Ag Business Climate Outlook for 2018

Chris Hurt, Professor & Extension Economist

Michael Langemeier, Professor & Associate Director

James Mintert, Professor & Director

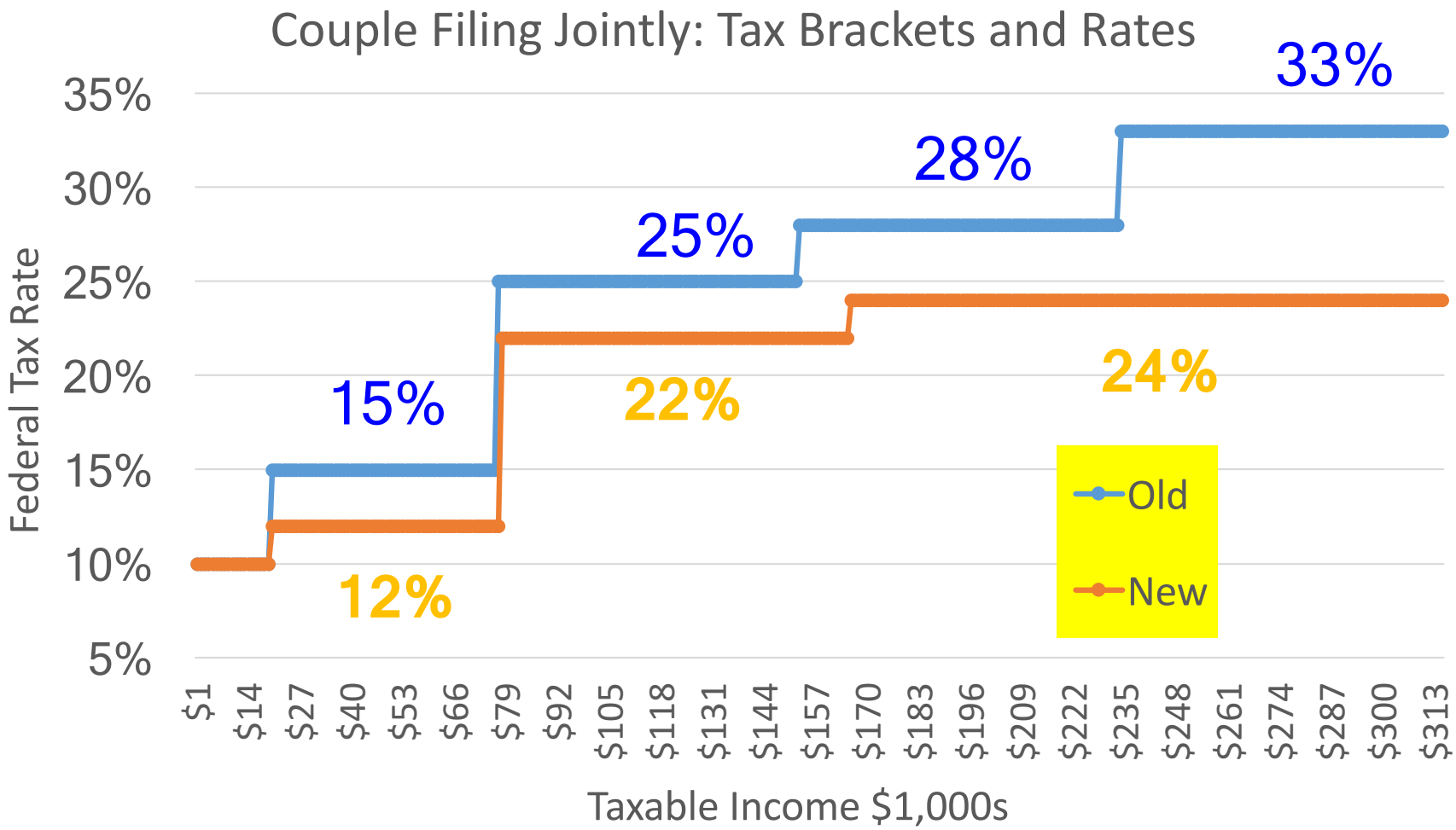
PURDUE UNIVERSITY | Center for Commercial Agriculture

AG ECONOMY BAROMETER
PURDUE UNIVERSITY · CME GROUP

January 5, 2018

2018 Macro Economic Environment

- Strong Ag Demand from U.S. and Foreign Economic Growth
- Full employment in the U.S.
- Consumer stimulus from Tax Reform
- Business stimulus from Tax Reform-Corporate Income & Stock Values
- Strong economic demand & tightening in resource availability:
  - Faster wage rate increases
  - Faster growth in housing values
  - Faster increases in inflation
  - Faster increases in interest rates

