

# Grain Market Outlook

## *2018 Crop Insurance Workshop*

Salina, Kansas

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Department of Agricultural Economics



# Topics to be discussed.....

## 1) Economic "forces at work" in the U.S.

*& where they are taking U.S. Agriculture*

## 2) Grain Market Overview ⇒ *Fall 2018 through 2019*

- Corn & Grain Sorghum
- Wheat
- Soybeans & Cotton

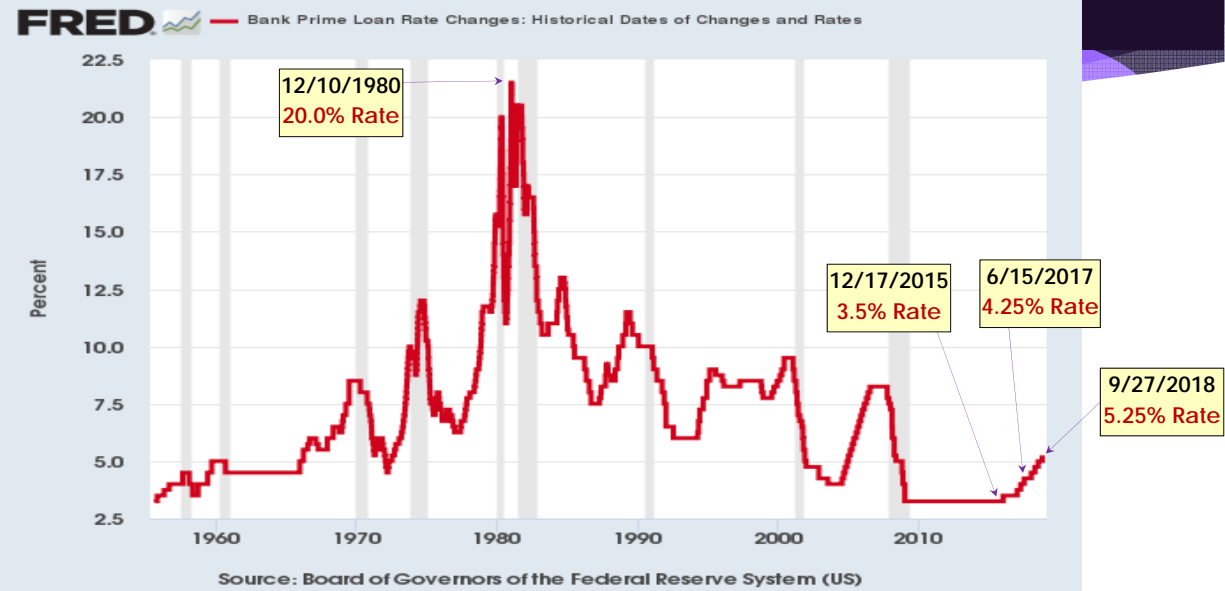
## 3) Kansas Farm Cost & Profitability Trends

