

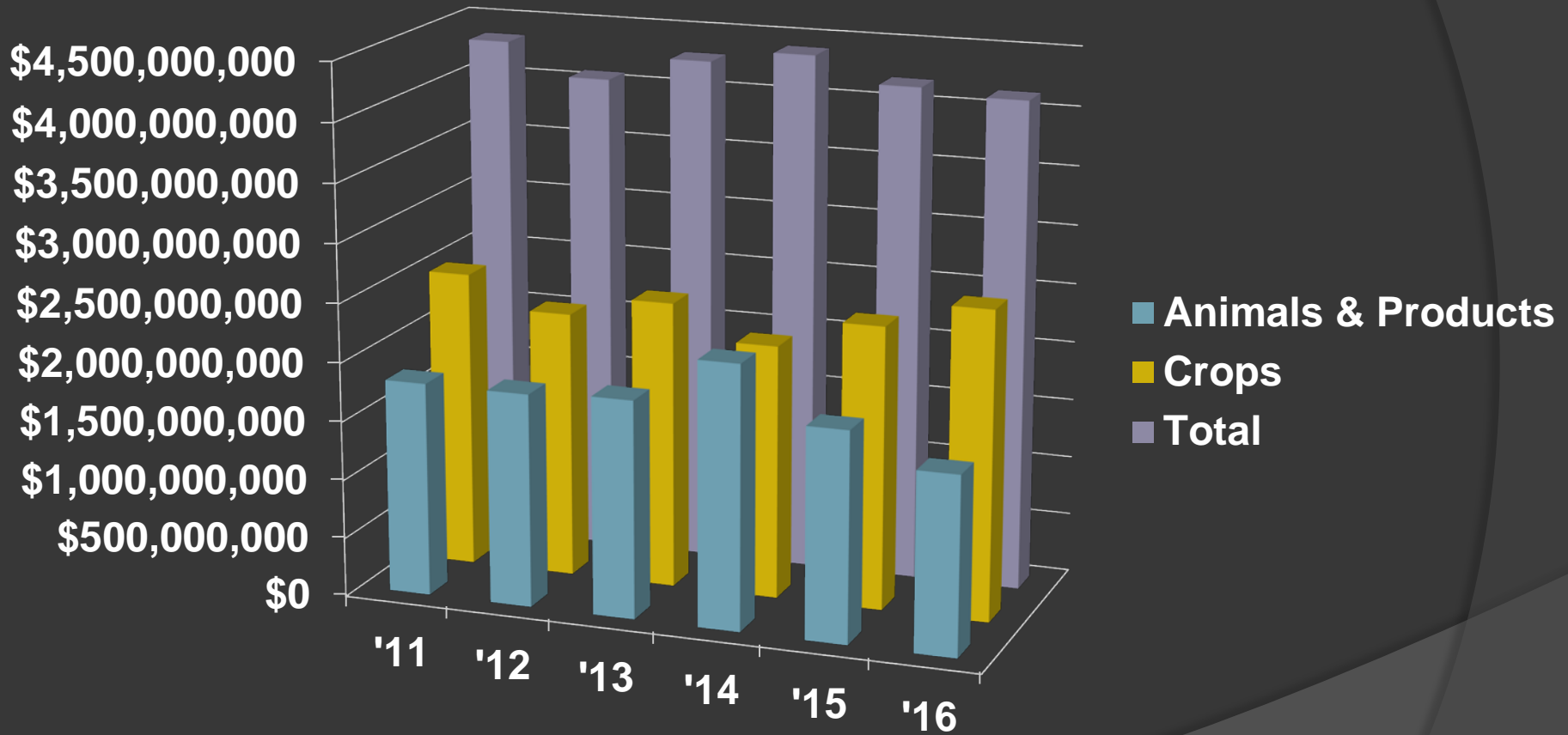
Arizona Ag Commodities

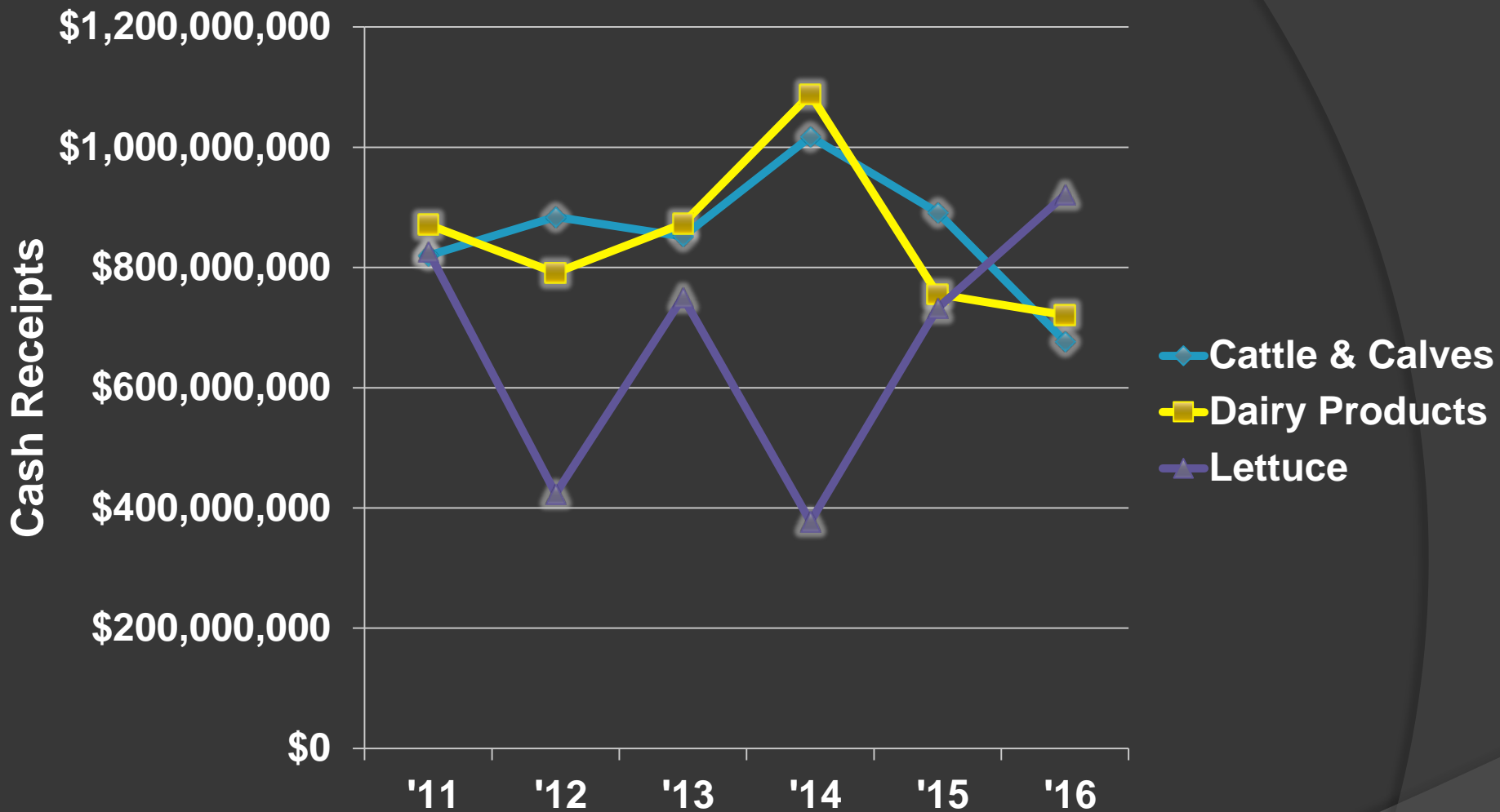
Larry Kreger Jr.