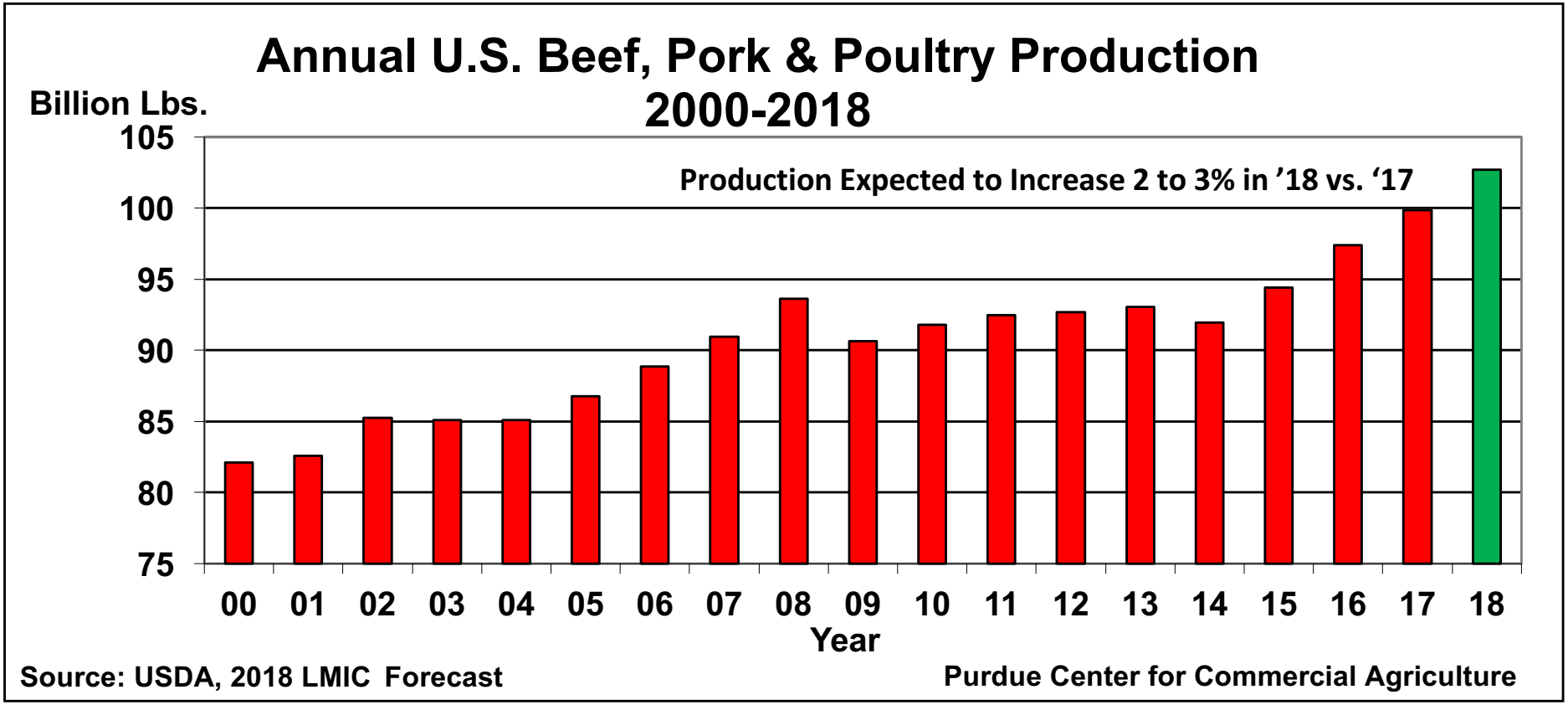


Agriculture's Economic Environment

- U.S. and World Grain Inventories are large
- U.S. animal industries back to full production-Weaker Prices?
- Trade concerns for Agriculture
  - NAFTA renegotiations
  - N. Korea & other Geopolitical hazards
  - China
  - "U.S. First" backlash?
- What could be friendly to Ag Prices?
  - Shift from equity to ag commodity investing
  - Will Unusual 4-year run of favorable weather end?
  - Weather/Weather/Weather

Meat Production Up Again in 2018

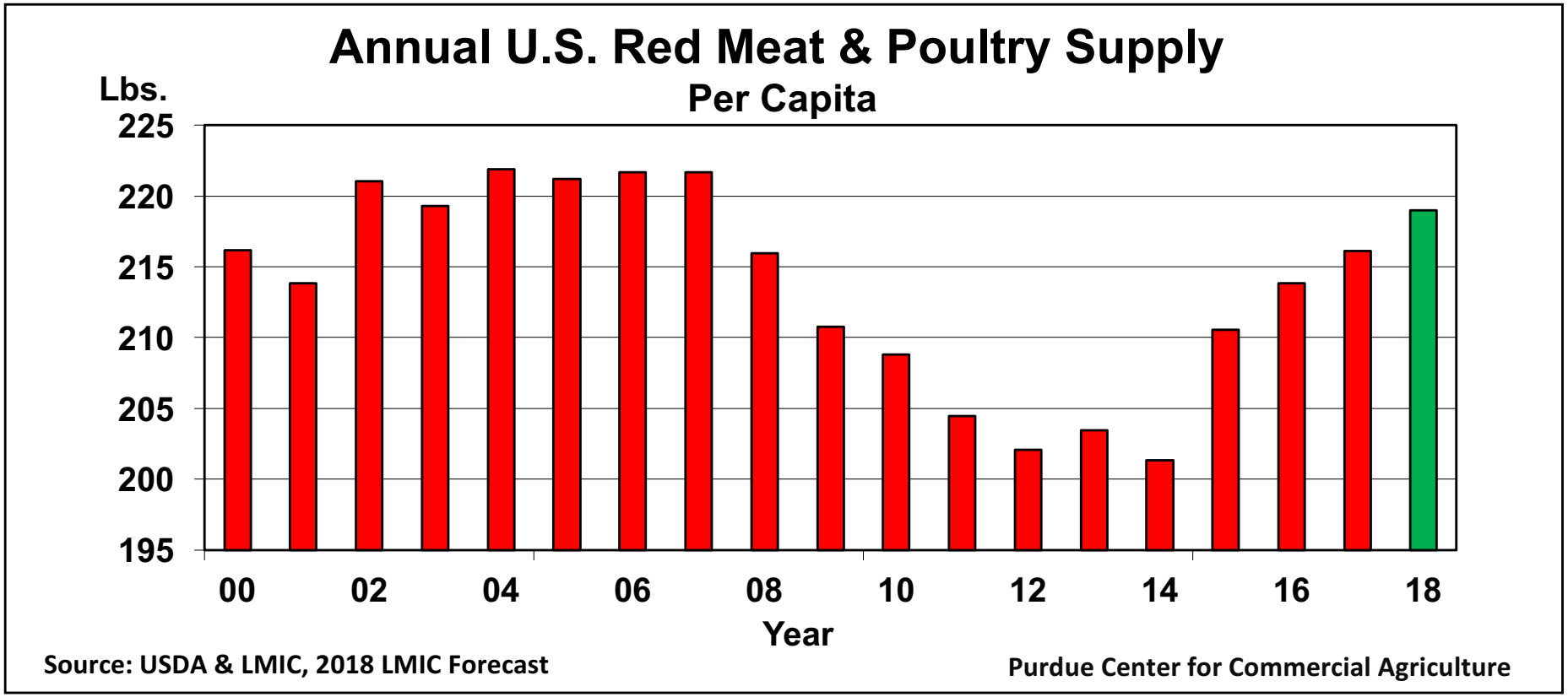
4th Year in a Row for a Production Increase



