siting policy is good industrial policy. That is local processors benefit if farmers are able to locate or expand in the state. Costs rise not only because of transport but also because of greater competition with other buyers when processors need to look further and further away for supply to keep their plants running. Therefore processors in the state have a stake in the success and viability of the State's livestock sector.

Working together on a favorable business environment in Illinois that is beneficial to both livestock production and meat and dairy processing would be invaluable to ensuring the future of this important agro-industrial complex.

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## Glossary of Terms

**Commercial farm** = Has at least commercial scale (derived from IASS 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. Standard is 40 hours times 52 weeks a year = 2080 hours of labor = 1 FTE.
**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 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. IASS is the local representative of the NASS system.
**Output multiplier** = Changes in total economic output by increasing output one unit in a specified industry.

# Appendices

## Appendix 1: Labor estimates

**Table 1 A: Output per full time employee estimates**

| | IMPLAN | | Goldsmith and Wang | | Share of unpaid labor |
|---|---|---|---|---|---|
| | Employment* | State average** | Employment | Pure livestock farms | Pure livestock farms |
| Beef | 1,557 | 311,728 | 6,286 | 78,903 | 34% |
| Dairy | 718 | 354,300 | 3,451 | 75,344 | 10% |
| Pork | 9,482 | 100,383 | 5,868 | 165,634 | 36% |
| Poultry | 101 | 1,253,735 | 779 | 165,634 | 36% |
| Others*** | 276 | 100,392 | 355 | 78,903 | 34% |

* Number of direct employment impact in terms of FTEs

** The direct output ($) per direct employee.

*** Includes Sheep and wool, and all other non-traditional livestock products

Source: FBFM (2009), IMPLAN (2009) and authors' calculations

## Appendix 2: Livestock Production

**Figure 2 A: Hog Production in Illinois (1999-2009)**

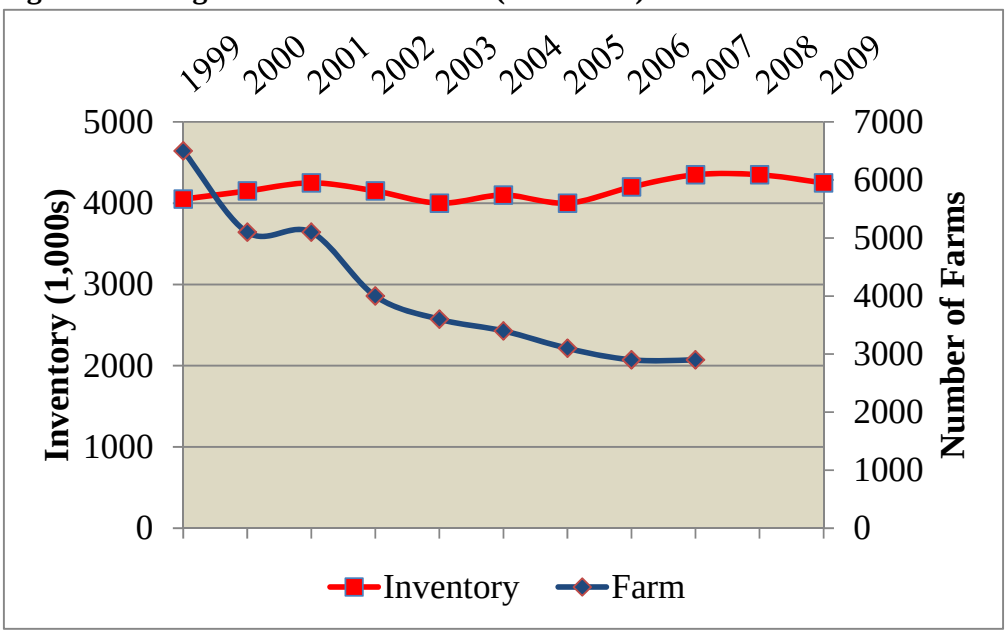



**Figure 2 B: Milk Production in Illinois (1999-2009)**

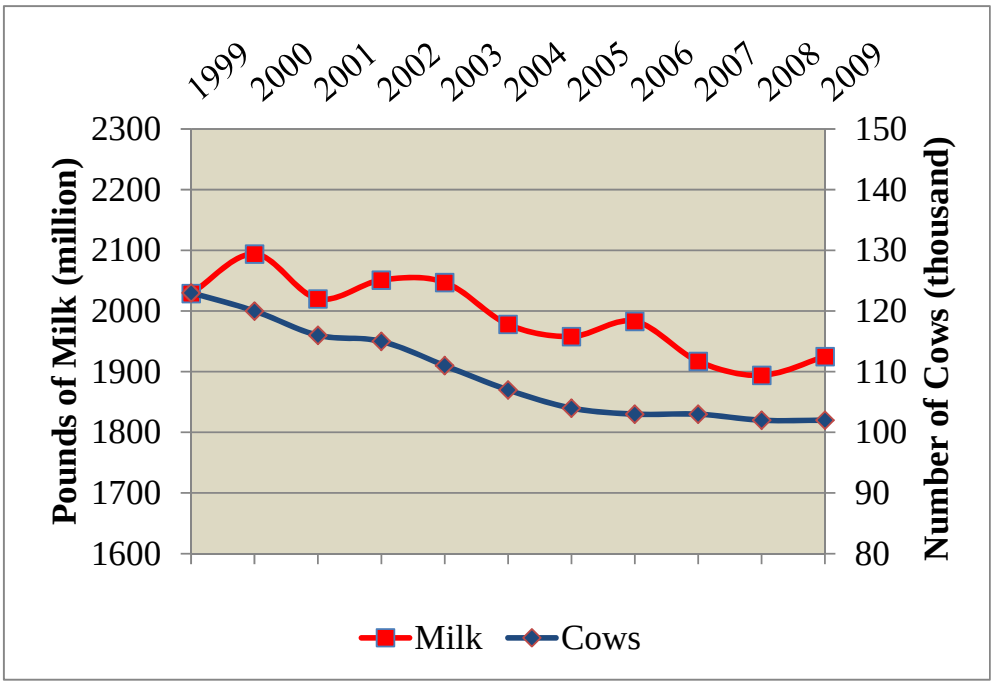
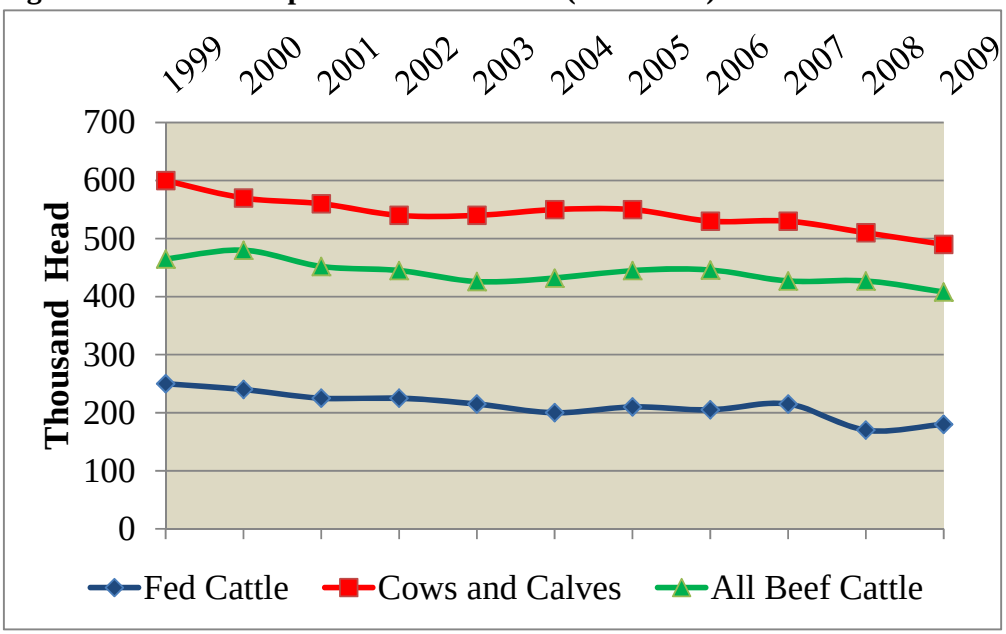


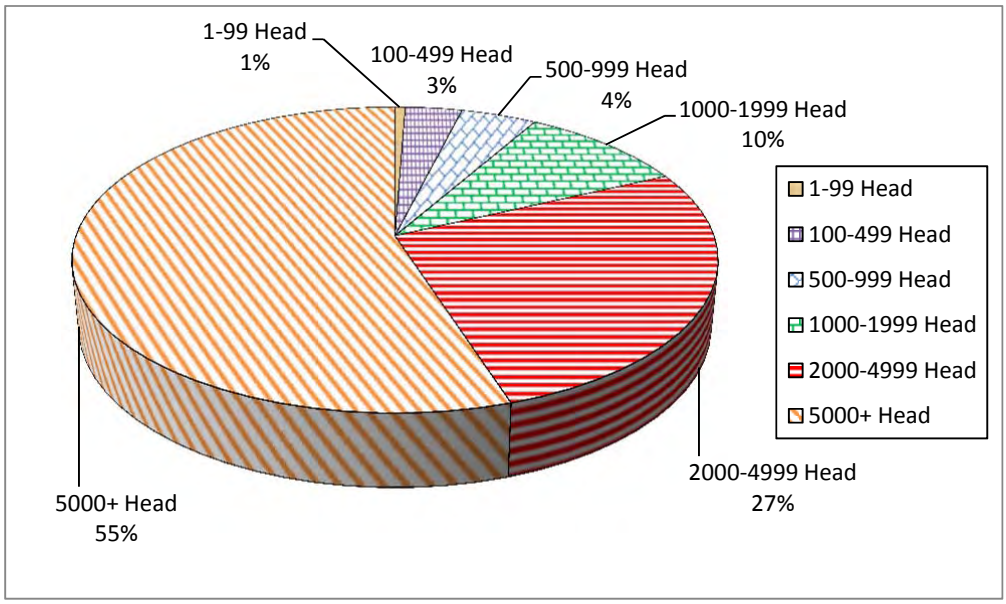
**Figure 2 C: Fed cattle production in Illinois (1999-2009)**



# Appendix 3: Hog Inventory

**Figure 3 A: Illinois Hog Inventory by Farm size (2007)**




Source: National Agricultural Statistics Service, U.S. and All States Data, Hogs and Pigs

**Figure 3 B: Illinois Hog Inventory by Farm size (2004)**

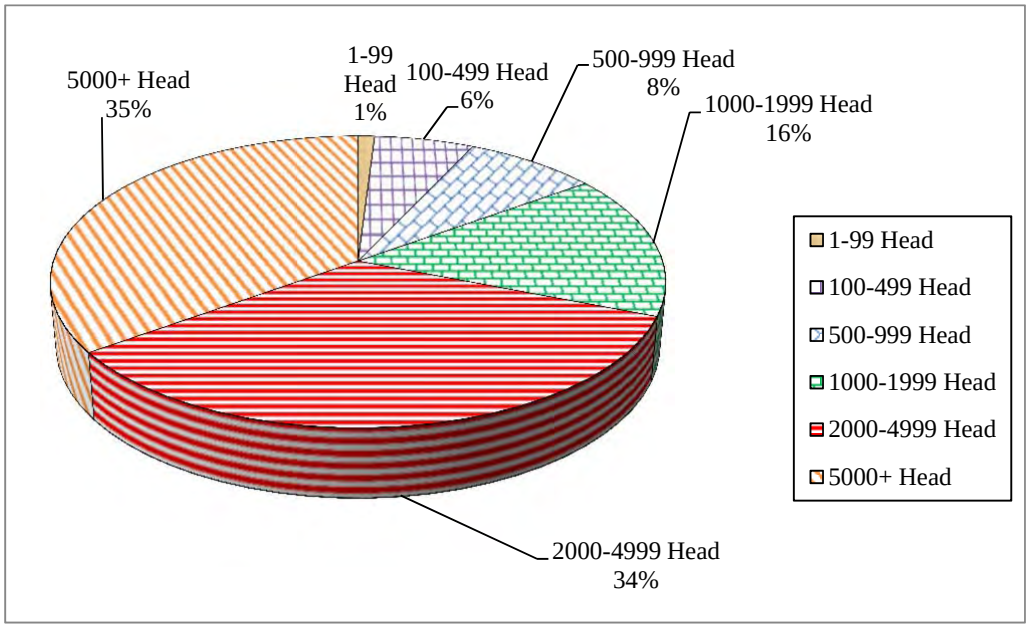
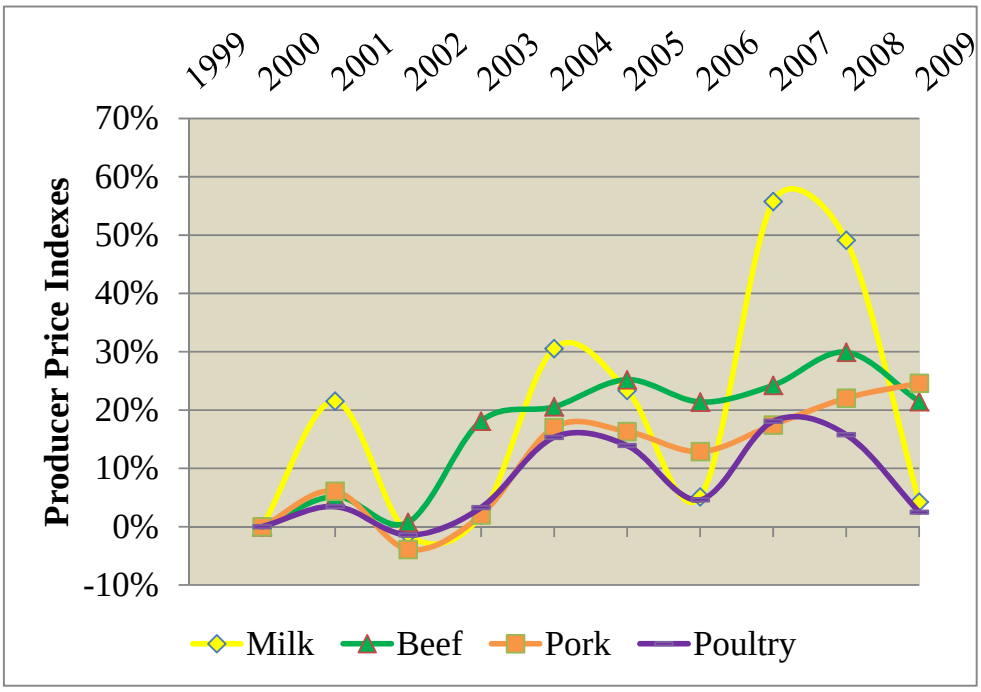


**Figure 3 C: Producer Price Indexes (2000-2009)**




Source: United States Department of Agriculture, Economic Research Service, Agricultural Outlook

## Appendix 4: Poultry

We do not present detail poultry data in this report. In prior years county level data were consistent between IMPLAN and NASS data. This consistency check, along with a third check using Census data, is very important to validate the internal consistency among the counties within a reporting year, and across Livestock Impact reports. This year, poultry data validation failed on both accounts; at the county level for 2009 and with respect to poultry values in previous reports. The county level data reported by IMPLAN for 2009 are only estimates, and bad estimates at that. They do not reflect actual NASS values and often counties were given the same poultry output value. Total values for the state though are accurate.

Part of the challenge for IMPLAN and NASS are the small number problems associated with the minor commercial species, such as poultry, where there are few flocks. Small numbers at the county level creates disclosure problems as individual farm values may be revealed. NASS does not report egg and turkey sales vales for most counties either because sales are zero or there are too few farms in the county. We do know that there are over $40 million in turkey sales in Illinois. NASS does not report broiler sales numbers at all for the State.