Appraiser

Farm Credit Services Southwest

Cash Receipts by Sector



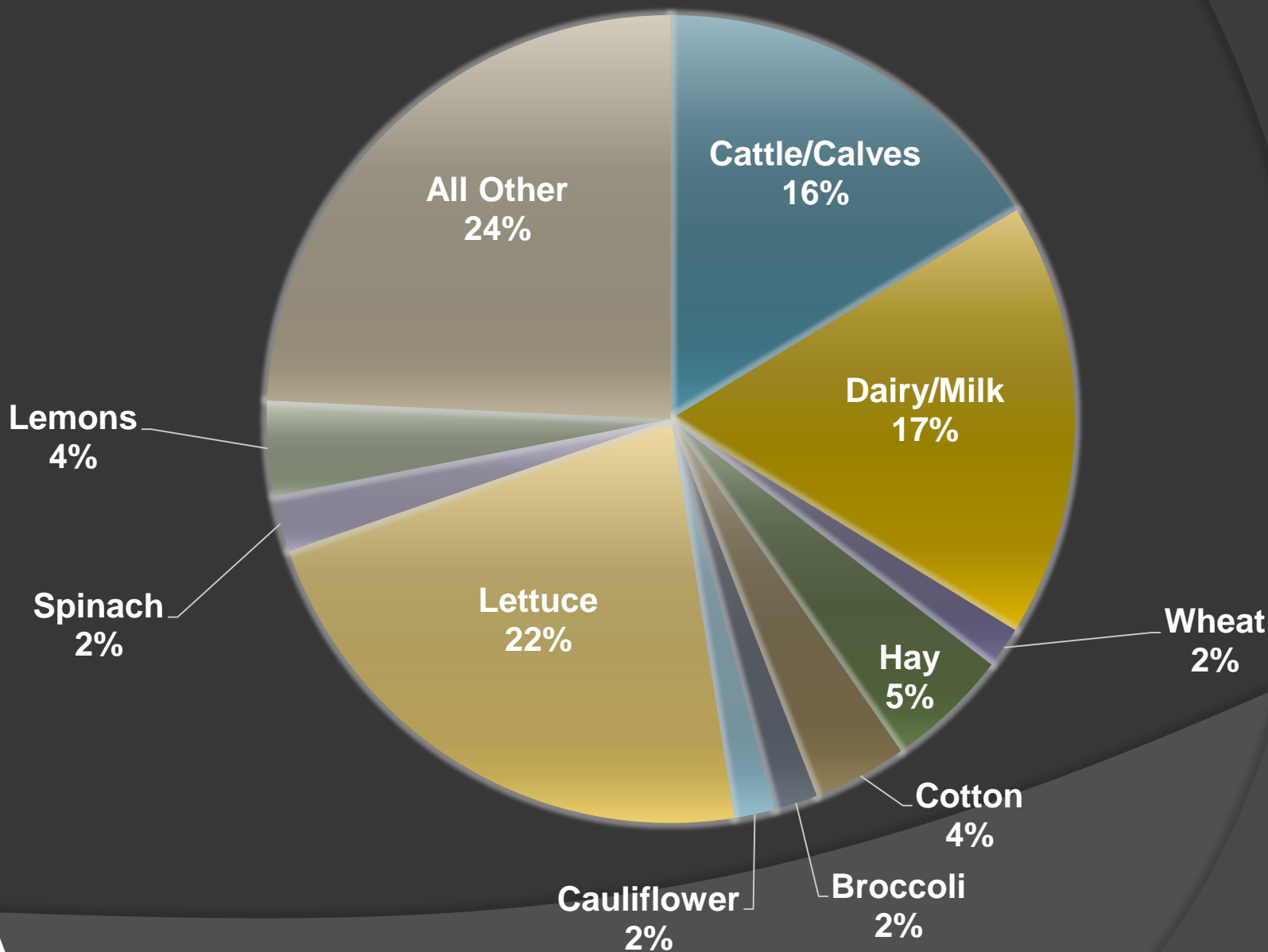


Cattle & Calves = +124% from 2011-2014 and -33% from 2014-2016

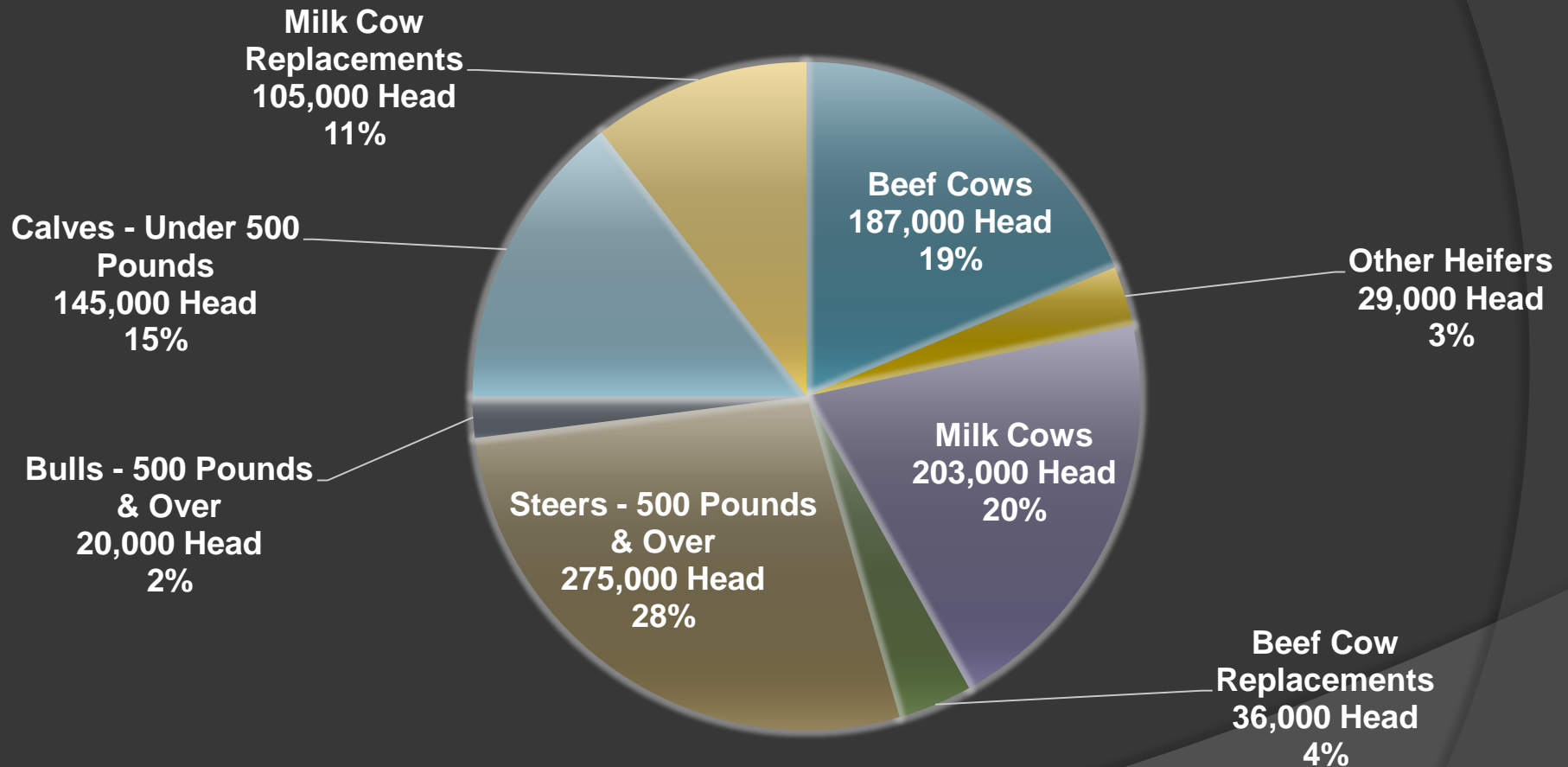
Dairy Products = +125% from 2011-2014 and -34% from 2014-2016

Lettuce = -54% from 2011-2014 and +244% from 2014-2016

2016 Cash Receipts by Commodity

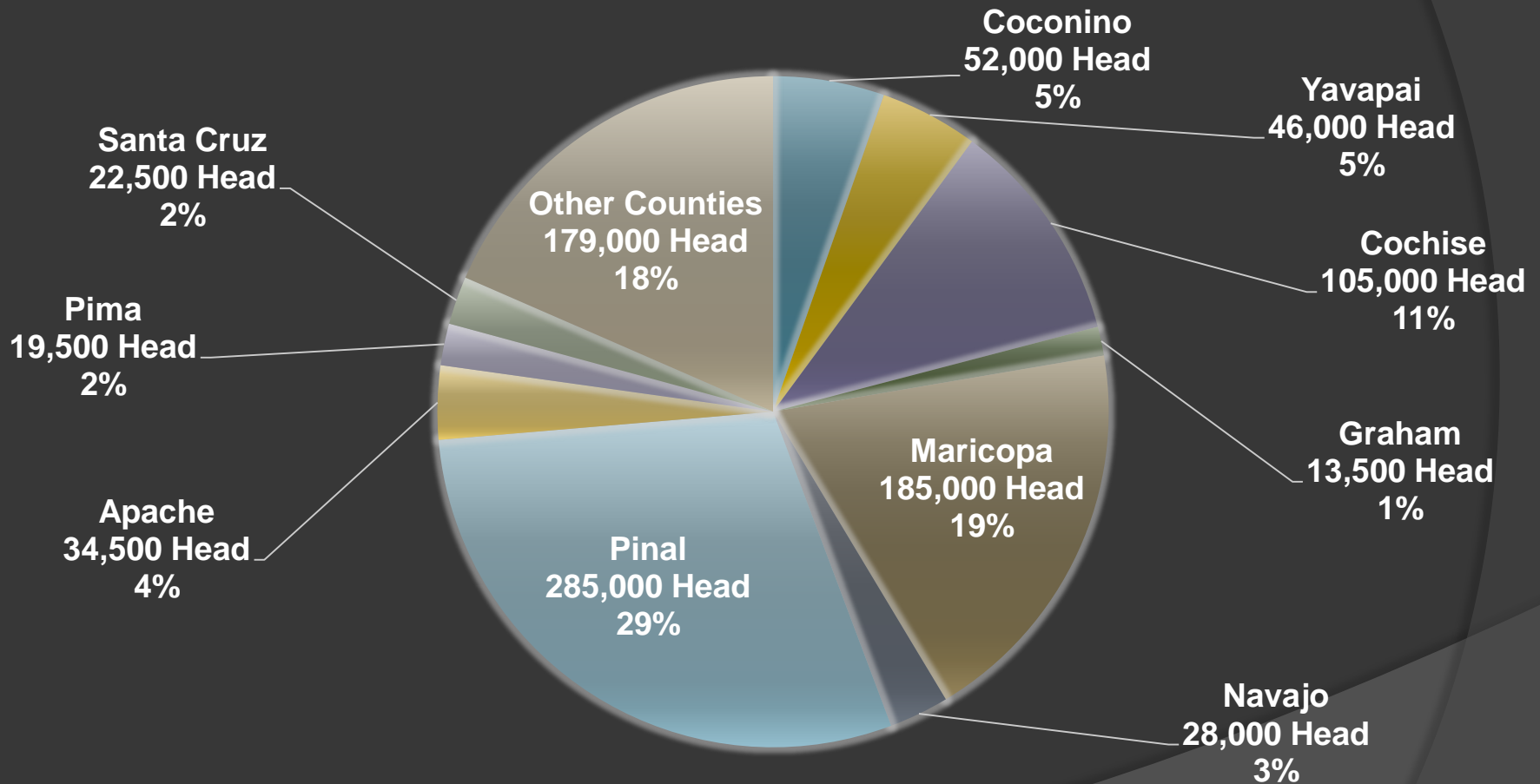


Cattle Inventory – 01/01/18



Total Inventory = 1,000,000 Head

Cattle Inventory on 01/01/17 by County

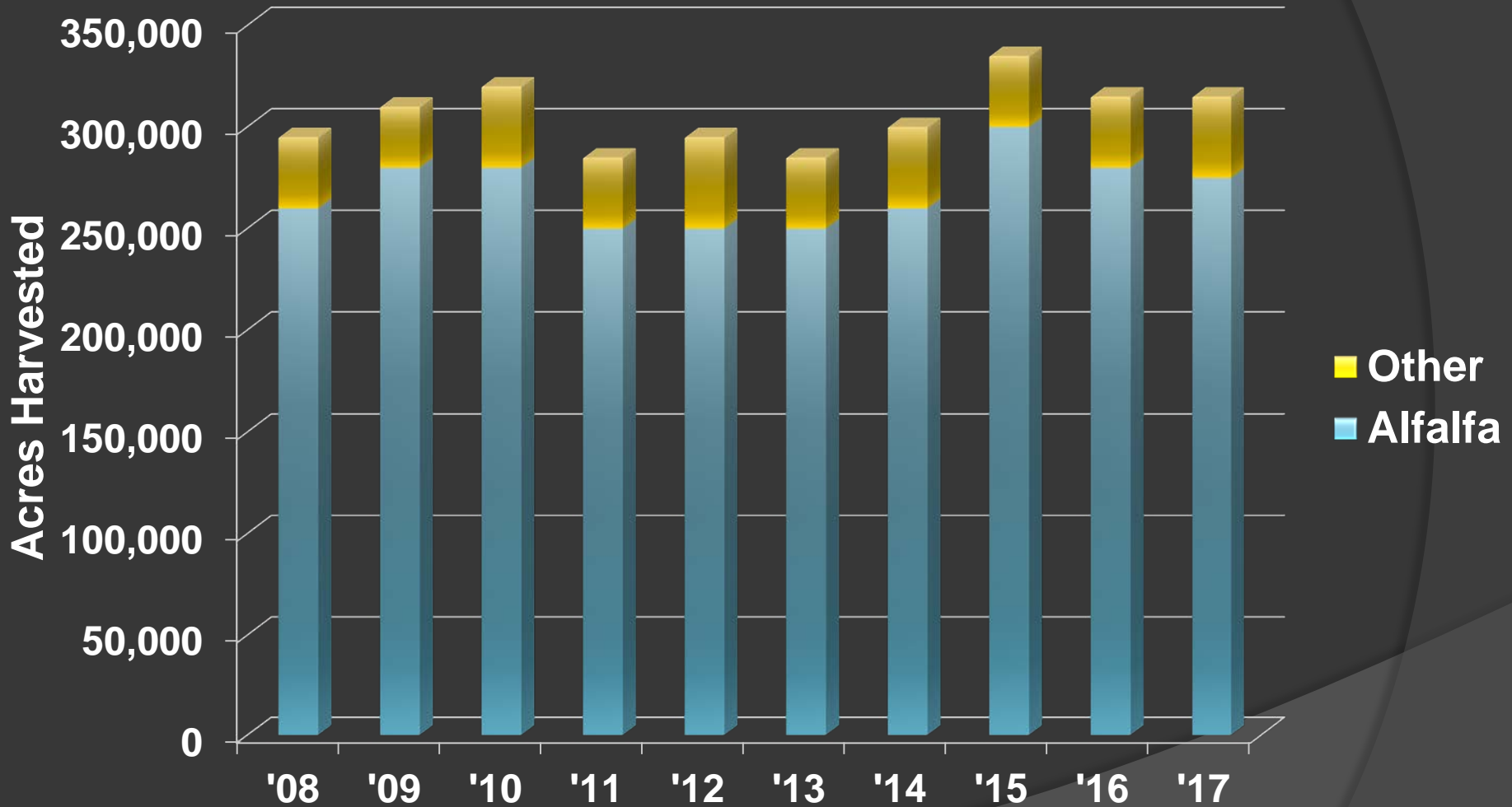


Total Inventory = 970,000 Head

Top 10 Commodities in 2017 by Acres Harvested (Reported)

