

The Economic Impacts of Immigrant Labor on U.S. Dairy Farms

USDA Outlook Conference

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David P. Anderson

Flynn Adcock

Parr Rosson

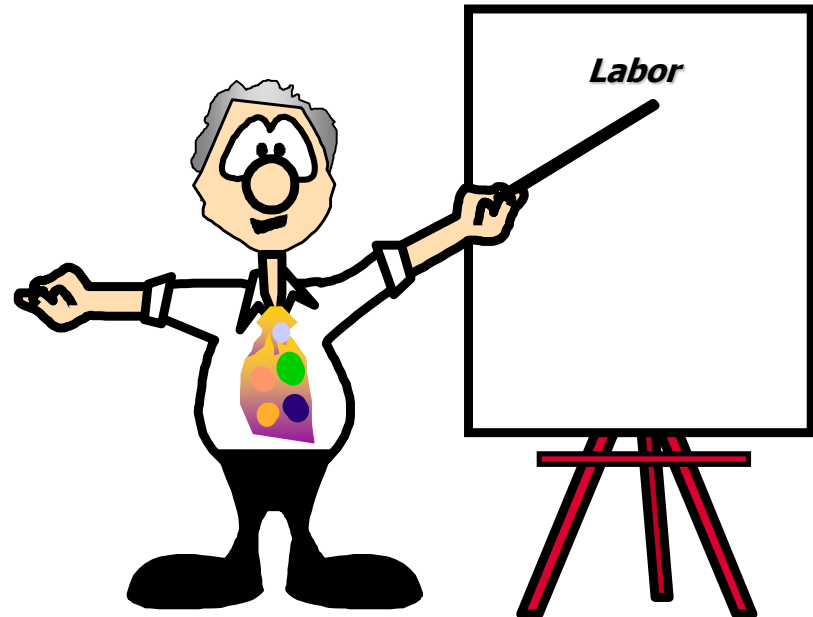
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Overview

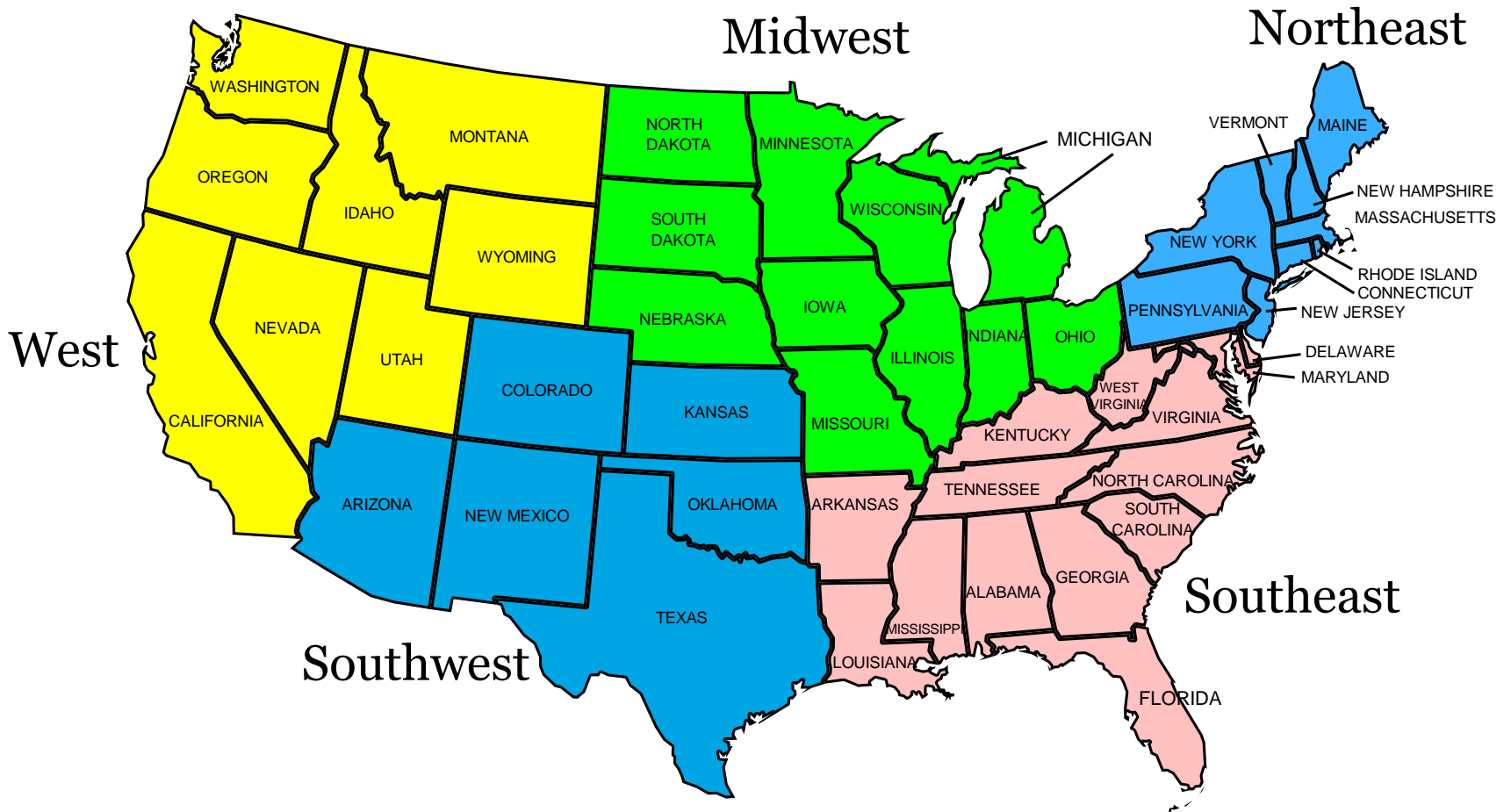
- Survey of Dairy Farmers
- Economic Importance of Immigrant Labor
- Some Implications



