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# Planning for Pennsylvania's Dairy Industry

John Frey Center for Dairy Excellence

Alan Novak- Professional Dairy Managers of PA

Alan Zepp- Center for Dairy Excellence



American Planning Association  
**Pennsylvania Chapter**

*Making Great Communities Happen*



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# John Frey

Executive Director  
Center for Dairy Excellence

# Session Objectives:

- ❑ Provide an overview of how Pennsylvania dairy farms and agriculture affect and are affected by local, regional, national and international circumstances.
- ❑ Initiate an honest discussion that increases the understanding of Pennsylvania's agricultural and planning issues including ways that society and farmers can successfully coexist and thrive in the future.



# Session Agenda notes:

- ❑ You are the planning experts
- ❑ We know the dairy industry and agriculture
- ❑ An overview of the Pennsylvania dairy industry
- ❑ An example of a dairy plant that considered PA but chose a site in another state
- ❑ Open discussion





A Growing, Dynamic Industry

# Pennsylvania: a leader in dairy

## ❑ Top 5 states for Milk

- California
- Wisconsin
- Idaho
- New York
- *Pennsylvania*

## ❑ Next 5 states for Milk

- Texas
- Minnesota
- Michigan
- New Mexico
- Washington

## ❑ **PA: Leader in Dairy Manufacturing**

- **One of the top states for fluid milk processing**
- **75 Dairy Manufacturing plants (4<sup>th</sup> most in US)**
- **Fluid drinking milk provider for Mid-Atlantic**



# Issue: demand outpaces supply = Opportunity

## ❑ US Dairy

- 1930: 1<sup>st</sup> 100 billion lbs. annual production
- 1992: 1<sup>st</sup> 150 billion lbs. annual production
- 2012: 1<sup>st</sup> 200 billion lbs. annual production

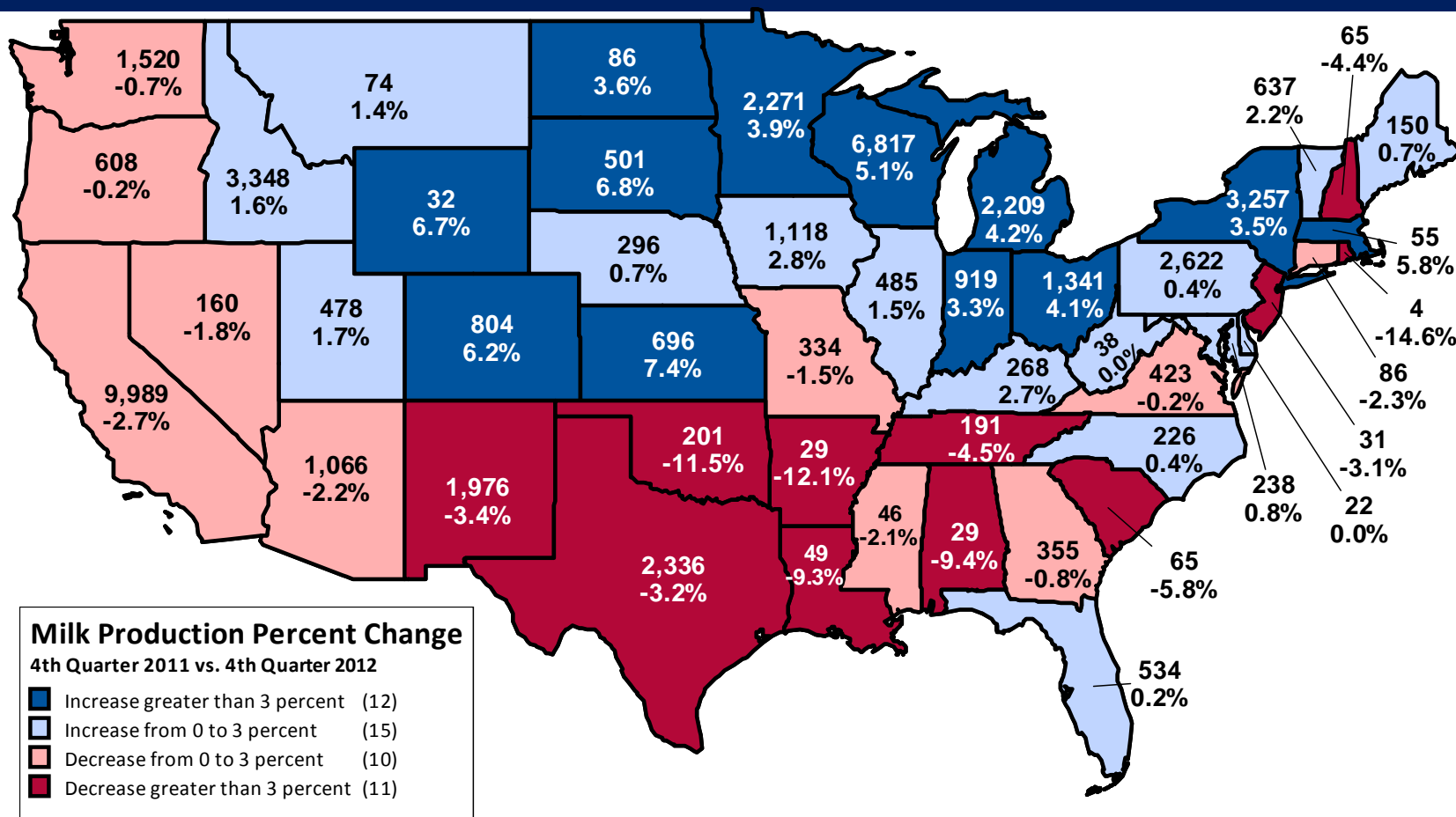
## ❑ Variables:

- Role of exports
- Role of technology
- Passion for industry, in Pennsylvania
- Need production / Need manufacturing



# Milk Production – million pounds

## 4th Quarter 2011 vs. 4th Quarter 2012\*



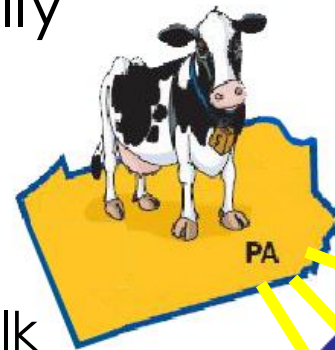
\*Adjusted for Leap Year  
U.S. 4Q production was up 0.9%

Top Number: 4Q 2012 Production  
Bottom Number: % Change from 2011

# Source of Dairy Protein

## ❑ Milk Produced & Sold Locally

- Milk sold in PA stores comes from less than 100 miles
- Butter, cheese, yogurt & chocolate biggest users of PA Milk