PURDUE UNIVERSITY | Center for Commercial Agriculture

January 5, 2018

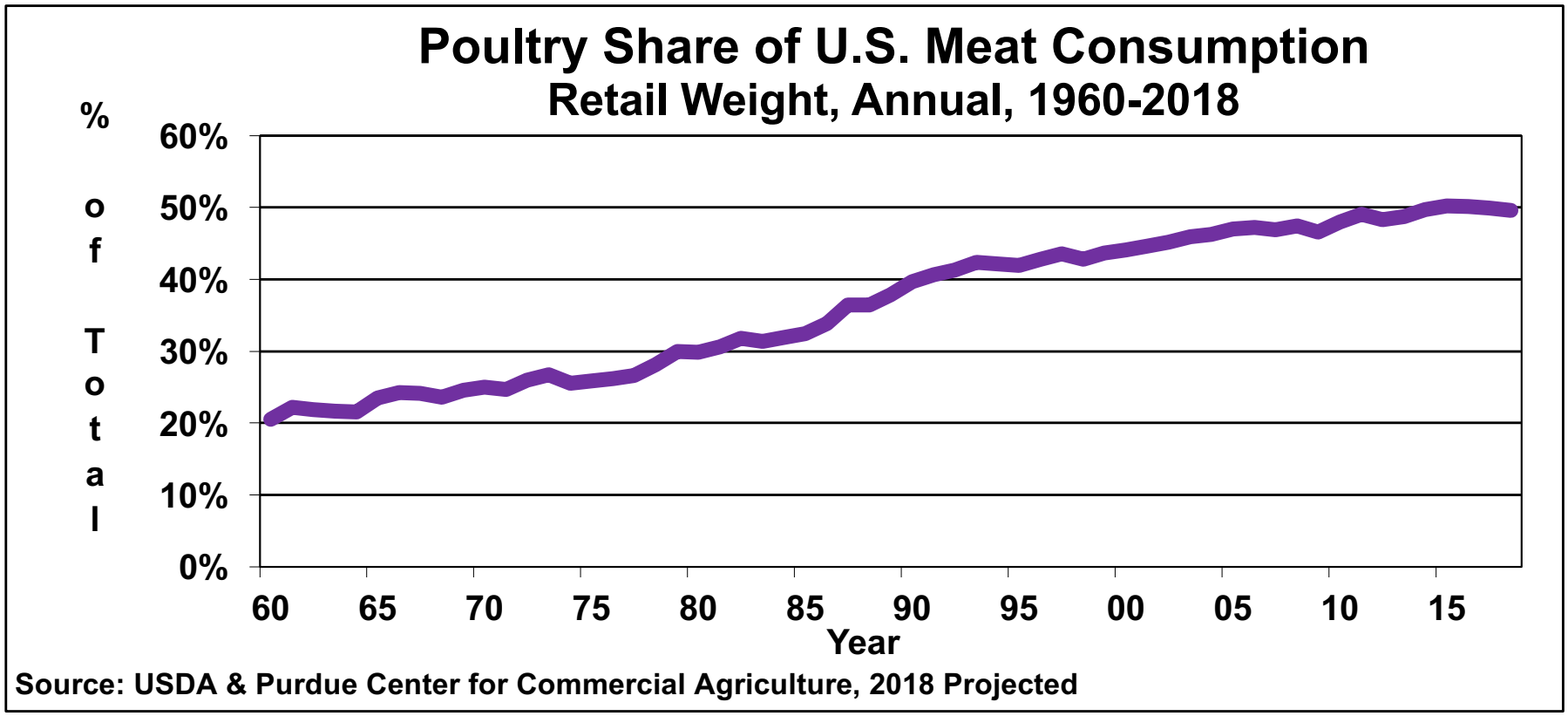
Improved Foreign Trade Will Hold Per Capita Meat Supply Increase to 1 to 2%



PURDUE UNIVERSITY | Center for Commercial Agriculture

January 5, 2018

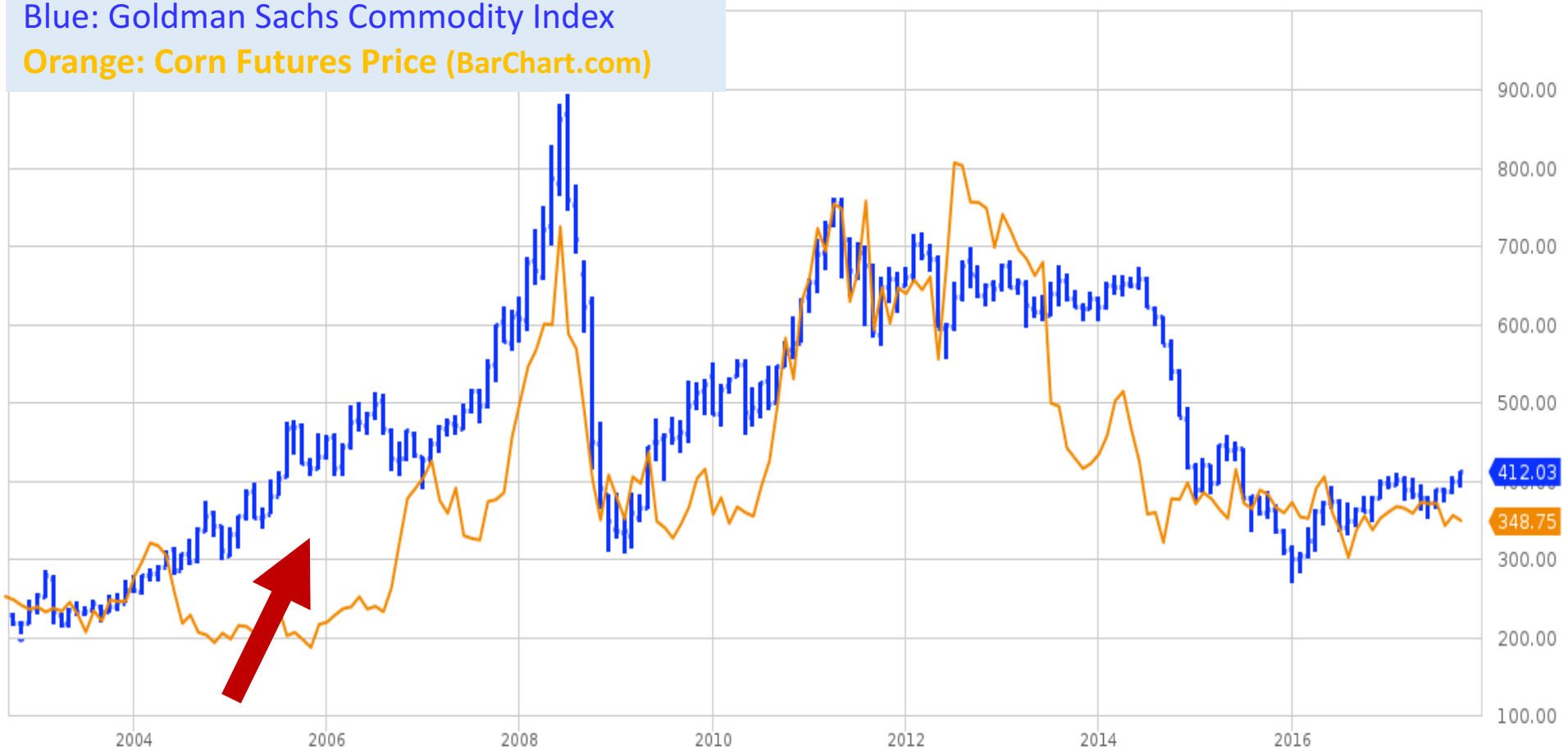
Poultry Is U.S. Consumers Largest Source of Animal Protein