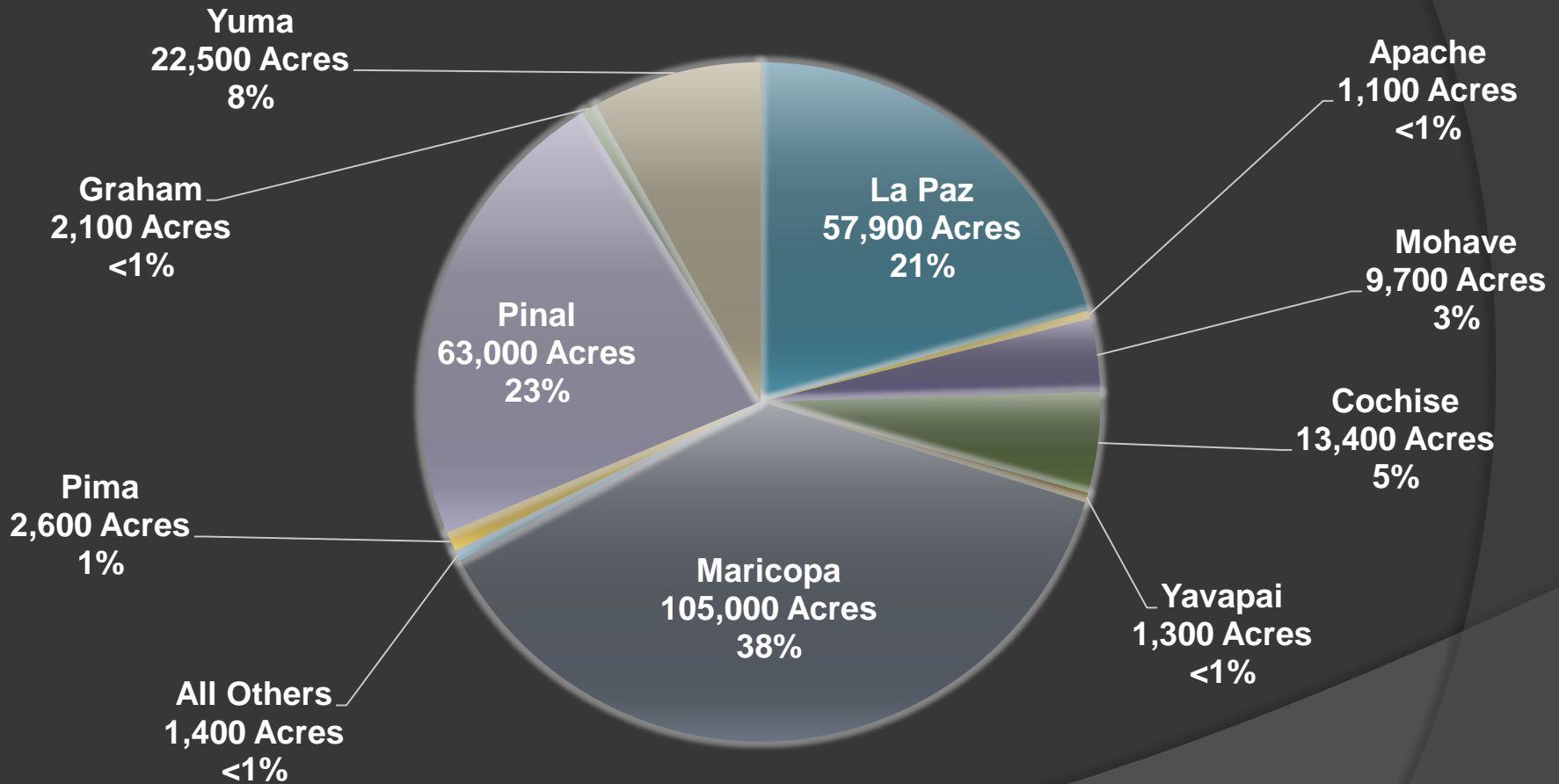
- 1) Hay – 315,000 Acres (unchanged from 2016)
- 2) Cotton – 173,500 Acres (+34% from 2016)
- 3) Wheat – 107,000 Acres (+4 from 2016)
- 4) Corn for Grain – 32,000 Acres (-36% from 2016)
- 5) Corn for Silage – 32,000 Acres (-27% from 2016)
- 6) Head Lettuce – 39,200 Acres (+6% from 2016)
- 7) Romaine Lettuce – 28,000 Acres (+7% from 2016)
- 8) Barley – 17,000 Acres (+6% from 2016)
- 9) Cantaloupe – 15,700 Acres (-1% from 2016)
- 10) Spinach – 12,800 Acres (+14% from 2016)