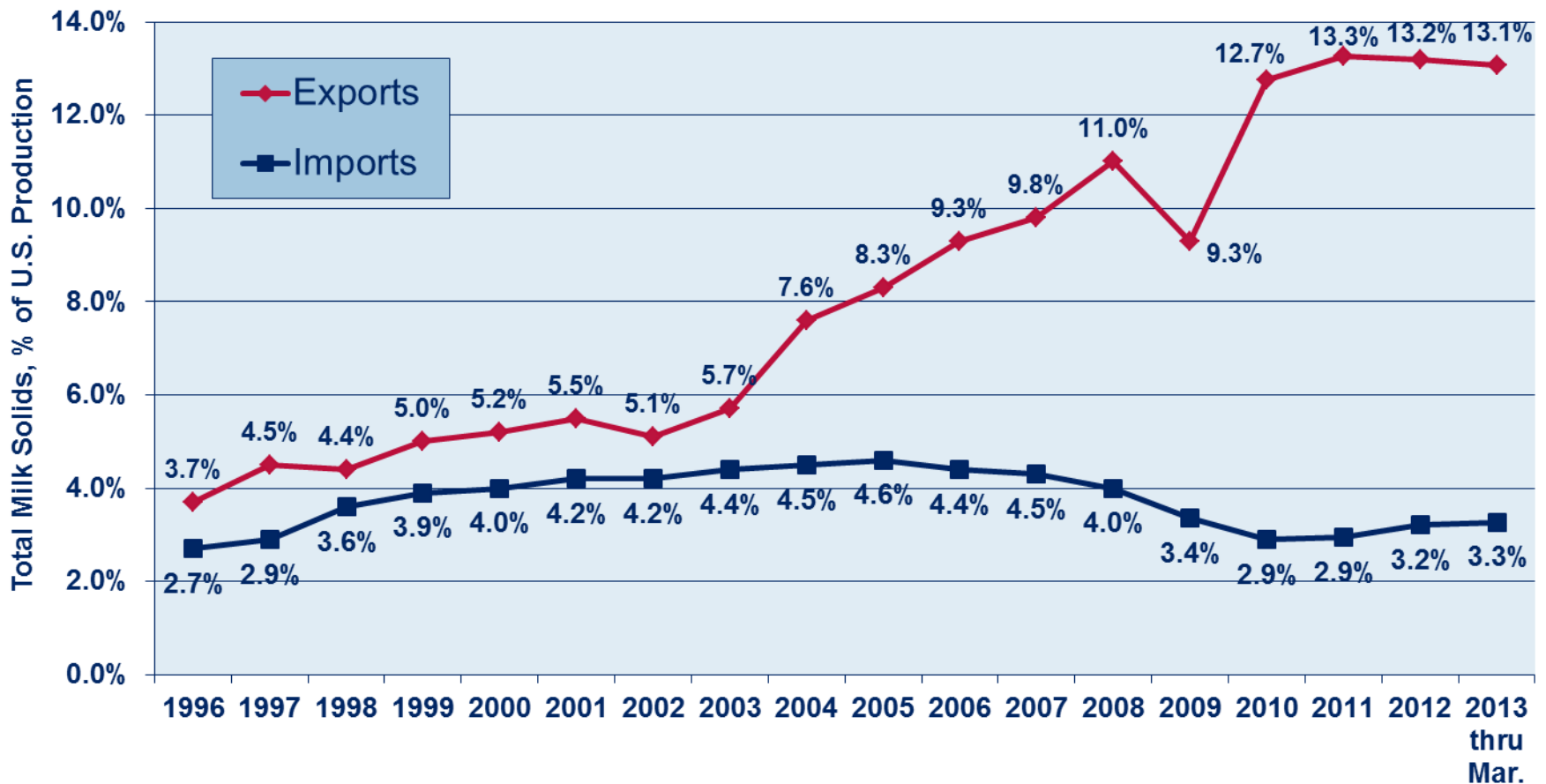
## ❑ Milk & Products Exported Globally

- Revenue from Exported Milk Returned to PA Communities



# Exported Share of Production

U.S. DAIRY TRADE BALANCE, 1996-2013



# Dairy in Pennsylvania

- ❑ The Largest Segment of PA's #1 Industry
  - 10.6 bill. lbs. (or 1.2 bill. gal.) of milk
  - 7,400 Dairy Farms
    - Ranked 2<sup>nd</sup> Nationally
    - 99 Percent Family Owned
  - \$2.5 billion in Milk Sales



## Fifth in Milk Production

# Dairy Contributes \$6 Billion in Economic Revenue to PA

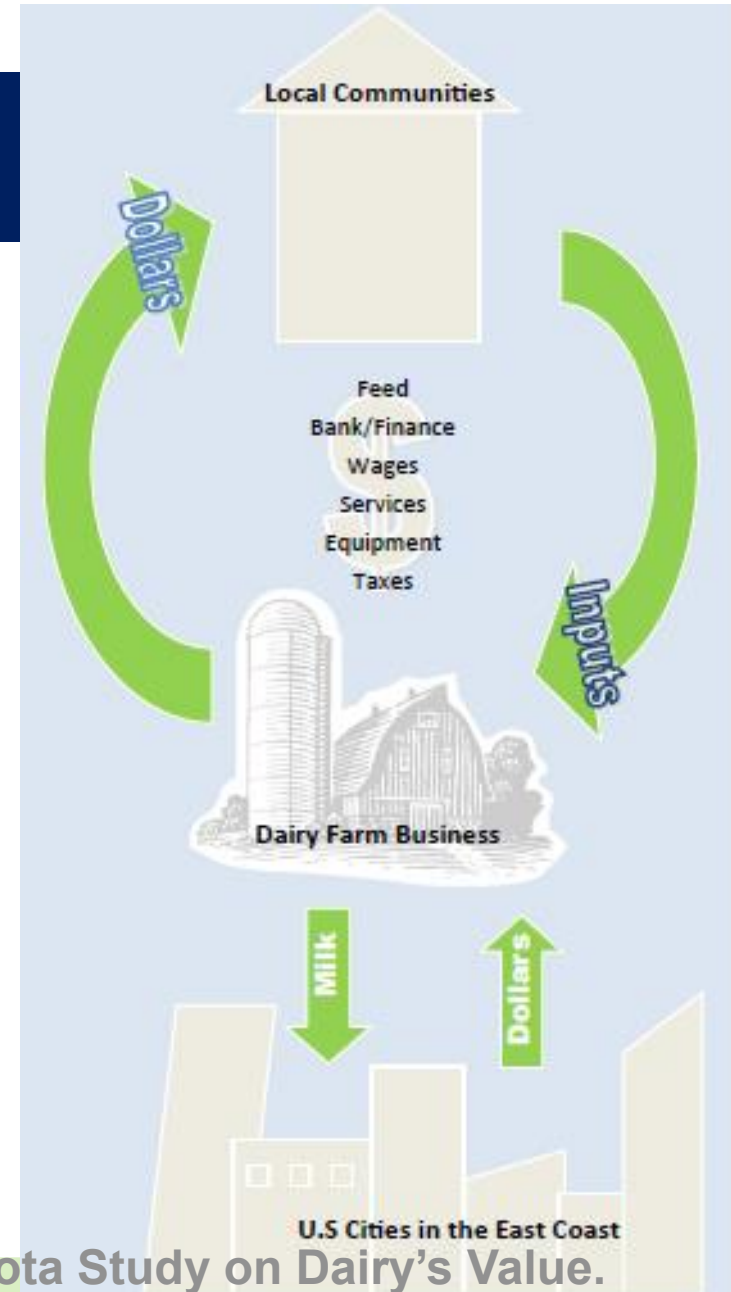


- ◆ **Average 70-cow dairy contributes nearly \$1 million to local economy**
- ◆ **500-cow dairy contributes \$7 million for local economy**
- ◆ **9 cows = 1 job**
  - ◆ **60,000 PA Dairy Jobs**

*\* From Minnesota Study on Dairy's Value.*

# Vital to the Economy

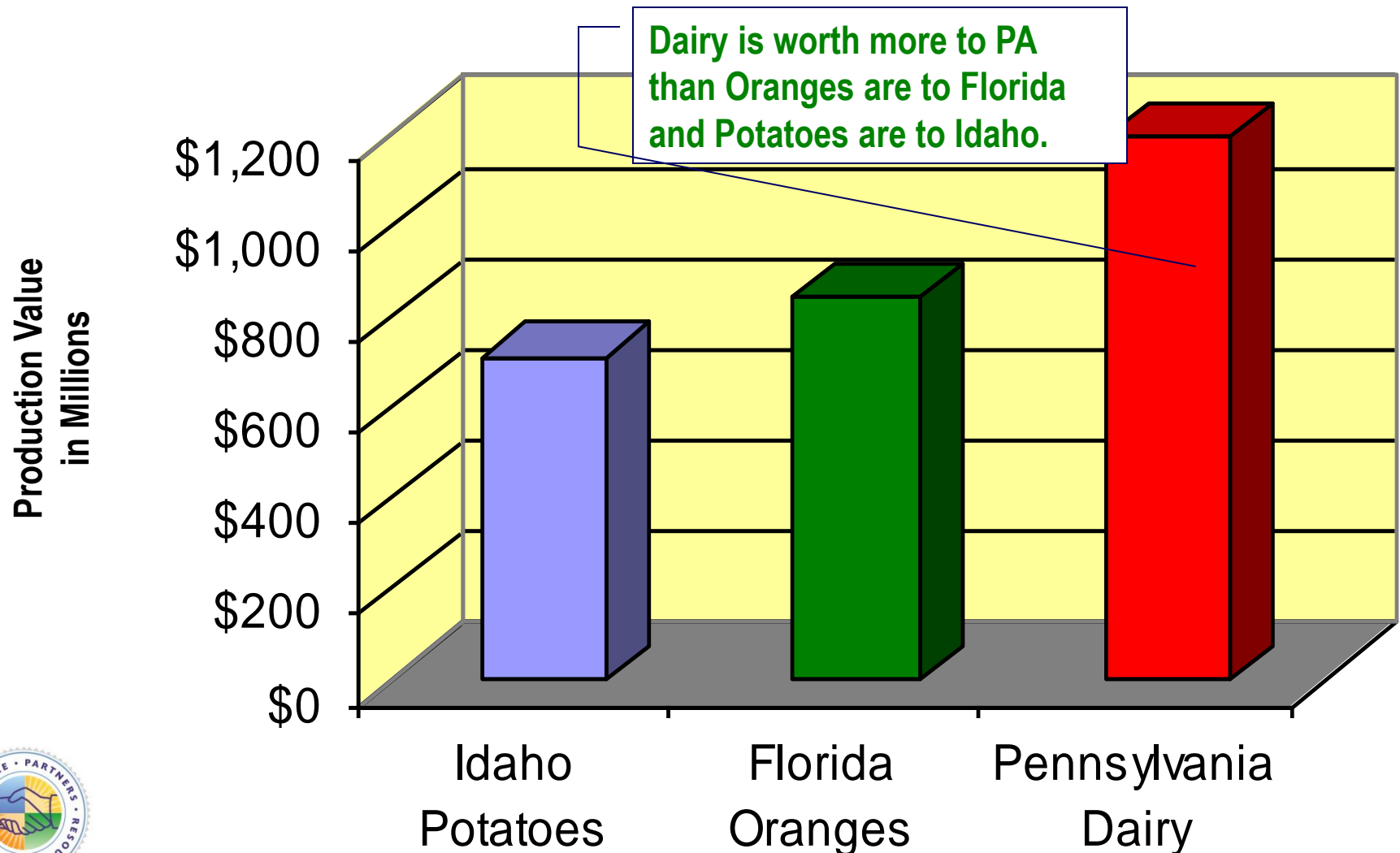
- ❑ 85 Percent of Milk Income Spent in Local Community
- ❑ Circulates through community 2.5 times to increase total economic revenue