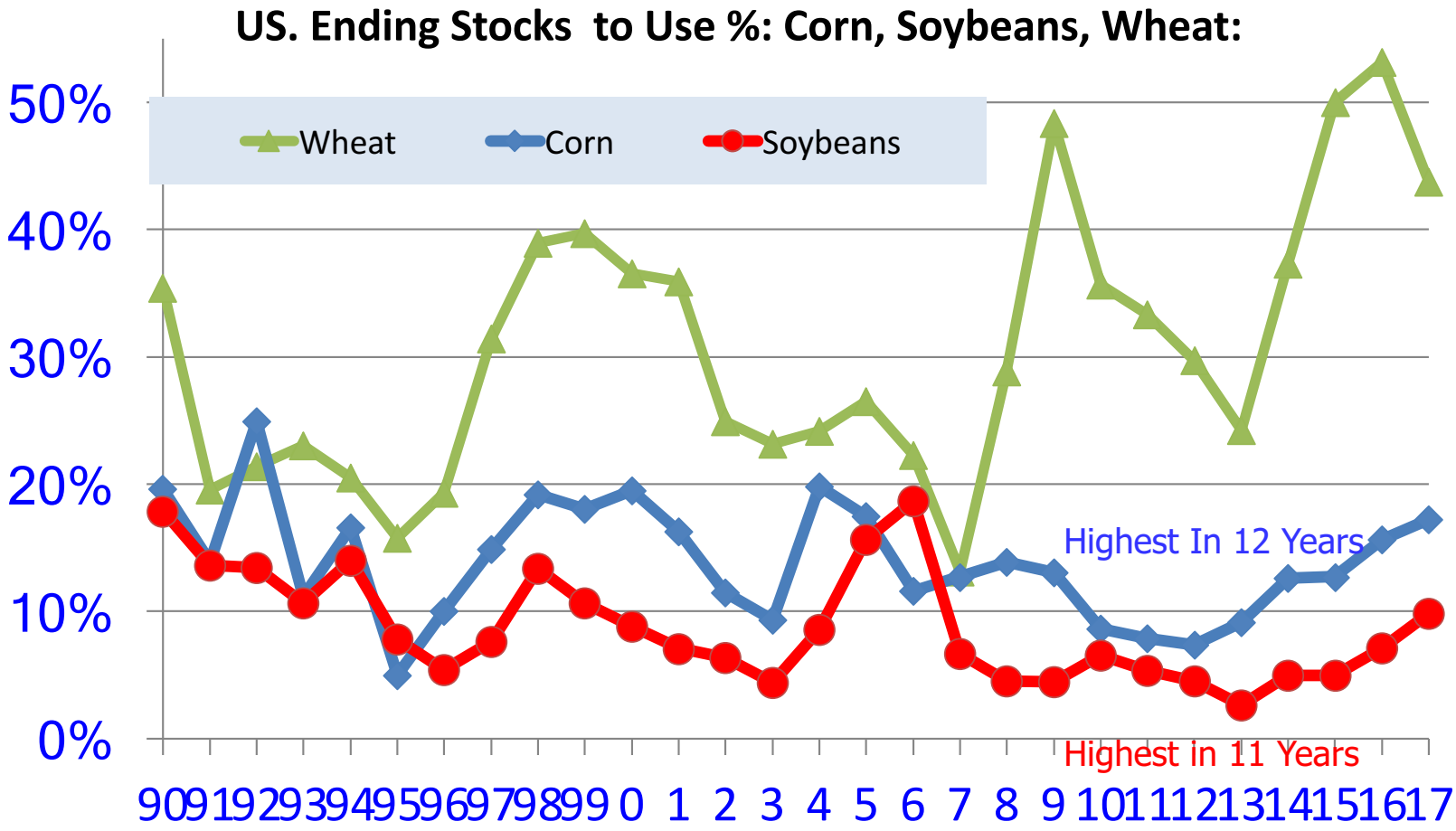


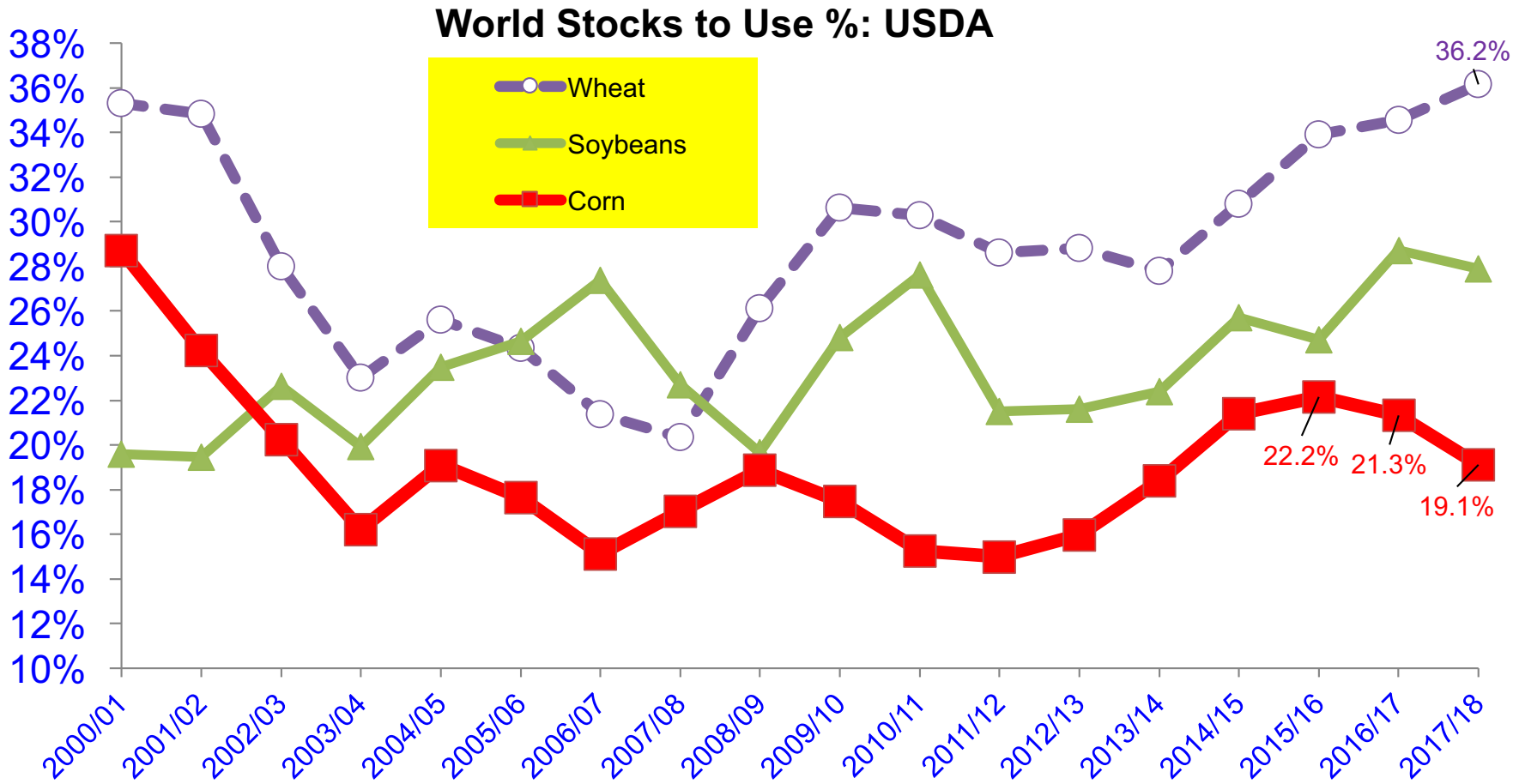
Source: USDA & Purdue Center for Commercial Agriculture, 2018 Projected