# Dow Jones Industrial Index (INDX)

Weekly Chart: June 2016 through October 31, 2018



# U.S. Fed: Bank Prime Loan Rate Changes



# U.S. Dollar Index (ICE Futures)

Weekly Chart: May 2016 through October 31, 2018



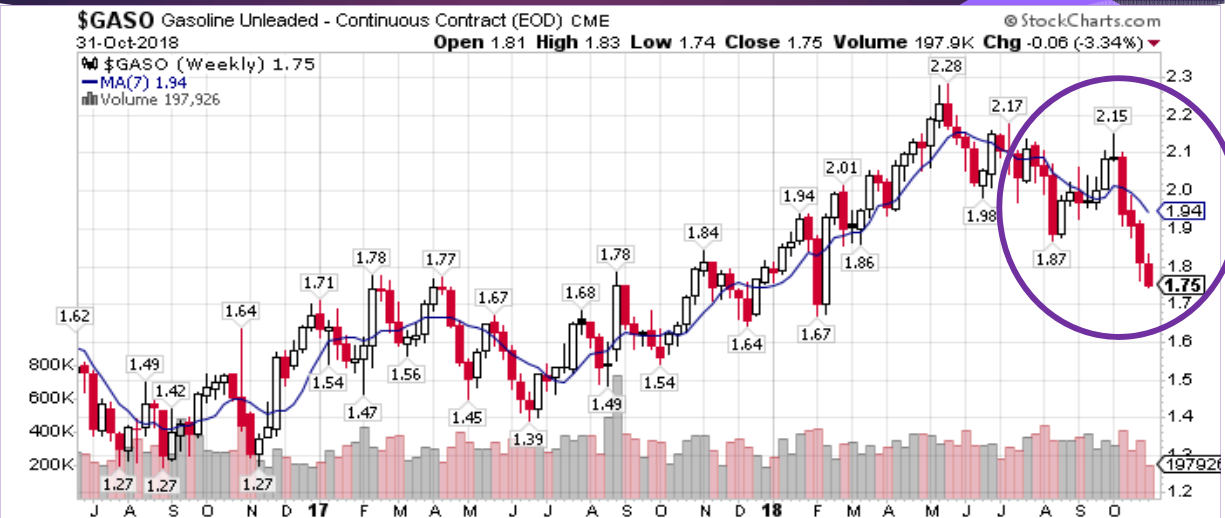
# Light Crude Oil (CME Futures)

Weekly Chart: June 2016 through October 31, 2018



# Unleaded Gasoline (CME Futures)

Weekly Chart: June 2016 through October 31, 2018



## Unpredictable Grain Markets in 2018-19

### □ The “Ups & Downs” of U.S. Trade Tensions

- **U.S. Abandonment of the Trans Pacific Partnership (TPP)**
  - Potential impact on U.S. wheat exports vs TPP Countries
- **U.S. vs China**
  - Soybeans & Sorghum (*Need of both “With” & “Without” Scenarios*)
- **NAFTA (U.S.-Mexico-Canada)**
  - **Mexico** grain purchases from the U.S.
  - **Canada** grain export competition vs U.S. (Wheat, Oilseeds)

## USDA Market Facilitation Payments (MFP)

### A. Direct payments to farmers of soybeans, sorghum, corn, wheat, cotton, dairy & hogs.

- **Soybean MFPs** = \$1.65 /bu x 50% of production (\$3.700 bln)
- **Sorghum MFPs** = \$0.86 /bu x 50% of production (\$156 mln)
- **Wheat MFPs** = \$0.14 /bu x 50% of production (\$119 mln)
- **Corn MFPs** = \$0.01 /bu x 50% of production (\$ 96 mln)
- **Cotton MFPs** = \$0.06 /lb x 50% of production (\$277 mln)

## Market Facilitation Payments (MFP) *more*

### A. Direct payments to farmers of soybeans, sorghum, corn, wheat, cotton, dairy & hogs.

- **Hog MFPs** = \$8.00 /head x 50% of production (\$290 mln)
- **Dairy MFPs** = \$0.12 /cwt milk x 50% of MPP Production (\$127 mln)

### ❑ No Adjustments for Low Yields in 2018

*“The aid is based on this year's production. It will not be adjusted for those who suffered low yields due to factors such as drought.”*

**DTN Chris Clayton 8/27/2018**

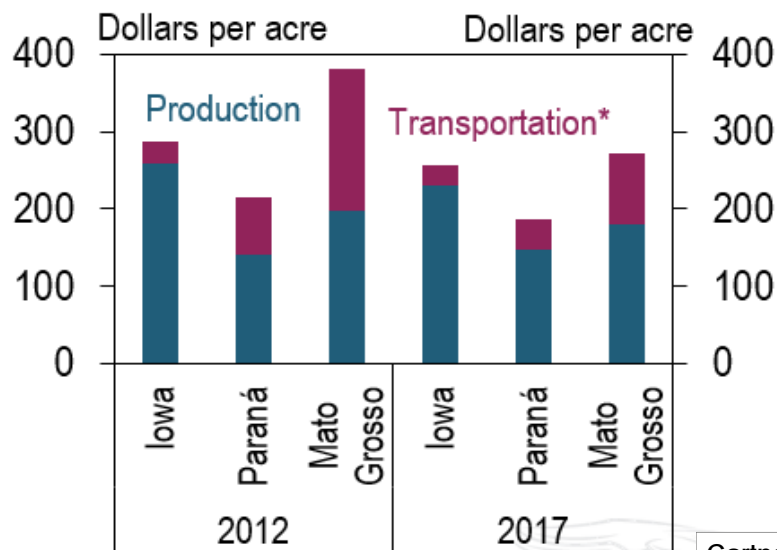
## Economic Impact of U.S.-China Tariffs (Hayes, Hart <sup>ISU</sup>)