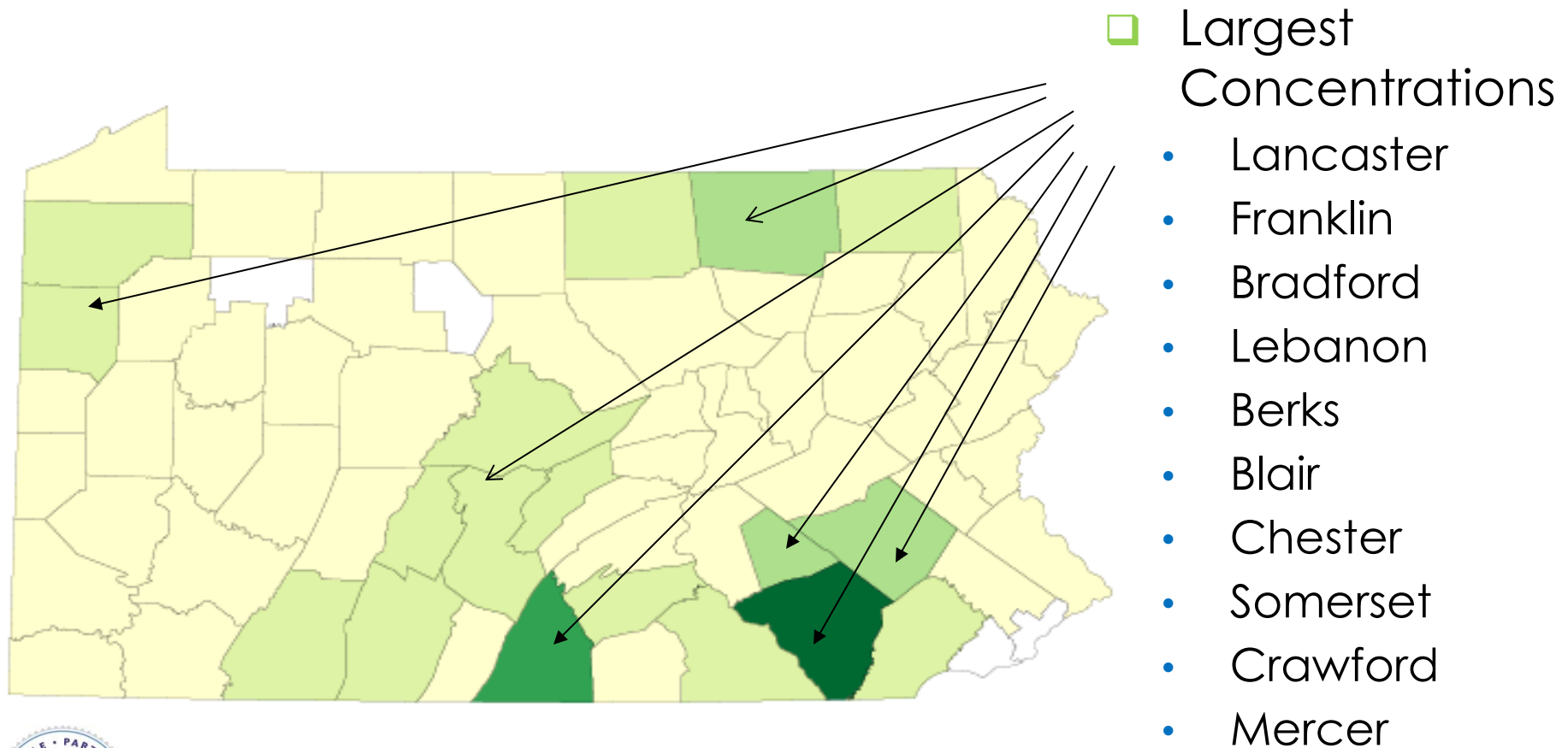
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\* From Minnesota Study on Dairy's Value.

# Value of Dairy to Pennsylvania



# Concentration of Dairy Cows in PA



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National Ag Statistics Service-PA, USDA

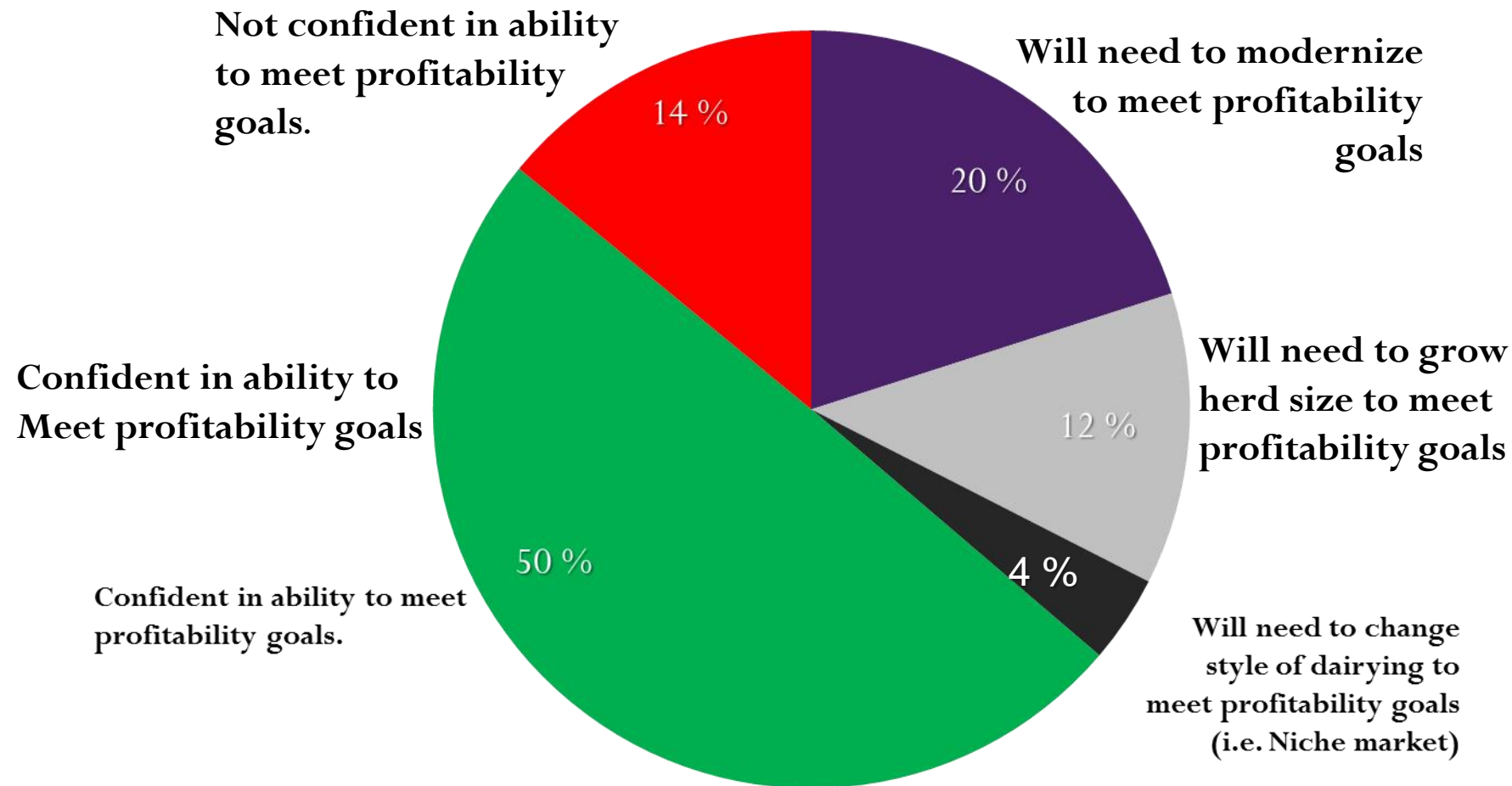
# 2013 PA Dairy Analysis:

- ❑ Trends in Pennsylvania Dairy Industry
  - Production
  - Processing
  - Consumption
- ❑ Evaluate needs for *growth & vitality* for Pennsylvania's Dairy Industry
  - 20 Prescriptions Offer Recommendations
  - 10 Webinars will review analysis results and offer insight into prescriptions