The Survey

- Supported by National Milk Producers Federation
- 2015 Survey Sent to 5,000 Dairy Farm in Hard Copy and Electronic Form
- 1,223 Questionnaires were Returned – 1,000 were Usable

Production Regions



Industry Responses

- Responses Came from All U.S. Regions and from All Herd Sizes
- Higher Proportion of Responses from Larger Farms that Hire Labor
- Geographic Dispersion Similar to NASS Reported Dairy Farm Data

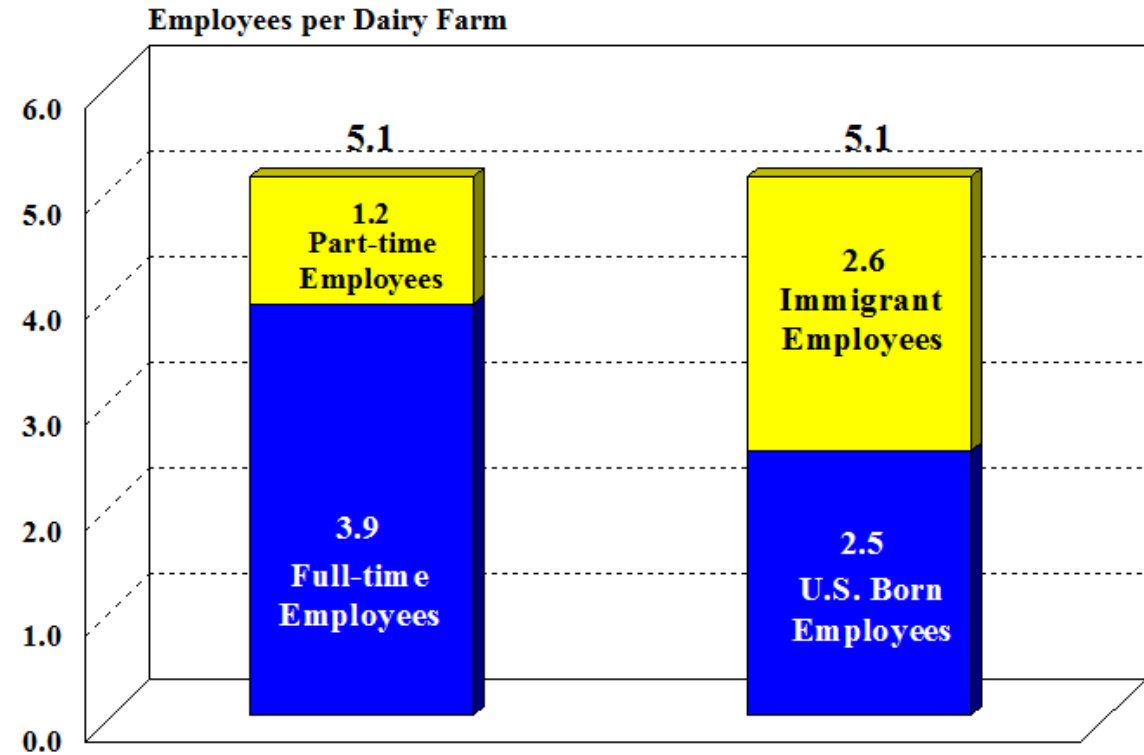
| Survey Respondents by Farm Size and Region | | |
|--|----------------------------------|------------------------|
| Number of Dairy Cows | Number of Dairy Farms Responding | % of Total Respondents |
| <50 | 45 | 4.5% |
| 50-199 | 193 | 19.3% |
| 200-499 | 154 | 15.4% |
| 500-999 | 269 | 26.9% |
| 1,000-1,999 | 184 | 18.4% |
| 2,000+ | 155 | 15.5% |
| Region of the United States | Number of Dairy Farms Responding | % of Total Respondents |
| Northeast | 172 | 17.3% |
| Southeast | 38 | 3.8% |
| Midwest | 467 | 46.7% |
| Southwest | 72 | 7.2% |
| West | 246 | 24.7% |