# Appendix 5: Sheep

**Table 8 A: Top 10 Counties—Sheep**

Rank by Output

| | | Output* | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | Warren | 635 | 754 | 0.11% | 4 | 5 | 0.06% | 54 |
| 2 | Wayne | 390 | 475 | 0.08% | 2 | 3 | 0.04% | 40 |
| 3 | La Salle | 249 | 379 | 0.01% | 2 | 3 | 0.01% | 31 |
| 4 | Woodford | 192 | 252 | 0.01% | 2 | 2 | 0.01% | 23 |
| 5 | Henry | 189 | 245 | 0.01% | 1 | 2 | 0.01% | 20 |
| 6 | Champaign | 187 | 257 | 0.00% | 1 | 2 | 0.00% | 23 |
| 7 | Stephenson | 177 | 232 | 0.01% | 2 | 3 | 0.01% | 21 |
| 8 | McDonough | 168 | 199 | 0.02% | 2 | 2 | 0.01% | 17 |
| 9 | Mclean | 162 | 215 | 0.00% | 1 | 1 | 0.00% | 21 |
| 10 | Winnebago | 140 | 204 | 0.00% | 2 | 2 | 0.00% | 17 |

*: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

**Table 8 B: Top 10 Counties—Sheep**

Rank by share in total county personal income

| | | Output* | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | Warren | 635 | 754 | 0.11% | 4 | 5 | 0.06% | 54 |
| 2 | Wayne | 390 | 475 | 0.08% | 2 | 3 | 0.04% | 40 |
| 3 | Clinton | 110 | 154 | 0.02% | 1 | 2 | 0.01% | 16 |
| 4 | McDonough | 168 | 199 | 0.02% | 2 | 2 | 0.01% | 17 |
| 5 | Schuyler | 35 | 51 | 0.02% | 1 | 1 | 0.02% | 5 |
| 6 | Edgar | 80 | 95 | 0.01% | 1 | 1 | 0.01% | 8 |
| 7 | Woodford | 192 | 252 | 0.01% | 2 | 2 | 0.01% | 23 |
| 8 | Pike | 60 | 82 | 0.01% | 1 | 1 | 0.01% | 8 |
| 9 | Stephenson | 177 | 232 | 0.01% | 2 | 3 | 0.01% | 21 |
| 10 | Henry | 189 | 245 | 0.01% | 1 | 2 | 0.01% | 20 |

*: in thousands of dollars

Source: NASS (2009), IMPLAN (2009), authors' calculations

**Figure 8 A: Top 10 Counties—Sheep**

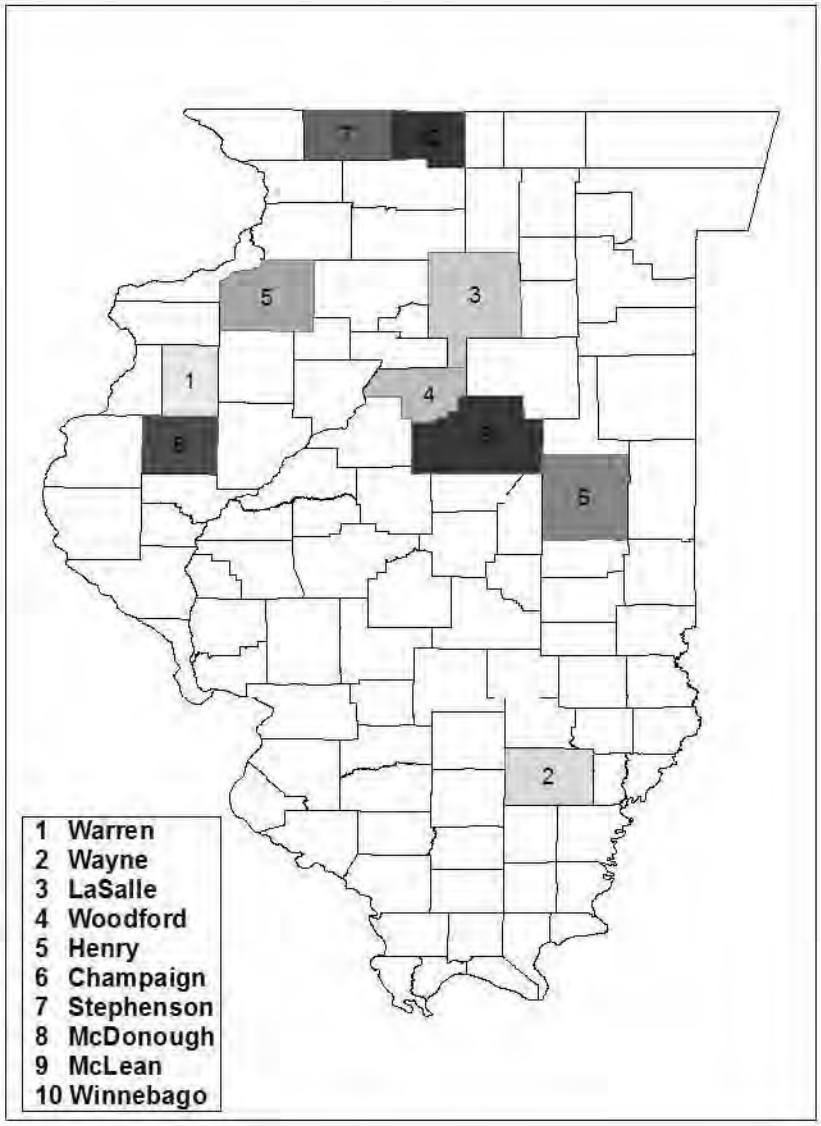


**Figure 8 B: Top 10 Counties—Sheep**
Rank by share in total county personal income

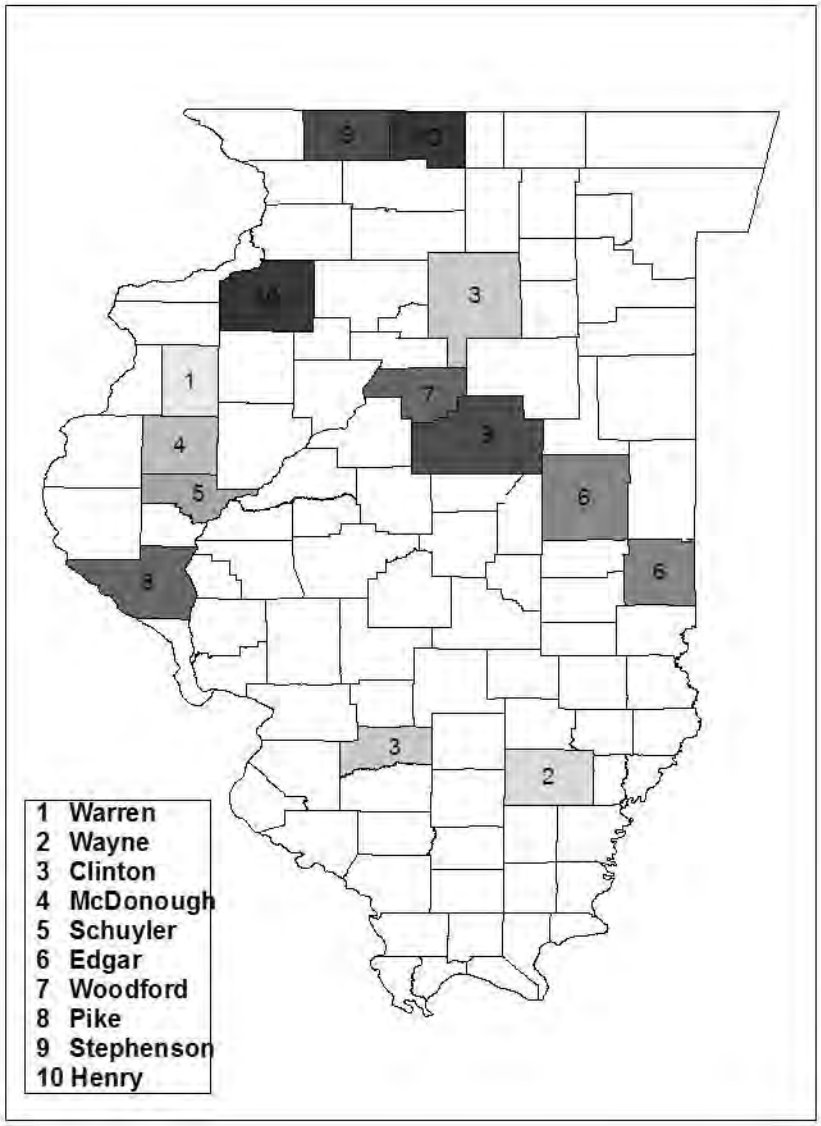


**Table 9 A: Top 10 Representative Districts--Sheep**
Rank by Output

| | | Output* | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | RD-93 | 647 | 875 | 0.02% | 4 | 6 | 0.01% | 73 |
| 2 | RD-94 | 621 | 925 | 0.02% | 4 | 6 | 0.01% | 68 |
| 3 | RD-109 | 528 | 687 | 0.02% | 3 | 5 | 0.01% | 57 |
| 4 | RD-90 | 480 | 677 | 0.01% | 3 | 5 | 0.00% | 57 |
| 5 | RD-74 | 361 | 486 | 0.01% | 2 | 3 | 0.01% | 44 |
| 6 | RD-71 | 323 | 449 | 0.01% | 2 | 3 | 0.00% | 34 |
| 7 | RD-106 | 316 | 406 | 0.01% | 2 | 3 | 0.00% | 34 |
| 8 | RD-89 | 289 | 434 | 0.01% | 2 | 3 | 0.00% | 40 |
| 9 | RD-107 | 279 | 385 | 0.01% | 2 | 3 | 0.00% | 37 |
| 10 | RD-100 | 226 | 317 | 0.00% | 1 | 2 | 0.00% | 29 |

*: in thousands of dollars

Source: National Agricultural Statistics Service, IMPLAN (2009), authors' calculations

**Table 9 B: Top 10 Representative Districts--Sheep**
Rank by share in total county personal income

| | | Output* | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | RD-94 | 621 | 925 | 0.02% | 4 | 6 | 0.01% | 68 |
| 2 | RD-109 | 528 | 687 | 0.02% | 3 | 5 | 0.01% | 57 |
| 3 | RD-93 | 647 | 875 | 0.02% | 4 | 6 | 0.01% | 73 |
| 4 | RD-74 | 361 | 486 | 0.01% | 2 | 3 | 0.01% | 44 |
| 5 | RD-90 | 480 | 677 | 0.01% | 3 | 5 | 0.00% | 57 |
| 6 | RD-106 | 316 | 406 | 0.01% | 2 | 3 | 0.00% | 34 |
| 7 | RD-107 | 279 | 385 | 0.01% | 2 | 3 | 0.00% | 37 |
| 8 | RD-72 | 179 | 212 | 0.01% | 1 | 1 | 0.00% | 15 |
| 9 | RD-71 | 323 | 449 | 0.01% | 2 | 3 | 0.00% | 34 |
| 10 | RD-89 | 289 | 434 | 0.01% | 2 | 3 | 0.00% | 40 |

*: in thousands of dollars

Source: National Agricultural Statistics Service, IMPLAN (2009), authors' calculations

**Figure 9 A: Top 10 Representative Districts--Sheep**

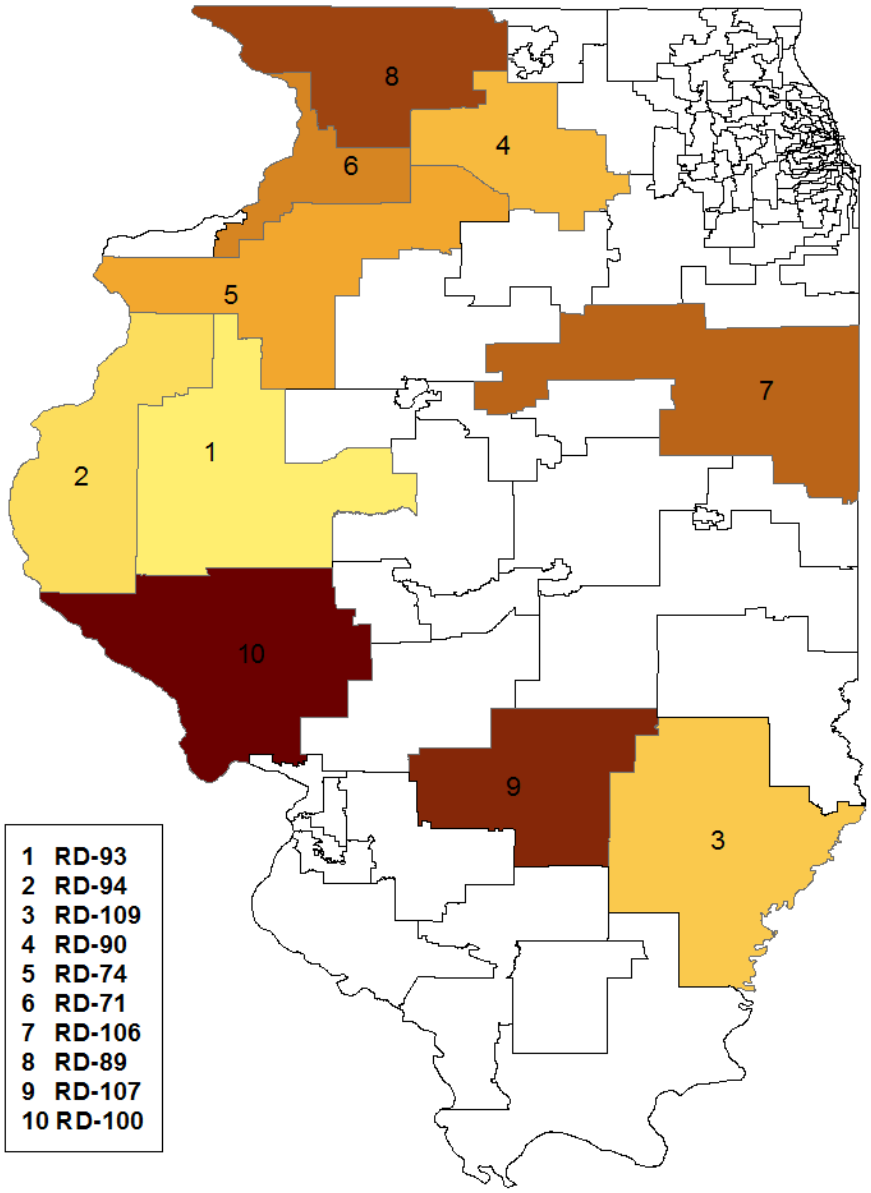


**Figure 9 B: Top 10 Representative Districts—Sheep**
Rank by share in total county personal income

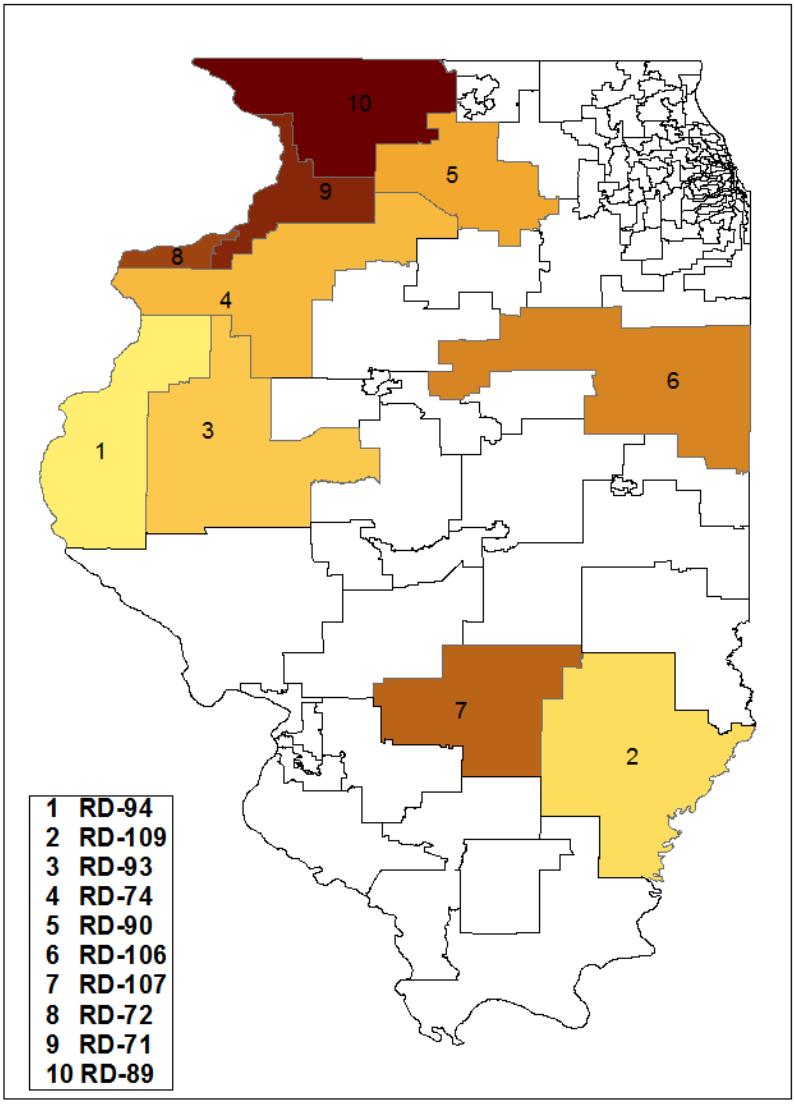


**Table 10 A: Top 10 Senate Districts--Sheep**
Rank by Output

| | | Output* | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | SD-47 | 1,268 | 1,800 | 0.02% | 8 | 11 | 0.01% | 141 |
| 2 | SD-45 | 769 | 1,111 | 0.01% | 5 | 8 | 0.00% | 97 |
| 3 | SD-55 | 631 | 815 | 0.01% | 4 | 6 | 0.00% | 67 |
| 4 | SD-37 | 536 | 771 | 0.01% | 3 | 5 | 0.00% | 74 |
| 5 | SD-36 | 502 | 661 | 0.01% | 3 | 4 | 0.00% | 50 |
| 6 | SD-53 | 416 | 540 | 0.01% | 3 | 4 | 0.00% | 45 |
| 7 | SD-54 | 365 | 527 | 0.00% | 3 | 4 | 0.00% | 50 |
| 8 | SD-51 | 359 | 473 | 0.00% | 2 | 3 | 0.00% | 41 |
| 9 | SD-50 | 238 | 332 | 0.00% | 2 | 2 | 0.00% | 30 |
| 10 | SD-48 | 225 | 310 | 0.00% | 1 | 2 | 0.00% | 27 |

