

Short-Term Agricultural Forecasting Methods

Presentation to Ag Workgroup on 04112013

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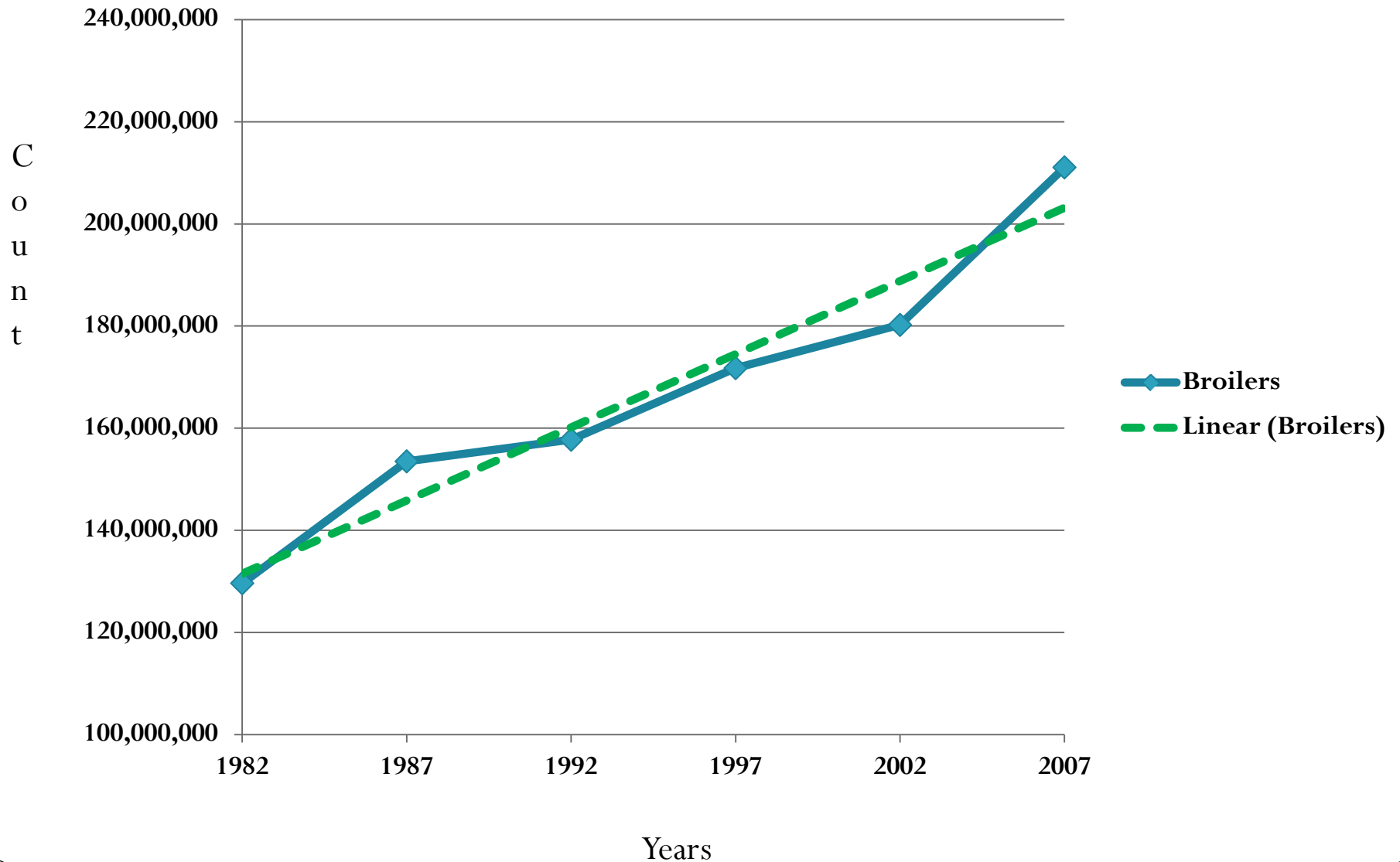
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Reminder of Method

- Incorporates both the short-term trend (2002 to 2007) and the long-term trend (1982 through 2007) to forecast future animal counts.
- Places a “weight” between 0 and 1 on the short-term trend and long-term trend so analysts and managers can place more value on one trend over the other.