U.S. Dairy Farm Labor

- Survey Results Indicate 114,092 Full-Time and 36,326 Part-Time Employees on U.S. Dairies for a Total of 150,418

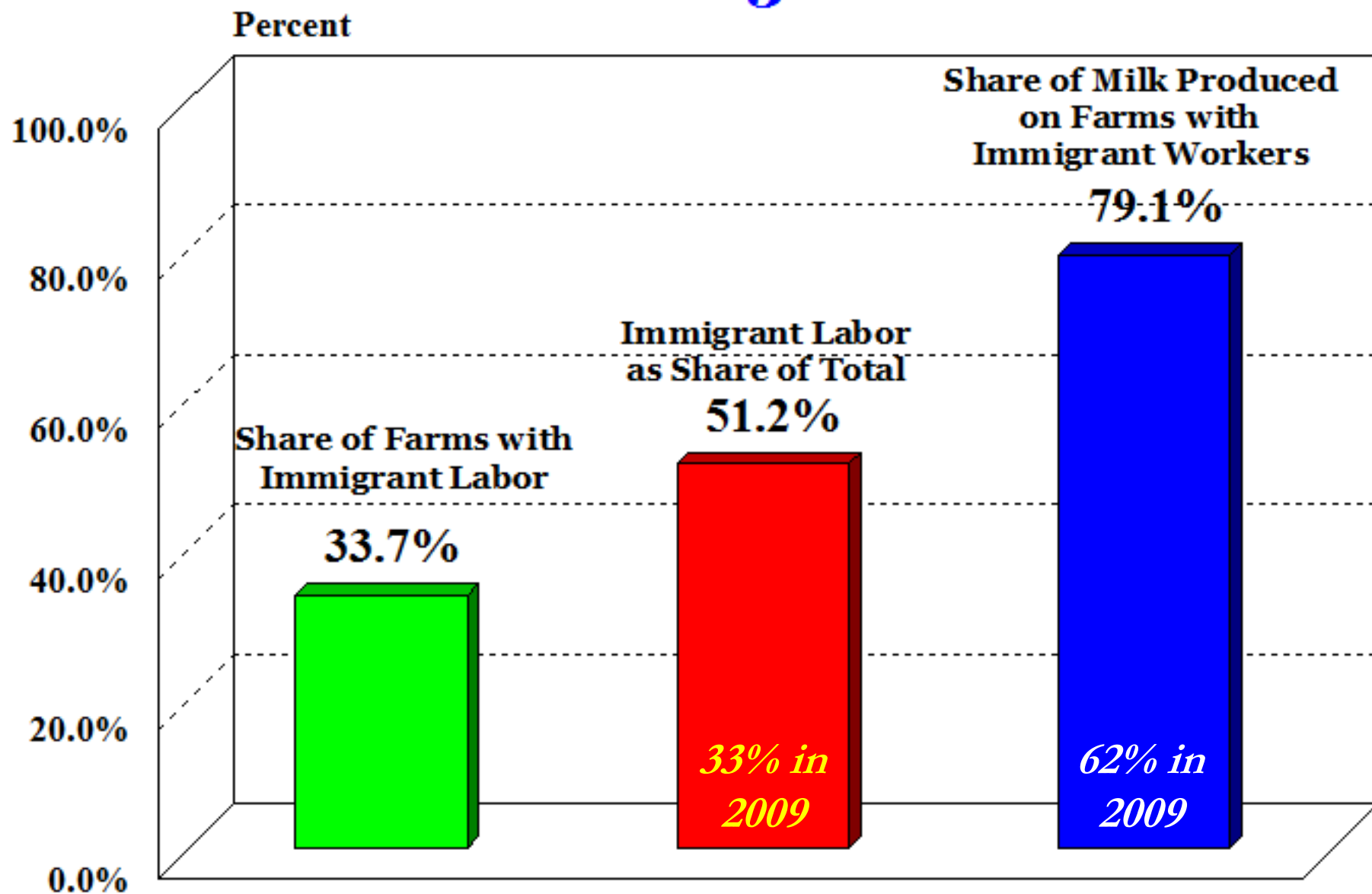
Workers on Dairy Farms Average, 2013

- Slightly More than Half, 76,968, of U.S. Dairy Labor are of Immigrant Origin



Source: National Dairy Labor Survey, n=911

Immigrant Workers on U.S. Dairy Farms, 2013