Hay



Trend = 6% decline from 2015-2017

2016 Alfalfa Hay Acres Harvested by County



280,000 Total Acres Harvested in 2016

Alfalfa Hay

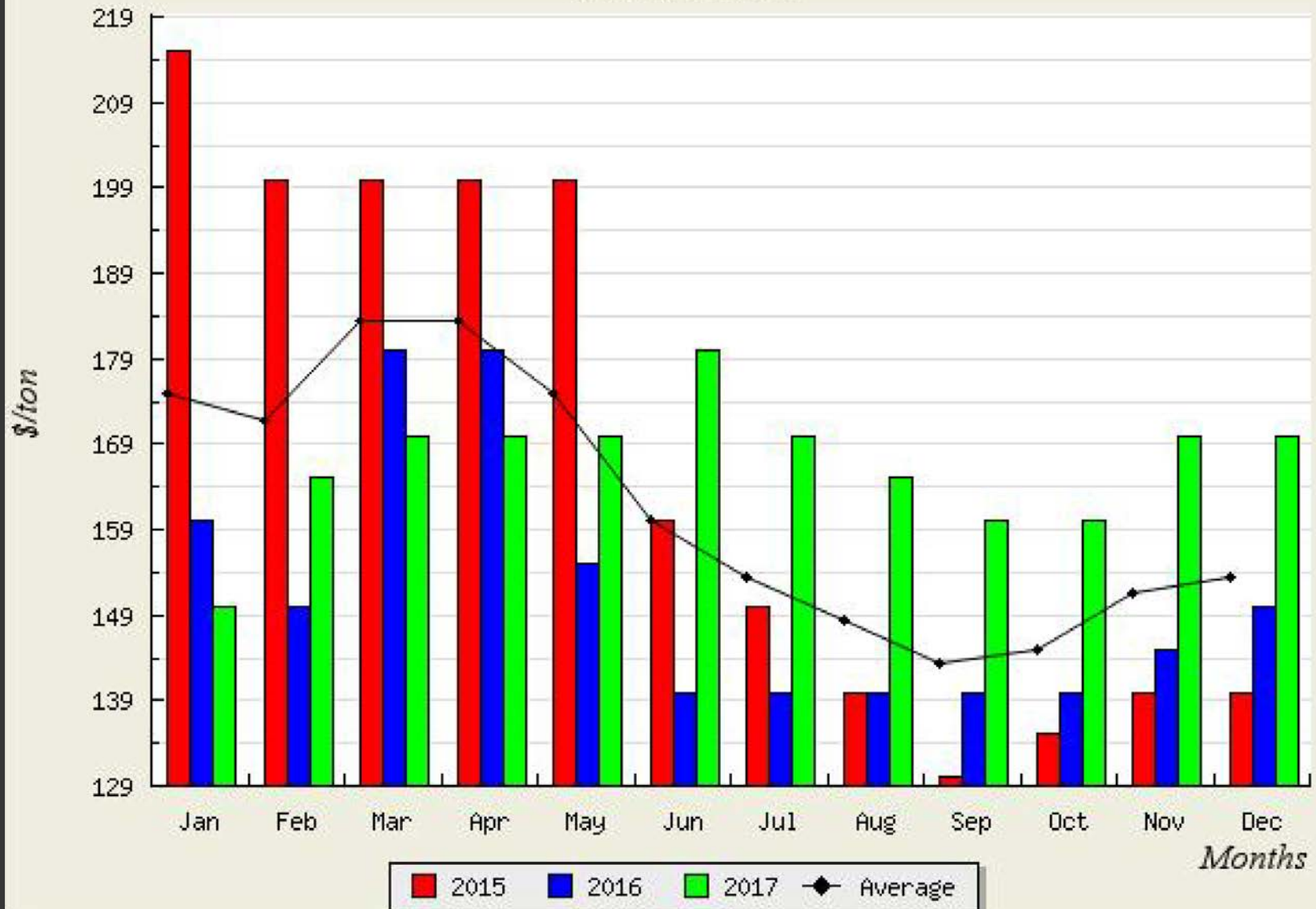
Yield vs Price



2015-2017 Trend = Yield is stable and Price is undetermined

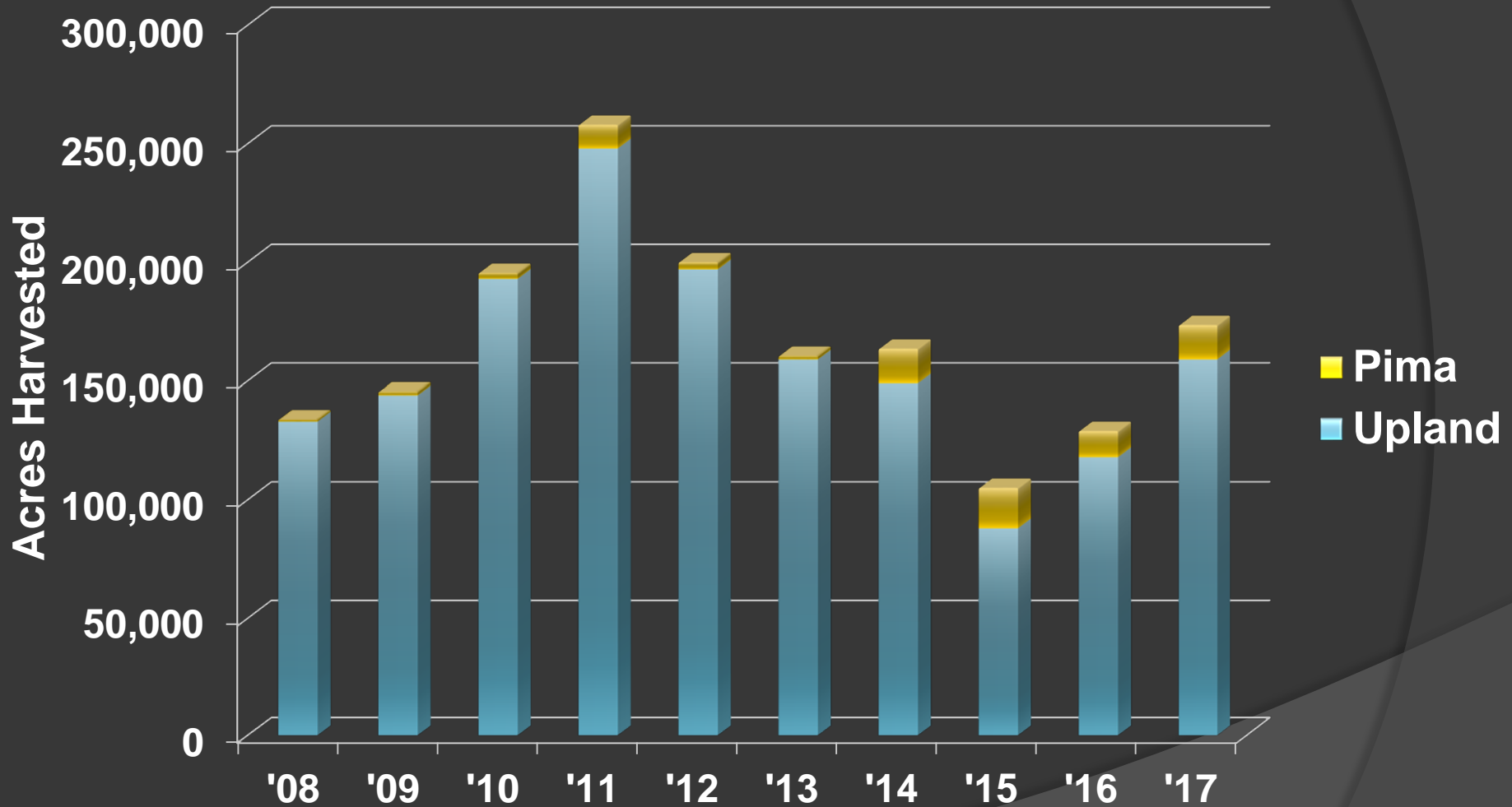
Hay, Alfalfa - Price Received

Area: ARIZONA



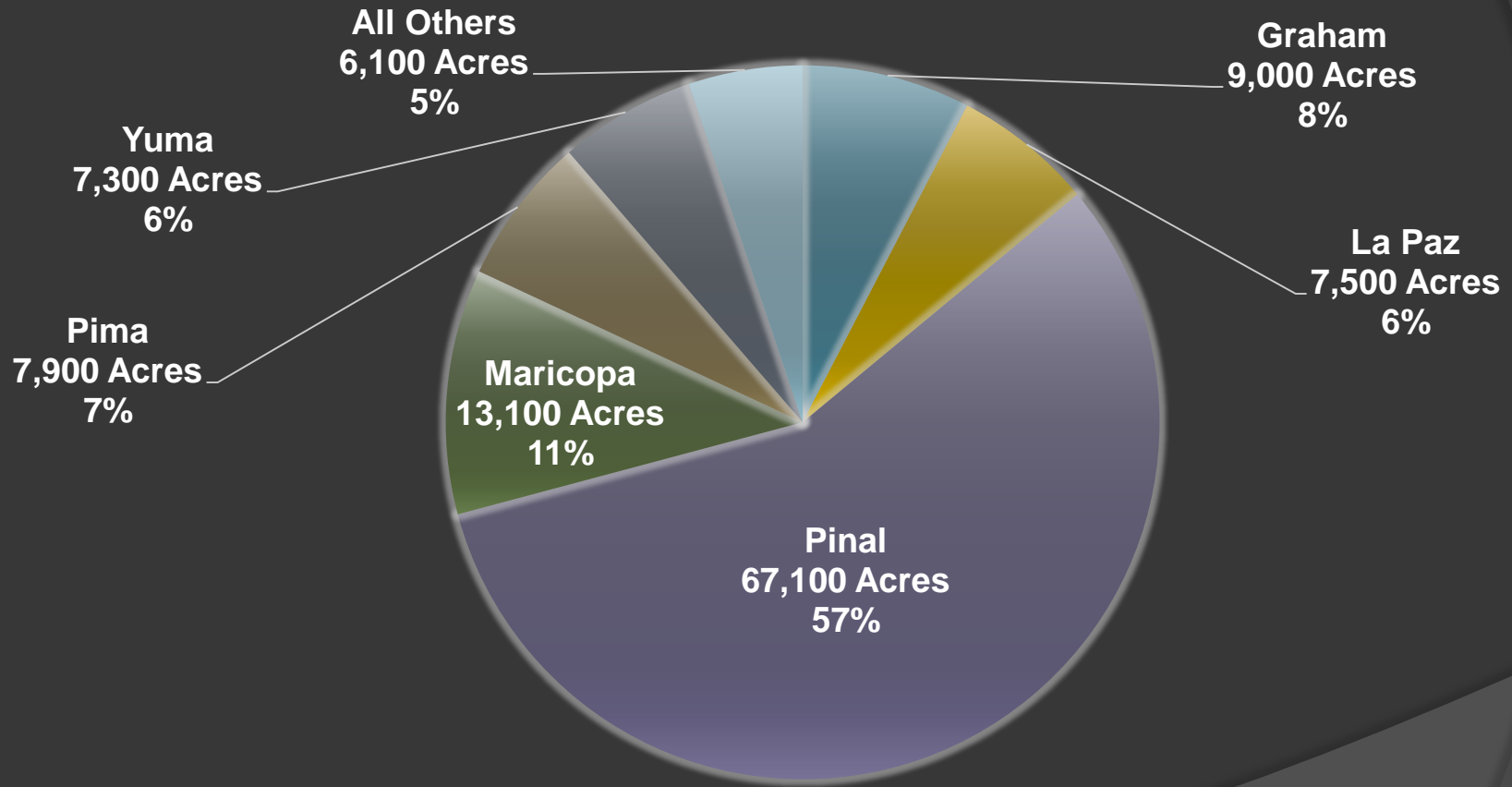
Source: Brian Gould, Agricultural and Applied Economics, UW Madison

Cotton



Trend = 65% increase from 2015-2017

2016 Upland Cotton Acres Harvested by County



118,000 Total Acres Harvested in 2016

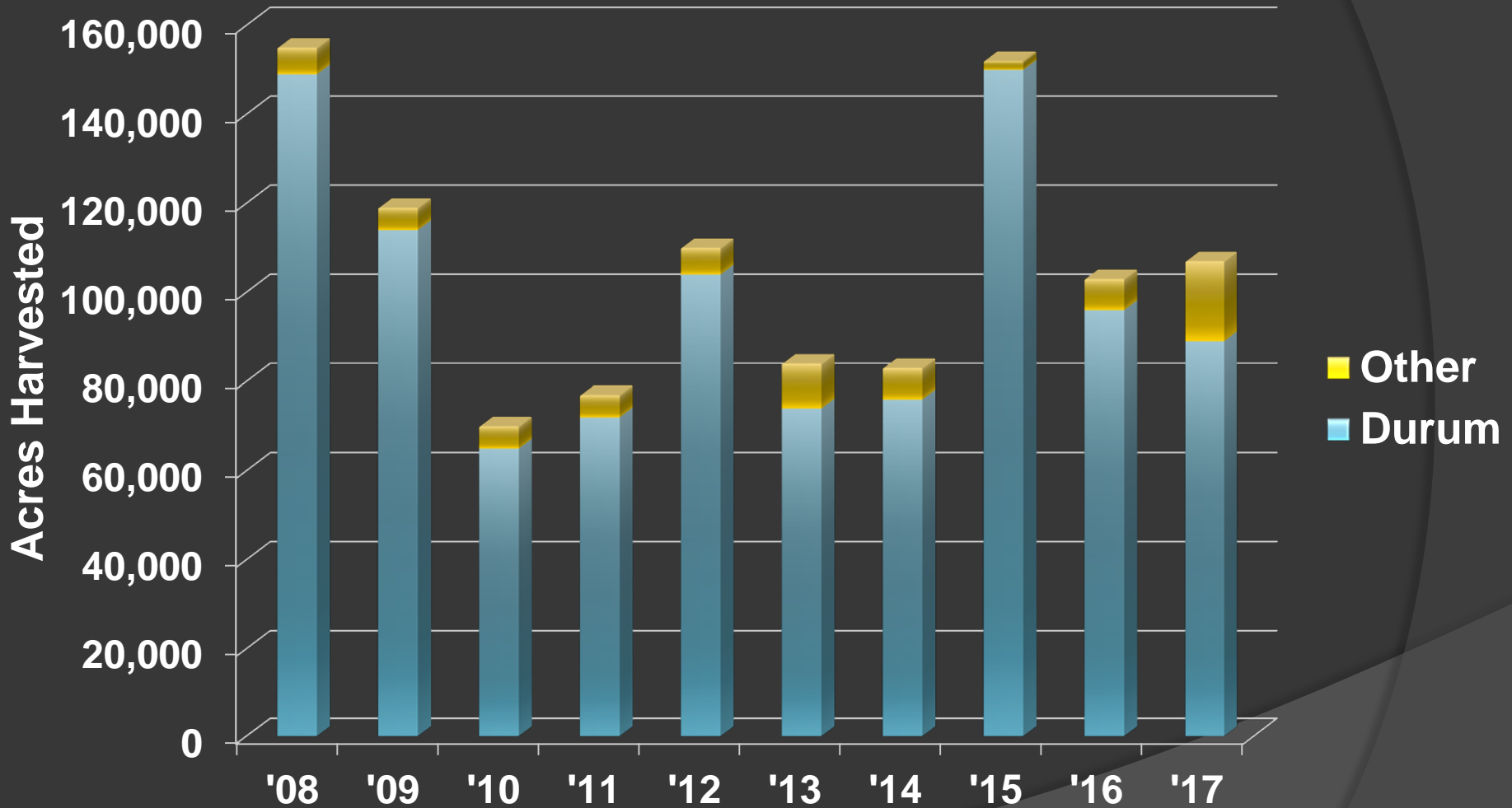
Upland Cotton

Yield vs Price



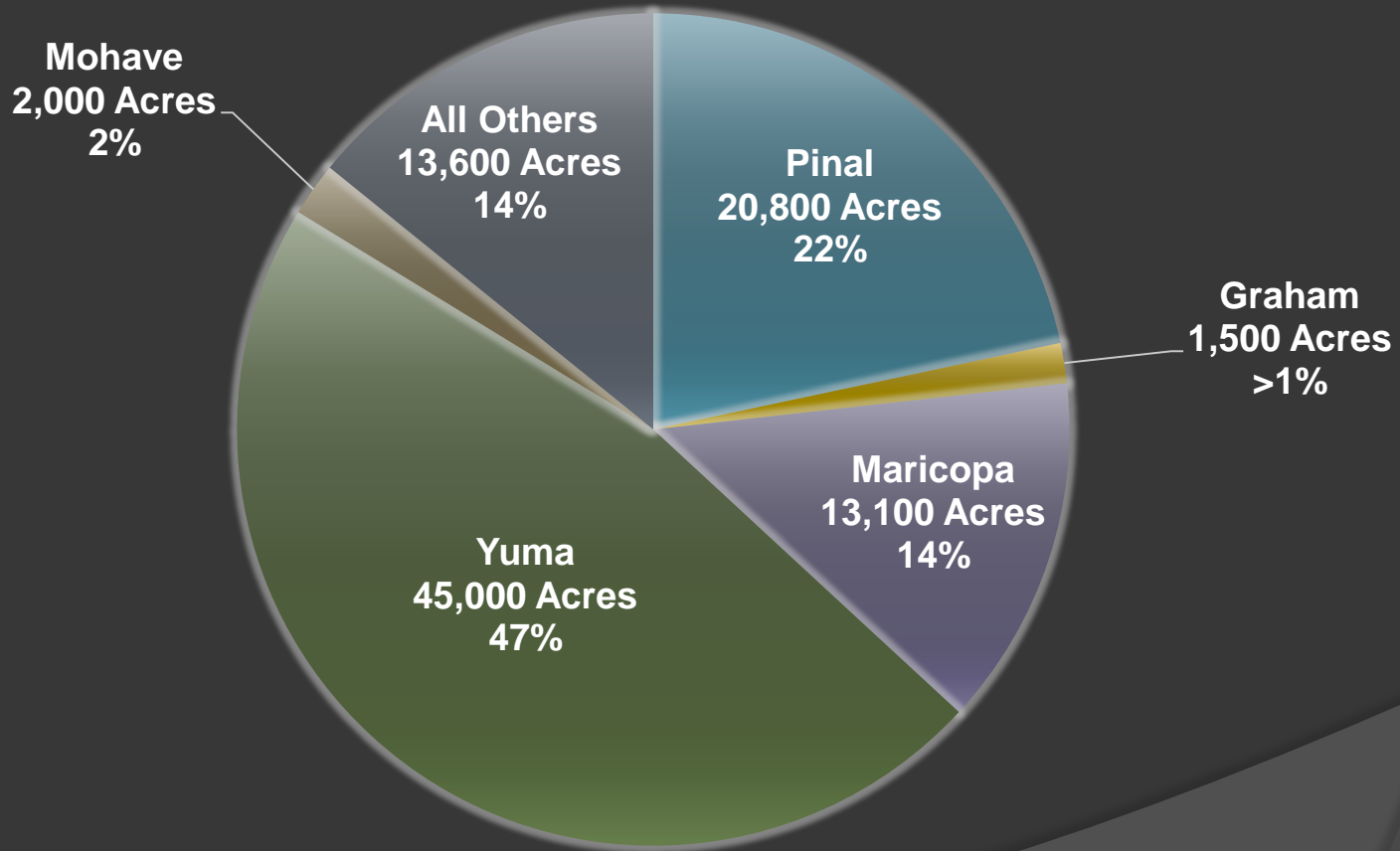
2015-2017 Trend = Yield is stable and Price is undetermined