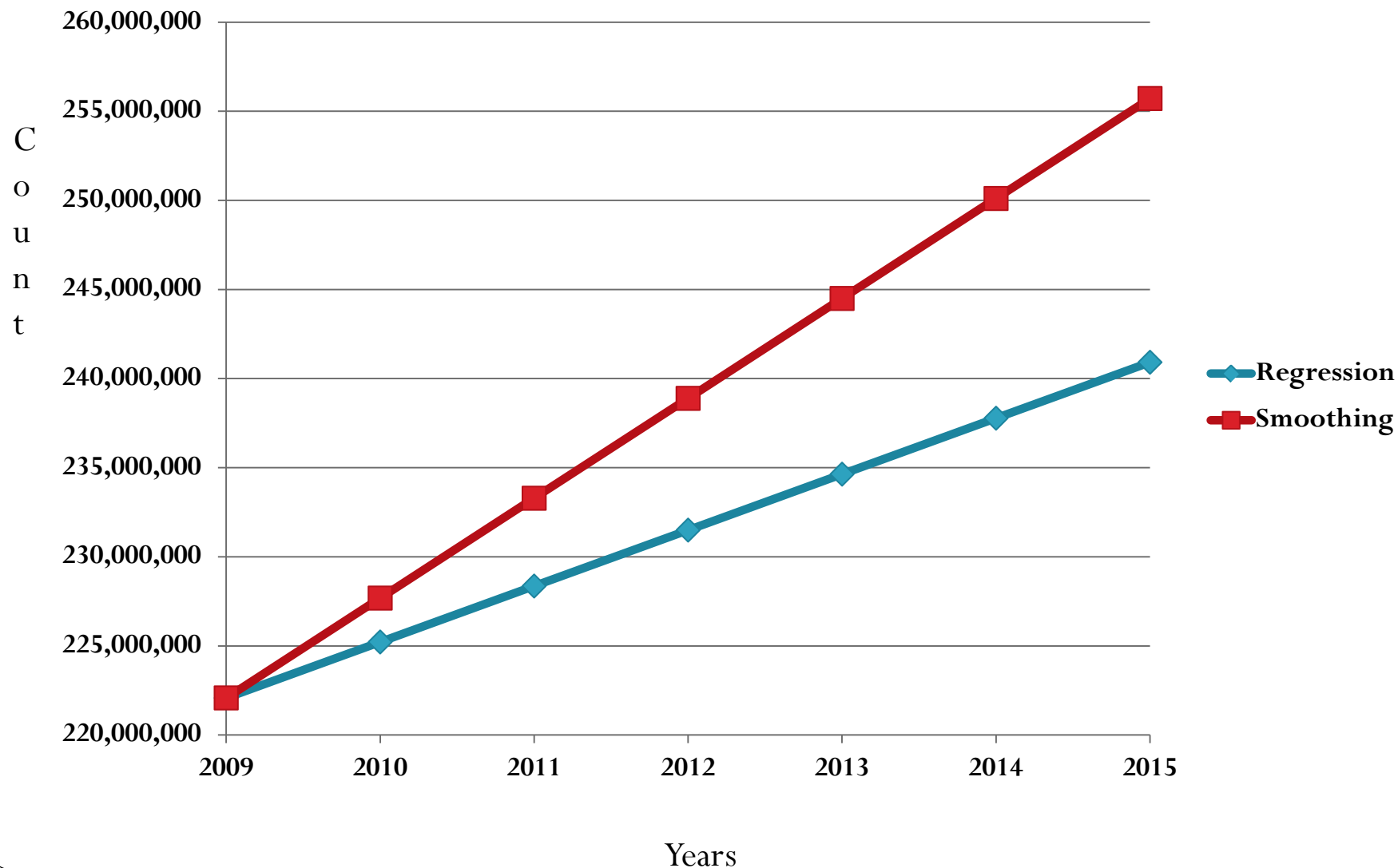
Broilers over time in Ag Census



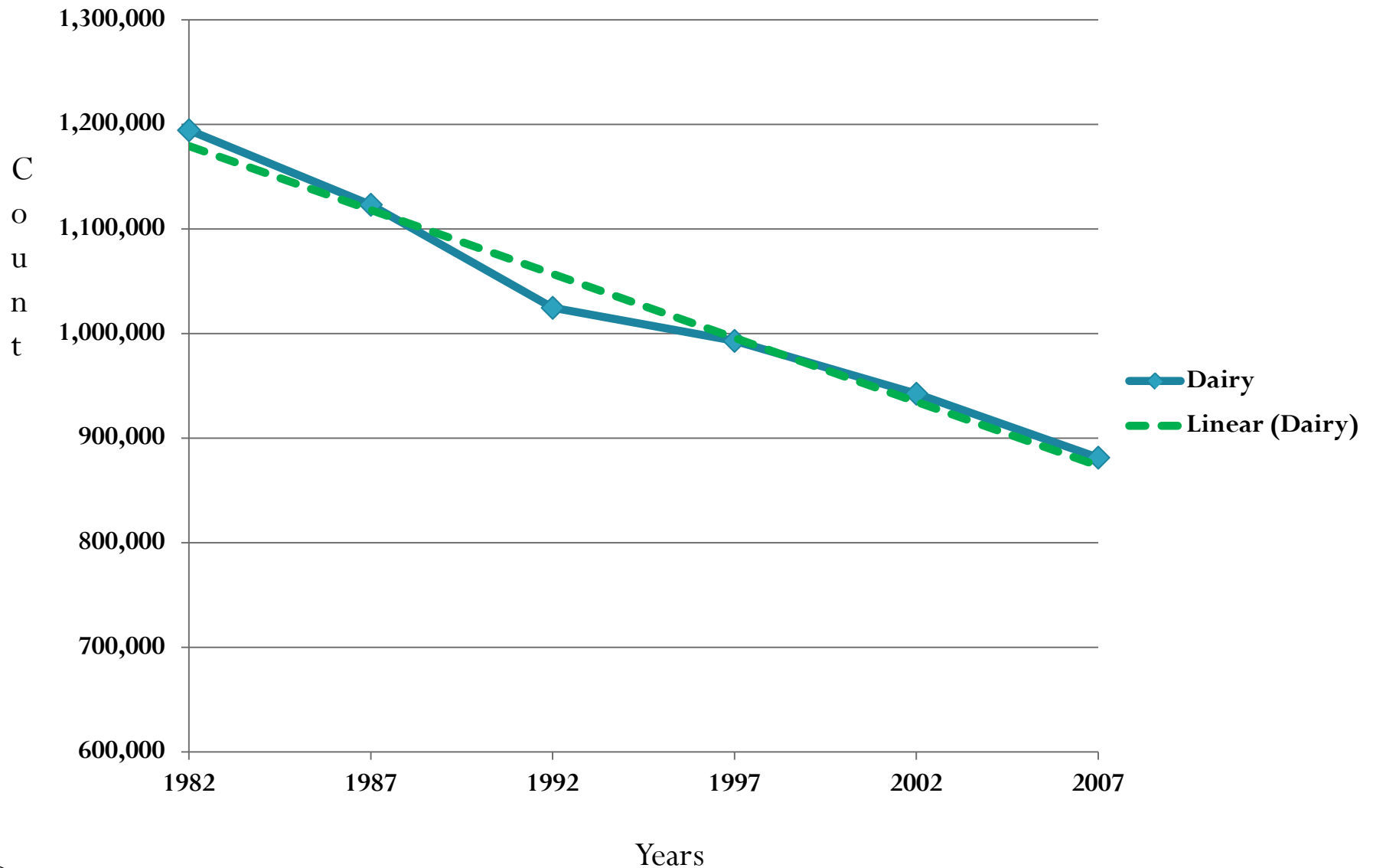
Predicting 2007 Broilers

	AgCensus	Regression	Smoothing
2007 Count	211,069,555	182,635,494	199,747,106
Delta	NA	-28,434,061	-11,322,449
Percent Delta	NA	-13.47%	-6.20%