- ▶ The **U.S.** will continue to export soybeans to **China**, BUT this means that a 25% wedge will exist (i.e., 25% Tariff = 25% “Wedge”)
  - **IF** the **U.S.** was equal to 50% the World Soybean Production, **THEN** the U.S. Soybean price should fall by 12.5% (1/2 of 25% “wedge”)
  - **BUT** the **U.S.** only produces 33% of World Soybean Production, **SO** the U.S. Soybean price will be down  $\approx$  \$1.75 /bu
  - **IF** Soybeans are \$1.75 lower **THEN** U.S. Corn will be \$0.70 /bu lower

## Economic Impact of U.S.-China Tariffs (Hayes, Hart ISU)

- ▶ Based on “*old crop*” MY 2017/18 Ending Stocks, U.S. Corn \$s are now **\$0.50 /bu lower** than they would usually be (Down \$0.35-\$0.50 /bu - KSU)
- ▶ **U.S.-China Possible Impact on U.S. Export Competitiveness**
  - US soybean producers do not have a 25% cost advantage over Brazil
  - If this “*Trade War*” between the U.S. & China goes on long enough, the U.S. will *likely* need to downsize U.S. soybean production by 30%
  - **As a result** – “*IF Soybeans are \$1.75 lower THEN U.S. Corn will be \$0.70 /bu lower.*” (because U.S. Corn Acres-Production will have *increased*)

## Soybean Costs in the U.S. and Brazil



\* Costs to ship from farm to port.  
Sources: [Gavilon](#) and USDA.

Cortney Cowley  
Federal Reserve Bank of KC  
Omaha Branch

## Grain Market Events to Come ....

### 1) 2018 U.S. Corn & Soybean harvest (*Oct-Nov 2018*)

- **Corn**<sup>2018</sup> < 14.778 bln bu? ➔ End Stocks < 1.774 bb?
- **Soybeans**<sup>2018</sup> < 4.690 bln bu? ➔ End Stocks < 845 mb?

### 2) U.S. HRW Wheat Seedings (*Oct 2018*)

- Increase in response to ↑ HRW wheat \$'s in 2018?
- *Profits for 2018 Kansas HRW Wheat vs Other Crops*

## More Grain Market Events to Anticipate....

### 3) 2019 South America Crop Plantings (*Nov 2018-Jan 2019*)

- **Soybeans** <sup>So-Am 2019</sup> *Up 5-10% ?* ➔ 'Existing' or 'New' Acres?
- **Corn** <sup>So-Am 2019</sup> *Down 5% ?* ➔ 2<sup>nd</sup> Crop Impact (*Exports*)?
- **Argentina** *politics / export taxes* & **Brazil** *domestic issues* are a wildcard

### 4) Break Dormancy for 2019 HRW Wheat Crop (*March 2019*)

- *Uncertain crop conditions affecting **Kansas HRW Wheat** at that time (?)*



## More Grain Market Events to Anticipate....

### 5) 2019 U.S. Spring Crop Plantings (*April-May 2019*)

- Soybeans <sup>U.S. 2019</sup>      *Down* ≈ 4 mln ac. ?    ⇨ *U.S.-China Trade Status?*
- Corn <sup>U.S. 2019</sup>      *Up* ≈ 4 mln ac. ?    ⇨ More if South America ↓

### 6) 2019 U.S. HRW Crop Development (*April-June 2019*)

Q? What will the protein &/or quality condition of the 2019 crop be?

Q? What “*cross over*” *HRS vs HRW* wheat market impacts will occur?