Wheat



Trend = 30% decline from 2015-2017

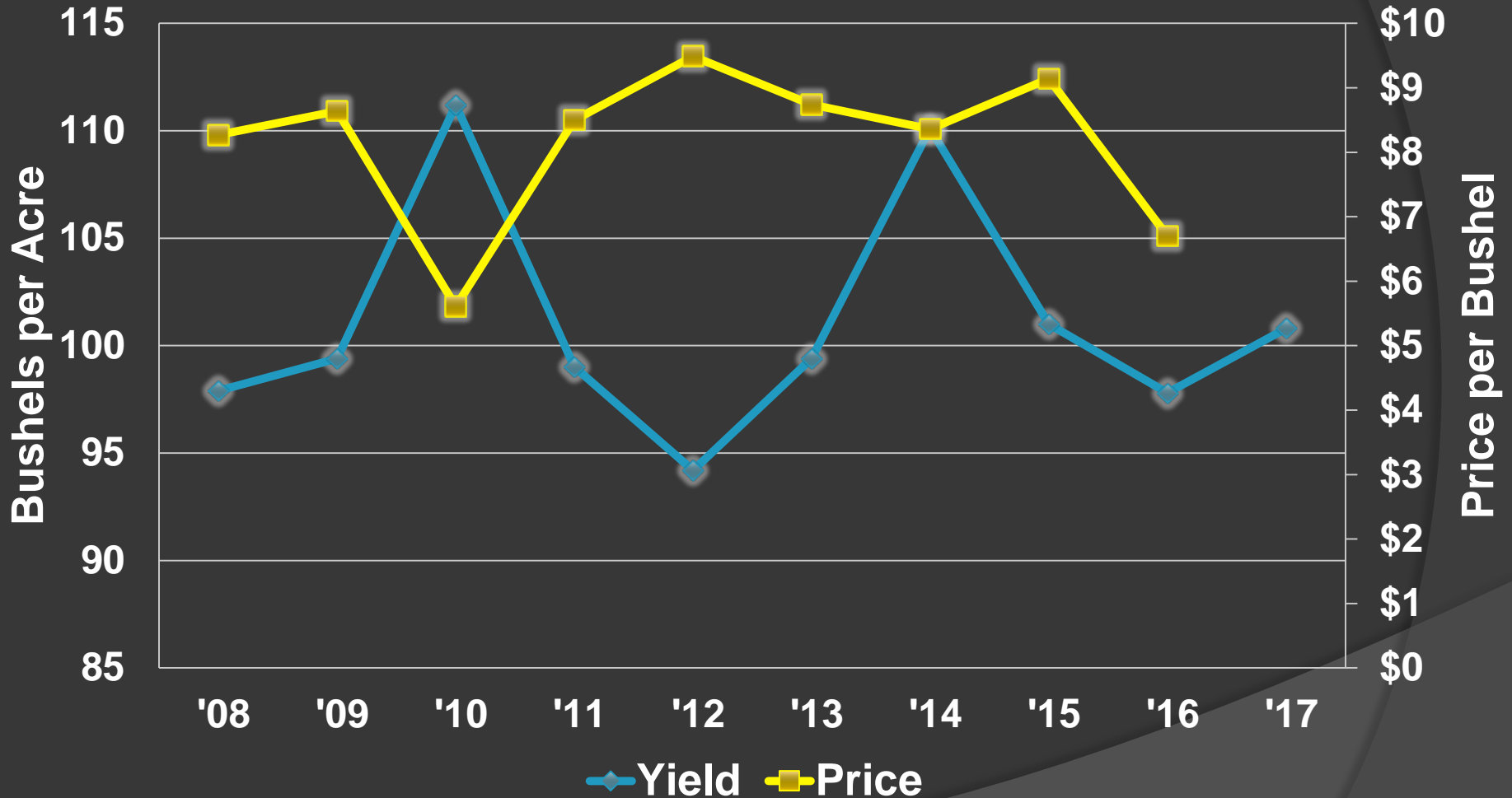
2016 Durum Wheat Acres Harvested by County