*: in thousands of dollars

Source: National Agricultural Statistics Service, IMPLAN (2009), authors' calculations

**Table 10 B: Top 10 Senate Districts--Sheep**
Rank by share in total county personal income

| | | Output* | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | SD-47 | 1,268 | 1,800 | 0.02% | 8 | 11 | 0.01% | 141 |
| 2 | SD-55 | 631 | 815 | 0.01% | 4 | 6 | 0.00% | 67 |
| 3 | SD-45 | 769 | 1,111 | 0.01% | 5 | 8 | 0.00% | 97 |
| 4 | SD-37 | 536 | 771 | 0.01% | 3 | 5 | 0.00% | 74 |
| 5 | SD-36 | 502 | 661 | 0.01% | 3 | 4 | 0.00% | 50 |
| 6 | SD-53 | 416 | 540 | 0.01% | 3 | 4 | 0.00% | 45 |
| 7 | SD-54 | 365 | 527 | 0.00% | 3 | 4 | 0.00% | 50 |
| 8 | SD-59 | 220 | 299 | 0.00% | 2 | 3 | 0.00% | 24 |
| 9 | SD-51 | 359 | 473 | 0.00% | 2 | 3 | 0.00% | 41 |
| 10 | SD-50 | 238 | 332 | 0.00% | 2 | 2 | 0.00% | 30 |

*: in thousands of dollars

Source: National Agricultural Statistics Service, IMPLAN (2009), authors' calculations

**Figure 10 A: Top 10 Senate Districts—Sheep**

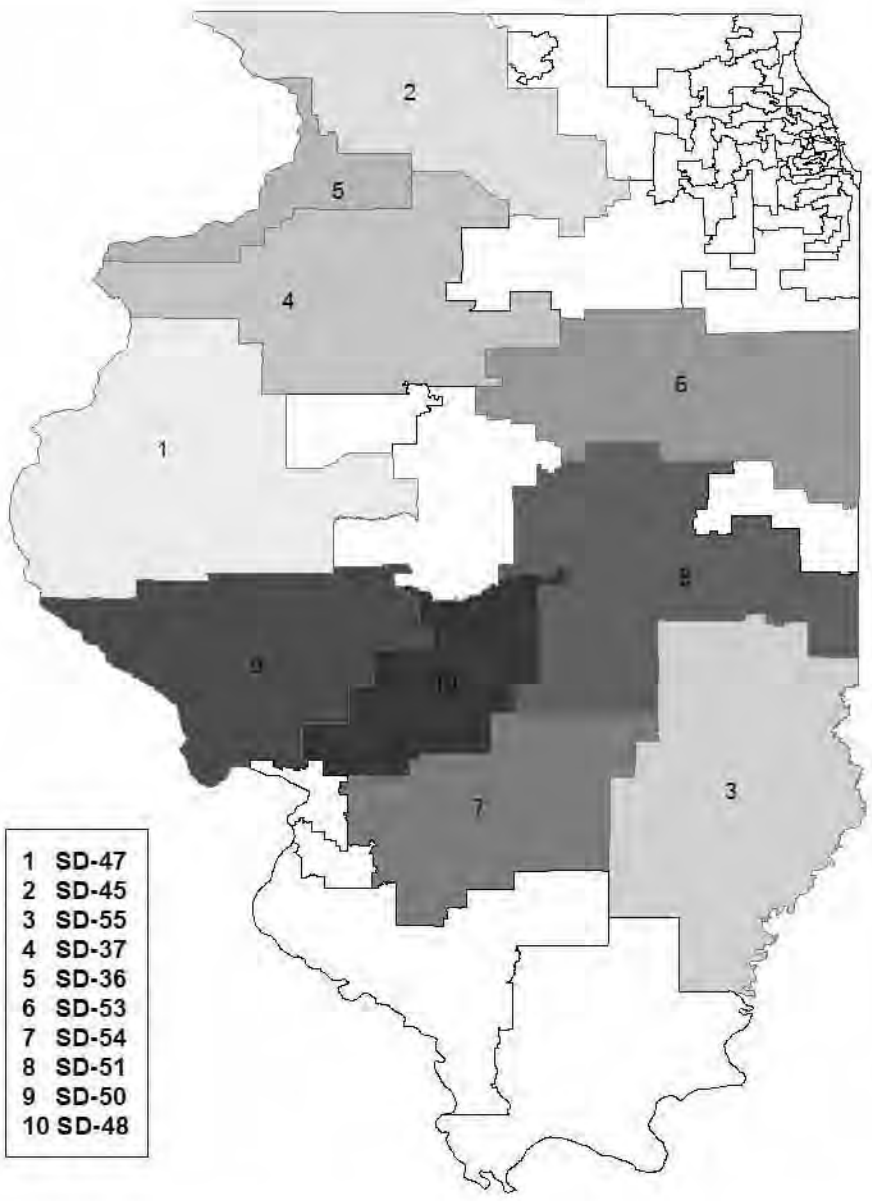


**Figure 10 B: Top 10 Senate Districts—Sheep**
Rank by share in total county personal income

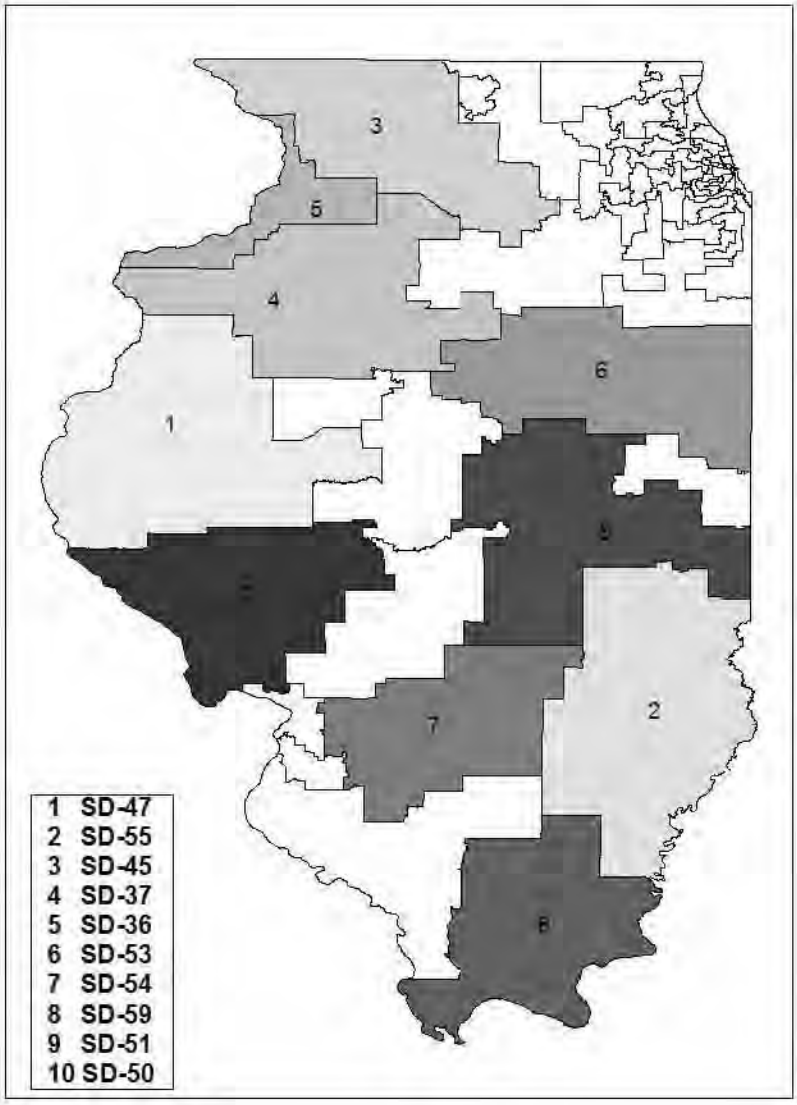


**Table 11 A: Congressional Districts—Sheep**

Rank by output

| | | Output* | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | CD-16 | 17,462 | 24,664 | 0.08% | 221 | 272 | 0.07% | 2,253 |
| 2 | CD-17 | 2,128 | 3,098 | 0.01% | 27 | 34 | 0.01% | 260 |
| 3 | CD-15 | 1,517 | 2,118 | 0.01% | 19 | 24 | 0.01% | 187 |
| 4 | CD-2 | 1,053 | 1,781 | 0.00% | 13 | 17 | 0.00% | 169 |
| 5 | CD-18 | 994 | 1,600 | 0.00% | 13 | 16 | 0.00% | 134 |
| 6 | CD-13 | 487 | 674 | 0.00% | 6 | 8 | 0.00% | 60 |
| 7 | CD-12 | 265 | 423 | 0.00% | 3 | 4 | 0.00% | 36 |
| 8 | CD-14 | 165 | 225 | 0.00% | 2 | 2 | 0.00% | 21 |
| 9 | CD-6 | 51 | 87 | 0.00% | 1 | 1 | 0.00% | 9 |
| 10 | CD-11 | 25 | 37 | 0.00% | 0 | 1 | 0.00% | 4 |

*: in thousands of dollars

Source: National Agricultural Statistics Service, IMPLAN (2009), authors' calculations

**Table 11 B: Congressional Districts—Sheep**

Rank by share in total county personal income

| | | Output* | | | Employment | | | Tax |
|---|---|---|---|---|---|---|---|---|
| | | Direct | Total | % PI | Direct | Total | % Total | Impact* |
| 1 | CD-16 | 17,462 | 24,664 | 0.08% | 221 | 272 | 0.07% | 2,253 |
| 2 | CD-17 | 2,128 | 3,098 | 0.01% | 27 | 34 | 0.01% | 260 |
| 3 | CD-15 | 1,517 | 2,118 | 0.01% | 19 | 24 | 0.01% | 187 |
| 4 | CD-18 | 994 | 1,600 | 0.00% | 13 | 16 | 0.00% | 134 |
| 5 | CD-2 | 1,053 | 1,781 | 0.00% | 13 | 17 | 0.00% | 169 |
| 6 | CD-13 | 487 | 674 | 0.00% | 6 | 8 | 0.00% | 60 |
| 7 | CD-12 | 265 | 423 | 0.00% | 3 | 4 | 0.00% | 36 |
| 8 | CD-14 | 165 | 225 | 0.00% | 2 | 2 | 0.00% | 21 |
| 9 | CD-1 | 19 | 26 | 0.00% | 0 | 0 | 0.00% | 2 |
| 10 | CD-11 | 25 | 37 | 0.00% | 0 | 1 | 0.00% | 4 |

*: in thousands of dollars

Source: National Agricultural Statistics Service, IMPLAN (2009), authors' calculations

**Figure 11 A: Top 3 Congressional Districts—Sheep**

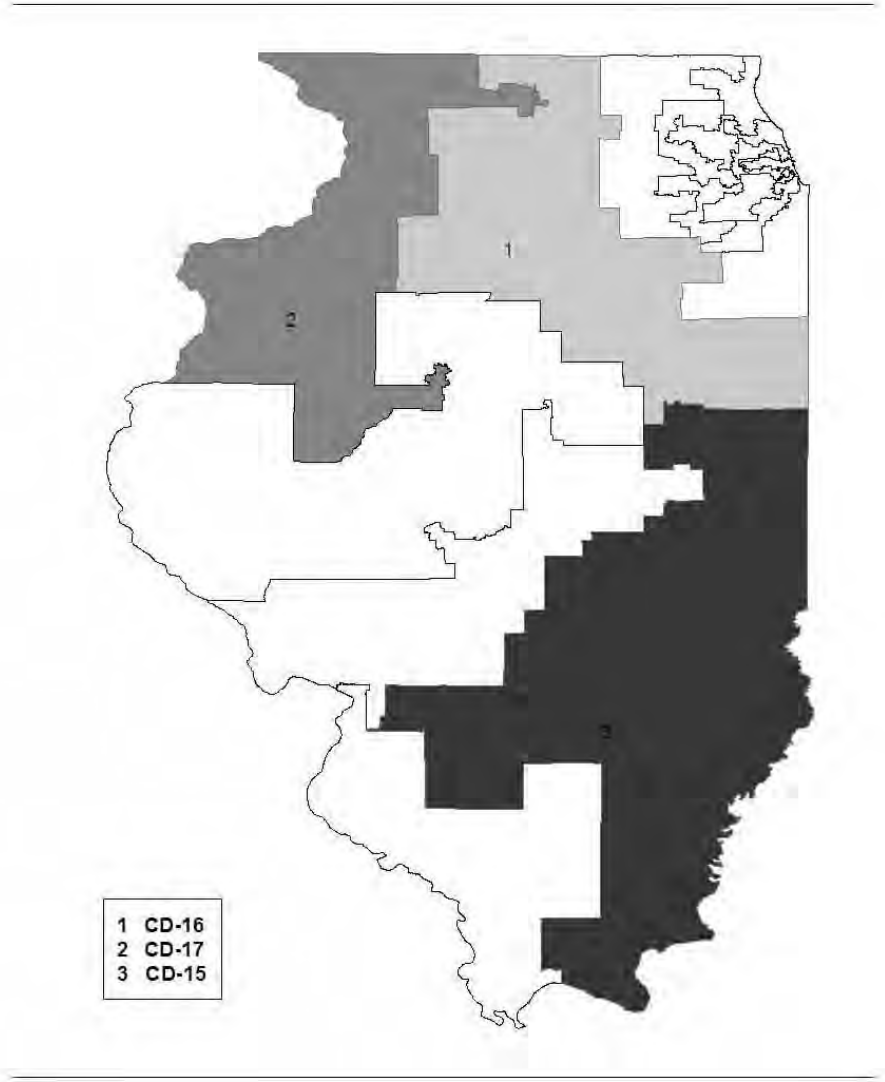
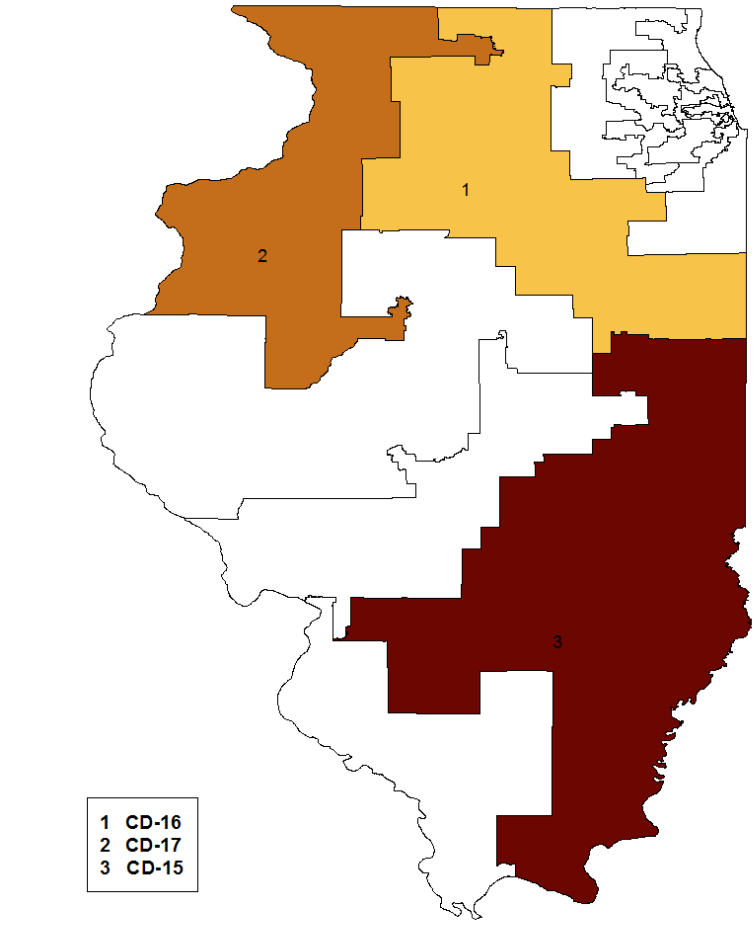


**Figure 11 B: Top 3 Congressional Districts—Sheep**
Rank by share in total county personal income




## Appendix 6: Tax Analysis Methodology and References

### 1. Tax Impact

IMPLAN makes two assumptions in estimating the tax impact. Firstly, marginal changes and impacts will use the same distribution as the base year. Changes resulting in the addition of the impact to the economy will not be reflected in the analysis. Secondly, the disbursement of the taxes generated is first aggregated and then disbursed as a single entity. In other words, the tax disbursement will be identical for all industry sectors.

The tax report generated by IMPLAN is highly aggregated to enhance readability. The

total taxes generated are classified as those made to the federal government for non-defense purposes and the state and local governments for non-education purposes. Each of the two categories is further sub-divided as corporate profits tax, indirect business tax and social insurance tax. There are five sources that pay these taxes—employee compensation, proprietary income, household expenditures, corporations and indirect business taxes. Social insurance tax is paid on the compensation earned by employees and proprietor's income. Households pay income tax and other personal taxes. Enterprises primarily pay tax on the profits.