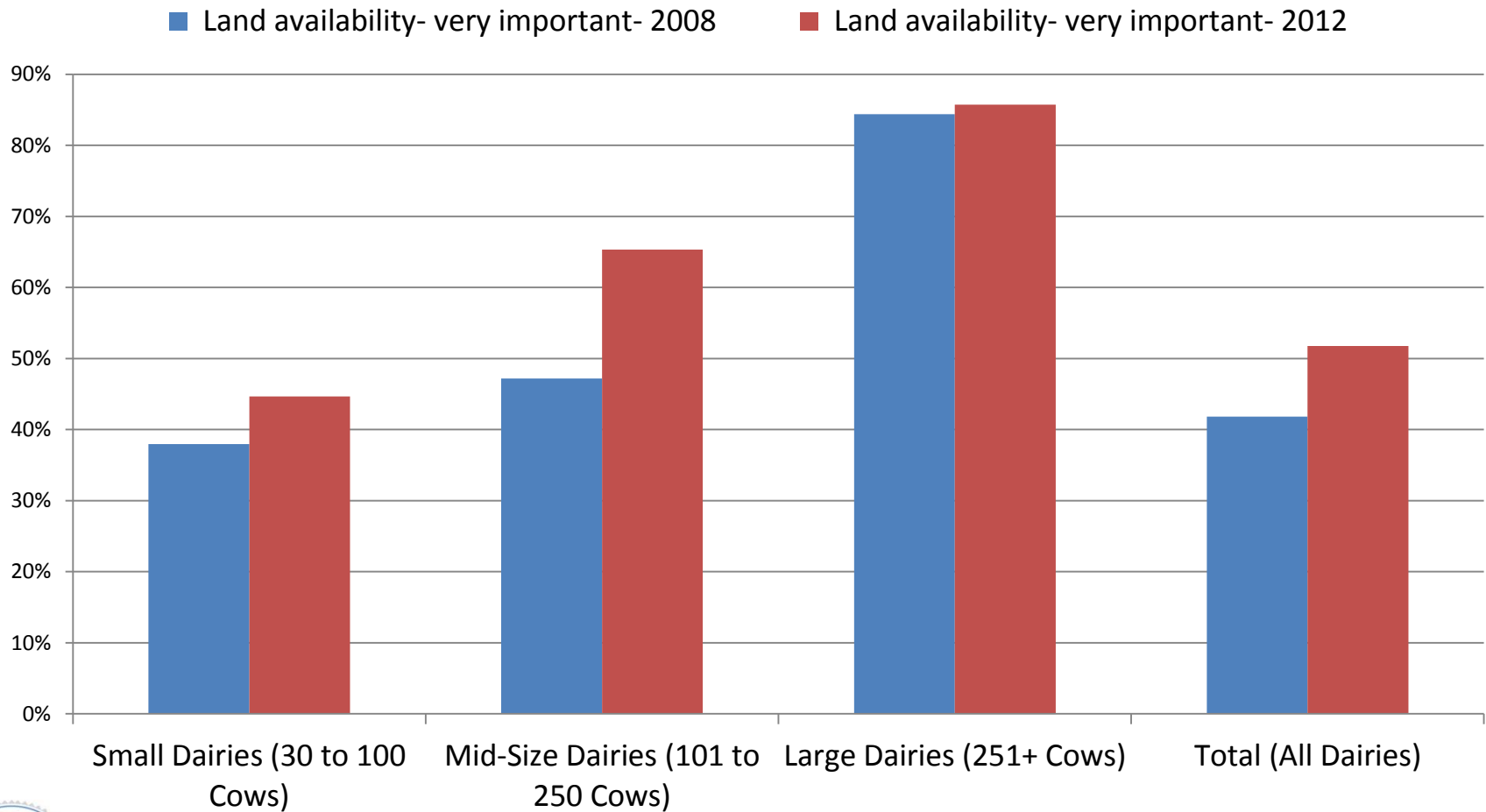


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# The following statement best describes my farm's future