## Yet Still MORE Events to Come....

### 7) 2019 South America Crop Development (*Jan-May 2019*)

- El Nino forecast <sup>2019</sup> ⇨ *Wetter than normal* in Spring-early Summer, but **NOT** a certain impact on their crops

### 8) 2019 U.S. Crop Developments (*May-Oct 2019*)

- El Nino forecast <sup>2019</sup> ⇨ Generally positive for U.S. crops, but also **NOT** a certain effect in the U.S. growing season

## Yet Still MORE Events to Come....

### 9) 2019 U.S. HRW Wheat Harvest (*June-July 2019*)

Q. Yields: What are the odds of a “*normal-to-large*” 2019 U.S. HRW *crop yield & production* vs a “*short*” crop ???

Q. Protein – Quality: What are the odds of a “*normal-to-low*” *protein crop* in 2019 for U.S. HRW wheat vs a “*high*” protein crop ???

➔ *These outcomes have serious market implications in Kansas!*

## Corn & Sorghum Markets



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## U.S. Corn & Sorghum Supply-Use

- 2018 U.S. Corn & Sorghum Production  $\geq$  2017 Crops
- Large Corn Stocks are limiting Feedgrain Price\$'s
- Low Price\$'s supporting "*New Crop*" MY 2018/19 Corn Use
  - Ethanol<sup>2018/19</sup> = 5.650 bln bu (*Record high* – vs 5.601 bb last year)
  - Livestock Feed<sup>2018/19</sup> = 5.550 bln bu (*10 year high* – vs 5.858 bb in 2007/08)
  - Exports<sup>2018/19</sup> = 2.475 bln bu (vs 2.438 bb in '17/18 & 2.294 in '15/16)
  - Other FSI<sup>2018/19</sup> = 1.480 bln bu (*Record high* – vs 1.453 bb in 2017/18)

## U.S. Corn & Sorghum Stocks.....

- Corn: "*Moderate*" Stocks & % S/U
  - End Stocks<sup>2018/19</sup>  $\Rightarrow$  1.813 bln bu (vs 2.140 bb last year)
  - % Stocks/Use<sup>2018/19</sup>  $\Rightarrow$  12.0% S/U (vs 14.5% Stx/Use last year)
- Grain Sorghum: "*Low*" Price\$'s (*Hurt by trade issues*)
  - End Stocks<sup>2018/19</sup>  $\Rightarrow$  37 mln bu ( $\downarrow$  Exports &  $\uparrow$  Ethanol Use)
  - % Stocks/Use<sup>2018/19</sup>  $\Rightarrow$  9.7% S/U (vs 9.6% Stx/Use last year)