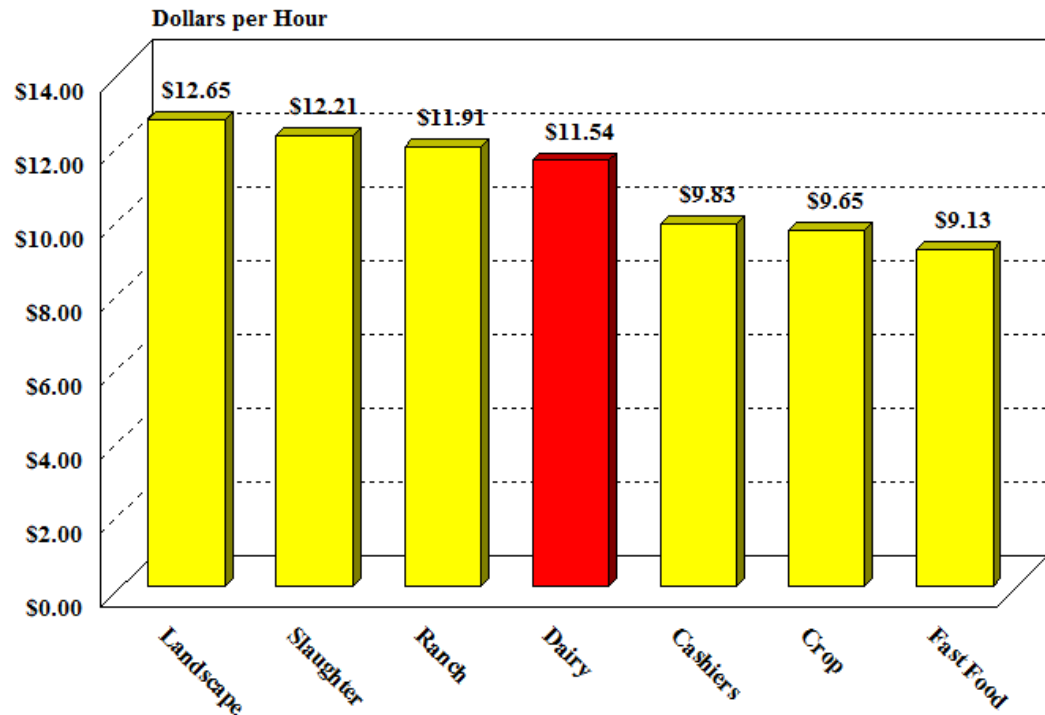


Source: National Dairy Labor Survey, n=911; Percents are for Farms with 50 or More Cows

U.S. Dairy Labor Compensation

- **U.S. Dairy Employees Earn an Average \$11.54/Hour**
 - **Dairies with Immigrant Labor Pay \$11.69/Hour**
- **Dairy Employees Work an Average of 54 Hours per Week, Earn \$623/Week or >\$31,000/Year**
- **Most Dairy Farms Pay a Wide Array of Benefits**