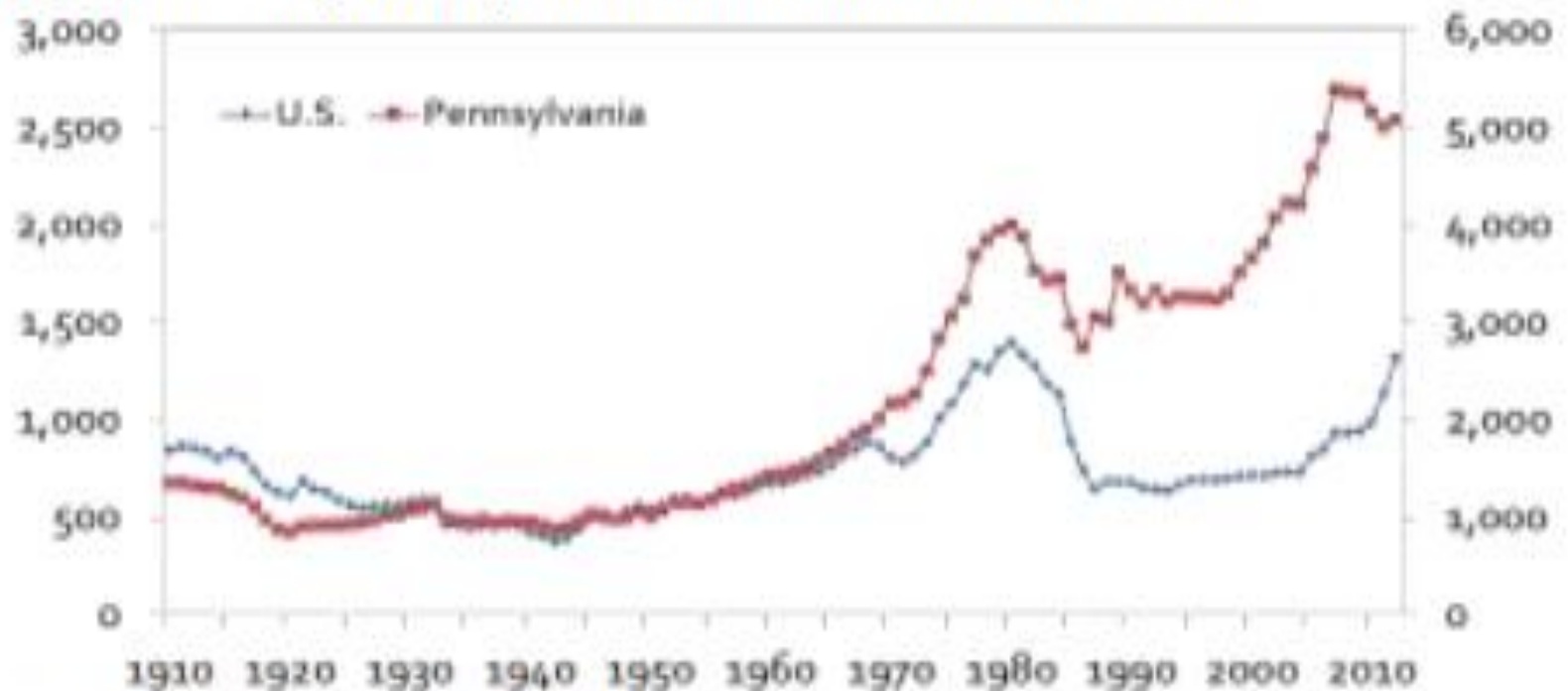
# Land Availability = Important



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# US and PA Farmland Values

*Figure 3.3: Comparison of Farm Real Estate Values in US & PA*



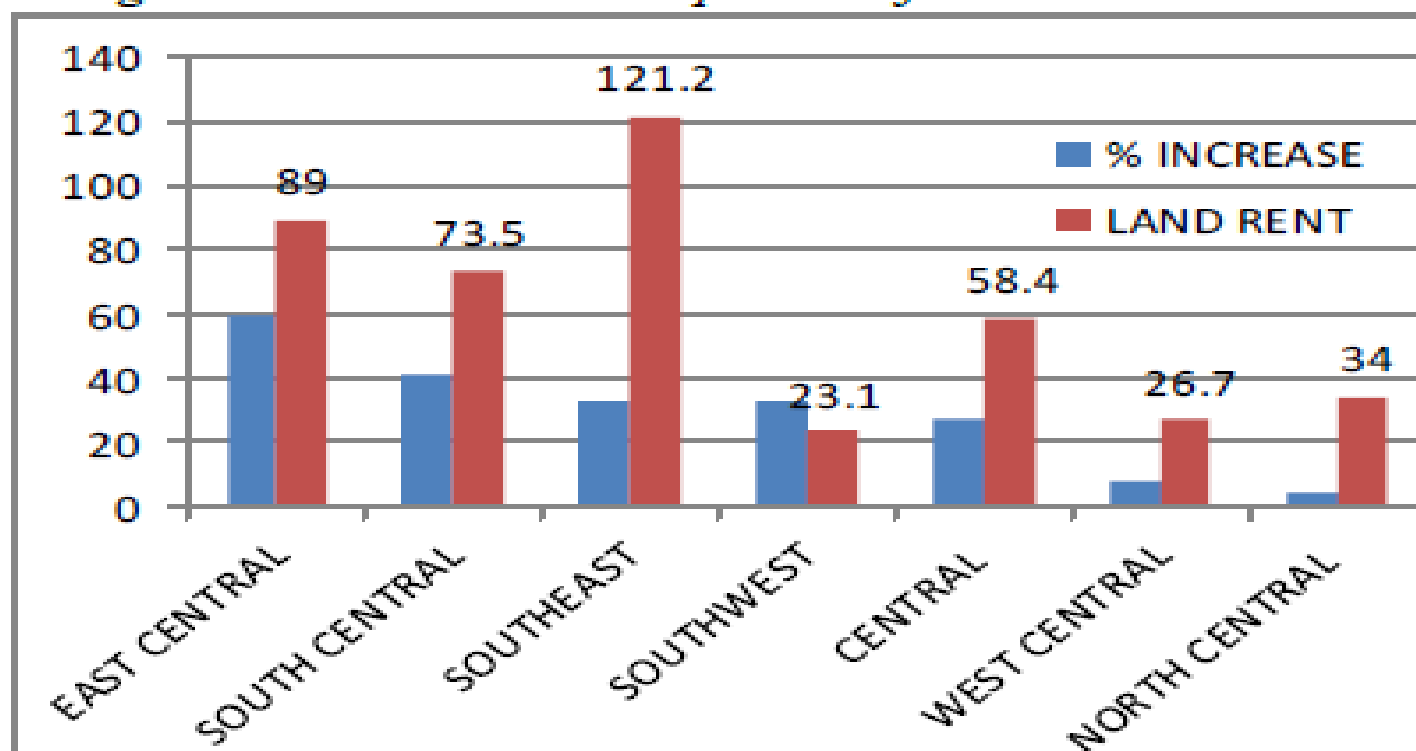
*Calculations based on USDA Data.*



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# Farmland Rental Cost

*Figure 3.4: Comparison of Average Farmland Rent in Pennsylvania Regions & Increase in Rate per Acre from 2008 - 2012*



*Calculations based on USDA Data.*



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# Elizabethtown College Confidence Survey

## DAIRY FARMERS: GOVERNMENT REGULATIONS

Environmental Regulations

Agricultural Regulations

Employment Regulations

Zoning/Land use regulations

Food safety regulations

Health/Safety regulations

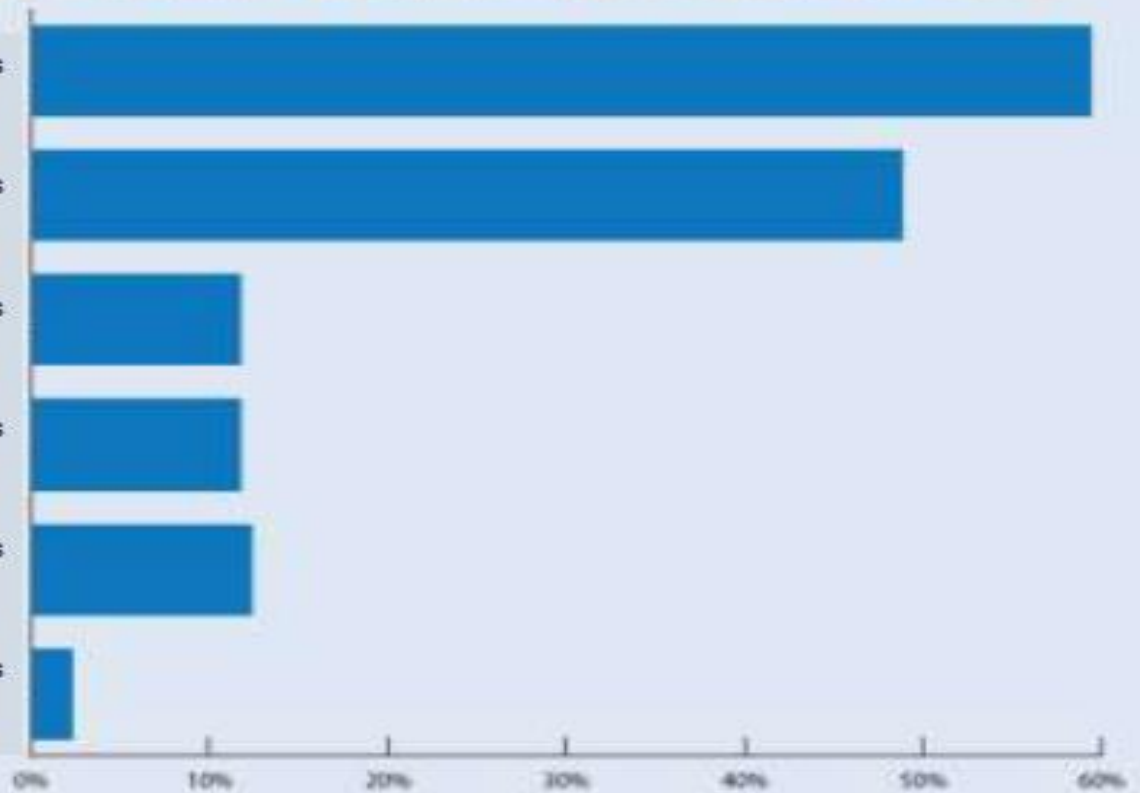


Figure 7.3



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# Threats for Production Dairy

- Regulatory/permitting
- Volatile margins
- Family Farm transitions
- Activists Agenda
- Land Availability
- Pace of modernization, reinvestment



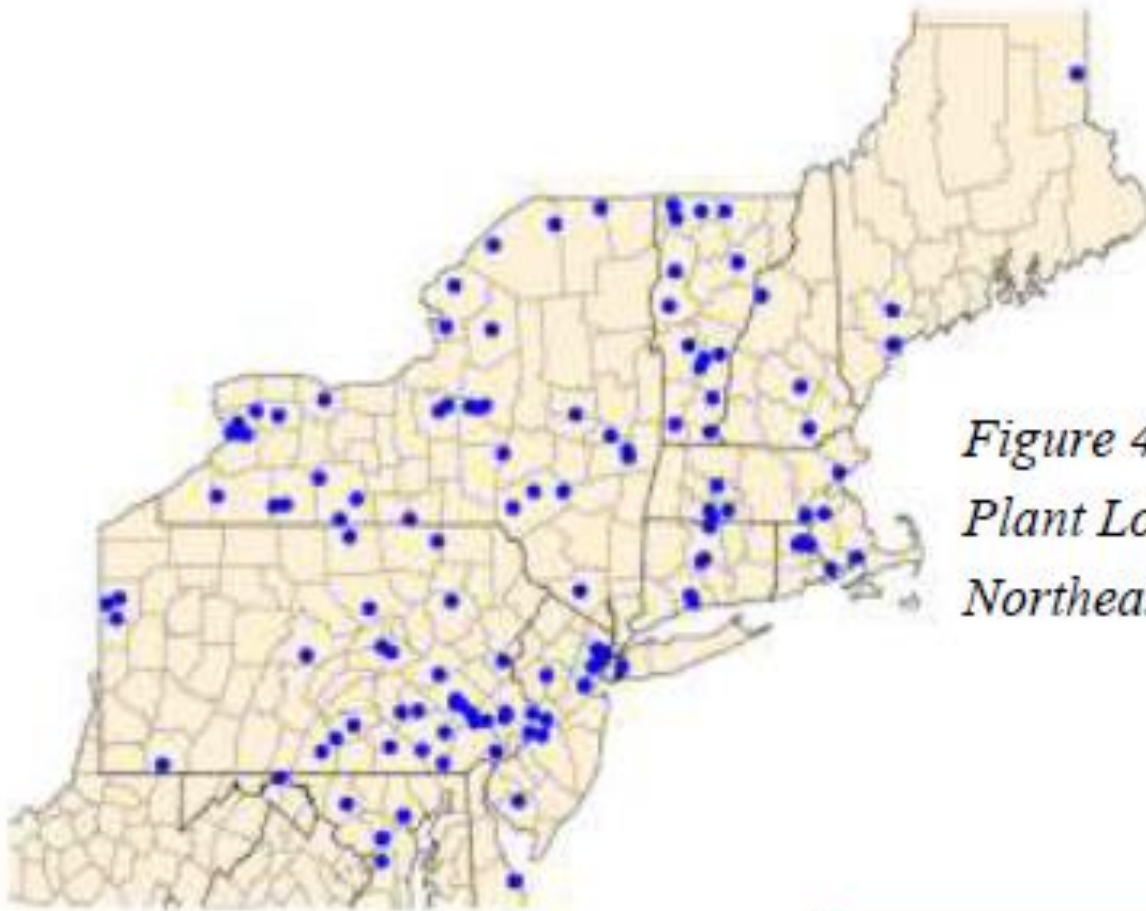


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# Alan Novak

Executive Director  
Professional Dairy Managers of  
Pennsylvania

# Processing Plants



*Figure 4: Dairy Processing Plant Locations in the Northeast*



# The Muller-Quaker Case:



# Muller- Quaker: US Yogurt Plant

- ❑ Muller- founded in 1896 by a German dairy farmer
- ❑ Quaker Oates began in 1877 – currently owned by Pepsi-Cola
- ❑ Investigated the Reading Area
- ❑ Genesee County and New York State put and advisory group together to facilitate site selection and construction



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# Muller-Quaker Case: PA or NY?