96,000 Total Acres Harvested in 2016

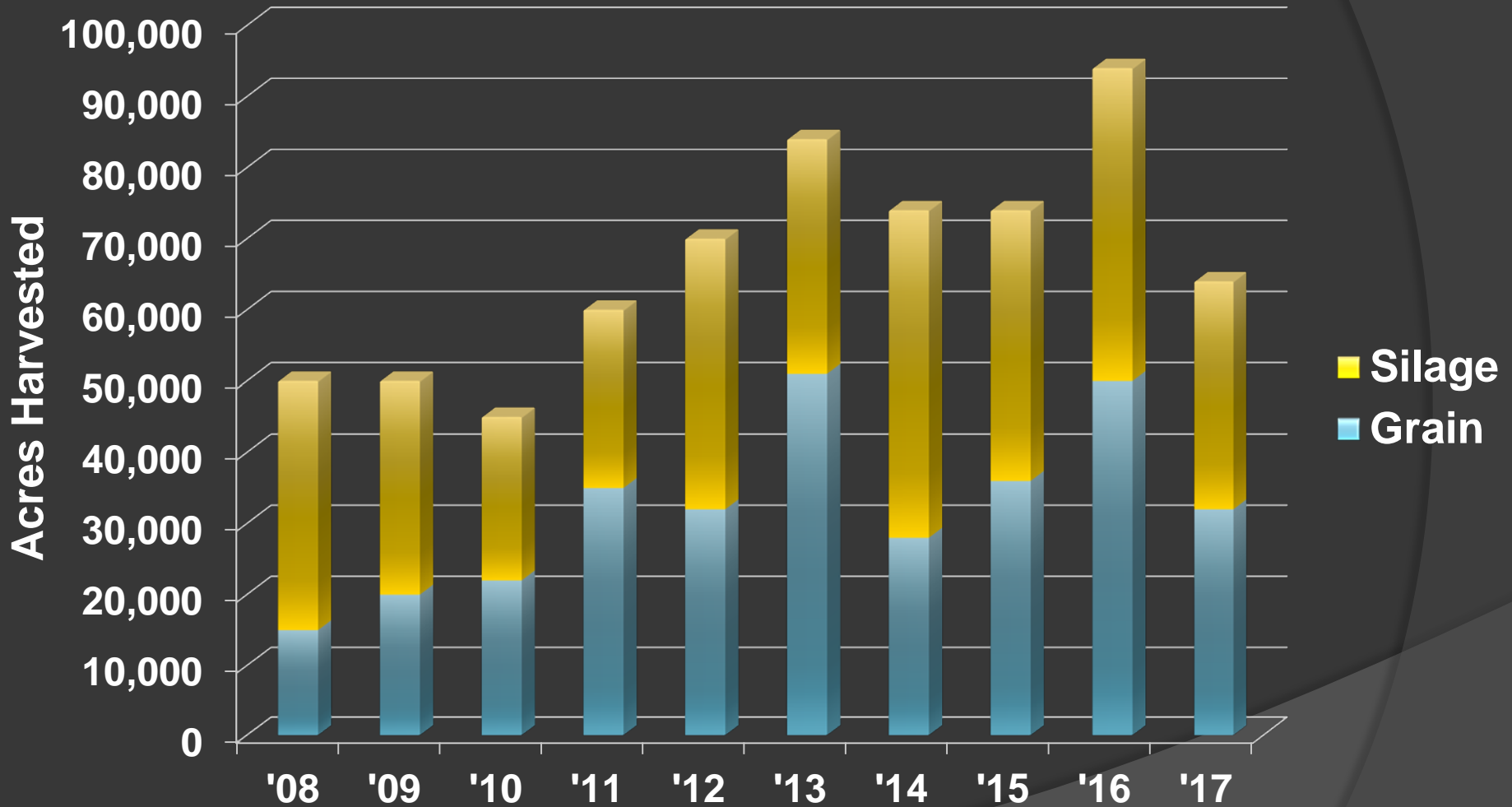
Wheat

Yield vs Price



2015-2017 Trend = Yield is stable and Price is undetermined

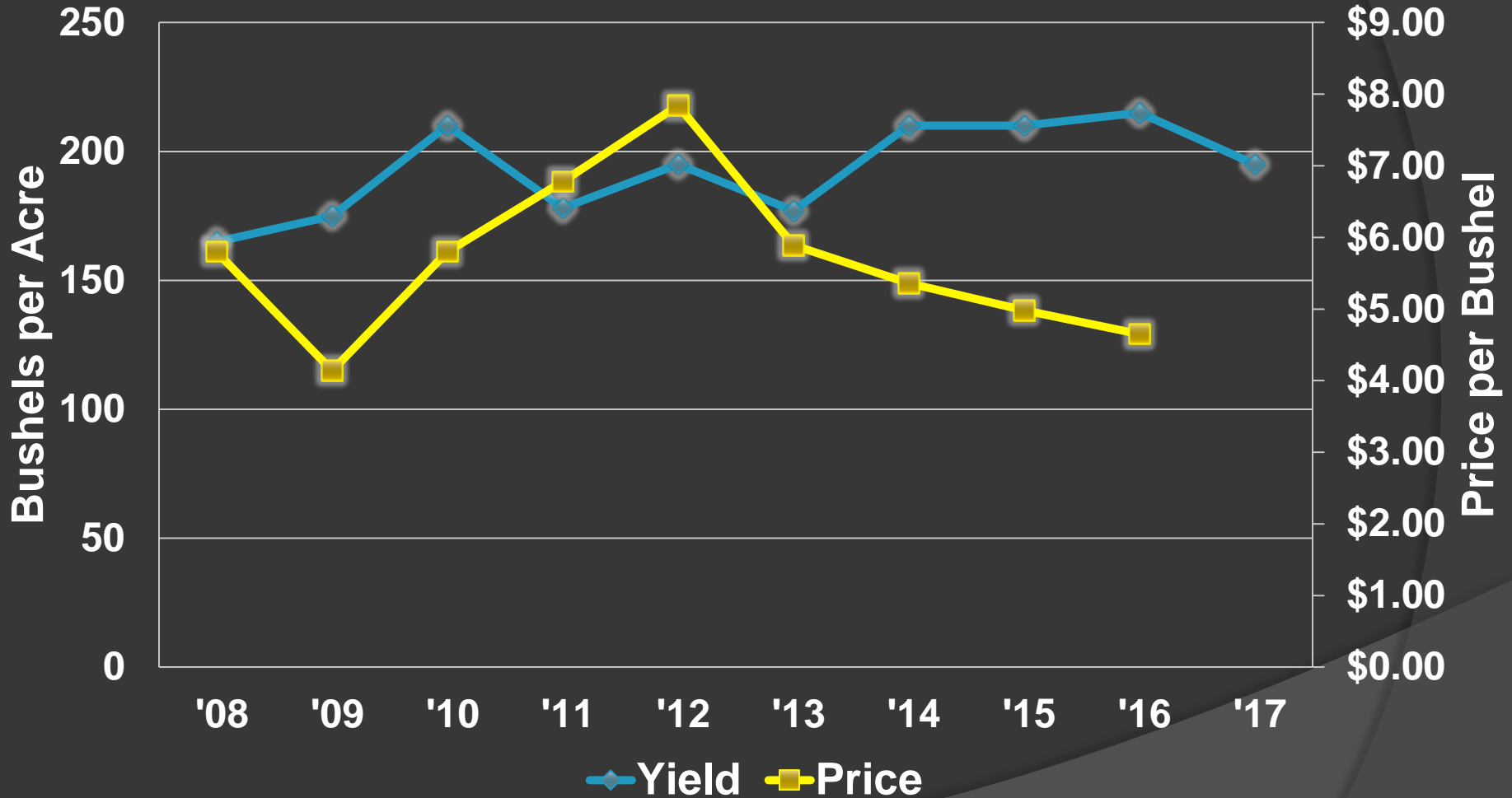
Corn



Trend = 14% decline from 2015-2017

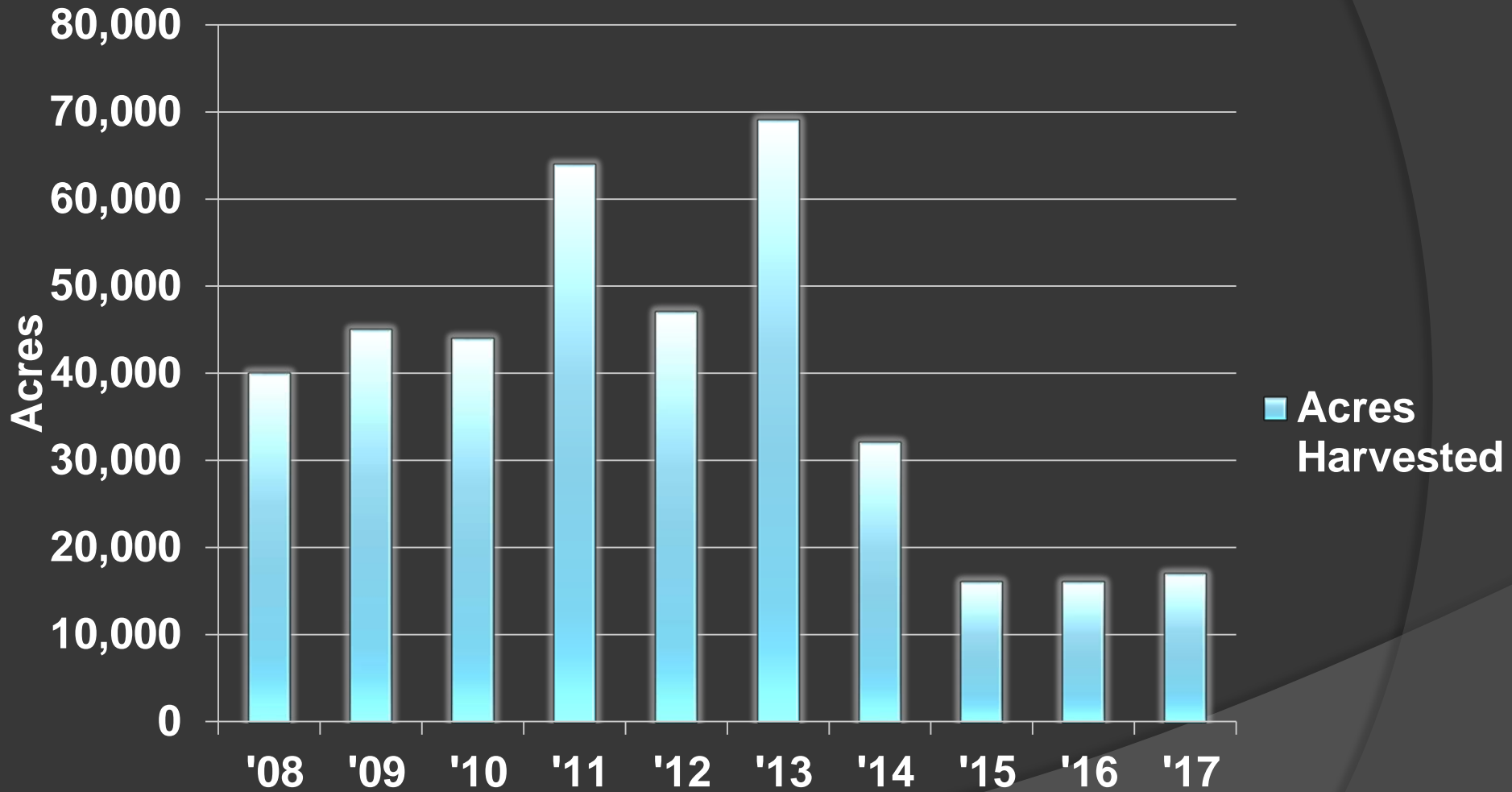
Grain Corn

Yield vs Price



2015-2017 Trend = -7% in Yield and Price is undetermined

Barley



Trend = 6% increase from 2015-2017

Barley

Yield vs Price

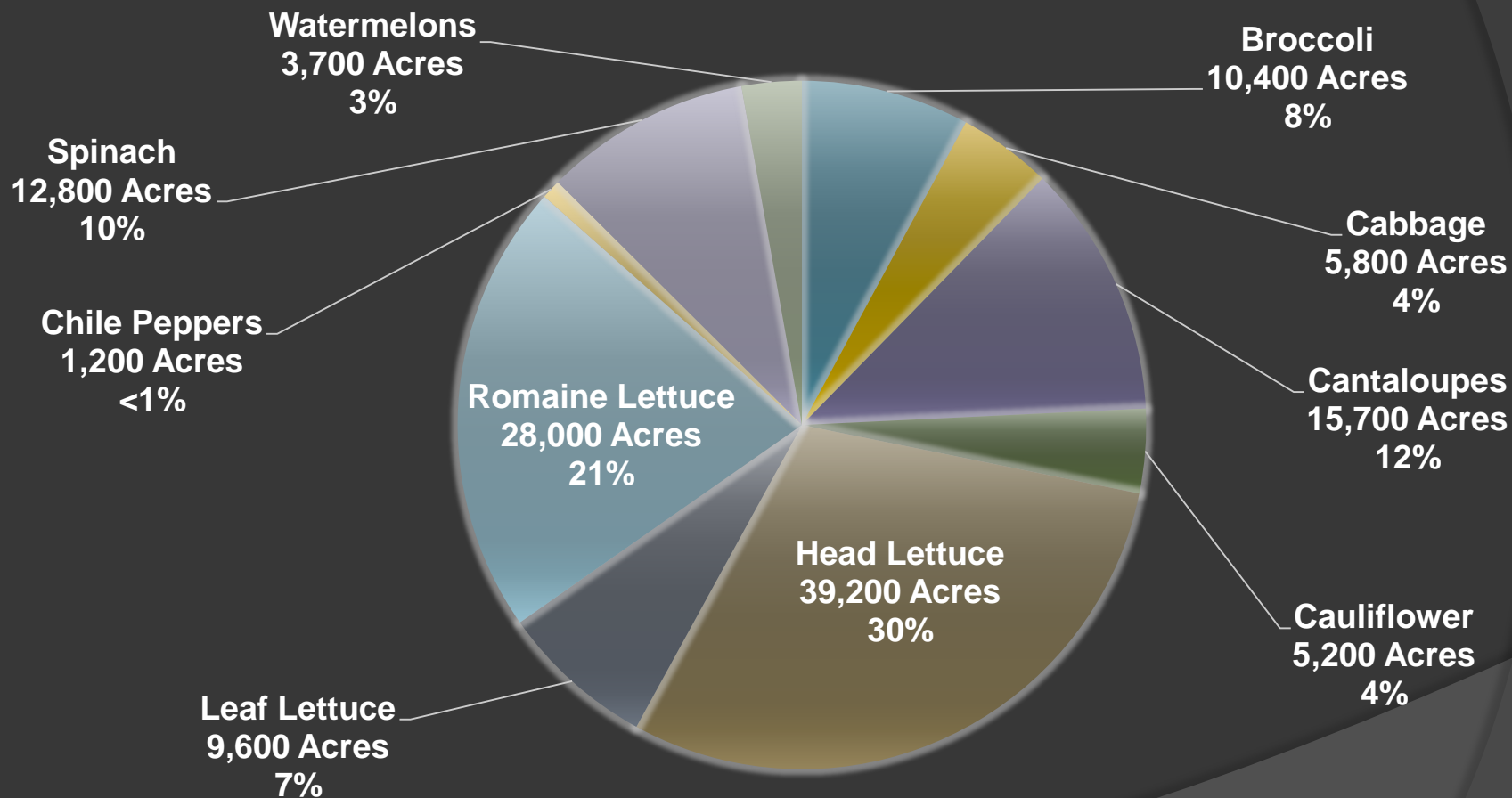


2015-2017 Trend = +9% in Yield and Price is undetermined

2017 Vegetables Annual Summary

Arizona harvested 131,600 acres of vegetables in 2017, up 6% from 124,400 acres harvested in 2016. The state produced 36.38 million hundredweight (cwt) of total vegetables in 2017. The value of utilized vegetable production increased 28% from \$1.30 billion in 2016 to \$1.67 billion in 2017.

2017 Vegetable Acres Harvested by Commodity



131,600 Total Acres Harvested in 2017

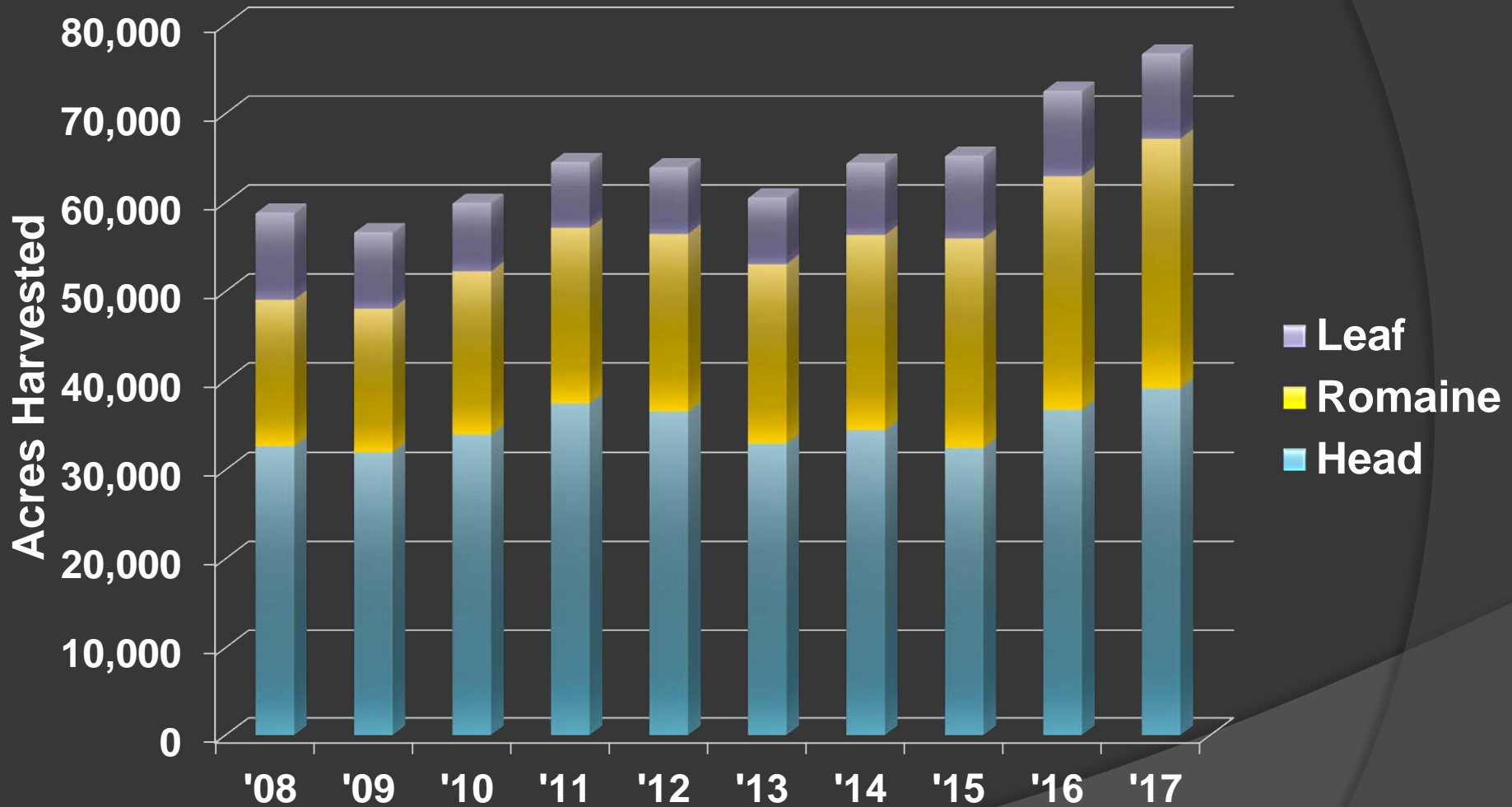
Rank, Production, & Percent of United States Total – Arizona: 2016