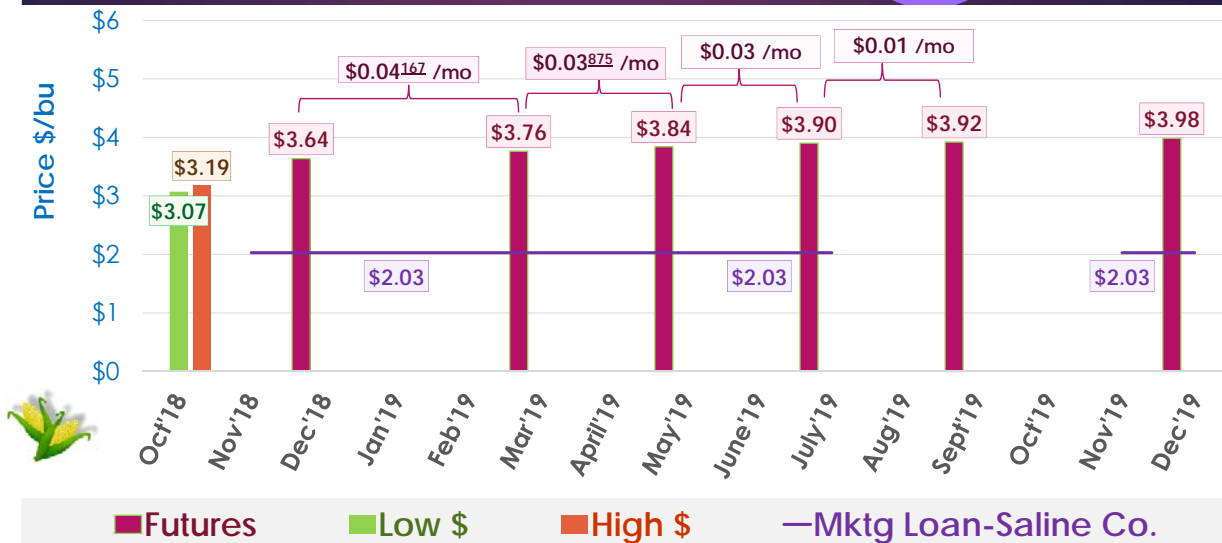
# CME Corn Futures

Weekly Chart: September 2009 – October 2018 + 10/31/2018



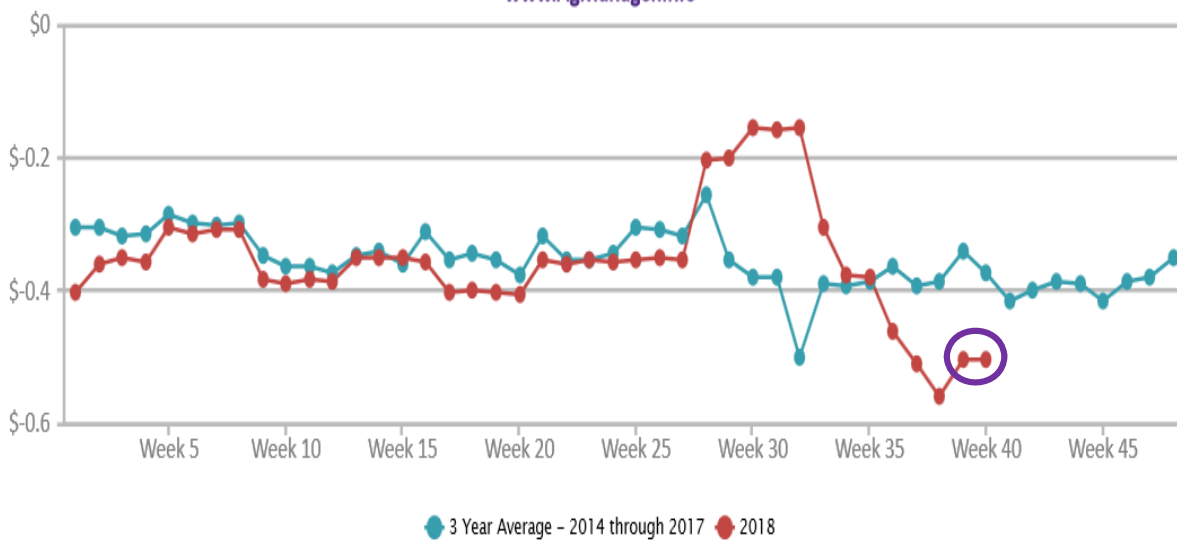
# Corn Cash & Futures \$'s

Salina, KS Local Elevators – October 31, 2018



# SALINA, KS: Corn Basis - CARGILL

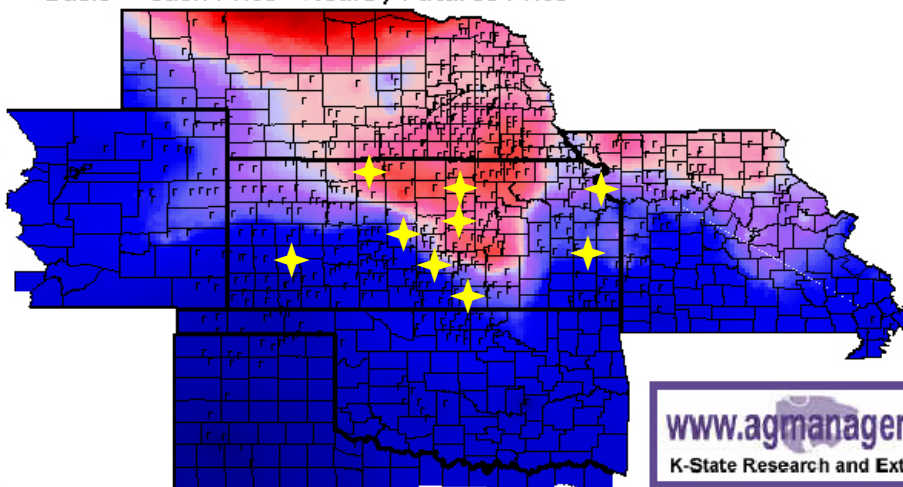
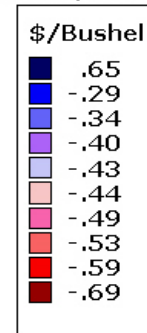
www.AgManager.info