Hourly Wage Comparison, 2013

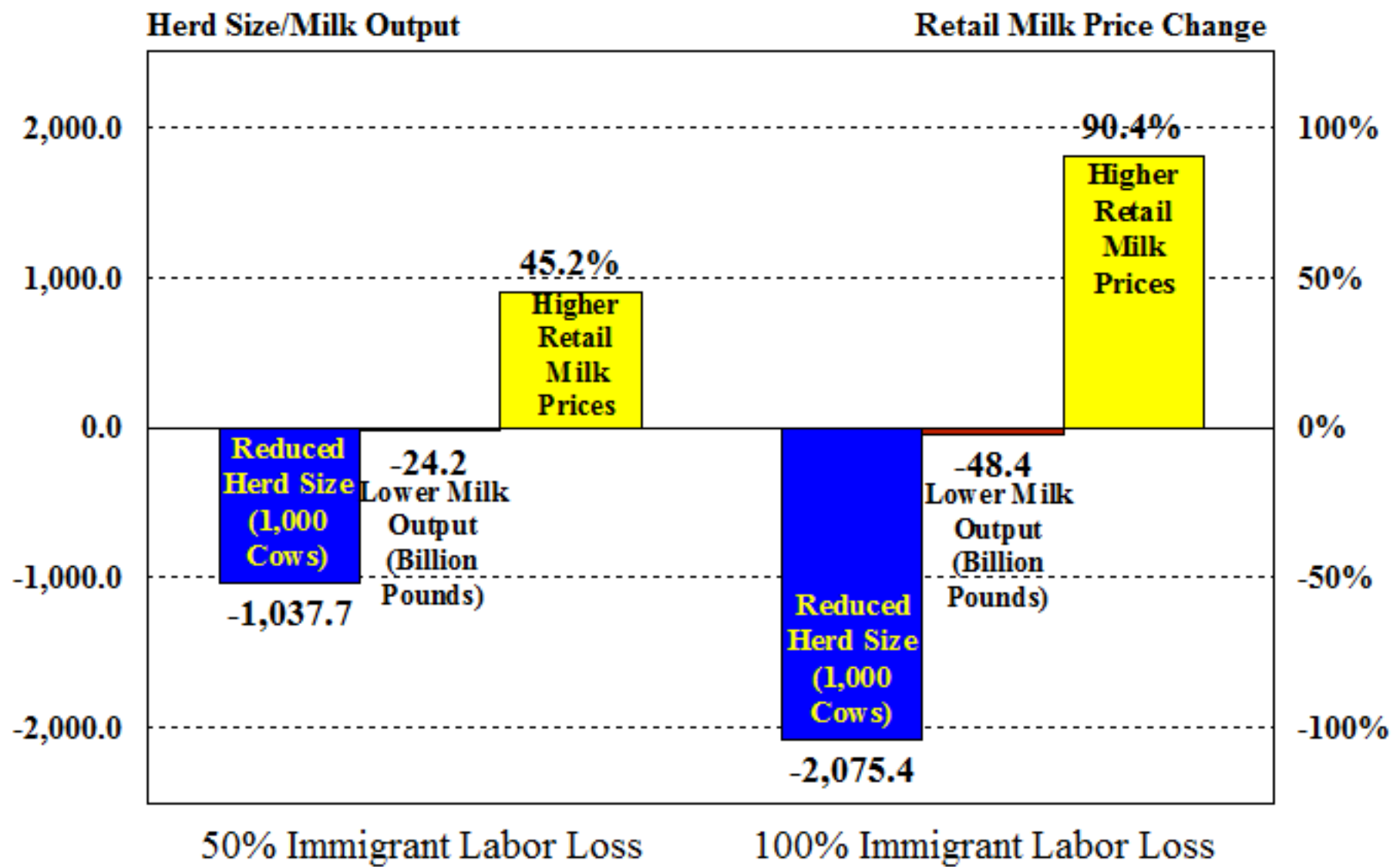


Source: National Dairy Labor Survey and Bureau of Labor Statistics

Estimating Impact of Immigrant Loss

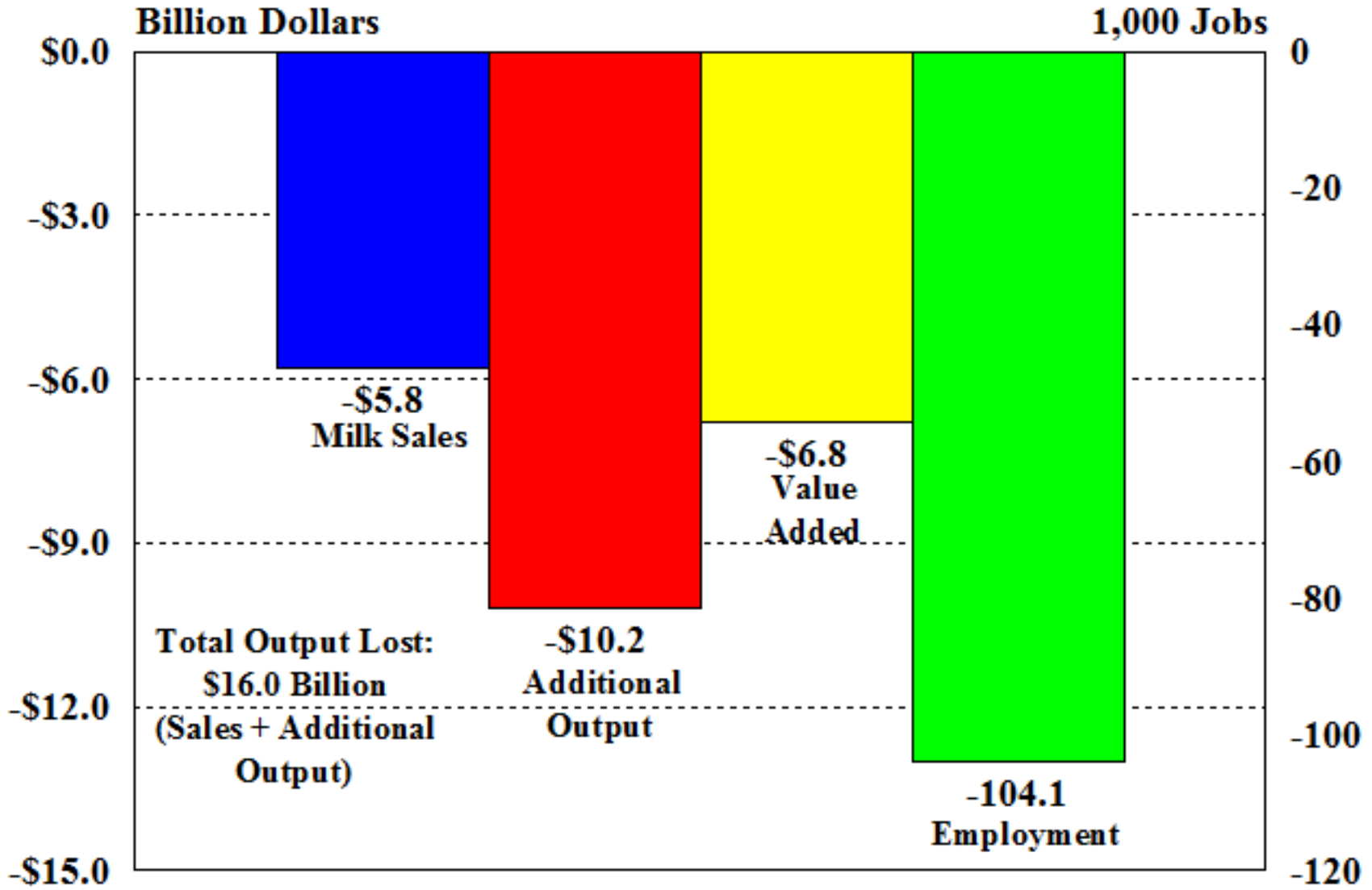
- 50% and 100% Loss of Immigrants
- Estimate of Labor Substitution – Can You Replace Them?
- Annualized the Estimated Impact on Milk Production, Cows

Immigrant Labor Loss Reduces Dairy Herd and Production & Raises Retail Milk Prices