Crop	Rank	Arizona	United States	Percent of U.S. Total
Barley..... (1,000 Bu)	12	2,048	199,914	1.0
Corn, Grain (1,000 Bu)	33	10,750	15,148,038	0.1
Corn, Silage (1,000 Tons)	23	1,320	125,670	1.1
Cotton, All ¹ (1,000 Bales)	10	395	17,170	2.3
Cotton, American Pima ¹ (1,000 Bales)	3	20	569	3.4
Cotton, Upland Production ¹ (1,000 Bales)	9	375	16,601	2.3
Hay, All (1,000 Tons)	22	2,576	134,781	1.9
Hay, Alfalfa (1,000 Tons)	9	2,408	58,263	4.1
Wheat, All (1,000 Bu)	26	10,073	2,308,723	0.4
Wheat, Spring Durum (1,000 Bu)	3	9,408	103,914	9.1
Wheat, Winter (1,000 Bu)	38	665	1,672,582	0.0
Vegetables				
Broccoli..... (1,000 Cwt)	2	1,116	22,465	5.0
Cabbage (1,000 Cwt)	6	1,615	22,665	7.1
→ Cantaloupe (1,000 Cwt)	2	3,737	13,774	27.1 ←
Cauliflower (1,000 Cwt)	2	846	6,660	12.7
→ Lettuce, Head (1,000 Cwt)	2	12,696	47,601	26.7 ←
→ Lettuce, Leaf (1,000 Cwt)	2	2,352	13,264	17.7 ←
→ Lettuce, Romaine (1,000 Cwt)	2	8,646	28,946	29.9 ←
Peppers, Chile (1,000 Cwt)	4	122	4,704	2.6
→ Spinach..... (1,000 Cwt)	2	2,016	7,135	28.3 ←
Watermelon (1,000 Cwt)	7	2,448	40,196	6.1
Fruits & Nuts				
Pecans ² (Mil Lbs)	4	24.8	268.77	9.2