- ❑ Preferred Pennsylvania “+”
  - Logistical advantages
  - PA offered direct routes to east seaboard retail
  - Cost savings in PA
  - Pull milk supply from PA and NY
- ❑ Pennsylvania “-” / New York “+”
  - Initial investment much higher
    - Price of land
  - Fewer state subsidies in PA
  - NY / team of 28 people ready to “coordinate”
    - Utilities, financial, reality, site, development, etc.
    - “New York very organized and professional”



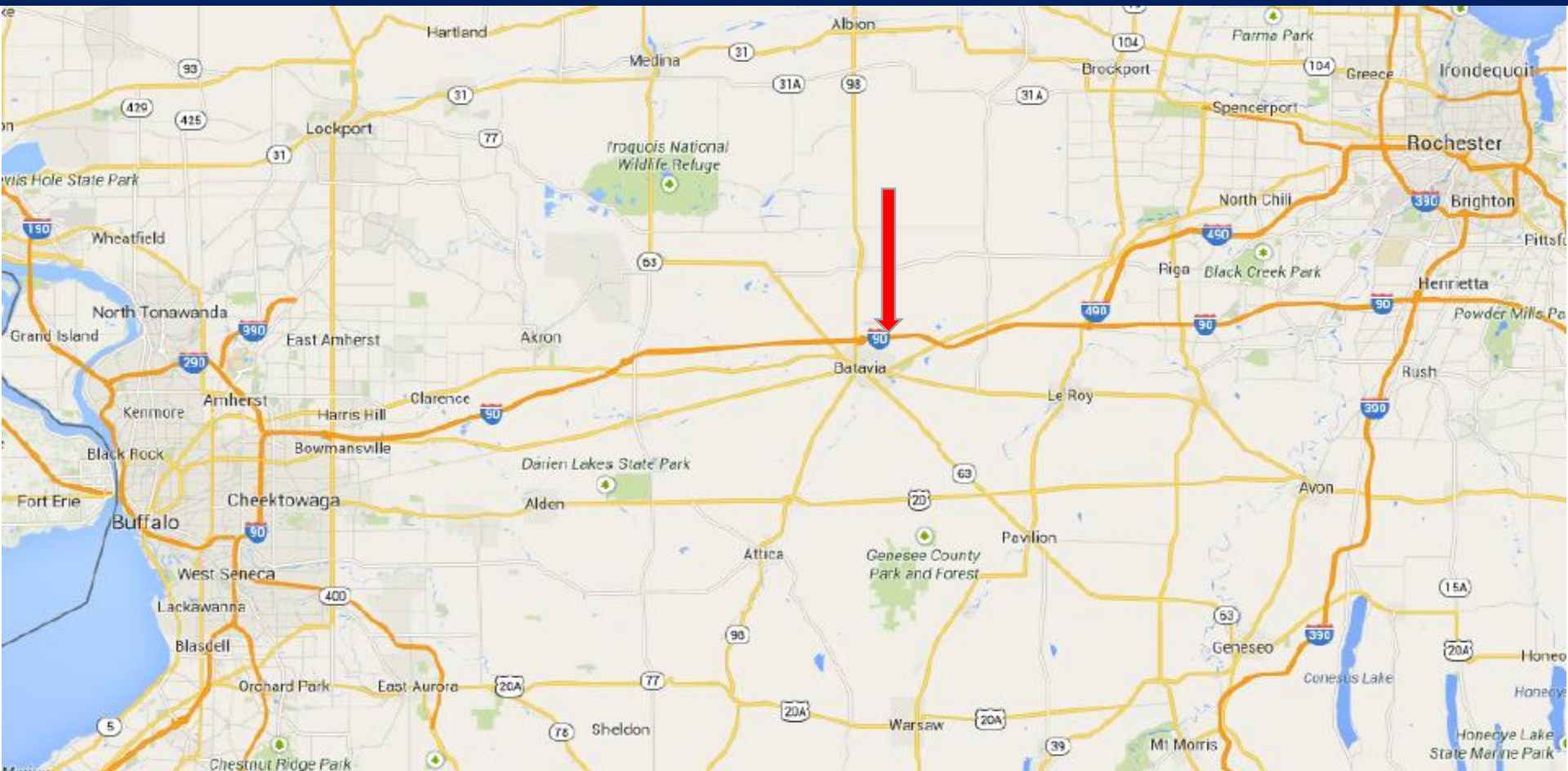
# Genesee Valley Agri-Business Park

- ❑ Genesee County Economic Development Center- Batavia, New York
- ❑ Shovel Ready Sites
- ❑ The two companies spent \$206 million on the factory in Batavia.



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# Batavia, New York



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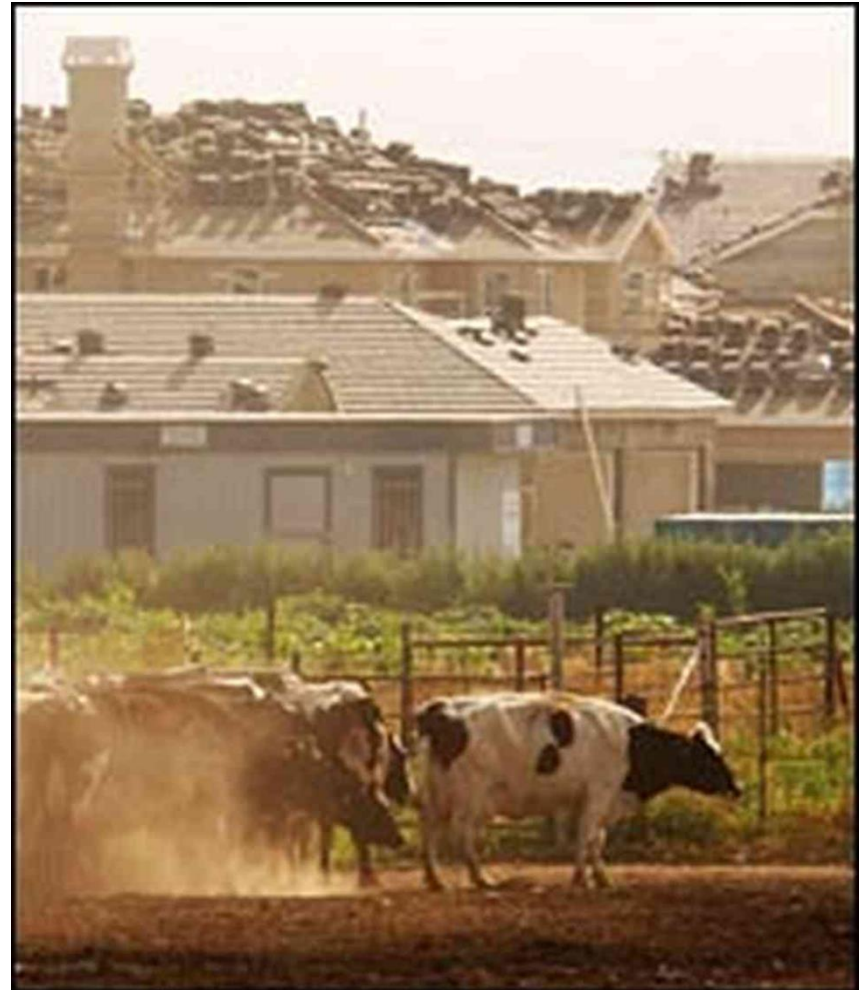
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# Alan Zepp

Risk Management Program Manager  
Center for Dairy Excellence

# Sustainability = Profitability

- ❑ **Smart Growth/Growth Management**
- ❑ **Urban growth boundaries**
- ❑ **Comprehensive planning and zoning**



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# 2010 State Land Use and Growth Management Report

“Pennsylvania’s total developed land area increased from 4.1 percent of the state’s total land area in 1992 to 9.6 percent in 2005—with the most significant acreage increases occurring in the Southeast and South Central regions. A total of approximately 500,000 acres of agricultural land was lost to development within these two regions.”