**Indirect Business Tax:**

Indirect Business Taxes[1] (IBT) are the taxes paid by businesses to the government through sales and excise tax imposition. They are called 'indirect' because the businesses primarily collect these taxes from the consumers, or the household sector, to pay the government. IBT is calculated from the value added[2] due to economic activity. The total value added, which includes Employee Compensation, Proprietary Income, Other Property Type Income and Indirect Business Taxes, is calculated using state and county level industry-specific data[3]. The estimates of each of the sub-components are based on the average regional distribution and are not industry specific. In other words, the IMPLAN estimate of the tax impact of a million dollar investment in the livestock and lumber industry will be different. However, the percent distribution of IBT, employee compensation and other sub-components will be identical.

In the tax report, IBT has five components—motor vehicle licensing taxes, property taxes, sales tax, severance tax, other taxes and non-taxes. Explanation for each of the following follows.

**Motor Vehicle Licensing Tax:**

Motor vehicle licensing tax is imposed on owners or operators of motor vehicles for the right to use public highways, such as fees for title registration, license plates, vehicle inspection, vehicle mileage and weight taxes on motor carriers, highway use taxes, and off-highway fees. IMPLAN estimates of motor vehicle taxes are based on the regional average derived from the Illinois Department of Revenue (IDoR).

**Property Tax and Assessments:**

Property taxes relate to property as a whole, taxed at a single rate or at classified rates according to the class of property. Property refers to real property (e.g., land and

[1] Indirect Business Tax is the term used in NIPA for sales tax.

[2] According to the BEA, value added is *"the contribution of an industry to the overall Gross Domestic Product"*. It is calculated as the difference of the gross output and cost of intermediate inputs.

[3] Mention what the sources are here

structures) as well as personal property; personal property can be either tangible (e.g., automobiles and boats) or intangible (e.g., bank accounts and stocks and bonds). Here, personal property taxes on motor vehicles. Property taxes and assessments are the most significant source of revenue for local governments. These taxes are also called *ad valorem*, which means according to value, because the tax is based on the value of the properties like land and buildings. The value of the property, as evaluated by the assessor is called the Equivalent Assessed Value (EAV). Property taxes are charged on the EAV and not the market value. These taxes are generally imposed by local taxing districts like the school district, municipalities and counties. Illinois does not have a state property tax.

**Sales Tax:**

These are generally levied by state and local governments as a percentage of the commodity's price. They include sales taxes collected by retail establishments, by wholesalers, and by service establishments. Many states have adopted local sales taxes that are dedicated to transportation projects. Often, transit projects are supported by transportation related local sales tax. Selective sales taxes are levied on a specific commodity at a percentage that differs from that of the general sales tax. They include taxes on motor fuels, tobacco products, alcoholic beverages, public utilities, meals, hotel occupancy, and amusements. (BEA)

**Other Taxes:**

Other taxes include all those taxes that are not listed here. These funds are primarily taxes on real estate transfer tax, and also include taxes on pharmaceutical assistance and qualified solid waste energy facility payment.

**Transportation Funding and Finance:**

**Sources of Transportation Funds:**

There are many sources of funding for transportation infrastructure projects in Illinois. Highway user taxes, property taxes and general funds and grant aids from the state and federal government are the primary sources of transportation finance for local government agencies. The Office of Highway Policy Information (OHPI) of the Federal Highway Administration (FHWA) publishes details of receipts and disbursement of funds at the state and national level.

For the purpose of this analysis, the statewide rates and ratios have been used to estimate the transportation funding impact of county livestock industry. As regards the

**Highway User Taxes:**

These are the taxes that are levied directly on the users of the highway. There are three types of user taxes—motor vehicle tax, motor fuel tax and roads and bridges tolls.

***Motor Fuel Taxes:***

These are taxes on gasoline, diesel oil, aviation fuel, "gasohol," "ethanol," and any other fuels used in motor vehicles or aircraft.
These are collected by the retailer and paid to the government. Thus, this tax is listed as IBT. Motor fuel taxes are levied by both the federal and state governments in all states as well as some of the local governments in 15 states.

In Illinois, out of the 18.4 cents that is levied on purchase of a gallon of gasoline, 15.4 cents are allotted to the Federal Highway Trust Fund, and the rest go towards the federal Mass Transit account. The Illinois Motor Fuel tax imposes an additional 19 cents per gallon of gasoline.

In addition, Cook, DuPage, Kane and McHenry counties in metropolitan Chicago are authorized to collect local taxes on motor fuel purchase at the rate of six, four, two and four cents per gallon respectively. While road and transit districts are allowed to levy local fuel taxes for improvement of local street infrastructure, data pertaining to such collections, if any, are unavailable.

***Motor Vehicle Licensing Tax:***
Governments are authorized to impose tax on purchase, rent and lease of vehicles. While many states levy a state tax, in Illinois these taxes are implemented locally. The taxes can either be *ad valorem* or excise taxes. In Illinois, the tax rate varies by vehicle type, and is therefore *ad valorem*.

***Road Toll Tax:***

Road and bridge toll taxes are excise levies on transportation infrastructure paid by the user of the vehicle. These taxes are paid by both households and businesses, and have an impact beyond their geographical location. Illinois has both state and local toll tax on three of the bridges located in Chicago, St.Louis and Peoria. These are also dedicated funds.

**Property Taxes:**

Illinois has many provisions to divert property taxes and assessment revenue to fund local transportation projects and other services. These taxes can be levied by cities, counties and transit and road districts for various purposes related to transportation. However, the property taxes are not reported by the purpose of collection.

**General Fund Appropriations:**

The general fund, as the name suggests, is a pool of money at the disposal of FHWA that is used for a variety of transportation projects. The sources of these funds are revenues from sales tax, income tax and other sources that are not explicitly identified by FHWA.

**Description of Methodology**

The transportation tax impact of livestock industry is based on the data published by the Federal Highway Administration (FWHA) Office of Highway Policy and Information. As the data is aggregated at the state level, the estimates of the county contribution are not county specific and use the same distribution as the state.

Property Taxes

Only local governments collect property tax to be used for transportation projects. The contribution of the livestock industry to transportation funds through property taxes is estimated as a constant proportion derived from the IDoR and FHWA data. The constant used is calculated as the ratio of transportation funds raised by property taxes to total property taxes collected.

General Funds

The contribution of livestock taxes to the state and local transportation general fund is calculated as a constant proportion of the state and local sales tax generated by livestock industries. The constant, in turn is the ratio of total general funds to the total sales tax.

Miscellaneous Income

Estimate of contribution to miscellaneous sources of transportation funding follows the state average distribution based on the FHWA data.

County Transportation Fund

The total tax, and in turn the transportation tax, are in proportion to the county's total personal income. Therefore, the total state and local transportation revenue is disbursed in proportion of the county personal income (PI) to each of the counties.

Transportation Fund Raised by County Businesses

The contribution of businesses by source of transportation funding is calculated from the transportation dollars raised by the county businesses, as opposed to households. The contribution though property tax is estimated as the ratio of total commercial and retail property tax to total property tax collected. Similarly, the share in general fund contribution is assumed to be same as the share of sales tax in total of business and income tax. The highway taxes, which account for less than five percent of the total transportation fund, have been ignored for this calculation.

**Table 12 A: Transportation Revenue Generated through Tax**

| | Motor Fuel and Vehicle Tax | Road Toll Tax | General Funds | Miscellaneous Income | Property Tax | Total |
|---|---|---|---|---|---|---|
| | | | (in millions of dollars) | | | |
| Local | 33 | 0 | - | 202 | 943 | 1,178 |
| Share | 3% | 0% | 0% | 17% | 80% | 100% |
| State | 1,702 | 666 | 541 | 40 | - | 2,949 |
| Share | 58% | 23% | 18% | 1% | 0% | 100% |
| **Total** | **1,735** | **666** | **541** | **242** | **943** | **4,127** |
| Percent Share | | | | | | |
| Local | 2% | 0% | 0% | 84% | 100% | 29% |
| State | 98% | 100% | 100% | 16% | 0% | 71% |

Note:

Source: FHWA 2005, and authors' calculations

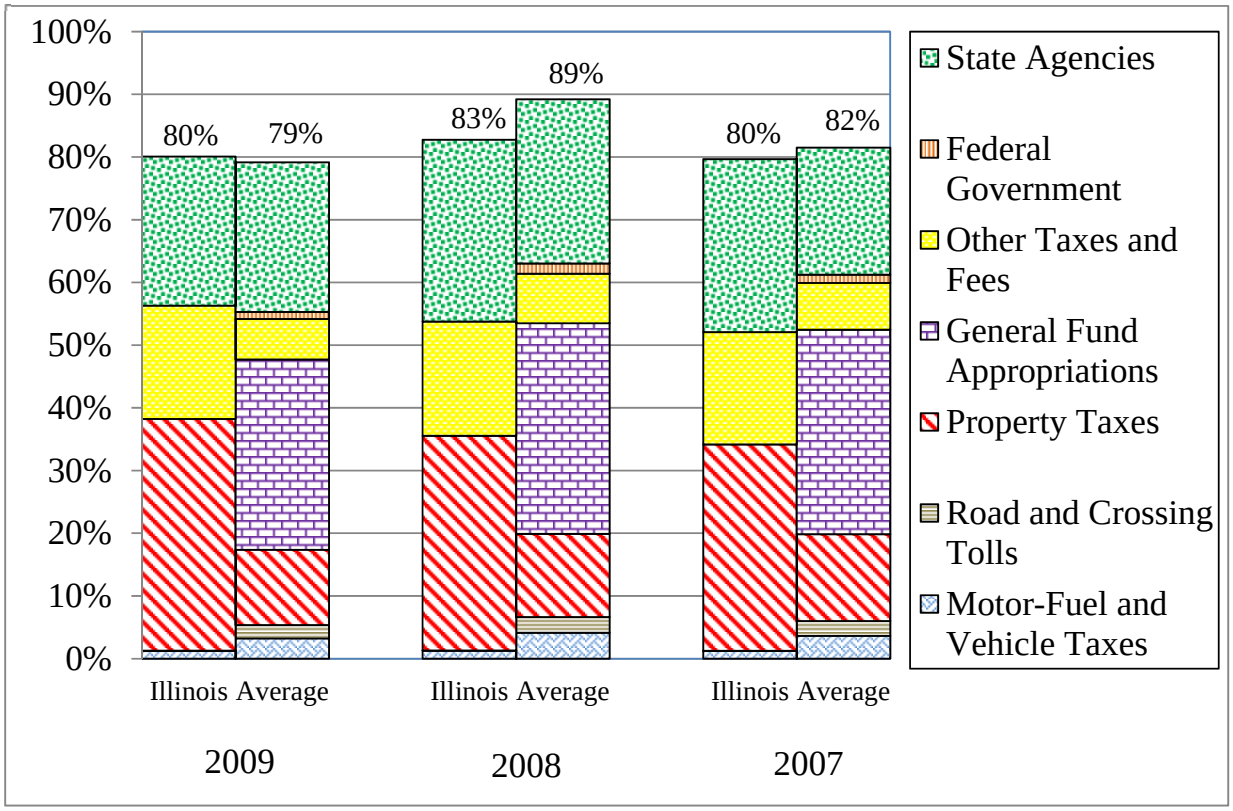
**Table 12 B: Revenues used by Local Governments for Highways**

| | Illinois | | National | Illinois | | National | Illinois | | National |
|---|---|---|---|---|---|---|---|---|---|
| | Total* | Share | Share | Total* | Share | Share | Total* | Share | Share |
| Total | 2,553 | 100% | 100% | 2,435 | 100% | 100% | 2,435 | 100% | 100% |
| Motor-Fuel and Vehicle Taxes | 33 | 1.3% | 3.2% | 32 | 1.3% | 4.1% | 30 | 1.2% | 3.6% |
| Road and Crossing Tolls | 0 | 0.0% | 2.1% | 0 | 0.0% | 2.5% | 0 | 0.0% | 2.4% |
| Property Taxes | 943 | 36.9% | 12.0% | 833 | 34.2% | 13.3% | 801 | 32.9% | 13.8% |
| General Fund Appropriations | 0 | 0.0% | 30.3% | 0 | 0.0% | 33.6% | 0 | 0.0% | 32.6% |
| Other Taxes and Fees | 461 | 18.1% | 6.5% | 444 | 18.2% | 7.9% | 436 | 17.9% | 7.5% |
| Federal Government | 0 | 0.0% | 1.1% | 0 | 0.0% | 1.6% | 0 | 0.0% | 1.3% |
| State Agencies | 607 | 23.8% | 23.9% | 706 | 29.0% | 26.2% | 672 | 27.6% | 20.3% |

Note:
http://www.fhwa.dot.gov/policyinformation/statistics/2009/
http://www.fhwa.dot.gov/policyinformation/statistics/2008/ldf.cfm
http://www.fhwa.dot.gov/policyinformation/statistics/2007/lgf1.cfm
*: in millions of dollars
Source: FHWA 2007, 2008, 2009, and authors' calculations

**Figure 12 A: Local Highway Revenues by Source, 2009**




Source: FHWA 2007, 2008, 2009, and authors' calculations

**Table 12 C: Disposition of Highway User Tax in 2009**

| | Collection | | Expenditure | | | |
|---|---|---|---|---|---|---|
| | | | | Transfers to | | Total |
| | | | State | Local | Local | Expenditure on |
| | State | Local | Highway | Governments | Streets | Local Highways |
| | (in millions of dollars) | | | | | |
| Motor Vehicle Tax | 857 | 16 | 489 | 288 | 81 | 858 |
| Motor Fuel Tax | 844 | 17 | 481 | 284 | 79 | 844 |
| Road Toll Tax | 666 | 0.2 | | | | |
| TOTAL | 2,367 | 33 | | | | |
| Local Motor Fuel Tax per dollar of Motor Vehicle Tax: | | | | | 1.07 | |
| State Motor Fuel Tax per dollar of Motor Vehicle Tax: | | | | | 0.98 | |
| Local Road Toll Tax per dollar of Motor Fuel and Vehicle Tax: | | | | | 0.01 | |
| State Road Toll Tax per dollar of Motor Fuel and Vehicle Tax: | | | | | 0.39 | |

Note:http://www.fhwa.dot.gov/policyinformation/statistics/2009/mv3.cfm,
http://www.fhwa.dot.gov/policyinformation/statistics/2009/mf3.cfm,
http://www.fhwa.dot.gov/policyinformation/statistics/2009/lgf1.cfm,
http://www.fhwa.dot.gov/policyinformation/statistics/2009/sf1.cfm.
Source: FHWA2009, and authors' calculations

**Table 12 D: Property Tax Revenue in 2009**

| | (in millions of dollars) | | |
|---|---|---|---|
| | 2007 | 2008 | 2009 |
| Total taxes extended | 22,443 | 23,552 | 24,768 |
| Commercial | 5,356 | 5,525 | 5,771 |
| Share | 24% | 23% | 23% |
| Local highway revenue | 2,435 | 2,504 | 2,553 |
| Local highway revenue from property taxes | 801 | 833 | 943 |
| Share | | | |
| of total | 4% | 4% | 4% |
| of commercial | 15% | 15% | 16% |

Note:http://www.fhwa.dot.gov/policyinformation/statistics/2009/lgf21.cfm,
http://www.revenue.state.il.us/Publications/LocalGovernment/PtaxStats/2006/index.htm.
Source: FHWA2007, 2008, 2009, and authors' calculations

**Table 12 E: Total Revenue Collected by State Government in 2009**

| | (in millions of dollars) | |
|---|---|---|
| Total state collections | 26,832 | |
| Income tax | 13,570 | 51% |
| Sales tax | 9,284 | 35% |
| Motor fuel | 1,371 | 5% |
| Excise tax | 2,527 | 9% |
| Gaming tax | 15 | 0% |
| Others | 64 | 0% |
| Total state indirect business taxes* | 45,827 | 78% |
| For local government | 13,200 | 23% |
| Total state and local taxes | 58,500 | 100% |
| | | Share |
| Total of Income, Sales and Excise tax | 25,381 | 100% |
| State General Fund Appropriations | 541 | 2% |
| Local General Fund Appropriations | 0 | 0% |
| Total General Fund Appropriations | 541 | |

*: Sales, excise and other taxes paid during normal operation of industry

Note:http://www.fhwa.dot.gov/policyinformation/statistics/2009/sf1.cfm, http://www.fhwa.dot.gov/policyinformation/statistics/2009/lgf21.cfm, http://www.google.com/url?sa=t&source=web&cd=11&ved=0CC8QFjAAOAo&url=http%3A%2F%2Fwww.ctmirror.org%2Fsites%2Fdefault%2Ffiles%2Fdocuments%2FEY-COST_FY2008_50-State_Business_Tax_Study.pdf&rct=j&q=2009%20Illinois%20state%20and%20local%20business%20tax&ei=sSbxTfPPKMycgQer1ZnRBA&usg=AFQjCNEYhdp6gnhAwm8bDEugru_74F8Y2w&sig2=HcO5zbtLC84xlSU6tQgAvw&cad=rja.

Source: FHWA2009, and authors' calculations

# Economic Impact of Livestock in ADAMS County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 15,474 | 26,872 | 0.65% | 196 | 260 | 0.47% | 1,338 |
| Dairy | 5,030 | 8,993 | 0.21% | 67 | 119 | 0.16% | 397 |
| Hog | 19,211 | 29,848 | 0.80% | 116 | 180 | 0.28% | 2,210 |
| Sheep | 89 | 132 | 0.00% | 1 | 1 | 0.00% | 12 |
| Livestock | 41,148 | 69,094 | 1.72% | 312 | 464 | 0.75% | 4,023 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes species data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

For a full report see: Goldsmith and Wang. 2011. "The Economic Impact of Illinois's Livestock Industry."