Forecasting (Draft) Broilers to 2015



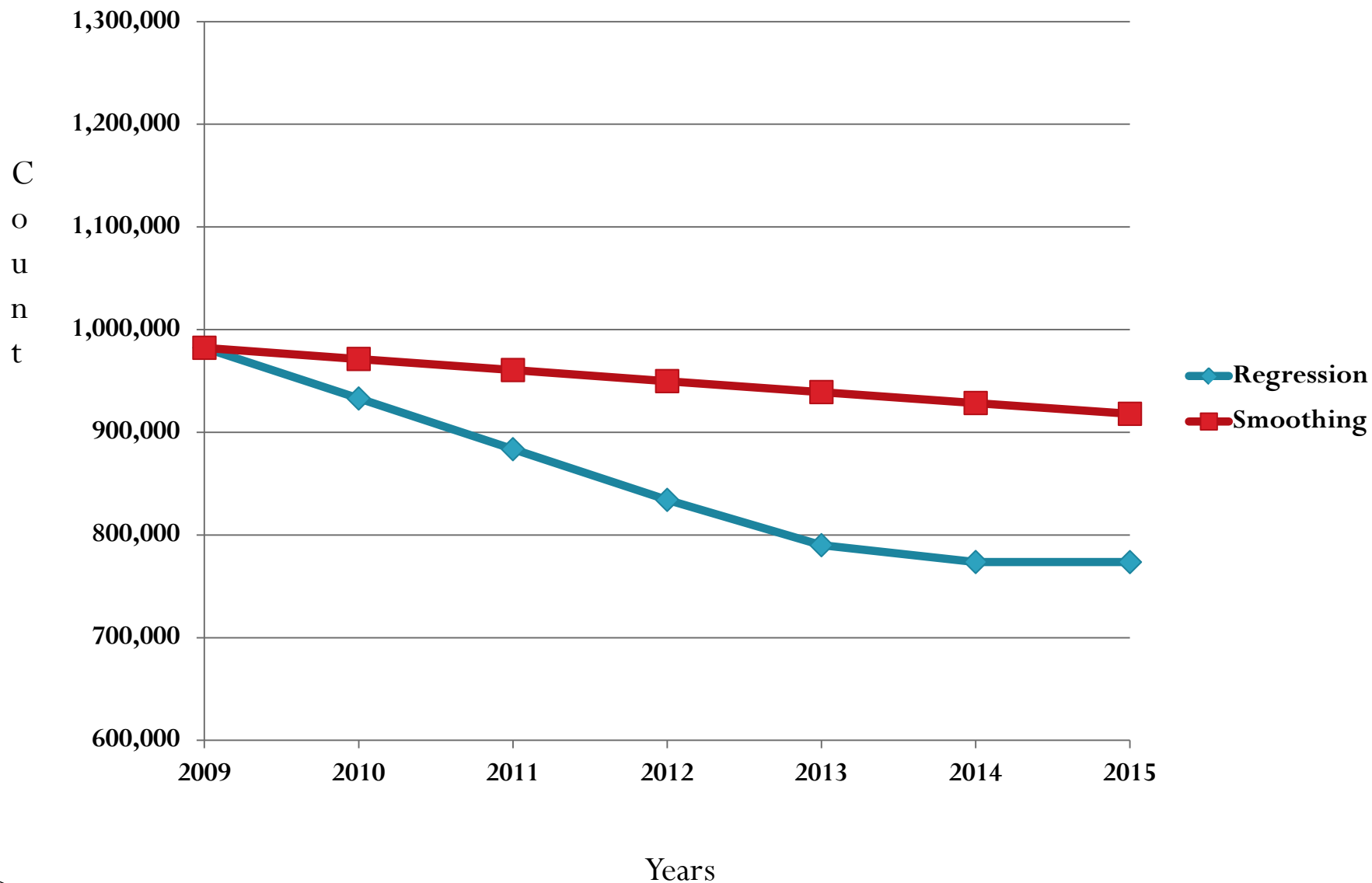
Dairy over time in Ag Census



Predicting 2007 Dairy

	AgCensus	Regression	Smoothing
2007 Count	881,370	930,080	859,060
Delta	NA	48,710	-22,310
Percent Delta	NA	5.53%	-2.53%

Forecasting (Draft) Dairy to 2015



Pros and Cons

Pros

- Allows us to place weight on short-term trend rather than long-term trend
- Results in a better prediction of 2007 Ag Census numbers
- With the addition of the 2012 Ag Census, this method will likely have more predictive power going into the future

Cons

- Will result in higher than expected or lower than expected animal numbers in counties with volatility in data
- Represents a shift in the way we have historically projected agricultural data
- Is more difficult to explain

~~Options~~ See Next Slide for Revisions

- ~~1) Continue to use the regression-based forecasting method for 2013, 2014, 2015 and all future years.~~
- ~~2) Begin using the smoothing forecasting method for 2013, 2014, 2015 and all future years.~~
- ~~3) Use the regression-based method for 2013, 2014 and 2015, and consider using the smoothing method for 2016, 2017 and beyond. This option would require a future presentation of revised agricultural data, and a future decision by this workgroup.~~

Revised Options

- 1) Option 1:
Continue to use the current regression-based forecasting method for future agricultural short-term projections until 2017, at which time the availability of the new CBP Phase 6 models will require a reassessment of short-term projection methods. It is understood that the 2012 Ag Census will be available in 2014 and will be incorporated to produce agricultural forecasts in future years until the 2017 reassessment.
- 2) Option 2:
Replace the current forecasting method with the double exponential smoothing forecasting method for future agricultural short-term projections until 2017, at which time the availability of the new CBP Phase 6 models will require a reassessment of short-term projection methods. It is understood that the 2012 Ag Census will be available in 2014 and will be incorporated to produce agricultural forecasts in future years until the 2017 reassessment.
- 3) Option 3:
Continue to use the current regression-based forecasting method to provide future agricultural forecasts for the years 2013, 2014 and 2015 for the 2015 Milestones, but reconsider using the double exponential smoothing forecasting method to provide future agricultural forecasts for the years 2016 and 2017 for the 2017 Milestones, and potentially for annual progress conditions. It is understood that the 2012 Ag Census will be available in 2014 and will be used to assess the value of the double exponential smoothing forecasting method. This option would require the workgroup to revisit this decision in the 2014-2015 timeframe, as well as for the 2017 reassessment.