## Corn Basis, 10-24-2018

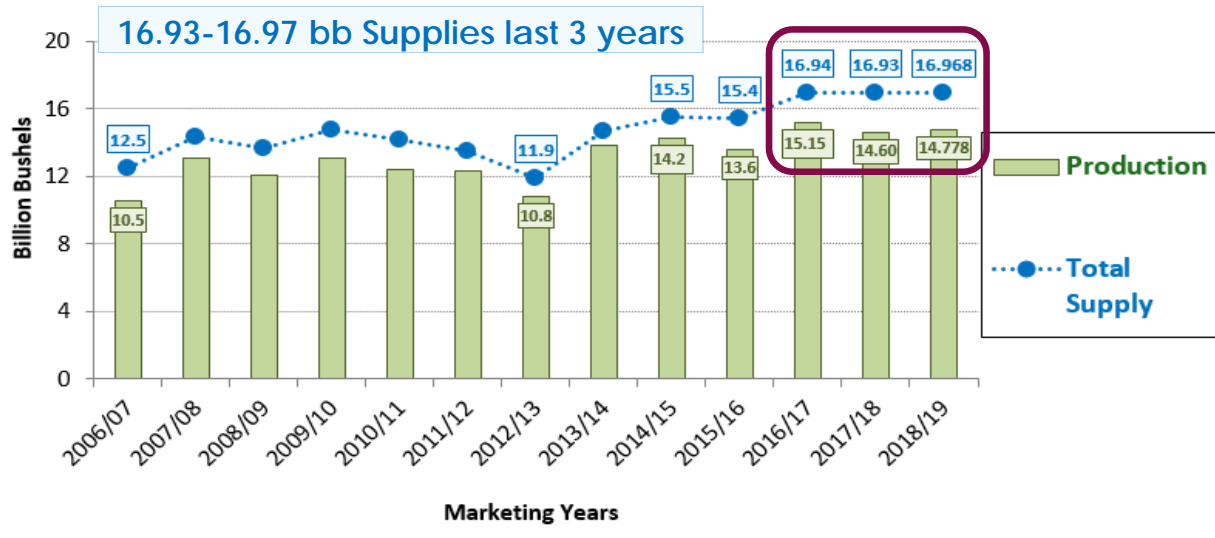
Basis = Cash Price - Nearby Futures Price