# Economic Impact of Livestock in ALEXANDER County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 686 | 857 | 0.34% | 4 | 5 | 0.17% | 41 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

For a full report see: Goldsmith and Wang. 2011. "The Economic Impact of Illinois's Livestock Industry."

# Economic Impact of Livestock in BOND County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,509 | 3,677 | 0.44% | 32 | 47 | 0.46% | 191 |
| Dairy | 7,198 | 8,401 | 1.25% | 96 | 105 | 1.39% | 410 |
| Hog | 1,945 | 2,287 | 0.34% | 12 | 14 | 0.17% | 195 |
| Sheep | 37 | 43 | 0.01% | N/A | N/A | 0.00% | 4 |
| Livestock | 11,071 | 13,310 | 1.92% | 43 | 59 | 0.63% | 726 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

For a full report see: Goldsmith and Wang. 2011. "The Economic Impact of Illinois's Livestock Industry."

# Economic Impact of Livestock in BOONE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 1,858 | 2,754 | 0.15% | 24 | 35 | 0.14% | 143 |
| Dairy | 4,758 | 5,401 | 0.38% | 63 | 72 | 0.38% | 237 |
| Hog | 5,094 | 6,049 | 0.41% | 31 | 37 | 0.19% | 535 |
| Sheep | 77 | 91 | 0.01% | N/A | 1 | 0.00% | 8 |
| Livestock | 15,362 | 17,836 | 1.24% | 99 | 121 | 0.60% | 1,006 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

For a full report see: Goldsmith and Wang. 2011. "The Economic Impact of Illinois's Livestock Industry."

# Economic Impact of Livestock in BROWN County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,746 | 4,311 | 1.52% | 35 | 43 | 0.81% | 212 |
| Dairy | 745 | 929 | 0.41% | 10 | 12 | 0.23% | 45 |
| Hog | 3,890 | 4,781 | 2.16% | 23 | 29 | 0.55% | 363 |
| Sheep | 7 | 9 | 0.00% | N/A | N/A | 0.00% | 1 |
| Livestock | 7,275 | 9,400 | 4.04% | 60 | 77 | 1.40% | 623 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

For a full report see: Goldsmith and Wang. 2011. "The Economic Impact of Illinois's Livestock Industry."

# Economic Impact of Livestock in BUREAU County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 8,549 | 15,455 | 0.65% | 108 | 196 | 0.62% | 1,116 |
| Dairy | 552 | 833 | 0.04% | 7 | 11 | 0.04% | 49 |
| Hog | 17,228 | 27,233 | 1.31% | 104 | 164 | 0.59% | 3,134 |
| Sheep | 58 | 92 | 0.00% | N/A | 1 | 0.00% | 11 |
| Livestock | 28,652 | 45,557 | 2.18% | 274 | 419 | 1.57% | 4,762 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in CALHOUN County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,183 | 3,067 | 1.29% | 28 | 39 | 1.47% | 133 |
| Dairy | 216 | 247 | 0.13% | 3 | 3 | 0.15% | 9 |
| Hog | 1,482 | 1,741 | 0.88% | 9 | 11 | 0.47% | 126 |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 3,896 | 4,800 | 2.30% | 65 | 79 | 3.46% | 268 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in CARROLL County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 23,639 | 42,331 | 4.89% | 300 | 400 | 4.12% | 2,386 |
| Dairy | 13,177 | 20,375 | 2.73% | 175 | 215 | 2.40% | 1,003 |
| Hog | 8,058 | 11,439 | 1.67% | 49 | 69 | 0.67% | 954 |
| Sheep | 51 | 72 | 0.01% | N/A | N/A | 0.00% | 6 |
| Livestock | 43,136 | 68,926 | 8.93% | 383 | 543 | 5.26% | 4,289 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in CASS County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,230 | 3,273 | 0.50% | 28 | 41 | 0.34% | 176 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 21,860 | 30,679 | 4.91% | 181 | 235 | 2.20% | 2,338 |
| Sheep | 33 | 46 | 0.01% | N/A | N/A | 0.00% | 4 |
| Livestock | 24,041 | 34,087 | 5.40% | 187 | 243 | 2.28% | 2,474 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in CHAMPAIGN County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 6,411 | 8,587 | 0.10% | 81 | 109 | 0.07% | 526 |
| Dairy | 734 | 1,022 | 0.01% | 10 | 14 | 0.01% | 54 |
| Hog | 4,539 | 6,239 | 0.07% | 27 | 38 | 0.02% | 562 |
| Sheep | 187 | 257 | 0.00% | 1 | 2 | 0.00% | 23 |
| Livestock | 13,067 | 18,000 | 0.20% | 51 | 84 | 0.05% | 1,293 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in CHRISTIAN County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,230 | 2,764 | 0.18% | 28 | 35 | 0.19% | 145 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 5,743 | 6,932 | 0.47% | 35 | 42 | 0.23% | 608 |
| Sheep | 64 | 77 | 0.01% | N/A | N/A | 0.00% | 7 |
| Livestock | 9,178 | 11,088 | 0.74% | 40 | 56 | 0.26% | 825 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in CLARK County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 836 | 1,208 | 0.17% | 11 | 15 | 0.16% | 52 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 12,505 | 14,661 | 2.58% | 75 | 89 | 1.17% | 1,108 |
| Sheep | 8 | 9 | 0.00% | N/A | N/A | 0.00% | 1 |
| Livestock | 14,720 | 17,382 | 3.03% | 108 | 131 | 1.68% | 1,259 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in CLAY County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,323 | 3,506 | 0.56% | 29 | 44 | 0.42% | 180 |
| Dairy | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Hog | 17,602 | 23,245 | 4.24% | 106 | 147 | 1.53% | 1,924 |
| Sheep | 68 | 90 | 0.02% | N/A | 1 | 0.01% | 7 |
| Livestock | 20,529 | 28,029 | 4.95% | 234 | 290 | 3.38% | 2,116 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in CLINTON County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 9,025 | 14,764 | 0.65% | 114 | 187 | 0.69% | 939 |
| Dairy | 42,788 | 55,841 | 3.07% | 556 | 644 | 3.34% | 3,040 |
| Hog | 61,701 | 86,050 | 4.43% | 696 | 913 | 4.18% | 8,888 |
| Sheep | 110 | 154 | 0 .02% | 1 | 2 | 0.01% | 16 |
| Livestock | 122,696 | 168,873 | 8.81% | 1,089 | 1,443 | 6.54% | 13,136 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in COLES County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 1,858 | 2,419 | 0.12% | 24 | 31 | 0.09% | 121 |
| Dairy | 379 | 450 | 0.02% | 5 | 6 | 0.02% | 21 |
| Hog | 1,667 | 2,024 | 0.10% | 10 | 12 | 0.04% | 165 |
| Sheep | 31 | 38 | 0.00% | N/A | N/A | N/A | 3 |
| Livestock | 4,961 | 6,069 | 0.31% | 22 | 30 | 0.08% | 374 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in COOK County: 2009
# NO LIVESTOCK DATA

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in CRAWFORD County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 836 | 1,166 | 0.13% | 11 | 15 | 0.11% | 51 |
| Dairy | 428 | 513 | 0.06% | 6 | 7 | 0.06% | 19 |
| Hog | 3,798 | 4,461 | 0.58% | 23 | 27 | 0.23% | 347 |
| Sheep | 10 | 12 | 0.00% | N/A | N/A | 0.00% | 1 |
| Livestock | 5,734 | 6,870 | 0.87% | 43 | 50 | 0.43% | 426 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in CUMBERLAND County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 3,624 | 5,807 | 0.99% | 46 | 74 | 1.02% | 329 |
| Dairy | 6,884 | 9,154 | 1.88% | 91 | 105 | 2.02% | 432 |
| Hog | 7,781 | 9,983 | 2.12% | 47 | 60 | 1.04% | 868 |
| Sheep | 15 | 20 | 0.00% | N/A | N/A | 0.00% | 2 |
| Livestock | 18,776 | 25,059 | 5.12% | 150 | 197 | 3.32% | 1,641 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in DE KALB County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 23,734 | 34,570 | 0.82% | 45 | 105 | 0.10% | 1,909 |
| Dairy | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Hog | 49,588 | 64,749 | 1.71% | 337 | 459 | 0.74% | 5,569 |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 74,725 | 98,823 | 2.57% | 663 | 839 | 1.46% | 7,322 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in DE WITT County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 836 | 1,202 | 0.14% | 11 | 15 | 0.15% | 58 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 4,539 | 5,251 | 0.74% | 27 | 32 | 0.39% | 420 |
| Sheep | 107 | 124 | 0.02% | 1 | 1 | 0.01% | 10 |
| Livestock | 5,882 | 6,965 | 0.95% | 26 | 33 | 0.37% | 448 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in DOUGLAS County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 743 | 904 | 0.11% | 9 | 11 | 0.09% | 44 |
| Dairy | 3,449 | 3,902 | 0.51% | 46 | 52 | 0.44% | 171 |
| Hog | 926 | 1,057 | 0.14% | 6 | 6 | 0.05% | 86 |
| Sheep | 32 | 37 | 0.00% | N/A | N/A | 0.00% | 3 |
| Livestock | 6,366 | 7,319 | 0.93% | 12 | 20 | 0.12% | 358 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in DU PAGE County: 2009
# NO LIVESTOCK DATA

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in EDGAR County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,137 | 2,717 | 0.35% | 27 | 34 | 0.31% | 133 |
| Dairy | 628 | 720 | 0.10% | 8 | 9 | 0.09% | 31 |
| Hog | 20,193 | 24,136 | 3.32% | 122 | 156 | 1.41% | 2,068 |
| Sheep | 80 | 95 | 0.01% | 1 | 1 | 0.01% | 8 |
| Livestock | 23,010 | 27,547 | 3.78% | 98 | 133 | 1.14% | 1,901 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in EDWARDS County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 1,765 | 2,802 | 0.93% | 22 | 36 | 0.58% | 158 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 2,686 | 3,312 | 1.42% | 16 | 20 | 0.42% | 285 |
| Sheep | 23 | 28 | 0.01% | N/A | N/A | 0.01% | 2 |
| Livestock | 4,606 | 5,871 | 2.43% | 45 | 58 | 1.15% | 445 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in EFFINGHAM County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 7,434 | 11,606 | 0.63% | 94 | 147 | 0.39% | 604 |
| Dairy | 16,753 | 20,832 | 1.42% | 222 | 251 | 0.92% | 1,045 |
| Hog | 20,252 | 25,831 | 1.70% | 122 | 173 | 0.70% | 2,107 |
| Sheep | 78 | 99 | 0.01% | N/A | 1 | 0.00% | 8 |
| Livestock | 41,875 | 55,103 | 3.56% | 322 | 427 | 1.33% | 3,527 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in FAYETTE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 4,925 | 7,674 | 0.86% | 62 | 97 | 0.68% | 388 |
| Dairy | 4,326 | 5,670 | 0.76% | 55 | 72 | 0.60% | 258 |
| Hog | 1,204 | 1,497 | 0.21% | 7 | 9 | 0.08% | 122 |
| Sheep | 115 | 143 | 0.02% | 1 | 1 | 0.01% | 12 |
| Livestock | 12,955 | 17,223 | 2.26% | 56 | 82 | 0.61% | 868 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in FORD County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 1,394 | 2,054 | 0.24% | 18 | 26 | 0.27% | 102 |
| Dairy | 409 | 470 | 0.07% | 5 | 6 | 0.08% | 21 |
| Hog | 9,633 | 11,653 | 1.66% | 58 | 70 | 0.90% | 1,000 |
| Sheep | 84 | 102 | 0.01% | 1 | 1 | 0.01% | 9 |
| Livestock | 11,799 | 14,267 | 2.03% | 64 | 81 | 0.99% | 1,167 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in FRANKLIN County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,230 | 3,363 | 0.21% | 28 | 43 | 0.24% | 165 |
| Dairy | 936 | 1,101 | 0.09% | 12 | 14 | 0.10% | 49 |
| Hog | 5,465 | 6,660 | 0.52% | 33 | 40 | 0.28% | 547 |
| Sheep | 50 | 61 | 0.00% | N/A | N/A | 0.00% | 5 |
| Livestock | 10,973 | 13,513 | 1.05% | 106 | 129 | 0.88% | 897 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in FULTON County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 11,346 | 20,389 | 0.93% | 144 | 187 | 1.18% | 1,071 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 17,691 | 23,250 | 1.45% | 107 | 140 | 0.88% | 1,750 |
| Sheep | 113 | 149 | 0.01% | 1 | 1 | 0.01% | 11 |
| Livestock | 31,401 | 45,110 | 2.57% | 164 | 253 | 1.34% | 2,811 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in GALLATIN County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 743 | 1,247 | 0.39% | 9 | 16 | 0.23% | 82 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 1,204 | 1,610 | 0.63% | 7 | 10 | 0.18% | 166 |
| Sheep | 2 | 3 | 0.00% | N/A | N/A | 0.00% | 0 |
| Livestock | 2,019 | 2,775 | 1.06% | 10 | 17 | 0.24% | 245 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in GREENE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 4,088 | 6,594 | 1.03% | 52 | 84 | 1.23% | 347 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 22,807 | 28,882 | 5.72% | 275 | 331 | 6.50% | 2,427 |
| Sheep | 39 | 49 | 0.01% | N/A | N/A | 0.01% | 4 |
| Livestock | 26,961 | 36,221 | 6.77% | 196 | 273 | 4.63% | 2,615 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in GRUNDY County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 836 | 1,344 | 0.05% | 11 | 17 | 0.05% | 73 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 1,019 | 1,295 | 0.06% | 6 | 8 | 0.03% | 114 |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 2,532 | 3,208 | 0.14% | 10 | 15 | 0.05% | 229 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in HAMILTON County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 929 | 1,270 | 0.37% | 12 | 16 | 0.40% | 59 |
| Dairy | 209 | 234 | 0.08% | 3 | 3 | 0.09% | 9 |
| Hog | 4,168 | 4,800 | 1.66% | 25 | 29 | 0.85% | 374 |
| Sheep | 36 | 41 | 0.01% | N/A | N/A | 0.01% | 3 |
| Livestock | 5,314 | 6,172 | 2.11% | 54 | 63 | 1.83% | 441 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in HANCOCK County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 9,101 | 14,699 | 1.66% | 176 | 203 | 2.64% | 695 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 35,013 | 49,000 | 6.39% | 228 | 318 | 3.43% | 3,350 |
| Sheep | 44 | 60 | 0.01% | N/A | N/A | 0.00% | 4 |
| Livestock | 49,774 | 65,014 | 9.08% | 442 | 570 | 6.64% | 5,808 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in HARDIN County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 1,394 | 2,104 | 1.21% | 18 | 27 | 1.32% | 95 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Sheep | 6 | 7 | 0.01% | N/A | N/A | 0.00% | 1 |
| Livestock | 2,733 | 3,605 | 2.38% | 55 | 72 | 4.09% | 187 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in HENDERSON County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 4,729 | 7,573 | 1.67% | 60 | 79 | 1.97% | 482 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 5,002 | 6,303 | 1.77% | 30 | 38 | 1.00% | 602 |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 12,338 | 16,601 | 4.37% | 66 | 103 | 2.17% | 1,315 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in HENRY County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 21,360 | 33,960 | 1.14% | 271 | 340 | 1.44% | 1,725 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 30,946 | 40,065 | 1.65% | 225 | 307 | 1.19% | 3,195 |
| Sheep | 189 | 245 | 0.01% | 1 | 2 | 0.01% | 20 |
| Livestock | 55,804 | 75,246 | 2.97% | 495 | 647 | 2.63% | 5,178 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in IROQUOIS County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 9,757 | 13,587 | 0.89% | 124 | 172 | 0.96% | 648 |
| Dairy | 2,114 | 2,446 | 0.19% | 28 | 32 | 0.22% | 94 |
| Hog | 10,281 | 12,189 | 0.94% | 62 | 74 | 0.48% | 983 |
| Sheep | 74 | 88 | 0.01% | N/A | 1 | 0.00% | 7 |
| Livestock | 24,974 | 30,684 | 2.27% | 116 | 157 | 0.89% | 1,965 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in JACKSON County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 3,624 | 7,309 | 0.19% | 46 | 93 | 0.14% | 466 |
| Dairy | 2,081 | 3,001 | 0.11% | 28 | 40 | 0.08% | 171 |
| Hog | 1,297 | 1,875 | 0.07% | 8 | 11 | 0.02% | 165 |
| Sheep | 43 | 62 | 0.00% | N/A | N/A | 0.00% | 5 |
| Livestock | 7,201 | 10,894 | 0.38% | 43 | 73 | 0.13% | 703 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in JASPER County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 4,300 | 6,237 | 1.34% | 55 | 63 | 1.20% | 291 |
| Dairy | 2,201 | 2,512 | 0.69% | 29 | 31 | 0.64% | 111 |
| Hog | 25,740 | 30,432 | 8.03% | 259 | 299 | 5.70% | 2,472 |
| Sheep | 14 | 17 | 0.00% | N/A | N/A | 0.00% | 1 |
| Livestock | 31,835 | 38,346 | 9.93% | 232 | 287 | 5.10% | 2,807 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in JEFFERSON County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 3,996 | 6,388 | 0.33% | 51 | 81 | 0.23% | 375 |
| Dairy | 869 | 1,082 | 0.07% | 12 | 14 | 0.05% | 59 |
| Hog | 1,853 | 2,431 | 0.15% | 11 | 15 | 0.05% | 232 |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 8,599 | 11,118 | 0.70% | 102 | 124 | 0.47% | 787 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in JERSEY County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,323 | 4,296 | 0.26% | 29 | 54 | 0.38% | 283 |
| Dairy | 833 | 1,115 | 0.09% | 11 | 15 | 0.14% | 62 |
| Hog | 741 | 995 | 0.08% | 4 | 6 | 0.06% | 97 |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 5,358 | 7,941 | 0.61% | 22 | 40 | 0.28% | 537 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in JO DAVIESS County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 21,641 | 36,148 | 2.45% | 274 | 378 | 2.23% | 1,995 |
| Dairy | 24,306 | 34,840 | 3.90% | 323 | 413 | 3.40% | 1,907 |
| Hog | 2,964 | 3,902 | 0.34% | 18 | 24 | 0.15% | 345 |
| Sheep | 82 | 108 | 0.01% | 1 | 1 | 0.01% | 10 |
| Livestock | 47,136 | 68,315 | 5.33% | 418 | 625 | 3.40% | 6,061 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in JOHNSON County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 3,345 | 5,156 | 1.12% | 42 | 65 | 1.22% | 254 |
| Dairy | 222 | 268 | 0.07% | 3 | 4 | 0.09% | 12 |
| Hog | 1,760 | 2,128 | 0.59% | 11 | 13 | 0.31% | 161 |
| Sheep | 5 | 6 | 0.00% | N/A | N/A | 0.00% | 0 |
| Livestock | 6,208 | 8,107 | 2.07% | 128 | 160 | 3.71% | 463 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

For a full report see: Goldsmith and Wang. 2011. "The Economic Impact of Illinois's Livestock Industry."