Blue: Goldman Sachs Commodity Index

Orange: Corn Futures Price (BarChart.com)







PURDUE UNIVERSITY | Center for Commercial Agriculture

January 5, 2018

July 2018 Corn Futures-BarChart.com

PURDUE UNIVERSITY | Center for Commercial Agriculture

January 5, 2018

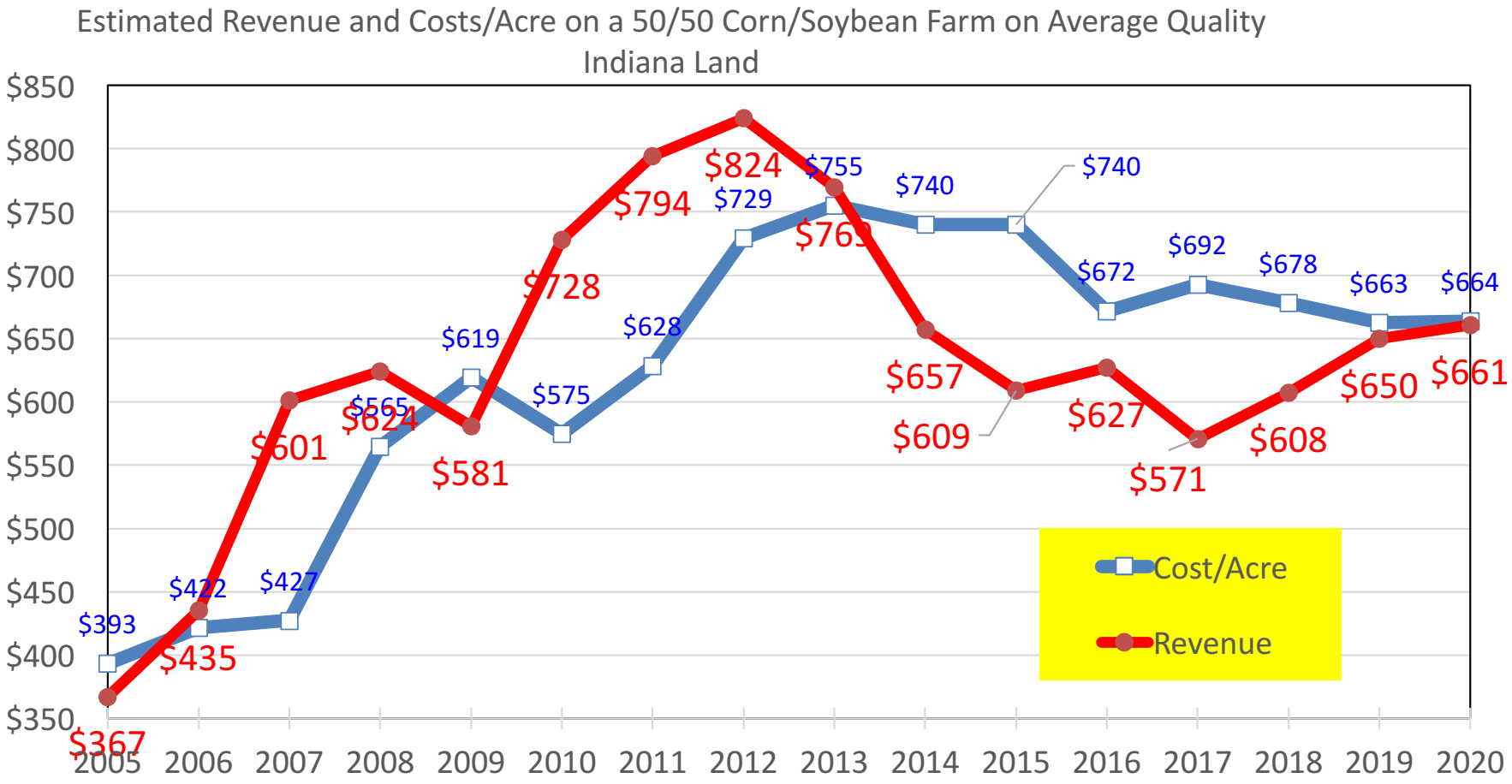
July 2018 Soybean Futures-BarChart.com

PURDUE UNIVERSITY | Center for Commercial Agriculture

January 5, 2018

MYA Farm Price: PAST and FUTURE

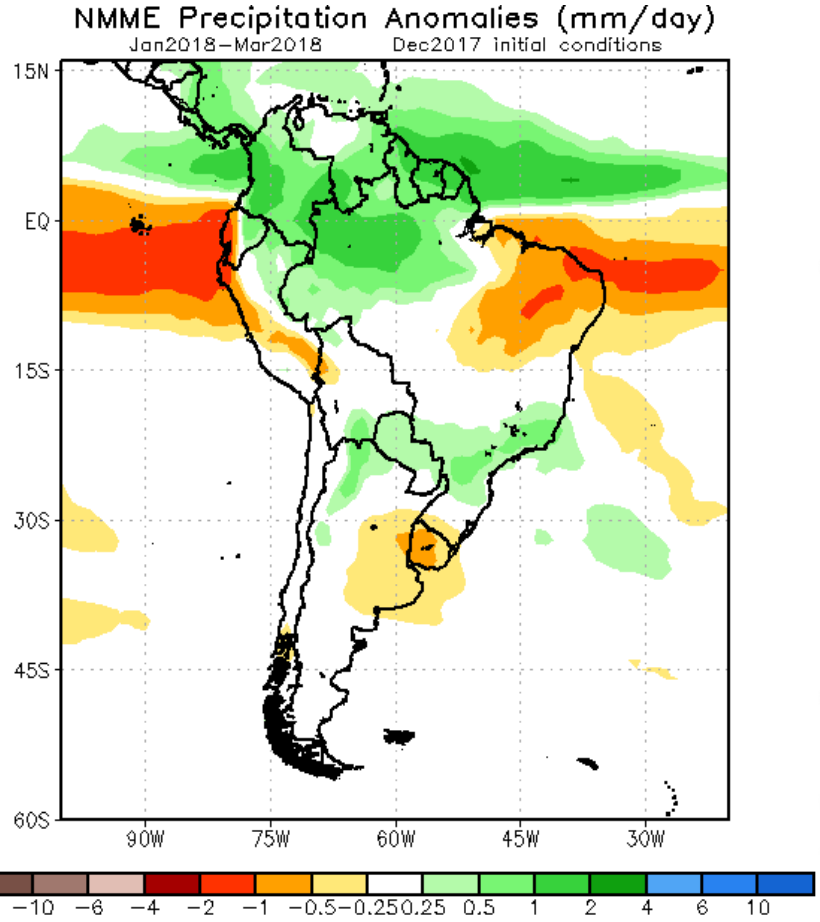
	2012	2013	2014	2015	2016 USDA	2017 USDA	2018 Futr MYA	2019 Futr MYA	2020 Futr MYA
Corn	$6.89	$4.46	$3.70	$3.60	$3.36	$3.20	$3.70	$3.90	$4.00
Soybeans	$14.40	$13.00	$10.10	$8.95	$9.47	$9.30	$9.55	$9.55	$9.45
Wheat	$7.77	$6.87	$5.99	$4.89	$3.89	$4.60	$4.20	$4.80	$5.00