CBT Dec  
Futures  
Price: \$3.68

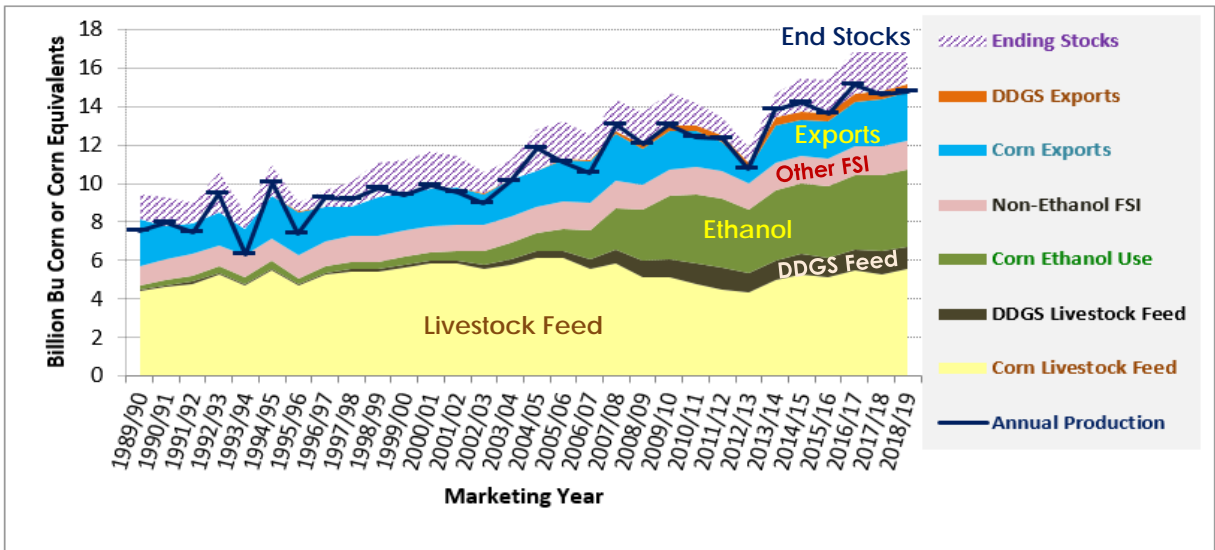


www.agmanager.info  
K-State Research and Extension

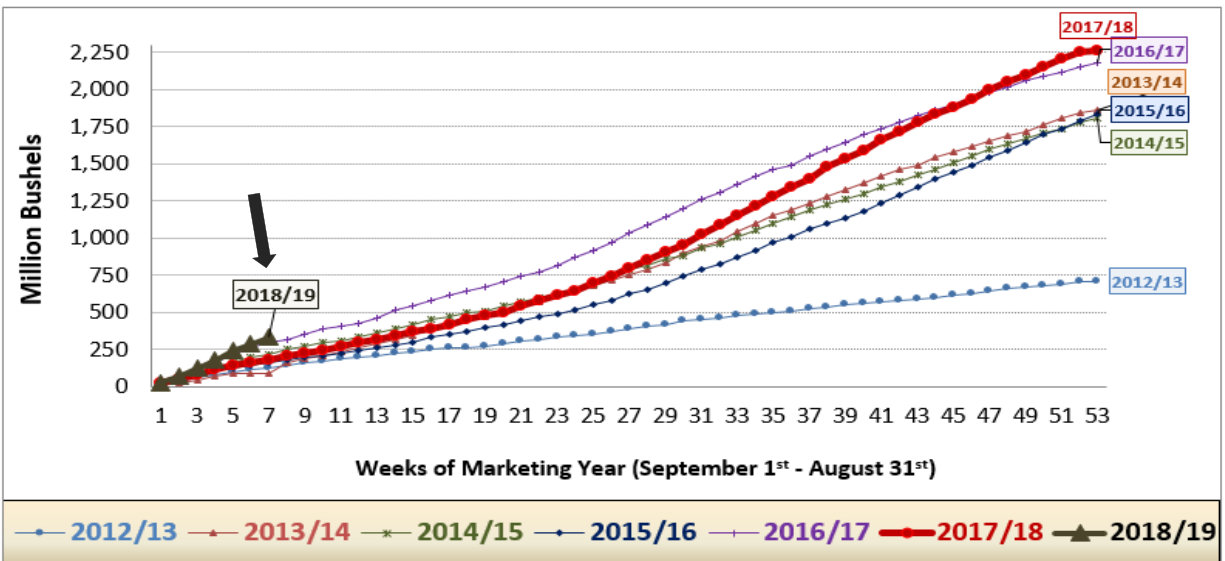
# U.S. Corn Production & Supplies