# Economic Impact of Livestock in KANE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,416 | 3,286 | 0.01% | 31 | 42 | 0.01% | 214 |
| Dairy | 2,674 | 3,852 | 0.01% | 35 | 51 | 0.01% | 222 |
| Hog | 6,484 | 9,030 | 0.04% | 39 | 55 | 0.02% | 853 |
| Sheep | 26 | 36 | 0.00% | N/A | N/A | 0.00% | 3 |
| Livestock | 13,257 | 18,603 | 0.07% | 138 | 173 | 0.06% | 1,434 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in KANKAKEE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,787 | 3,441 | 0.08% | 35 | 44 | 0.07% | 189 |
| Dairy | 1,158 | 1,366 | 0.03% | 15 | 17 | 0.03% | 65 |
| Hog | 6,113 | 7,763 | 0.17% | 37 | 47 | 0.07% | 704 |
| Sheep | 42 | 53 | 0.00% | 1 | 1 | 0.00% | 5 |
| Livestock | 10,965 | 13,656 | 0.31% | 89 | 113 | 0.18% | 1,075 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in KENDALL County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 929 | 1,332 | 0.03% | 12 | 17 | 0.04% | 72 |
| Dairy | 628 | 838 | 0.02% | 8 | 11 | 0.03% | 40 |
| Hog | 6,576 | 8,470 | 0.20% | 40 | 51 | 0.14% | 725 |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 9,411 | 12,313 | 0.28% | 75 | 96 | 0.27% | 916 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in KNOX County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 12,436 | 15,171 | 0.73% | 158 | 178 | 0.62% | 809 |
| Dairy | 371 | 421 | 0.02% | 5 | 6 | 0.02% | 19 |
| Hog | 30,756 | 37,674 | 1.80% | 237 | 304 | 0.93% | 3,425 |
| Sheep | 55 | 67 | 0.00% | 1 | 1 | 0.00% | 6 |
| Livestock | 45,268 | 54,647 | 2.65% | 402 | 488 | 1.58% | 4,270 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in LA SALLE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 7,062 | 12,899 | 0.18% | 90 | 163 | 0.17% | 766 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 2,779 | 4,224 | 0.07% | 17 | 26 | 0.03% | 345 |
| Sheep | 249 | 379 | 0.01% | 2 | 3 | 0.01% | 31 |
| Livestock | 11,016 | 19,071 | 0.28% | 32 | 74 | 0.06% | 1,185 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in LAKE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 372 | 502 | 0.00% | 5 | 6 | 0.00% | 33 |
| Dairy | 419 | 550 | 0.00% | 5 | 7 | 0.00% | 34 |
| Hog | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Sheep | 24 | 32 | 0.00% | N/A | N/A | 0.00% | 3 |
| Livestock | 2,173 | 2,882 | 0.01% | 21 | 27 | 0.00% | 199 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in LAWRENCE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 650 | 872 | 0.12% | 8 | 11 | 0.14% | 43 |
| Dairy | 419 | 474 | 0.08% | 5 | 6 | 0.09% | 20 |
| Hog | 8,336 | 9,884 | 1.53% | 50 | 60 | 0.84% | 848 |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 10,915 | 12,851 | 2.00% | 69 | 84 | 1.14% | 976 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in LEE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 6,969 | 8,580 | 0.58% | 88 | 109 | 0.56% | 428 |
| Dairy | 409 | 470 | 0.03% | 5 | 6 | 0.03% | 22 |
| Hog | 12,227 | 14,346 | 1.01% | 74 | 87 | 0.47% | 1,180 |
| Sheep | 85 | 101 | 0.01% | 1 | 1 | 0.01% | 9 |
| Livestock | 22,017 | 25,786 | 1.83% | 88 | 118 | 0.55% | 1,762 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in LIVINGSTON County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,509 | 3,734 | 0.19% | 32 | 47 | 0.17% | 174 |
| Dairy | 2,879 | 3,777 | 0.22% | 38 | 50 | 0.20% | 155 |
| Hog | 38,042 | 48,230 | 2.69% | 204 | 268 | 1.08% | 3,659 |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 45,135 | 59,163 | 3.20% | 401 | 480 | 2.13% | 4,055 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in LOGAN County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 1,858 | 2,290 | 0.18% | 24 | 29 | 0.20% | 112 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 15,654 | 18,599 | 1.55% | 95 | 112 | 0.79% | 1,461 |
| Sheep | 54 | 64 | 0.01% | 1 | 1 | 0.01% | 5 |
| Livestock | 17,852 | 21,051 | 1.77% | 92 | 116 | 0.77% | 1,612 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in MACON County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,137 | 2,626 | 0.05% | 27 | 33 | 0.04% | 129 |
| Dairy | 419 | 483 | 0.01% | 6 | 6 | 0.01% | 20 |
| Hog | 3,705 | 4,471 | 0.09% | 22 | 27 | 0.04% | 372 |
| Sheep | 23 | 28 | 0.00% | N/A | N/A | 0.00% | 2 |
| Livestock | 6,855 | 8,154 | 0.16% | 33 | 41 | 0.05% | 562 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in MACOUPIN County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 8,456 | 13,371 | 0.54% | 107 | 169 | 0.70% | 744 |
| Dairy | 2,549 | 3,160 | 0.16% | 34 | 42 | 0.22% | 164 |
| Hog | 16,487 | 21,169 | 1.06% | 100 | 128 | 0.65% | 1,866 |
| Sheep | 79 | 101 | 0.01% | 1 | 1 | 0.01% | 9 |
| Livestock | 31,827 | 40,118 | 2.04% | 211 | 274 | 1.38% | 2,985 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in MADISON County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 3,624 | 5,685 | 0.04% | 46 | 72 | 0.04% | 336 |
| Dairy | 3,715 | 5,273 | 0.04% | 49 | 70 | 0.04% | 271 |
| Hog | 4,261 | 6,241 | 0.04% | 26 | 38 | 0.02% | 577 |
| Sheep | 37 | 54 | 0.00% | N/A | 1 | 0.00% | 5 |
| Livestock | 15,962 | 23,348 | 0.16% | 129 | 175 | 0.11% | 1,494 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in MARION County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,974 | 4,456 | 0.25% | 38 | 56 | 0.24% | 218 |
| Dairy | 209 | 242 | 0.02% | 3 | 3 | 0.02% | 11 |
| Hog | 1,945 | 2,338 | 0.16% | 12 | 14 | 0.07% | 195 |
| Sheep | 36 | 43 | 0.00% | N/A | 1 | 0.00% | 4 |
| Livestock | 7,094 | 8,786 | 0.59% | 53 | 67 | 0.33% | 534 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in MARSHALL County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,137 | 3,280 | 0.46% | 27 | 42 | 0.62% | 137 |
| Dairy | 437 | 510 | 0.09% | 6 | 7 | 0.13% | 19 |
| Hog | 1,389 | 1,618 | 0.30% | 8 | 10 | 0.19% | 109 |
| Sheep | 22 | 26 | 0.00% | N/A | N/A | 0.01% | 2 |
| Livestock | 3,941 | 4,599 | 0.84% | 15 | 19 | 0.34% | 243 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in MASON County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 1,394 | 1,841 | 0.25% | 18 | 23 | 0.37% | 96 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 2,038 | 2,504 | 0.36% | 12 | 15 | 0.26% | 203 |
| Sheep | 17 | 21 | 0.00% | N/A | N/A | 0.00% | 2 |
| Livestock | 3,895 | 4,828 | 0.70% | 17 | 23 | 0.34% | 345 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in MASSAC County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,323 | 3,598 | 0.56% | 29 | 46 | 0.48% | 167 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 2,223 | 2,734 | 0.53% | 13 | 17 | 0.22% | 213 |
| Sheep | 93 | 114 | 0.02% | 1 | 1 | 0.02% | 9 |
| Livestock | 6,155 | 7,997 | 1.48% | 77 | 97 | 1.23% | 487 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in MCDONOUGH County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 5,389 | 7,702 | 0.55% | 68 | 98 | 0.42% | 395 |
| Dairy | 838 | 976 | 0.09% | 11 | 13 | 0.07% | 45 |
| Hog | 3,520 | 4,179 | 0.36% | 21 | 25 | 0.13% | 355 |
| Sheep | 168 | 199 | 0.02% | 2 | 2 | 0.01% | 17 |
| Livestock | 10,594 | 13,101 | 1.08% | 46 | 65 | 0.28% | 785 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in MCHENRY County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 7,341 | 9,430 | 0.06% | 93 | 120 | 0.08% | 578 |
| Dairy | 11,014 | 13,398 | 0.10% | 143 | 161 | 0.12% | 734 |
| Hog | 3,890 | 4,887 | 0.03% | 23 | 30 | 0.02% | 464 |
| Sheep | 74 | 92 | 0.00% | 1 | 1 | 0.00% | 9 |
| Livestock | 29,344 | 36,571 | 0.25% | 275 | 332 | 0.23% | 2,550 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

For a full report see: Goldsmith and Wang. 2011. "The Economic Impact of Illinois's Livestock Industry."