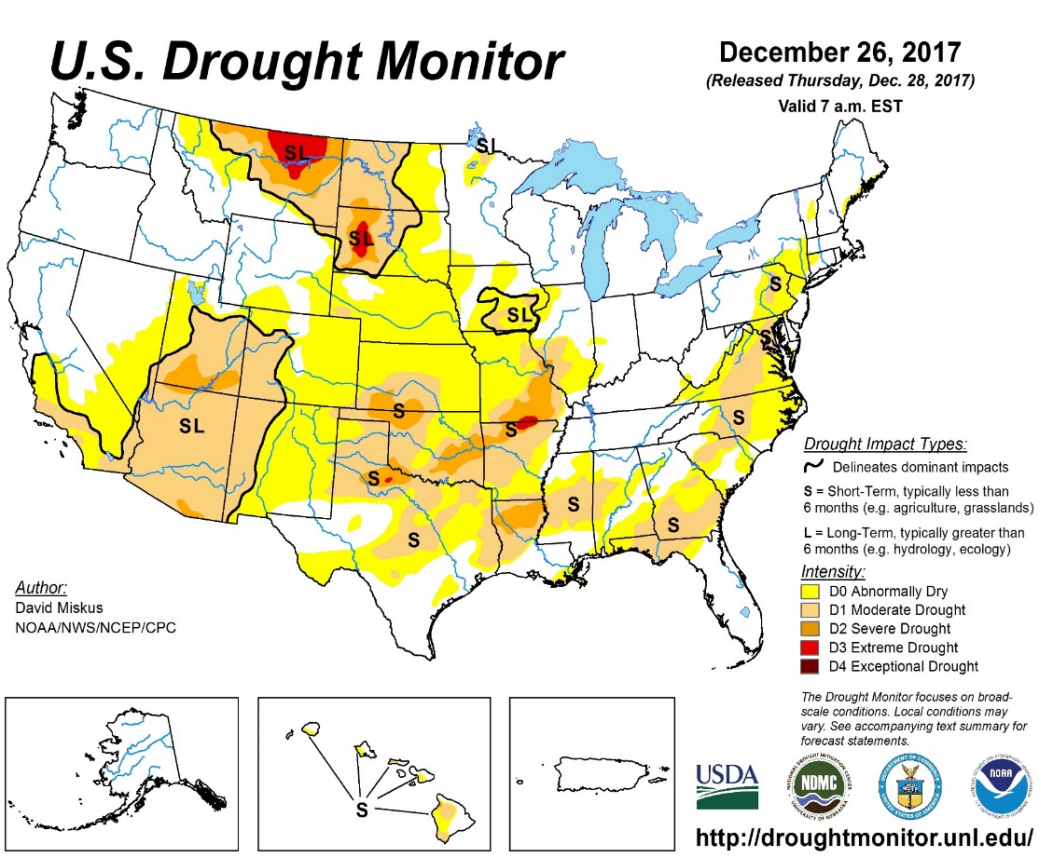


C. Hurt, Purdue, January 2018

PURDUE UNIVERSITY | Center for Commercial Agriculture

January 5, 2018





Current Prices Favor Rotation Soybeans Over Continuous Corn

Corn Prices Required to Produce Per Acre Returns Equivalent to Soybeans

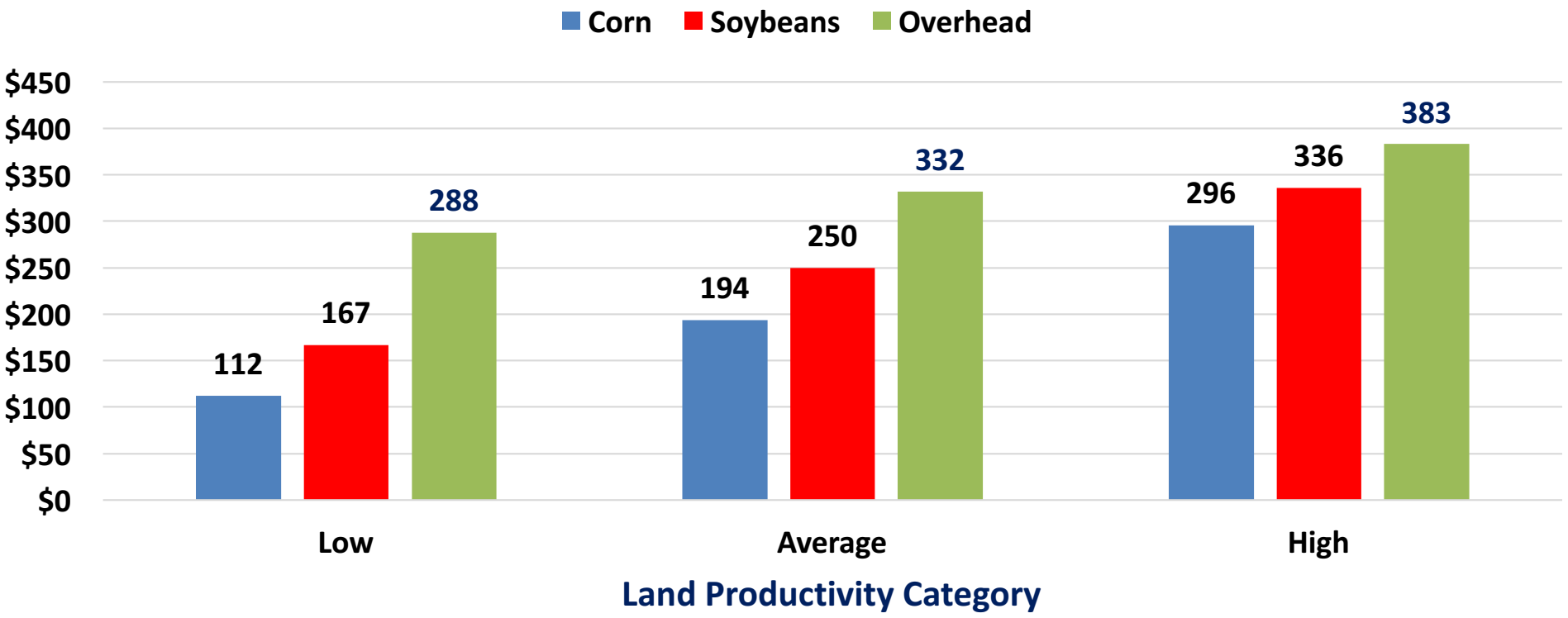
Soybean Price	Low Productivity (C=130; SB=43)	Avg. Productivity (C=162; SB=53)	High Productivity (C=194; SB=63)
$8.50	$4.03	$3.95	$3.80
$9.00	$4.20	$4.11	$3.96
$9.50	**$4.37**	**$4.27**	**$4.12**
$10.00	$4.53	$4.44	$4.28
$10.50	$4.70	$4.60	$4.45
$11.00	$4.86	$4.77	$4.61