¹ 480 lb. bales

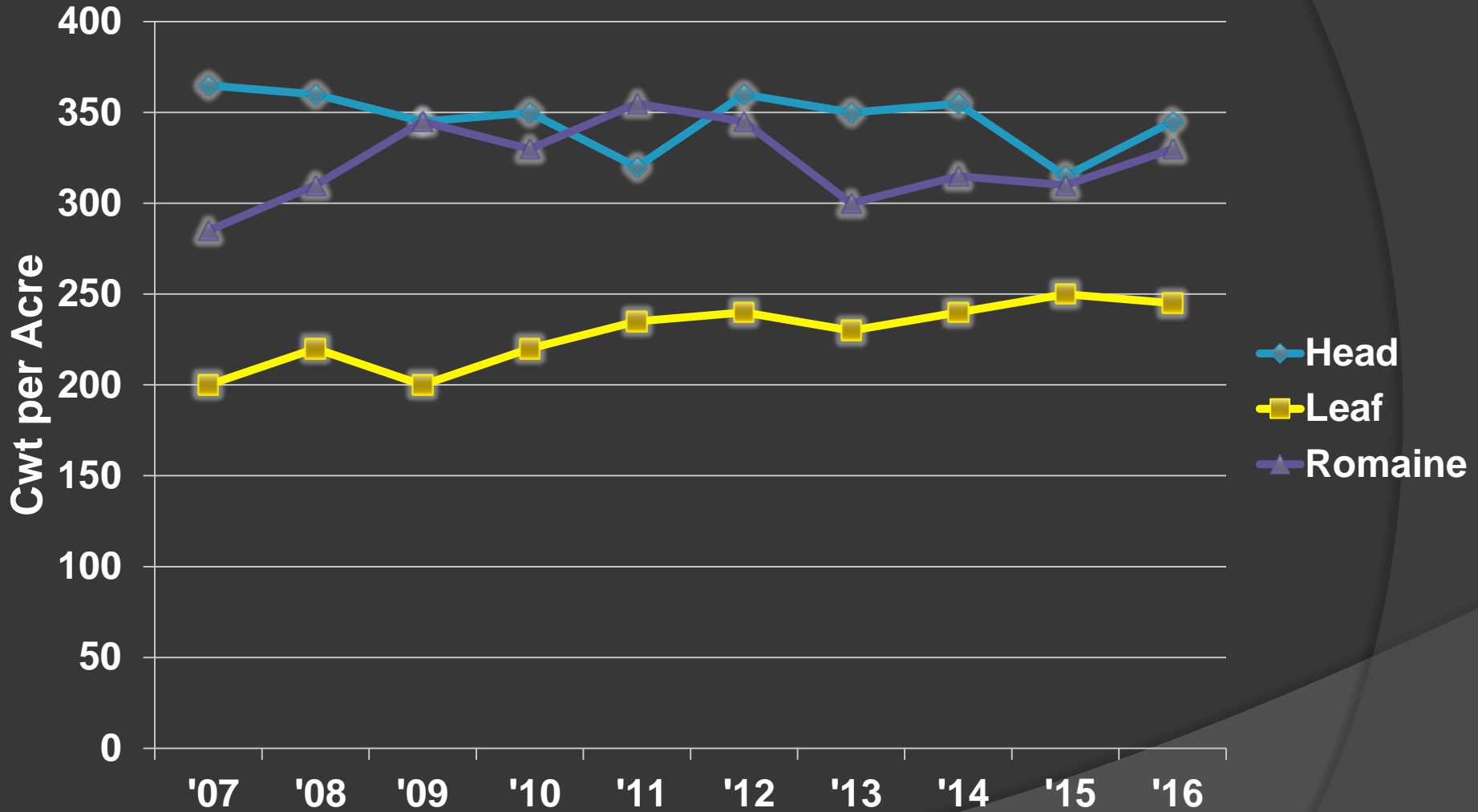
² Utilized Production, in shell

Lettuce



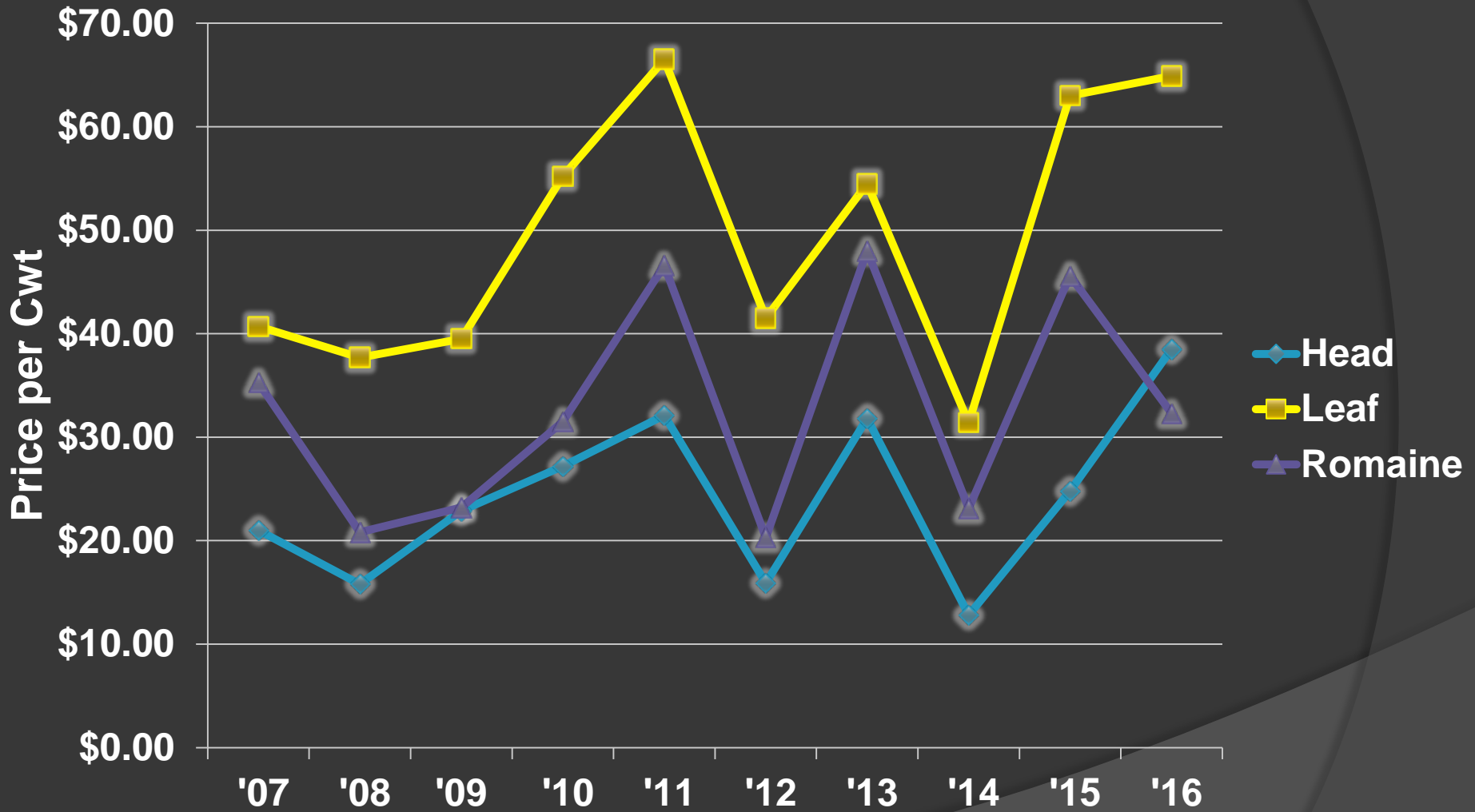
Trend = 18% increase from 2015-2017

Lettuce



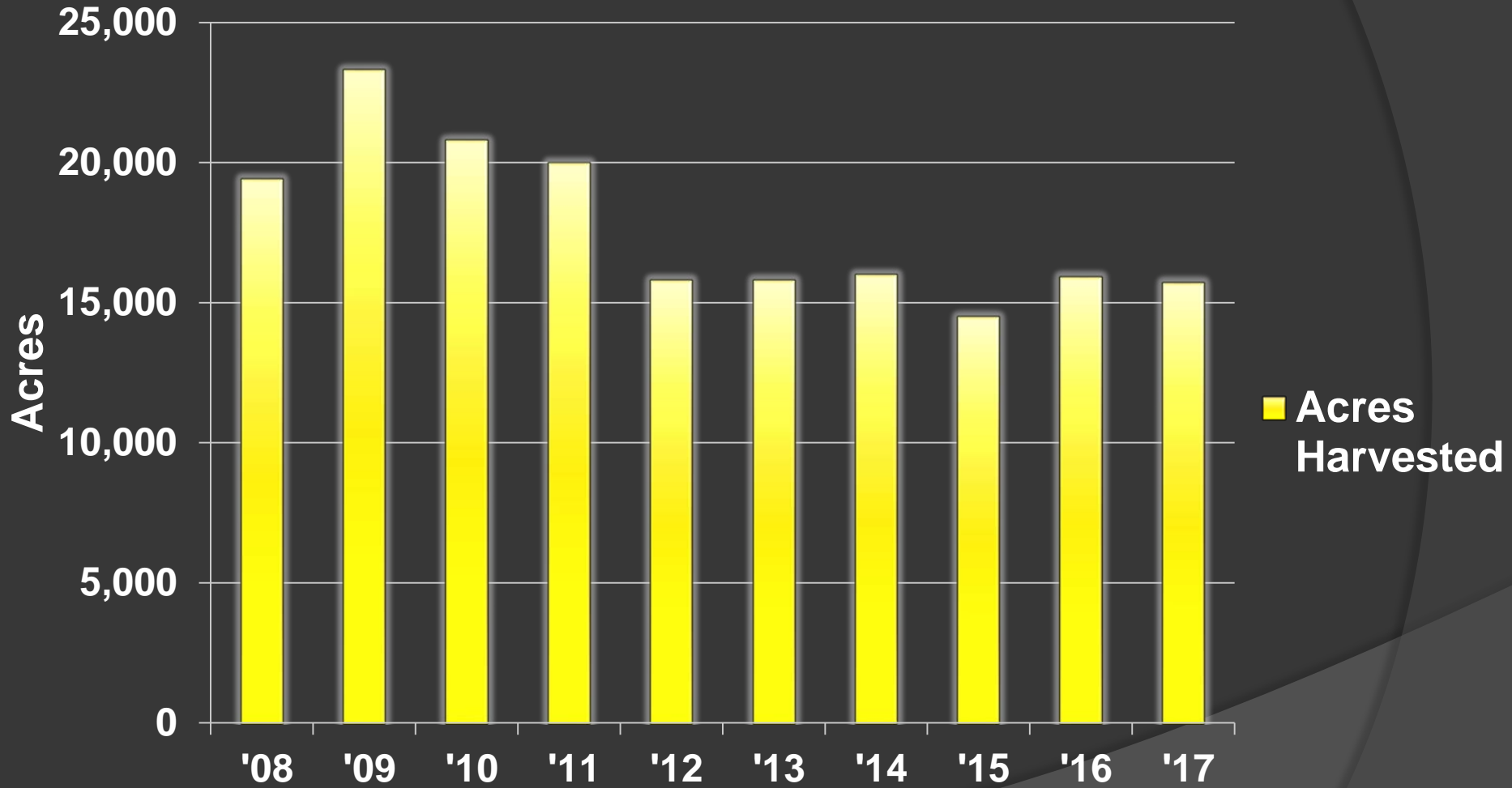
2014-2016 Trends = Head -3%; Leaf +2%; Romaine +5%

Lettuce



2014-2016 Trends = Head +201%; Leaf +107%; Romaine +40%

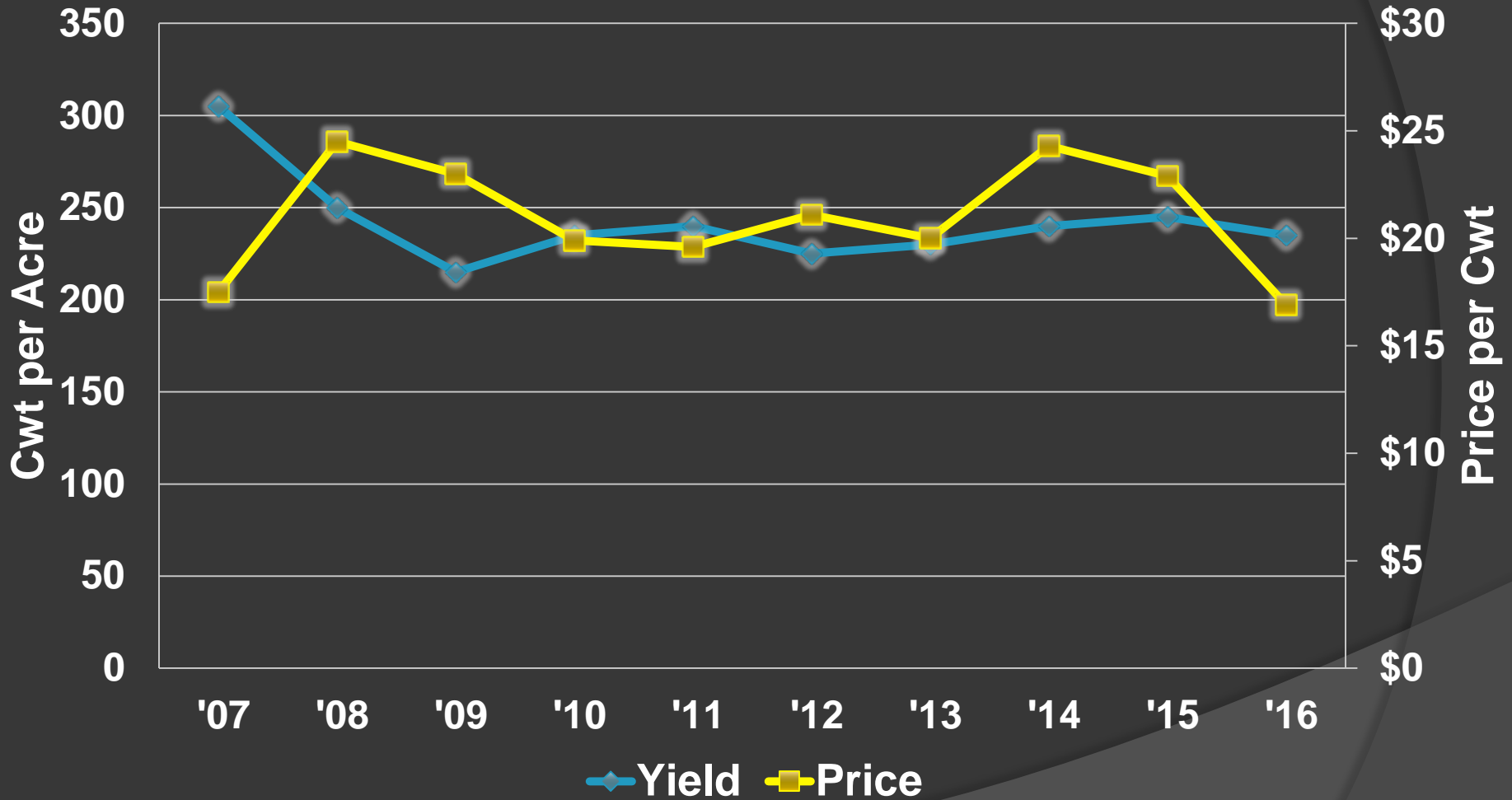
Cantaloupes



Trend = 8% increase from 2015-2017

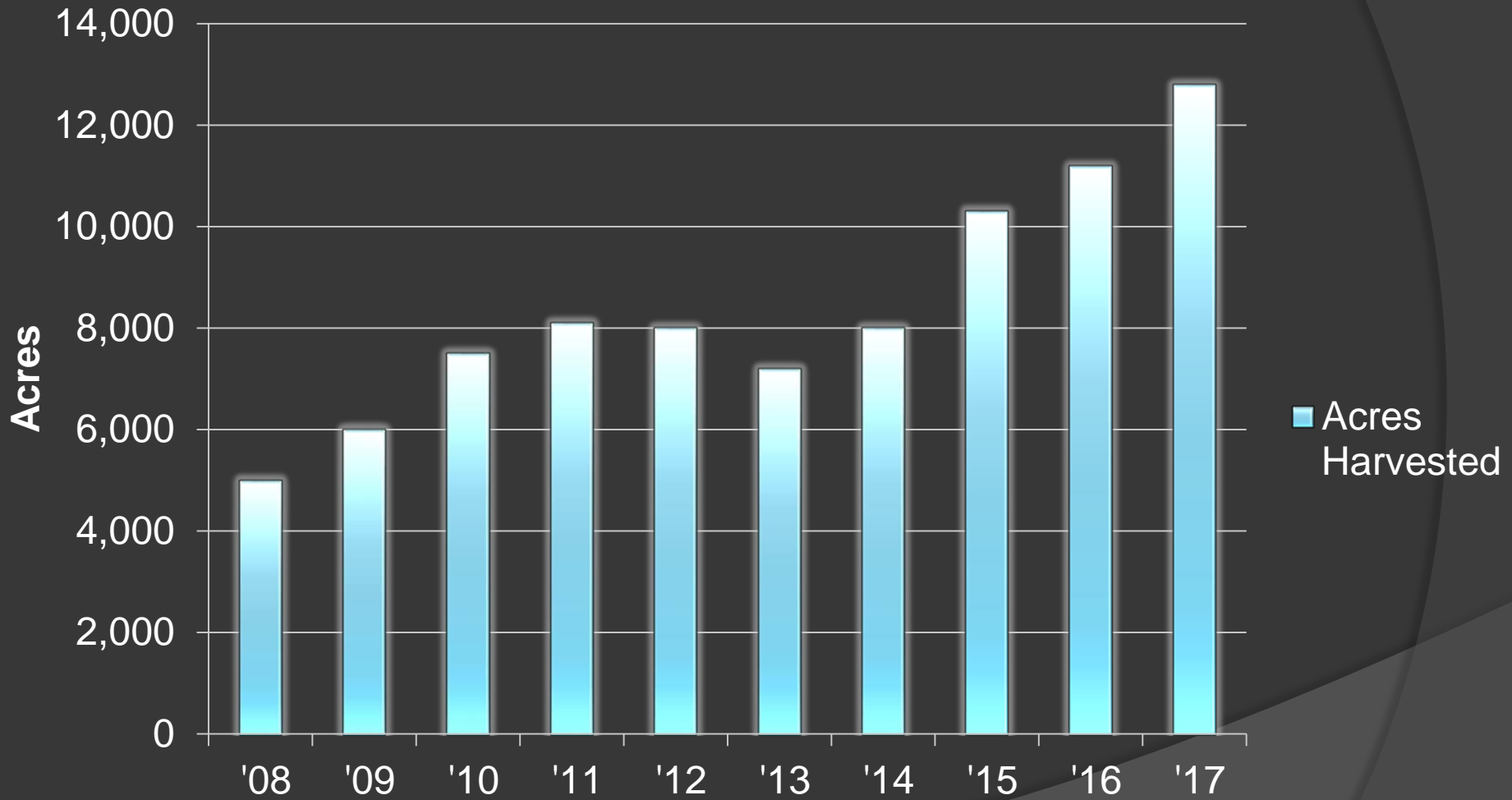
Cantaloupes

Yield vs Price



2014-2016 Trend = -2% in Yield and -30% in Price

Spinach



Trend = 24% increase from 2015-2017

Spinach

Yield vs Price



2014-2016 Trend = +16% in Yield and +16% in Price

When Are Prices Coming Back?

Excerpt from a November 2017 article in DTN/Progressive Farmer featuring Dave Kohl, Professor Emeritus of Ag Economics at Virginia Tech

When are prices coming back? Kohl said he gets asked this question all the time. His short answer: “It’s unlikely, unless there is a catastrophic event.” In his long answer, Kohl walked the bankers through the four waves of economic cycles.

- 1) The offensive wave – from 2006-2012 – was a super cycle, led by China demand, ethanol and low interest rates, Kohl explained. “It was an aberration.”
- 2) The transition wave occurred from 2013-2017. Kohl said this was marked by commodity surplus, working capital burn (decreasing available cash) and land value resiliency.

When Are Prices Coming Back?

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3) The defensive wave is coming next. From 2018-2021, Kohl predicted a widening gap of economic performance by farmers/ranchers, core equity burn (increasing leverage), steep decline of marginal land and increasing vendor/nontraditional operating credit as regulated lenders shut off operating credit for poor-performing borrowers. “Yet, even during this time, the top 40% of ag producers will grow their business,” Kohl added. Banks need to be ready to launch those opportunities with credit, he advised.

4) The regeneration wave from 2021-2025 will be consumer driven, data driven and people driven with more diversity on how farm and ranch businesses are organized. “One-size enterprise does not fit all,” said Kohl.