# Economic Impact of Livestock in MCLEAN County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 6,412 | 9,225 | 0.10% | 81 | 117 | 0.08% | 554 |
| Dairy | 19,743 | 25,024 | 0.29% | 262 | 294 | 0.25% | 1,290 |
| Hog | 19,173 | 25,357 | 0.29% | 116 | 153 | 0.11% | 2,441 |
| Sheep | 162 | 215 | 0.00% | 1 | 1 | 0.00% | 21 |
| Livestock | 31,566 | 41,033 | 0.47% | 103 | 167 | 0.10% | 2,875 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in MENARD County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,509 | 3,724 | 0.47% | 32 | 47 | 0.84% | 215 |
| Dairy | 209 | 243 | 0.04% | 3 | 3 | 0.07% | 12 |
| Hog | 2,779 | 3,333 | 0.52% | 17 | 20 | 0.44% | 325 |
| Sheep | 12 | 14 | 0.00% | N/A | N/A | 0.00% | 1 |
| Livestock | 5,843 | 7,326 | 1.10% | 42 | 53 | 1.10% | 584 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in MERCER County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 5,389 | 8,146 | 0.87% | 68 | 103 | 1.38% | 364 |
| Dairy | 628 | 729 | 0.10% | 8 | 9 | 0.16% | 28 |
| Hog | 19,729 | 23,392 | 3.17% | 119 | 147 | 2.40% | 1,726 |
| Sheep | 129 | 153 | 0.02% | 2 | 2 | 0.03% | 11 |
| Livestock | 26,820 | 33,101 | 4.31% | 147 | 190 | 2.96% | 2,144 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in MONROE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 1,858 | 2,812 | 0.14% | 24 | 36 | 0.22% | 163 |
| Dairy | 1,716 | 2,123 | 0.13% | 23 | 28 | 0.21% | 105 |
| Hog | 8,707 | 11,432 | 0.65% | 53 | 69 | 0.49% | 1,087 |
| Sheep | 46 | 60 | 0.00% | 1 | 1 | 0.01% | 6 |
| Livestock | 16,212 | 21,544 | 1.21% | 154 | 202 | 1.44% | 1,704 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in MONTGOMERY County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 3,252 | 4,955 | 0.34% | 41 | 63 | 0.32% | 263 |
| Dairy | 1,401 | 1,685 | 0.15% | 19 | 22 | 0.14% | 85 |
| Hog | 15,191 | 19,057 | 1.58% | 92 | 115 | 0.71% | 1,652 |
| Sheep | 93 | 117 | 0.01% | 1 | 1 | 0.01% | 10 |
| Livestock | 21,876 | 27,995 | 2.27% | 161 | 212 | 1.24% | 2,154 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in MORGAN County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 5,018 | 6,419 | 0.44% | 64 | 81 | 0.35% | 322 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 6,947 | 8,939 | 0.60% | 42 | 54 | 0.23% | 736 |
| Sheep | 41 | 53 | 0.00% | 1 | 1 | 0.00% | 4 |
| Livestock | 13,297 | 16,943 | 1.16% | 73 | 99 | 0.40% | 1,146 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in MOULTRIE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 836 | 1,037 | 0.17% | 11 | 13 | 0.17% | 50 |
| Dairy | 1,092 | 1,360 | 0.23% | 14 | 17 | 0.22% | 56 |
| Hog | 926 | 1,120 | 0.19% | 6 | 7 | 0.09% | 91 |
| Sheep | 36 | 44 | 0.01% | N/A | 1 | 0.01% | 4 |
| Livestock | 7,373 | 9,322 | 1.53% | 19 | 30 | 0.30% | 483 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in OGLE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 17,753 | 22,870 | 1.05% | 225 | 255 | 1.01% | 1,268 |
| Dairy | 3,406 | 4,129 | 0.20% | 43 | 52 | 0.19% | 220 |
| Hog | 13,523 | 16,440 | 0.80% | 82 | 99 | 0.37% | 1,410 |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 35,705 | 43,979 | 2.12% | 162 | 217 | 0.73% | 2,915 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in PEORIA County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 4,460 | 6,891 | 0.06% | 57 | 87 | 0.05% | 406 |
| Dairy | 1,256 | 2,065 | 0.02% | 17 | 27 | 0.01% | 111 |
| Hog | 4,724 | 7,109 | 0.06% | 29 | 43 | 0.02% | 601 |
| Sheep | 43 | 65 | 0.00% | 1 | 1 | 0.00% | 5 |
| Livestock | 18,063 | 27,969 | 0.23% | 85 | 141 | 0.07% | 1,828 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in PERRY County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,509 | 3,519 | 0.44% | 32 | 45 | 0.43% | 162 |
| Dairy | 419 | 482 | 0.07% | 6 | 6 | 0.08% | 20 |
| Hog | 741 | 859 | 0.13% | 4 | 5 | 0.06% | 65 |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 5,446 | 6,719 | 0.96% | 20 | 29 | 0.27% | 322 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in PIATT County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 5,947 | 7,195 | 0.80% | 75 | 91 | 1.44% | 345 |
| Dairy | 419 | 462 | 0.06% | 6 | 6 | 0.11% | 18 |
| Hog | 1,853 | 2,101 | 0.25% | 11 | 13 | 0.21% | 174 |
| Sheep | 23 | 26 | 0.00% | N/A | N/A | 0.01% | 2 |
| Livestock | 8,139 | 9,205 | 1.10% | 33 | 41 | 0.63% | 629 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in PIKE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 6,040 | 10,072 | 1.18% | 77 | 128 | 1.08% | 628 |
| Dairy | 838 | 1,104 | 0.16% | 11 | 15 | 0.16% | 60 |
| Hog | 28,580 | 38,740 | 5.60% | 341 | 443 | 4.80% | 3,678 |
| Sheep | 60 | 82 | 0.01% | 1 | 1 | 0.01% | 8 |
| Livestock | 35,559 | 49,029 | 6.97% | 349 | 477 | 4.92% | 4,262 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in POPE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 1,447 | 2,166 | 1.33% | 18 | 33 | 1.62% | 90 |
| Dairy | 209 | 238 | 0.19% | 3 | 3 | 0.25% | 9 |
| Hog | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Sheep | 4 | 5 | 0.00% | N/A | N/A | 0.00% | 0 |
| Livestock | 1,571 | 2,041 | 1.44% | 27 | 37 | 2.37% | 84 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in PULASKI County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 1,301 | 2,258 | 0.71% | 16 | 29 | 0.52% | 125 |
| Dairy | 419 | 693 | 0.23% | 6 | 9 | 0.18% | 34 |
| Hog | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Sheep | 4 | 6 | 0.00% | N/A | N/A | 0.00% | 0 |
| Livestock | 2,331 | 3,936 | 1.28% | 9 | 18 | 0.27% | 204 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in PUTNAM County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 650 | 1,107 | 0.51% | 8 | 14 | 0.24% | 90 |
| Dairy | 419 | 539 | 0.33% | 6 | 7 | 0.16% | 36 |
| Hog | 1,482 | 2,120 | 1.15% | 9 | 13 | 0.26% | 294 |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 2,993 | 4,260 | 2.33% | 20 | 33 | 0.59% | 479 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in RANDOLPH County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 5,482 | 9,257 | 0.44% | 69 | 117 | 0.42% | 489 |
| Dairy | 4,193 | 5,753 | 0.34% | 56 | 76 | 0.34% | 267 |
| Hog | 2,872 | 3,748 | 0.23% | 17 | 23 | 0.11% | 295 |
| Sheep | 29 | 37 | 0.00% | N/A | N/A | 0.00% | 3 |
| Livestock | 15,723 | 21,355 | 1.27% | 80 | 111 | 0.49% | 1,128 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in RICHLAND County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 1,805 | 2,814 | 0.38% | 23 | 36 | 0.29% | 144 |
| Dairy | 1,462 | 1,876 | 0.31% | 19 | 25 | 0.25% | 90 |
| Hog | 12,782 | 16,320 | 2.69% | 77 | 99 | 0.98% | 1,322 |
| Sheep | 10 | 13 | 0.00% | 1 | 1 | 0.01% | 1 |
| Livestock | 18,169 | 23,770 | 3.82% | 146 | 194 | 1.86% | 1,700 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in ROCK ISLAND County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 4,181 | 4,978 | 0.07% | 53 | 63 | 0.06% | 223 |
| Dairy | 637 | 740 | 0.01% | 8 | 10 | 0.01% | 31 |
| Hog | 5,650 | 6,706 | 0.10% | 34 | 40 | 0.04% | 489 |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 12,049 | 14,131 | 0.22% | 79 | 95 | 0.09% | 861 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in SALINE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,323 | 3,444 | 0.28% | 29 | 44 | 0.25% | 164 |
| Dairy | 419 | 489 | 0.05% | 6 | 6 | 0.05% | 22 |
| Hog | 4,539 | 5,546 | 0.55% | 27 | 33 | 0.23% | 443 |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 7,665 | 9,394 | 0.93% | 99 | 116 | 0.84% | 644 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in SANGAMON County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 3,995 | 5,611 | 0.05% | 51 | 71 | 0.04% | 308 |
| Dairy | 628 | 779 | 0.01% | 8 | 10 | 0.01% | 40 |
| Hog | 10,374 | 13,257 | 0.13% | 63 | 80 | 0.05% | 1,134 |
| Sheep | 48 | 61 | 0.00% | 1 | 1 | 0.00% | 5 |
| Livestock | 17,104 | 21,851 | 0.21% | 74 | 108 | 0.06% | 1,595 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in SCHUYLER County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 3,219 | 5,235 | 1.51% | 41 | 56 | 0.97% | 351 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 12,690 | 18,553 | 5.95% | 77 | 126 | 1.83% | 1,708 |
| Sheep | 35 | 51 | 0.02% | 1 | 1 | 0.02% | 5 |
| Livestock | 17,861 | 26,614 | 8.38% | 148 | 217 | 3.53% | 2,192 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in SCOTT County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,091 | 3,753 | 1.45% | 27 | 34 | 1.36% | 204 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 2,223 | 2,856 | 1.54% | 13 | 17 | 0.69% | 227 |
| Sheep | 14 | 18 | 0.01% | N/A | N/A | 0.01% | 1 |
| Livestock | 3,857 | 5,449 | 2.67% | 23 | 33 | 1.19% | 373 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in SHELBY County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 7,248 | 10,439 | 1.02% | 92 | 132 | 1.24% | 471 |
| Dairy | 8,188 | 9,322 | 1.15% | 109 | 117 | 1.47% | 372 |
| Hog | 10,467 | 12,289 | 1.47% | 63 | 74 | 0.85% | 938 |
| Sheep | 65 | 77 | 0.01% | 1 | 1 | 0.01% | 6 |
| Livestock | 27,228 | 33,159 | 3.82% | 137 | 178 | 1.84% | 1,883 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in ST CLAIR County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,230 | 3,592 | 0.02% | 28 | 46 | 0.02% | 237 |
| Dairy | 2,460 | 4,132 | 0.03% | 33 | 55 | 0.03% | 243 |
| Hog | 6,854 | 10,567 | 0.07% | 41 | 64 | 0.03% | 943 |
| Sheep | 26 | 40 | 0.00% | N/A | 1 | 0.00% | 4 |
| Livestock | 12,118 | 19,410 | 0.13% | 87 | 133 | 0.07% | 1,440 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in STARK County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 929 | 1,443 | 0.39% | 12 | 18 | 0.42% | 73 |
| Dairy | 782 | 911 | 0.33% | 10 | 12 | 0.37% | 39 |
| Hog | 2,501 | 2,929 | 1.04% | 15 | 18 | 0.54% | 225 |
| Sheep | 30 | 35 | 0.01% | N/A | N/A | 0.01% | 3 |
| Livestock | 4,165 | 5,056 | 1.74% | 16 | 23 | 0.56% | 314 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in STEPHENSON County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 15,664 | 23,941 | 0.98% | 199 | 243 | 0.85% | 1,288 |
| Dairy | 43,488 | 56,649 | 2.71% | 577 | 646 | 2.45% | 2,537 |
| Hog | 18,155 | 23,790 | 1.13% | 110 | 144 | 0.47% | 2,128 |
| Sheep | 177 | 232 | 0.01% | 2 | 3 | 0.01% | 21 |
| Livestock | 71,743 | 94,125 | 4.48% | 637 | 768 | 2.71% | 5,261 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in TAZEWELL County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,602 | 3,507 | 0.05% | 33 | 44 | 0.05% | 184 |
| Dairy | 1,769 | 2,225 | 0.04% | 22 | 28 | 0.03% | 108 |
| Hog | 16,302 | 21,206 | 0.33% | 98 | 128 | 0.14% | 1,704 |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 21,761 | 28,040 | 0.44% | 119 | 169 | 0.17% | 1,958 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in UNION County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 3,345 | 6,345 | 0.65% | 42 | 80 | 0.66% | 399 |
| Dairy | 695 | 946 | 0.14% | 9 | 12 | 0.14% | 52 |
| Hog | 463 | 635 | 0.09% | 3 | 4 | 0.04% | 60 |
| Sheep | 19 | 26 | 0.00% | N/A | N/A | 0.00% | 2 |
| Livestock | 4,570 | 7,148 | 0.89% | 61 | 93 | 0.96% | 459 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in VERMILION County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,788 | 3,614 | 0.11% | 35 | 46 | 0.10% | 188 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 2,779 | 3,532 | 0.11% | 17 | 21 | 0.05% | 292 |
| Sheep | 53 | 67 | 0.00% | 1 | 1 | 0.00% | 6 |
| Livestock | 7,044 | 9,239 | 0.29% | 25 | 39 | 0.07% | 591 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in WABASH County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 558 | 832 | 0.15% | 7 | 11 | 0.16% | 41 |
| Dairy | 1,012 | 1,173 | 0.27% | 13 | 16 | 0.31% | 51 |
| Hog | 370 | 438 | 0.10% | 2 | 3 | 0.05% | 37 |
| Sheep | 1 | 1 | 0.00% | N/A | N/A | 0.00% | 0 |
| Livestock | 1,621 | 1,928 | 0.43% | 6 | 8 | 0.13% | 99 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in WARREN County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 7,434 | 8,949 | 1.24% | 94 | 113 | 1.08% | 389 |
| Dairy | 703 | 812 | 0.12% | 9 | 11 | 0.11% | 31 |
| Hog | 10,559 | 12,523 | 1.76% | 64 | 76 | 0.73% | 901 |
| Sheep | 635 | 754 | 0.11% | 4 | 5 | 0.06% | 54 |
| Livestock | 19,189 | 22,611 | 3.20% | 98 | 127 | 1.12% | 1,426 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in WASHINGTON County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 7,108 | 10,381 | 1.38% | 90 | 108 | 1.23% | 561 |
| Dairy | 22,286 | 26,156 | 4.32% | 296 | 326 | 4.03% | 1,244 |
| Hog | 14,357 | 17,450 | 2.78% | 87 | 105 | 1.18% | 1,556 |
| Sheep | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livestock | 40,629 | 50,852 | 7.88% | 190 | 265 | 2.58% | 3,153 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in WAYNE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 3,717 | 5,534 | 0.72% | 47 | 70 | 0.67% | 276 |
| Dairy | 628 | 737 | 0.12% | 8 | 10 | 0.12% | 34 |
| Hog | 13,060 | 15,900 | 2.53% | 79 | 96 | 1.13% | 1,326 |
| Sheep | 390 | 475 | 0.08% | 2 | 3 | 0.04% | 40 |
| Livestock | 18,872 | 23,655 | 3.65% | 205 | 250 | 2.92% | 1,686 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in WHITE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 1,022 | 1,314 | 0.20% | 13 | 17 | 0.20% | 66 |
| Dairy | 0 | 0 | 0.00% | N/A | N/A | 0.00% | 0 |
| Hog | 3,798 | 4,473 | 0.74% | 23 | 27 | 0.35% | 382 |
| Sheep | 23 | 27 | 0.00% | N/A | N/A | 0.00% | 2 |
| Livestock | 5,475 | 6,531 | 1.06% | 31 | 39 | 0.47% | 489 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in WHITESIDE County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 20,266 | 36,040 | 1.04% | 257 | 325 | 0.93% | 1,699 |
| Dairy | 4,723 | 7,781 | 0.24% | 63 | 103 | 0.23% | 329 |
| Hog | 20,656 | 30,374 | 1.07% | 125 | 183 | 0.45% | 2,172 |
| Sheep | 93 | 137 | 0.00% | 1 | 2 | 0.00% | 10 |
| Livestock | 47,387 | 68,221 | 2.44% | 421 | 565 | 1.53% | 6,121 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in WILL County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 1,301 | 1,793 | 0.00% | 16 | 23 | 0.01% | 109 |
| Dairy | 1,363 | 1,866 | 0.01% | 18 | 25 | 0.01% | 107 |
| Hog | 3,427 | 4,754 | 0.01% | 21 | 29 | 0.01% | 445 |
| Sheep | 74 | 103 | 0.00% | 1 | 1 | 0.00% | 10 |
| Livestock | 8,145 | 11,087 | 0.03% | 57 | 77 | 0.02% | 826 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in WILLIAMSON County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,044 | 2,808 | 0.10% | 26 | 36 | 0.08% | 136 |
| Dairy | 209 | 250 | 0.01% | 3 | 3 | 0.01% | 11 |
| Hog | 1,667 | 2,044 | 0.08% | 10 | 12 | 0.03% | 158 |
| Sheep | 19 | 23 | 0.00% | N/A | N/A | 0.00% | 2 |
| Livestock | 4,920 | 6,025 | 0.24% | 82 | 92 | 0.27% | 370 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

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# Economic Impact of Livestock in WINNEBAGO County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 4,460 | 7,771 | 0.05% | 57 | 98 | 0.04% | 458 |
| Dairy | 3,733 | 5,865 | 0.04% | 50 | 78 | 0.03% | 309 |
| Hog | 2,779 | 4,046 | 0.03% | 17 | 24 | 0.01% | 346 |
| Sheep | 140 | 204 | 0.00% | 2 | 2 | 0.00% | 17 |
| Livestock | 13,288 | 19,987 | 0.14% | 60 | 96 | 0.04% | 1,184 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

For a full report see: Goldsmith and Wang. 2011. "The Economic Impact of Illinois's Livestock Industry."

# Economic Impact of Livestock in WOODFORD County: 2009

| | Output* | | | Employment | | | Tax Impact* |
|---|---|---|---|---|---|---|---|
| | Direct | Total | % PI | Direct | Total | % Total | |
| Beef | 2,602 | 4,120 | 0.17% | 33 | 52 | 0.21% | 224 |
| Dairy | 628 | 776 | 0.04% | 8 | 10 | 0.05% | 36 |
| Hog | 17,506 | 22,994 | 1.12% | 106 | 139 | 0.69% | 2,054 |
| Sheep | 192 | 252 | 0.01% | 2 | 2 | 0.01% | 23 |
| Livestock | 22,649 | 29,510 | 1.46% | 177 | 236 | 1.15% | 2,409 |

- * In thousands of dollars
- Note (1): % PI refers to percentage of direct output of total county personal income, % Total refers to percentage of direct employment of total county employment.
- Note (2): The sum of Beef, Dairy, Hog, and Sheep does not equal Livestock because data sources differ across the groups. See data sources below.
- Note (3): Livestock includes data that are not provided at the county level, such as poultry.
- Note (4) Data Sources - Direct Output (Beef, Hog, and Livestock), National Agricultural Statistics Service, Illinois Annual Bulletin 2009; Direct Output (Dairy and Sheep), National Agricultural Statistics Service, Agricultural Census, 2007; Indirect Output, IMPLAN 2009; Employment, IMPLAN 2009 and Farm Business and Farm Management, University of Illinois; and authors' calculation

For a full report see: Goldsmith and Wang. 2011. "The Economic Impact of Illinois's Livestock Industry."

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

| | | |
|---|---|---|
| IN THE MATTER OF: | ) | |
| | ) | |
| CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFOS): PROPOSED AMENDMENTS TO 35 ILL. ADM. CODE 501, 502 AND 504 | ) | R-2012-023 |

**PRE-FILED TESTIMONY OF DAVID P. TRAINOR, P.E., P.G.**

My name is Daniel Trainor. I am a registered professional engineer and registered professional geologist and hold such registrations in six states. I have over 32 years of experience evaluating geologic and hydrogeologic conditions and have consulted on more than 150 environmental projects and investigations. These included work on federal projects as well as state-led projects, including superfund sites and sites related to RCRA enforcement or remediation. Specifically, I have been involved in conducting geotechnical testing and analyses, groundwater assessments, disposal facility siting and design, groundwater remedy systems, and construction management. I hold three degrees: A Bachelor of Science in Geology and Bachelor of Science in Civil Engineering from the Ohio State University, and a Masters Degree in Environmental Engineering from the University of Wisconsin-Madison. A copy of my curriculum vitae is included as Attachment A.

I am a partner in Newfields, a science and engineering consulting firm founded in 1995 emphasizing solution-oriented approaches to our consulting assignments. See http://www.newfields.com/about.

I have been retained by the Agricultural Coalition to provide technical testimony in response to Mr. Sam Panno's testimony in this proceeding in Dekalb, Illinois. I am familiar with Mr. Panno's perspective on livestock facilities in karst areas, as he testified similarly in a case entitled *Helping Others Maintain Environmental Standards ("HOMES") v. A.J. Bos, Traditions Investments, LLC.* In that case, HOMES attempted to enjoin the construction of a large dairy farm in Jo Davies County. Mr. Panno provided the perspective that the facility and any land application from the facility would not be protective of area groundwater. As here, his testimony was general in nature, based simply on broad conclusions related to karst areas.

We and other technical consultants were retained by Traditions Investment to perform an evaluation of the regional and site-specific investigation data for a facility in Jo Daviess County, to ensure protection of the environment and consistency with Illinois law. This evaluation addressed the design specifications required to ensure protection of the environment in a karst region - as required by the Illinois Livestock Management Facilities Act. Regional data reviewed included an evaluation of topographic conditions, bedrock geology, and a well survey

of all nearby private wells. The depths to the regional water table used as the primary potable drinking water source were derived from this survey, along with an approximate understanding of flow direction and hydraulic parameters within the aquifer. Site specific data reviewed included data from multiple borings sampled and analyzed for both soil and bedrock at the proposed manure holding basins area. These data were essential to design the basins with the required bedrock separation. These data were also used to design perimeter collection system to prevent groundwater incursion from a perched aquifer encountered during drilling. Based on the regional information previously described, this perched aquifer was considered separate from the regional aquifer. Accordingly, we concluded that the proposed design was protective of groundwater and surface water resources potentially affected by the proposed facility. On the basis of the expert testimony describing these conditions, the judge dismissed HOMES' lawsuit. See Attachment B.

With regard to the potential impact on groundwater resources from land application of livestock wastes, I have reviewed the Pre-filed testimony of Mr. Panno in this proceeding and here provide the following points in my testimony:

- Proposed Title 35 Section 502.620 h) states

  Liquid livestock waste shall not be applied to land with less than 10 inches of soil covering fractured bedrock, sand or gravel;

- Proposed Title 35 Section 502.620 i) states

  Livestock waste shall not be applied to bedrock outcrops;

- Proposed Title 35 Section 502.620 j) states

  Livestock waste shall be applied at no greater than 50 percent of the agronomic nitrogen rate determined pursuant to Section 502.625 when there is less than 20 inches of unconsolidated material over bedrock, and

- Proposed Title 35 Section 502.620 k) states

  Livestock waste shall be applied at no greater than 50 percent of the agronomic nitrogen rate determined pursuant to Section 502.625 when the minimum soil depth to seasonal high water table is less than or equal to 2 feet.