Continuous Soybeans and Rotation Corn Comparison

Corn Prices Required to Produce Per Acre Returns Equivalent to Soybeans

Soybean Price	Low Productivity (C=138; SB=43)	Avg. Productivity (C=172; SB=53)	High Productivity (C=206; SB=63)
$8.50	$3.68	$3.61	$3.49
$9.00	$3.84	$3.77	$3.64
$9.50	**$4.00**	**$3.92**	**$3.79**
$10.00	$4.15	$4.08	$3.95
$10.50	$4.31	$4.23	$4.10
$11.00	$4.46	$4.38	$4.25

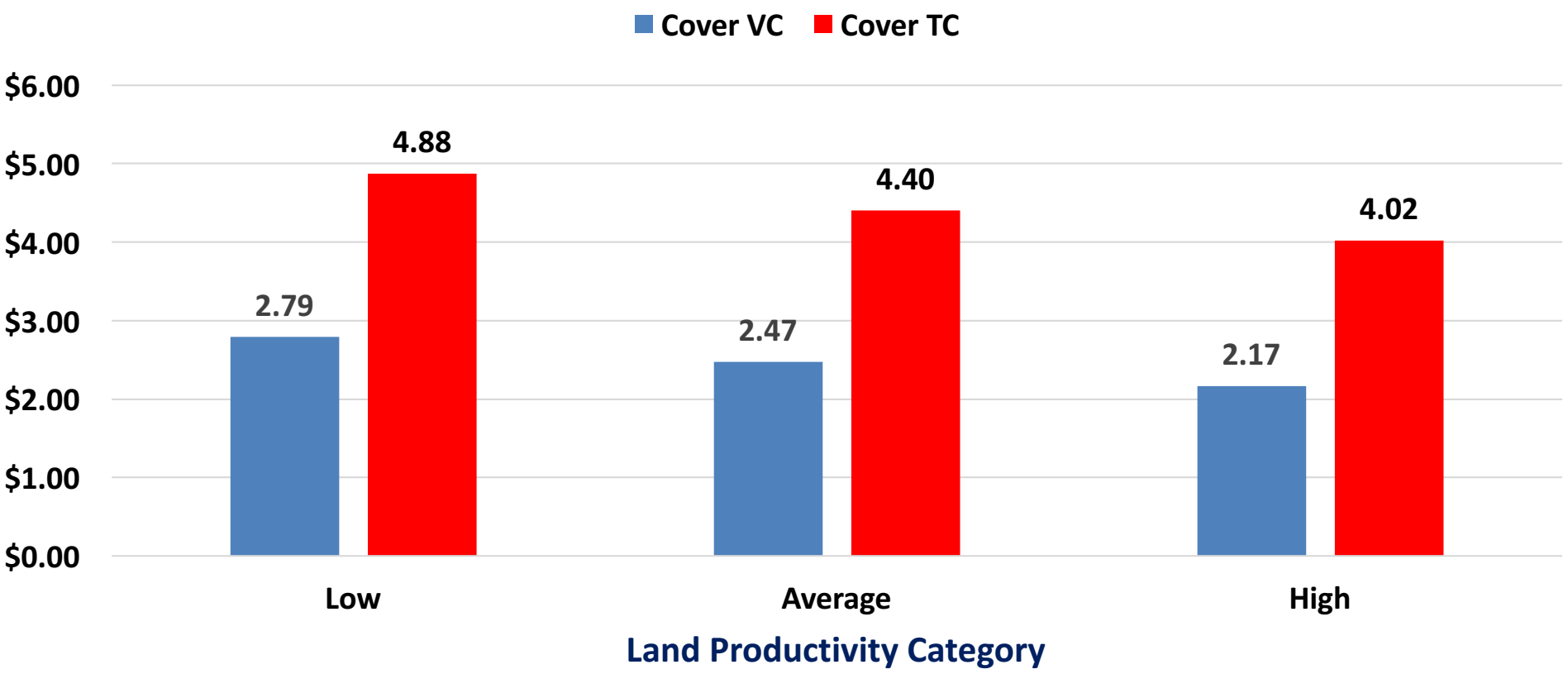
2018 Contribution Margin per Acre for Rotation Corn and Soybeans in Indiana



PURDUE UNIVERSITY | Center for Commercial Agriculture

January 5, 2018

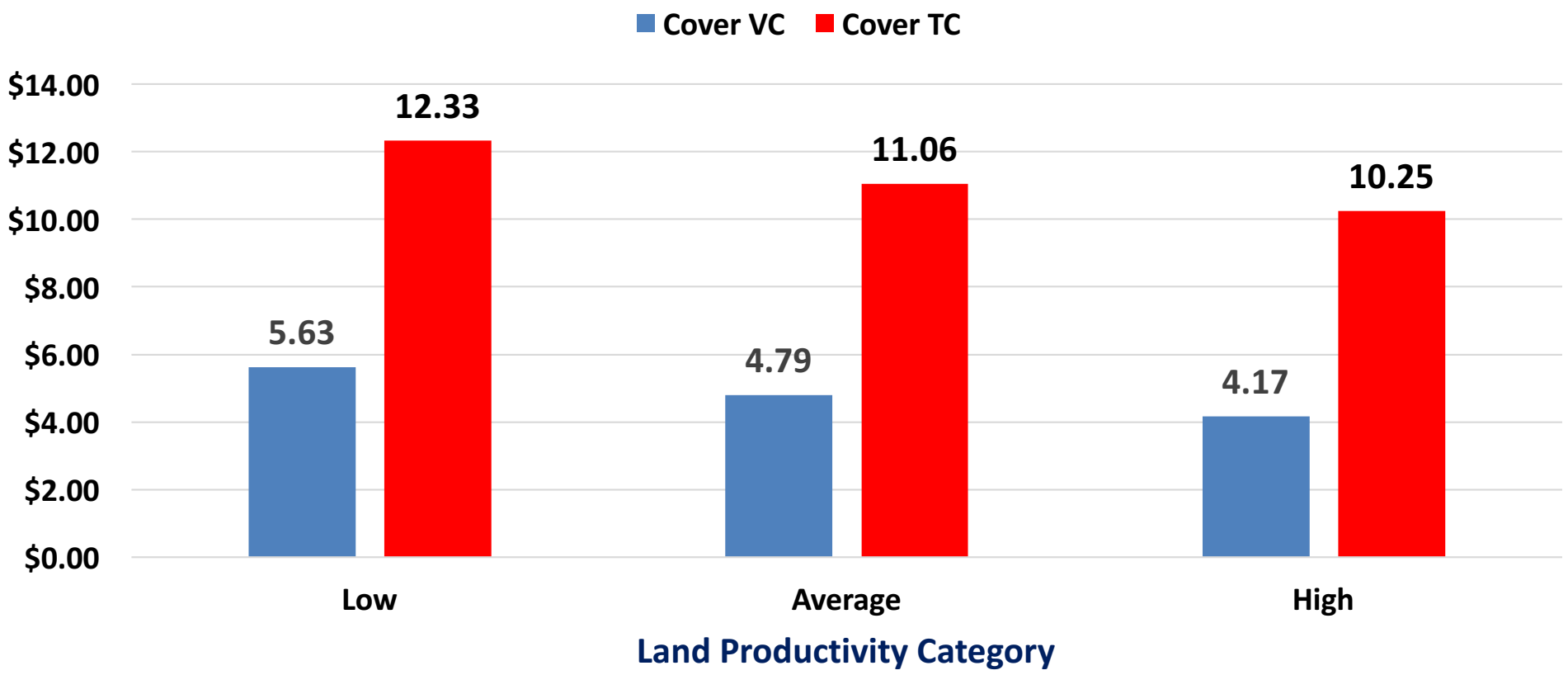
2018 Breakeven Prices for Rotation Corn in Indiana