# 2010 State Land Use and Growth Management Report

“The Southeast region experienced the greatest percentage loss in acres of forest to developed land (20.4 percent), while three regions (Northern Tier, North Central, and Central) experienced less than a 2 percent loss. The Southeast Region also had the greatest percentage loss of acres of agricultural land to developed land (24.4 percent), while the Northern Tier had the lowest percentage loss with 4.9 percent.”



# Dairy Community Contributions

- ❑ Open Space
- ❑ Tax contributions exceed municipal needs
- ❑ Jobs
- ❑ Water Recharge
- ❑ Community Pride



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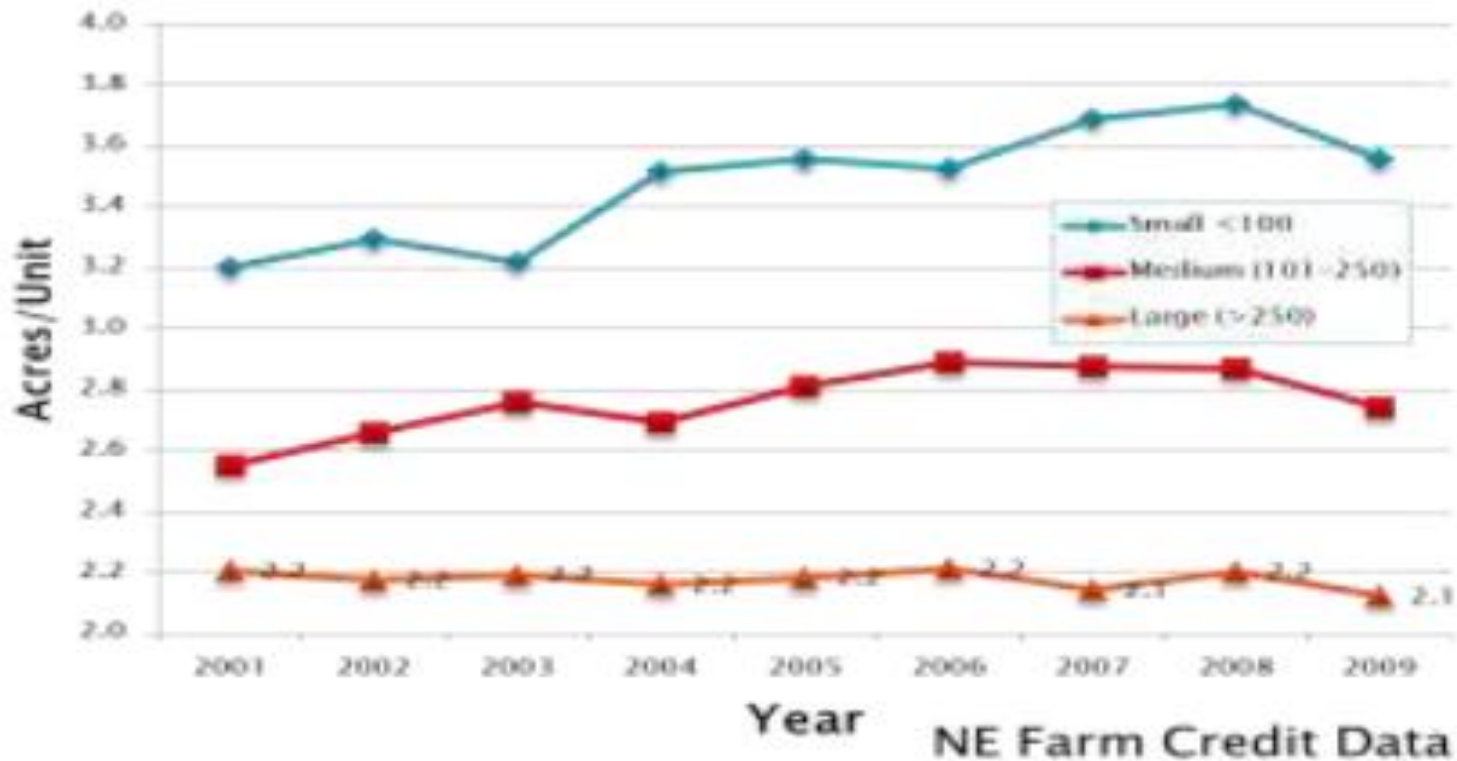
# Dairy Requirements

- ❑ Long Term Planning
- ❑ Realistic Regional Zoning
- ❑ A critical mass of quality land
- ❑ Support businesses
- ❑ Ability to grow and modernize
- ❑ Reasonable setbacks
- ❑ Uncongested roads



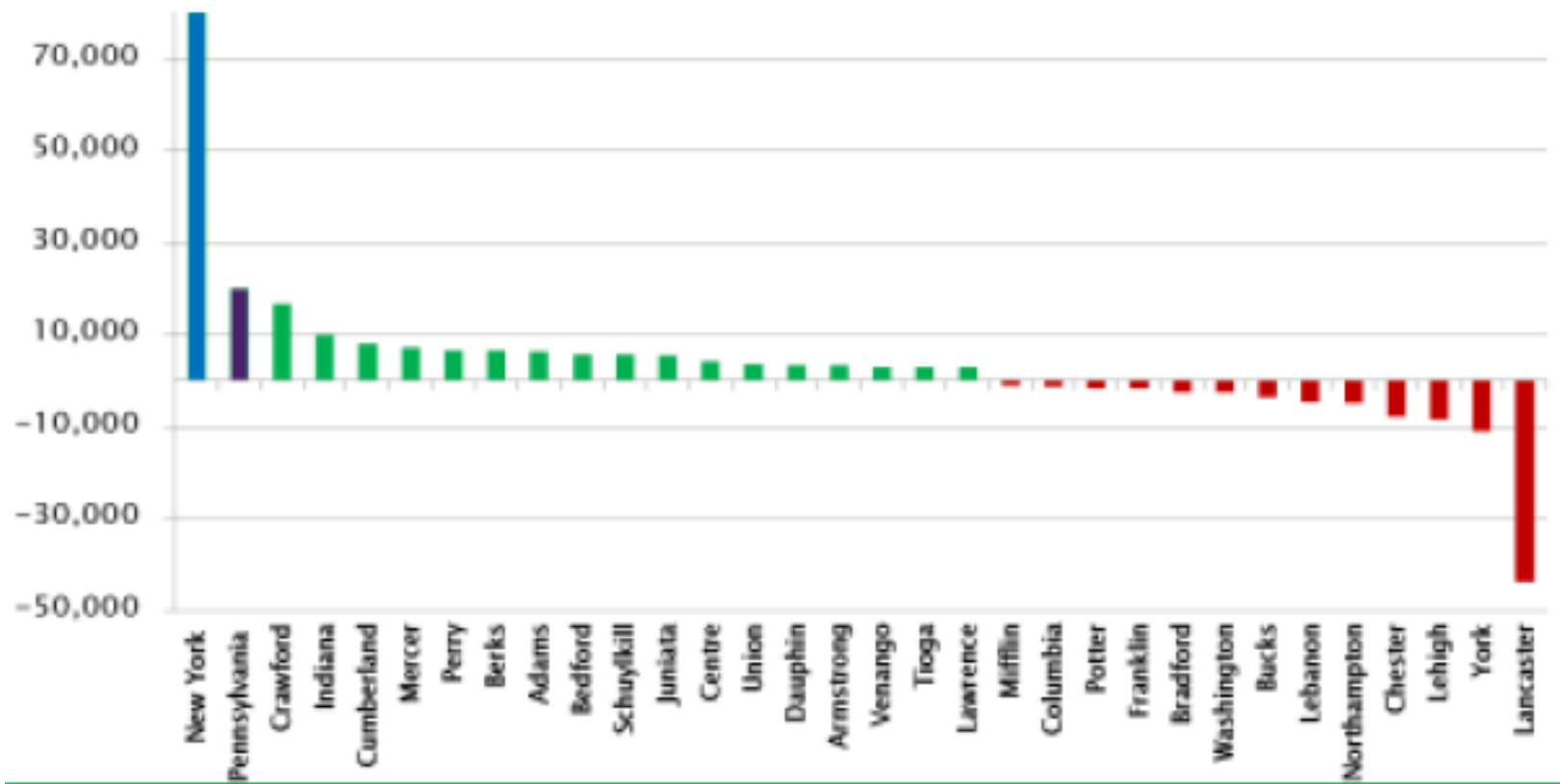
# Acres to support 1 cow

*Figure 3.7: Acres per Animal Unit on NE Dairy Farms*



# Change in Acres of Corn Silage

*Figure 3.9: Change in Corn Acres Planted from 2002 to 2011 By County & State*



# Regulatory Compliance Cost

**Annual Pre-tax Compliance Costs of the New Regulations**  
(Millions of 2001 dollars)

	>1000 AU	300 - 1000 AU	<300 AU (designated)	Total	Distribution
Cattle	\$85.8	\$1.9	\$0.5	\$88.2	27.0%
Heifers	\$0.1	\$0.1	\$0.0	\$0.2	0.1%
Veal	\$3.8	\$2.4	\$0.1	\$6.3	1.9%
Dairy	\$128.2	\$22.0	\$0.9	\$151.1	46.3%
Hogs	\$24.9	\$9.5	\$0.4	\$34.8	10.7%
Broilers	\$16.8	\$2.4	\$1.3	\$20.5	6.3%
Layers - Dry	\$7.2	\$0.1	\$0.2	\$7.5	2.3%
Layers - Wet	\$8.4	\$0.5	\$0.1	\$9.0	2.8%
Turkeys	\$8.1	\$0.3	\$0.3	\$8.7	2.7%
<b>Total</b>	<b>\$283.2</b>	<b>\$39.1</b>	<b>\$3.8</b>	<b>\$326.1</b>	<b>100.0%</b>