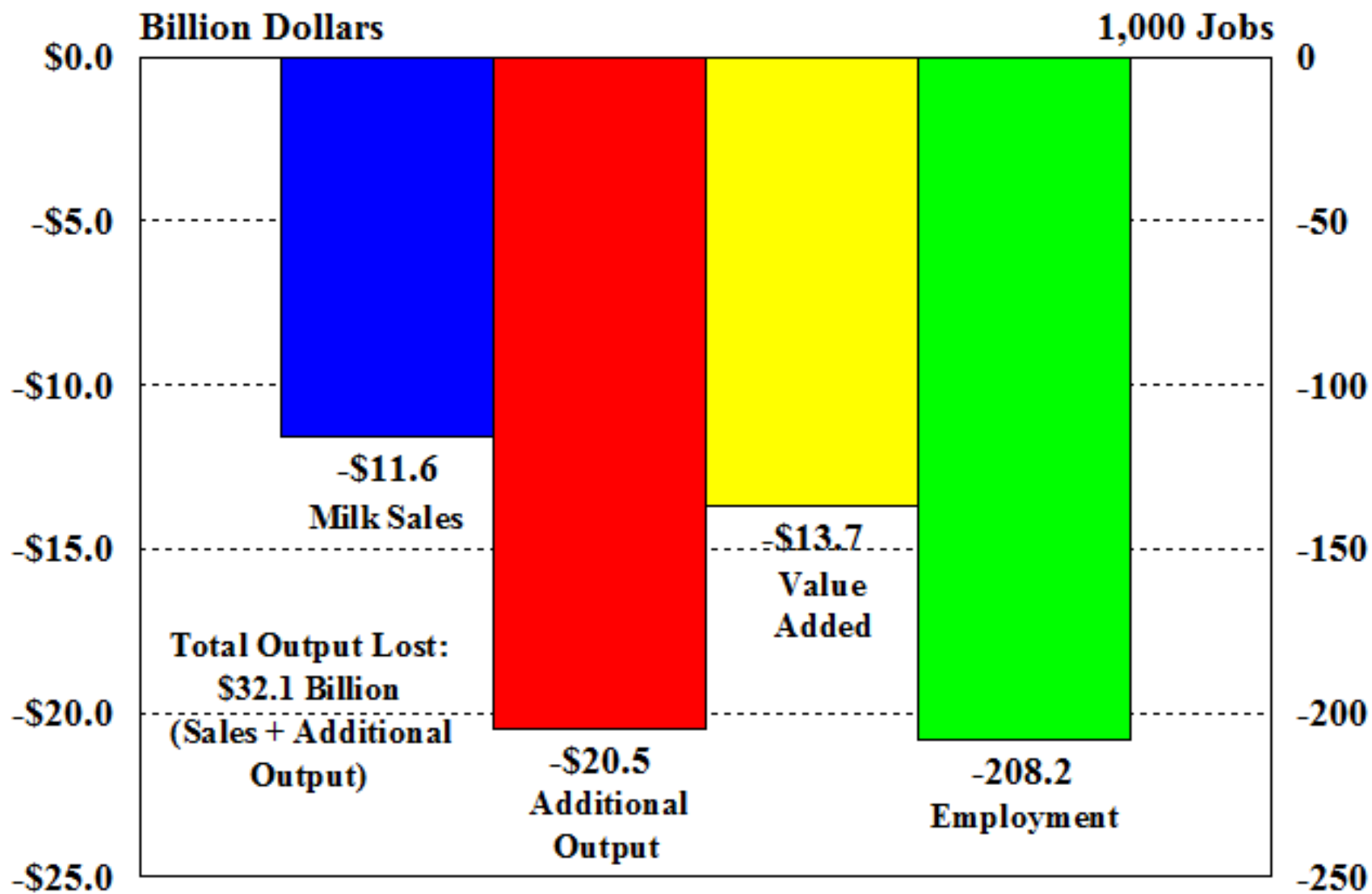
Source: National Dairy Labor Survey, n=955