PURDUE UNIVERSITY | Center for Commercial Agriculture

January 5, 2018

2018 Breakeven Prices for Rotation Soybeans in Indiana



PURDUE UNIVERSITY | Center for Commercial Agriculture

January 5, 2018

Reducing Per Unit Costs

(Variable Cost + Fixed Cost) ÷ Yield = Total Cost per Bushel

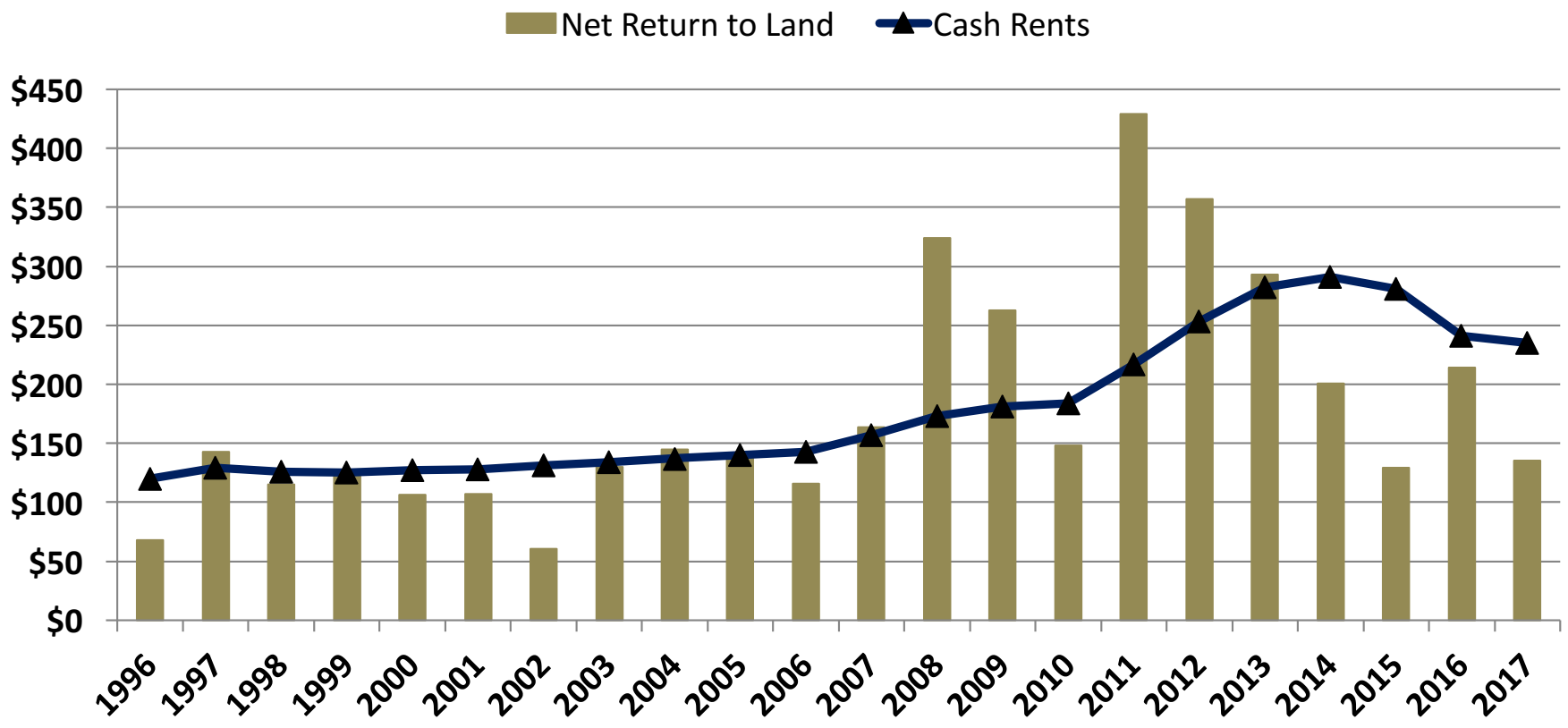
- **Reduce cost by:**
  - **Reducing variable cost without impacting yield**
  - **Reducing fixed cost (lowers fixed cost per bushel)**
  - **Improving yield without increasing variable or fixed cost**

What is My Cost of Production?

Illustrated Below: High Productivity Soil in Indiana, Trend Yields

Cost Category	Rotation Corn	Rotation Soybeans
Land (Fixed)	$1.19	$3.90
Machinery (Var. & Fixed)	$0.68	$2.05
Fertilizer (Variable)	$0.61	$0.86
Seed (Variable)	$0.54	$1.06
Pesticides (Variable)	$0.29	$1.03
Labor (Fixed)	$0.18	$0.59
Sub-Total	$3.49	$9.49
Total Cost per Bushel	$4.02	$10.25

Cash Rent and Net Return to Land, West Central Indiana



Management Philosophy-2018

- Think tight margins
- Look for modest price increases
  - Earn market carrying charges & basis improvement
  - New Purdue CCA Crop Basis Tool on the web next week
- Think cost control
- Think preservation of capital
- Think about getting through 2018
- Will there be improvement in late-2018 and 2019?
- Know your financial position...work with your lender

Purdue Top Farmer Conference

Tues. Jan. 9, 2018

Registration details at: Purdue.edu/commercialag

Purdue.edu/agbarometer

PURDUE UNIVERSITY | Center for Commercial Agriculture

AG ECONOMY BAROMETER
PURDUE UNIVERSITY · CME GROUP

January 5, 2018