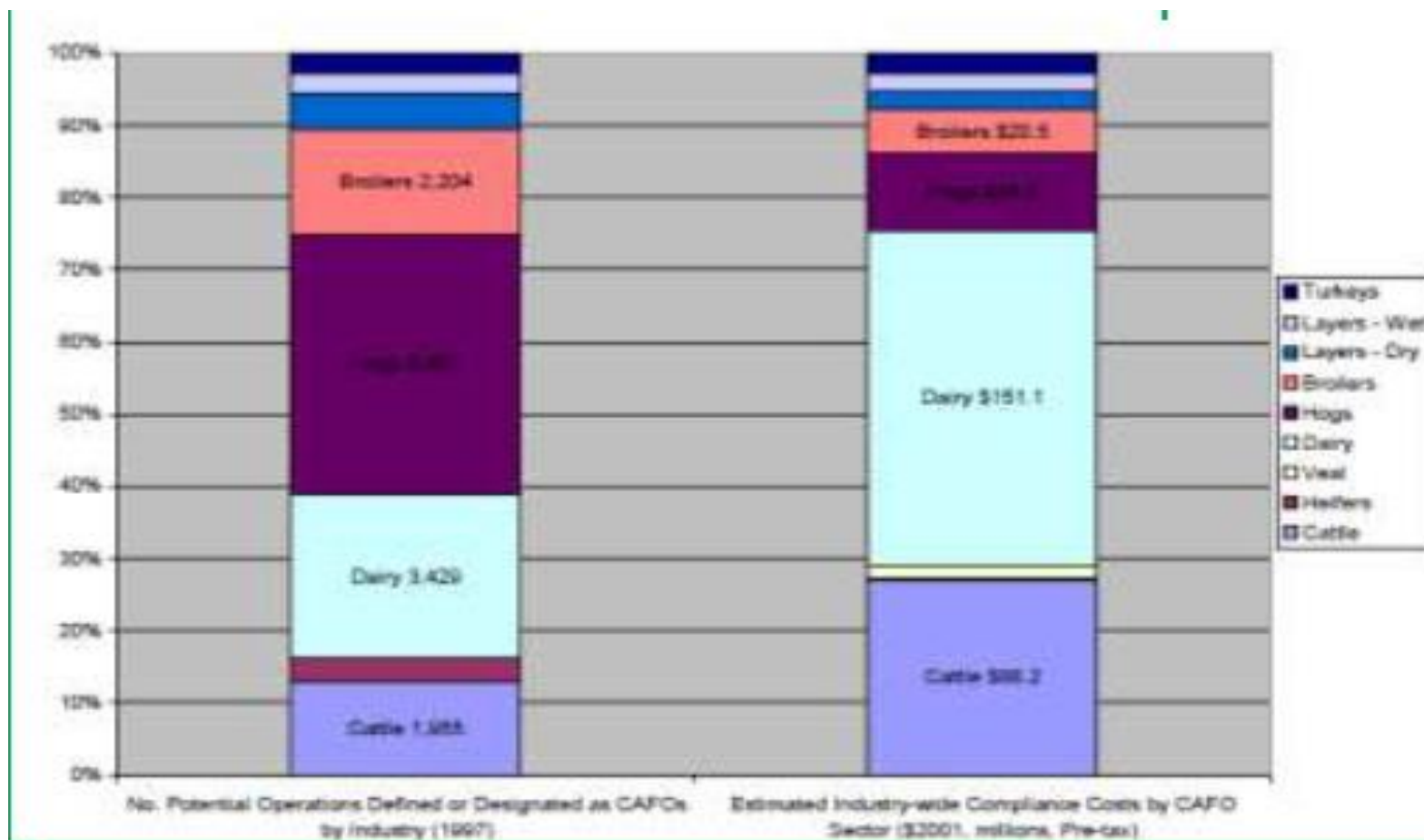
May not add due to rounding.

Source: Table 3-4, Option 2, USEPA EA Report (December 2002); Table 8-1 Federal Register, Vol. 68, No. 29 (February 12, 2003).



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# Number of CAFOs & Compliance Cost



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# Pennsylvania's requirements comparable to other states

*Figure 7.7: Comparison of State Regulatory Requirements to National CAFO Requirements*

Area	PA	NY	OH	MD
Permitting Types	General, Individual & Other	General & Individual	General, Individual and Other	General & Other (No Individual)
Water-quality Requirements				
Discharge Rule	=	<	=	>
Nutrient Management	>	>	>	>
Setback Requirements	=	=	>	=
Air Quality Requirements				
Nuisance/Buffer Provisions	=	<	>	=
Property Odor Limits	=	=	=	=
Public Hearing Requirements	=	=	=	=
Additional Requirements	Training, Record Keeping, Odor Control Plan, Local Control	Record Keeping	Training, NMP in Impaired Watersheds, Odor Control Plan	Training, Record Keeping, Local Control
Assistance Programs?	Yes	Yes	Yes	Yes



# Dairy Center Resources

- ❑ Dairy Profit Teams
- ❑ Dairy Transition Teams
- ❑ Dairy Decision Consultants
- ❑ Risk Management Resources
- ❑ Upcoming events:
  - December 11, 2013: Annual Meeting - Harrisburg
  - February 12,13 2013: PA Dairy Summit – State College



# Center Foundation

## ❑ Dairy Leaders of Tomorrow

- High School Business Management Curriculum
  - Prepares students to work in dairy production careers
- Dairy Tours
  - Exposes students to well-managed dairy businesses
- Scholarships
  - Awards outstanding students pursuing dairy careers
  - 24 Applicants



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# Discussion Questions:

- ☐ What do farmers need to know before they approach the planning process?
- ☐ What do you wish farmers would do more ?
- ☐ ...less of?
- ☐ Legislative action?





Dairy farms  
contribute more than  
\$6 billion to the  
Pennsylvania  
economy...

[Learn More](#)



#### IN THE NEWS

November 14—**Deadline to Nominate Pacesetters is November 30**

November 5 —**Building the Bridge Transition Workshop Later this Month**

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#### UPCOMING EVENTS

November 20, 2012: **Building a Bridge to Dairy Transition Family Workshop**

February 6-7, 2013: **Pennsylvania Dairy Summit**

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Thank you to everyone who supported the fun and silent auction last week at the PA Dairy Summit, which brought in \$4,460 for the Center... [↻](#) [↶](#) ☆  
(about 3 days ago)

Congratulations to Jeff Ainslie, Jeff Harding and Wal-Moore Farms, named the 2013 Pacesetters Award winners.  
<http://t.co/FrsAhVAQ> [↻](#) [↶](#) ☆  
(about 4 days ago)

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The Dairy Decisions Consultant Program can provide that outside perspective to fine-tune your dairy business. [Learn more...](#)

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Be a part of the momentum to grow a stronger, more profitable dairy industry in Pennsylvania. [Learn more!](#)

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#### DairyLink

Are you a young dairy producer seeking facilities? A dairy landowner seeking a farmer? [Dairy Link](#) can connect you.

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#### Attend the Dairy Summit

Considered the premier dairy event in Pennsylvania, the summit is held annually in February. [Learn more](#)

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#### DAIRY MARGINS

	July '12 Estimate	2011-12 Actual	5-Year Average
Jan	\$13.84	\$13.84	\$13.84
Feb	\$13.84	\$13.84	\$13.84
Mar	\$13.84	\$13.84	\$13.84
April	\$13.84	\$13.84	\$13.84
May	\$13.84	\$13.84	\$13.84
June	\$13.84	\$13.84	\$13.84
July	\$13.84	\$13.84	\$13.84
Aug	\$13.84	\$13.84	\$13.84
Sept	\$13.84	\$13.84	\$13.84
Oct	\$13.84	\$13.84	\$13.84
Nov	\$13.84	\$13.84	\$13.84
Dec	\$13.84	\$13.84	\$13.84

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MEET SOME  
FEATURED  
ALLIES:

THE MID-ATLANTIC SPOT FOR DAIRY  
**DairySpot**

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