Economic Impacts of 50% Immigrant Labor Loss



Source: National Dairy Labor Survey and IMPLAN

Economic Impacts of 100% Immigrant Labor Loss

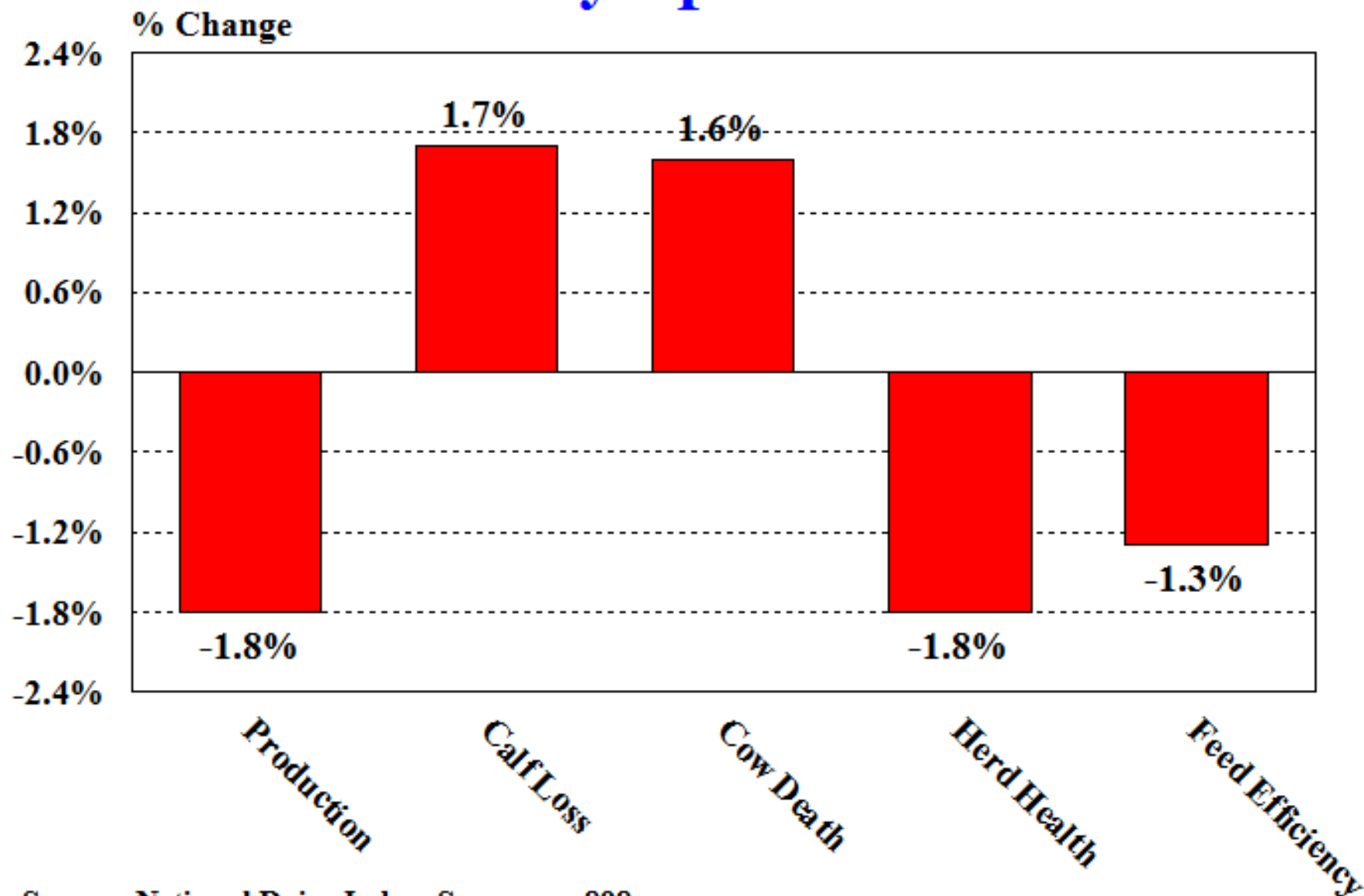


Source: National Dairy Labor Survey and IMPLAN

Beyond Immigrant Labor

- What is The Effect of Employee Turnover on Production Efficiency Measures?
- Employee Turnover in Survey About 13%
- Milk Production, Feed Efficiency, Herd Health

Effects of Employee Turnover on Surveyed Dairy Operations



Source: National Dairy Labor Survey, n=898

Implications

- Dairy Industry Highly Dependent on Immigrant Labor
- A Significant Loss of Immigrant Labor Would:
 - Lower Milk Production
 - Increase Milk Prices to Consumers
 - Cost the Economy Billions of Dollars in Output and Thousands of Jobs
- Substitute Capital for Labor
- Robotic Milking Technology and More

Other Thoughts

- Time to Adjustment From Labor Loss?
 - Assumed instantaneous loss and annual production change
 - If you can't get cows milked production drops quickly

Thank You!

livestock-marketing.tamu.edu

afpc.tamu.edu

@LivestockEcon

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danderson@tamu.edu