These requirements are comparable to other states that have developed best practices for land application as envisioned by the federal rules. For example, Wisconsin Administrative Code (WAC) Chapter ATCP 51 Appendix B V. B. (Criteria to Minimize Entry of Nutrients to Groundwater) states

> To minimize N (nitrogen) leaching to groundwater on high permeability soils, or soils with less than 20 inches to bedrock, or soils with less than 12 inches to apparent water

table, or within 1000 feet of a municipal well, apply the following applicable management practices:[1]

The above-referenced groundwater and bedrock separation distances in the Illinois proposal and in the Wisconsin Administrative Code are based on experience and best management practices. This experience has shown that contaminants in typical livestock wastes are attenuated and are generally not a threat to groundwater when these setbacks are followed. Accordingly, it is my opinion that the restrictions contained in the IEPA's proposed rule are acceptable and adequately protective of the environment.

Groundwater within karst bedrock can migrate rapidly (in hydrogeologic terms) because of secondary and tertiary porosity and fracture conditions as described by Mr. Panno. Accordingly, all sites vary and should be investigated to develop site specific data which will allow for the development of land application plans with the proper environmental safeguards. Investigations comparable to those described above (and in the IEPA proposed rules) can provide sufficient information to develop a land application plan. Specific karst investigation techniques referenced in Mr. Panno's testimony (e.g. trenching and dye tracing, assuming both are recommended) may be appropriate to develop the proper data for an appropriate design of large facilities with significant potential environmental risks. However, in my opinion such procedures are excessive to evaluate areas proposed for land application, even in areas with potential karst like features.

Additionally, Mr. Panno recommends that "…areas potentially suitable for siting of large and very large CAFOs should be identified based on the absence of all indicators of karst terrain and a minimum of 50 feet of unconsolidated materials overlying karst bedrock (sic)." Earlier in the testimony Mr. Panno references a discussion with a colleague that "Fifty feet of unconsolidated material overlying a karst aquifer is the thickness necessary for protection." Note that the proposed rule specifies the separation distance between the surface for land application areas and the bedrock/groundwater, not the separation distance between large and very large CAFOs. Implementation of Mr. Panno's recommendations would result in the virtual elimination of land spreading areas in essentially much of the Driftless Area that encompasses southwest Wisconsin, southeast Minnesota, northeast Iowa and northwest Illinois. Existing CAFOs have operated for many years in these areas with few adverse consequences.

November 7, 2012

[1] These WAC Chapter ATCP 51 Appendix B V. B. sub-provisions specify proper land application procedures for nitrogen and phosphorous bearing wastes. The bedrock and groundwater separation distances apply and are not reproduced here for brevity.

NewFields
Perspective. Vision. Solutions.

# David P. Trainor, P.E. P.G.

## Partner

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## Registrations and Professional Affiliations

Professional Engineer, Wisconsin, Michigan, Pennsylvania, California, Idaho, Iowa
Professional Geologist, Wisconsin
American Society of Civil Engineers
International Society for Soil Mechanics and Foundation Engineering
American Institute of Professional Geologists, Certified Professional Geologist, AIPG

## Education and Training

M.S. Civil and Environmental Engineering, University of Wisconsin, Madison, 1983
B.S. Civil Engineering, Ohio State University, 1978
B.S. Geology, Ohio State University, 1975
OSHA 40-hour Hazwoper

## Professional History

NewFields, 2003 to present
URS Corporation (previously Dames & Moore), Principal-in-Charge/Senior Engineer, 1987 to 2003
RMT, Inc., Geotechnical Project Engineer, 1983 to 1984; 1985 to 1987
Northern Engineering and Testing, Geotechnical Project Engineer, 1984 to 1985
Terratech, Inc., Staff Engineer, 1978 to 1981

## Experience Summary

Mr. Trainor has over 32 years' experience in numerous environmental projects and investigations, which include both federal (NPL, RCRA and removal action programs) and state-lead projects. Categories include RI/FS programs, geotechnical testing and analyses, groundwater assessments, disposal facility siting and design, groundwater remedy systems, and construction management. He has represented industrial and government clients in technical negotiations for a variety of facilities and settings.

## Representative Project Summaries

- Currently managing multi-firm RI/FS at a former ordnance manufacturing facility, NPL site; administered as a wildlife refuge by the federal Fish and Wildlife Service; Marion, Illinois.
- Managed RI/FS for NPL site, former manufactured gas plant and wood treatment site; directed remedial design and construction for interim coal tar removal system from a confined aquifer; Ashland, Wisconsin.

- Refurbished defunct groundwater extraction and pumping system; developed ozone sparge system design for low permeability soil conditions contaminated with chlorinated hydrocarbons at a former manufacturing plant. Edgerton, Wisconsin.
- Provided expert testimony at trial for a defendant siting a dairy operation in a karstic geologic region. Jo Daviess County, Illinois.
- Currently assisting with PRP negotiations for de minimum contribution of PCBs to estuarine environment, NPL site; Sheboygan, Wisconsin.
- Analyzed historical data for contribution of PCBs related to disposal from publicly owned treatment works, Neenah/ Menasha, Wisconsin
- Oversaw USEPA removal action; negotiated groundwater cleanup costs for final settlement with Wisconsin Department of Natural Resources for a former plating facility; Elkhorn, Wisconsin.
- Developed source and groundwater characterization data for an historic industrial site contaminated with chlorinated hydrocarbons; developed in-situ and ex-situ remedial options for soil contaminated as hazardous waste; Fort Atkinson, Wisconsin
- Coordinated investigation and developed remedial options for a former manufactured gas plant site currently used as a bulk propane distribution facility. Marshfield, Wisconsin.
- Performed research and provided expert testimony about the fate and transport of gasoline contaminants released from underground storage tanks allegedly contaminating a private residence. Wisconsin.
- Coordinated and implemented environmental due diligence in preparation for acquisition for poultry processing operations at 90+ facilities. Wisconsin and Minnesota.
- Provided expert testimony at an arbitration hearing on the validity of long-term remedial costs for a landfill (Superfund site) in southeastern Wisconsin. Developed remedial options for several manufactured gas plant sites; New York and Pennsylvania.
- Coordinates groundwater extraction/treatment and monitoring at a plating facility site contaminating groundwater with chromium. Illinois.
- Evaluated applicability of past and future costs to validate insurance claims for remedial action at several landfill sites, Great Lakes States.
- Provided research and expert testimony at deposition for a named party at an NPL site identifying other PRPs from individual waste stream analyses, Wisconsin.
- Directed ROD implemented remedy including a gas extraction system upgrade and point-of-entry water filter installations for private homes.
- Directed work plan development, negotiated USEPA approval, and directed the investigation for an abandoned landfill (NPL site); Tomah, Wisconsin.
- Oversaw design and construction of a landfill gas extraction system for an abandoned sanitary landfill; Tomah, Wisconsin.
- Provided expert testimony at deposition for a machine parts manufacturer evaluating the identification of manufactured gas plant waste disposed on their property; Milwaukee, Wisconsin.

- Provided expert testimony at trial for a paper company providing alternative water supplies for private residences affected by groundwater contamination from an industrial landfill; Eau Claire, Wisconsin.

## Publications and Presentations

Author, "The Results of Treating MGP Generated Tar with an Innovative In-Situ Chemical Oxidation Technology at a former MGP Site in Northern Wisconsin," Remtech09 Conference, 2009

Author, "Strengths of GIS Application on Site Characterization," American Gas Association – MGP Workshop, 2006.

Author, "Characterization and Remedial Action at a Former MGP Adjacent to a Former Wood Treatment Operation," Gas Technology Institute Site Remediation Technologies Conference, 2000.

Co-author, "Isotopic Identification of the source of Methane in Subsurface Sediments of an Area Surrounded by Waste Disposal Facilities," in Applied Geochemistry, USGS, 1998.

Co-author, "Groundwater Remediation at a DeInk Landfill," TAPPI Environmental Conference, 1994.

Author, "Isotope Aging to Determine Methane Gas Sources, Geological Society of America, National Conference, 1992.

Author, "Current Status of Environmental Assessments," Government Institutes Seminar, Madison, 1992.

Author, "RCRA Corrective Action – 1990," paper presented to the Minnesota State Bar Association, Minneapolis, 1990.

Author, "Investigation and Remediation of a Printing Solvent Release," paper presented at the short course Detection and Corrective Action for Leaking Underground Storage Tanks, Department of Engineering-Professional Development, University of Wisconsin, Madison, 1989.

Co-author, "Case Studies in Constructive Use of Foundry Wastes for Landfill Construction," paper presented at the American Foundrymen's Society Casting Conference, 1987.

Author, "Moisture and Saturation Effects on Hydraulic Conductivity Testing," paper presented at the ninth annual Madison Waste Conference, 1986.

Co-author, "Use of Foundry Quenched Slag - Drainage Medium," presented at the 1986 Madison Waste Conference.

IN THE CIRCUIT COURT OF THE FIFTEENTH JUDICIAL CIRCUIT
JO DAVIESS COUNTY, ILLINOIS

| | |
|---|---|
| HELPING OTHERS MAINTAIN ENVIRONMENTAL STANDARDS, An Illinois Not For Profit Corporation, Leroy Behrens, Laurel Behrens, Mary Jo Burke, Juanita Cropper, Jeffrey Graves, Dean Hicks, Kathleen Hicks, Steve Holesinger, Will Libberton, Lori Runkle, and Richard Runkle, | FILED<br>DEC 15 2009<br>CLERK OF THE CIRCUIT COURT OF THE FIFTEENTH JUDICIAL CIRCUIT JO DAVIESS COUNTY ILLINOIS |
| Plaintiffs, vs. | CASE: 2008 CH 42 |
| A.J. Bos, Tradition Investments, LLC, an Illinois Limited Liability Company, and the Illinois Department of Agriculture, | |
| Defendants. | |

**JUDGMENT**

**THIS CAUSE CAME BEFORE THIS** COURT from November 23, 2009 through December 10, 2009 for bench trial. The Plaintiffs appearing in open Court by their attorneys, David Albee and Paula Rieghns, and the Defendants appearing through their attorneys, Donald Manning and Thomas Nack. The Court, hearing evidence and arguments of the parties, reviewing exhibits, and being otherwise fully advised in the premises, **FINDS:**

1. The Court has jurisdiction over the parties and the subject matter hereof.

2. Plaintiffs proceeded on Counts I - IV of their Second Amended Complaint, filed June 11, 2009.

A-C-1

3. Count I alleges prospective Public Nuisance, Count II alleges prospective Private Nuisance, and Count III alleges prospective Continuing Trespass. Each of these counts requests Declaratory Judgment. In Count IV the Plaintiffs request a Permanent Injunction prohibiting Defendants from constructing and operating a livestock management facility.

4. A public nuisance is the doing of or the failure to do something that injuriously affects the safety, health or morals of the public, or works some substantial annoyance, inconvenience or injury to the public.
Village of Wilsonville v. SCA Services, Inc., (Ill., 1981), 86 Ill.2d 1, 426 N.E.2d 824, 55 Ill.Dec. 499

5. A private nuisance is a substantial invasion of another's interest in the use and enjoyment of his or her land. The invasion must be: substantial, either intentional or negligent, and unreasonable. The standard for determining if particular conduct constitutes a nuisance is the conduct's effect on a reasonable person.
In re Chicago Flood Litigation, (Ill.,1997), 680 N.E.2d 265, 176 Ill.2d 179, 223 Ill.Dec. 532 (internal citations omitted)

6. A trespass is an invasion of the interest in the exclusive possession of land, as by entry upon it.
In re Chicago Flood Litigation, *Id*

7. In order to be entitled to a permanent injunction, the party seeking the injunction must demonstrate: (1) a clear and ascertainable right in need of protection; (2) that he or she will suffer irreparable harm if the injunction is not granted; and (3) that there is no adequate remedy at law.
In re Marriage of Seffren, (Ill.App. 1 Dist.,2006), 366

A-C-2

Ill.App.3d 628, 637, 852 N.E.2d 302, 311, 304 Ill.Dec. 52, 61

8. A prospective nuisance is a fit candidate for injunctive relief.
Wilsonville, 86 Ill.2d at 25

9. A defendant may be restrained from entering upon an activity where it is highly probable that it will lead to a nuisance, although if the possibility is merely uncertain or contingent he may be left to his remedy after the nuisance has occurred.
Wilsonville, 86 Ill.2d at 26, 55 Ill.Dec. at 511, 426 N.E.2d at 836

10. In order to obtain the requested relief Plaintiffs must prove, by a preponderance of the evidence, it is highly probable that the operation of Defendants' livestock management facility will lead to a public nuisance, a private nuisance, or a trespass.

11. The Plaintiffs presented the expert opinion testimony of: Sam Panno, (geology, groundwater contamination, karst, and hydrology), Dr Peter Huettl, (soil science), Dr Marc Gorelick, MD, (pediatric emergency medicine), and Dr Michael Netzel, MD, (pulmonology and allergies). The transcript of the expert opinion testimony of Lester Johnson (resource conservation and soil classification) from the August 15, 2008 preliminary injunction hearing herein was also admitted into evidence. Dr Pius Weibel (geology) testified in rebuttal.

12. Plaintiffs Steve Holesinger, Leroy Behrens, Jeff Graves, Mary Jo Burke, Dean Hicks, Kathleen Hicks, Rich Runkle, Will Libberton, and Jim Francis (as a member of HOMES, NFP) testified.

A-C-3

13. The Defendants presented the expert opinion testimony of: Brett Naugle (geology), David Trainor (geology, hydrogeology, and environmental engineering), and Robert Pofahl (agricultural engineering and hydrogeology).

14. Terry Feldmann, engineer with Maurer Stutz, also testified for Defendants.

15. The Complaint alleges, and the Plaintiffs who did testify expressed concern, that, when operated, the facility will emit noise, odor, dust, other airborne particulates, and light, and will generate traffic, so as to constitute a nuisance or trespass. Although Plaintiffs' allegations and concerns may be understandable, they are not competent evidence of prospective nuisance or trespass and do not contribute to overcoming the burden of proof.

16. The competent evidence presented by Plaintiffs showed that the gist of their claims is that, because the site of the proposed facility is underlain by karst, the waste containment pond liners are inadequately designed, and contaminants will therefore leak into surface water, ground water, and an underlying aquifer, and move into Plaintiffs' wells and public waterways.

17. This evidence came primarily from Mr Panno and Dr Huettl. Plaintiffs presented numerous exhibits to show that Dr Huettl relied heavily on Mr Panno's opinions in forming his own opinions.

18. On cross-examination Mr Panno admitted that there were a number of tests which could have been performed which would provide a more definitive indicator of the presence of karst, including ground water chemistry evaluation, well monitoring, and dye tracing. These tests were not performed because of their expense. Mr Panno also admitted that he never examined the rock corings from the site and never

sought bacterial well data for the area. He admitted that these things were not prohibitively expensive, he could have done them, and he should have done them as they would have been informative as to the question of karst.

19. Mr Panno also admitted that site specific investigation is necessary for a thorough geological assessment of a parcel of real property.

20. Plaintiffs' evidence was otherwise vague and lacked clarity as to the specific types, concentrations, or mechanisms of release of alleged contaminants. The means or likelihood of contaminant exposure to Plaintiffs, their properties, or the public was left largely to inference.

21. The expert opinion testimony presented by Defendants was based on regional and site specific investigations. As part of their investigations Mr Trainor and Mr Naugle both examined the rock corings and Mr Trainor also considered well data. Mr Naugle concluded that there was no evidence of karstified carbonate bedrock at the site. Mr Trainor concluded there were no karst features at the site, the facility design would protect the environment, and any releases from the ponds would be minimal and would not migrate.

22. Considering all of the evidence in totality, for the foregoing reasons, the evidence of Defendants should be accorded greater weight and quality and, as such, Plaintiffs did not prove, by a preponderance of the evidence, that it is highly probable that the operation of Defendants' livestock management facility will lead to a public nuisance, a private nuisance, or a trespass, and judgment should be entered for Defendants.

**IT IS, THEREFORE, ORDERED AND ADJUDGED** that Plaintiffs' requests for Declaratory Judgment and Permanent Injunction are denied, and that judgment enter for Defendants, A.J. BOS and TRADITION INVESTMENTS, LLC, and against Plaintiffs, HELPING OTHERS MAINTAIN ENVIRONMENTAL STANDARDS, NFP, LEROY BEHRENS, LAUREL BEHRENS, MARY JO BURKE, JUANITA CROPPER, JEFFREY GRAVES, DEAN HICKS, KATHLEEN HICKS, STEVE HOLESINGER, WILL LIBBERTON, LORI RUNKLE, AND RICHARD RUNKLE, all costs taxed to Plaintiffs.

ENTERED this 15 day of DEC, 2009.

Kevin J. Ward
Associate Judge

A-C-6