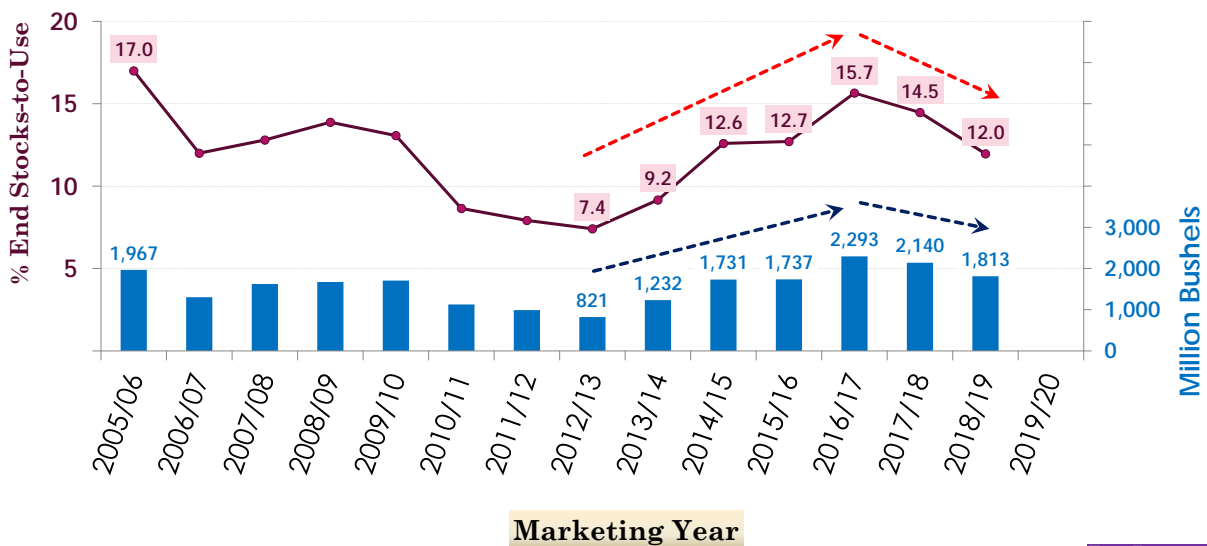
# U.S. Corn Use - By Category

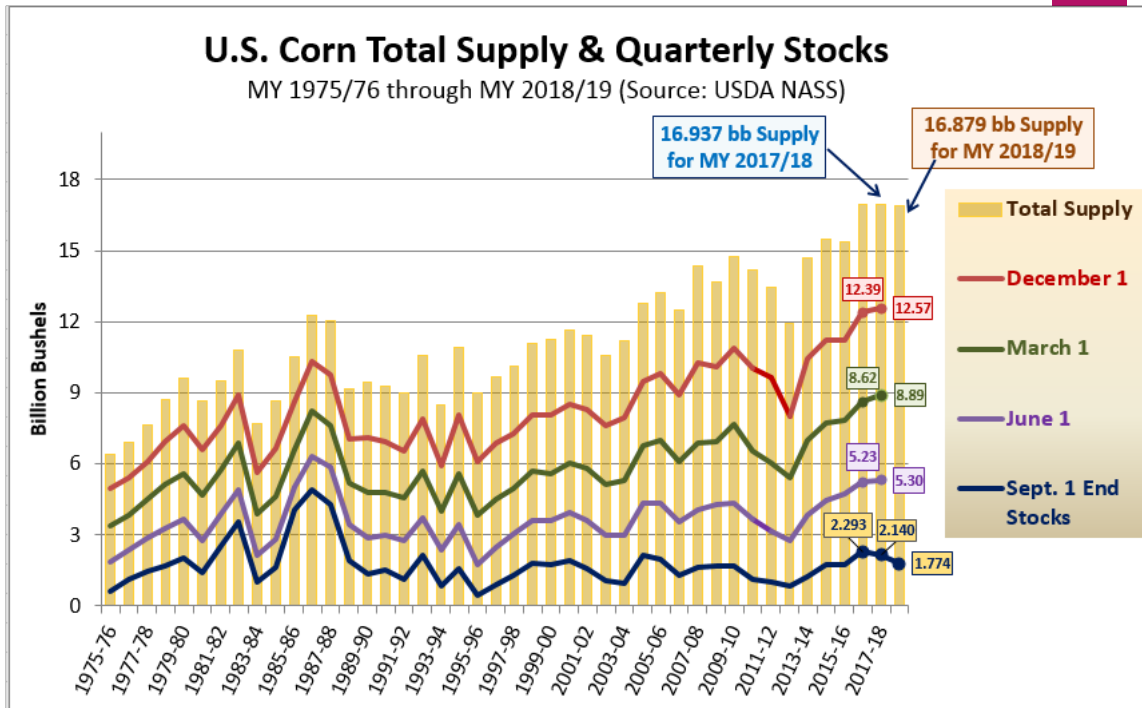


# U.S. Corn Exports - Weekly thru October 18, 2018



# U.S. Corn Ending Stocks & % Stx/Use





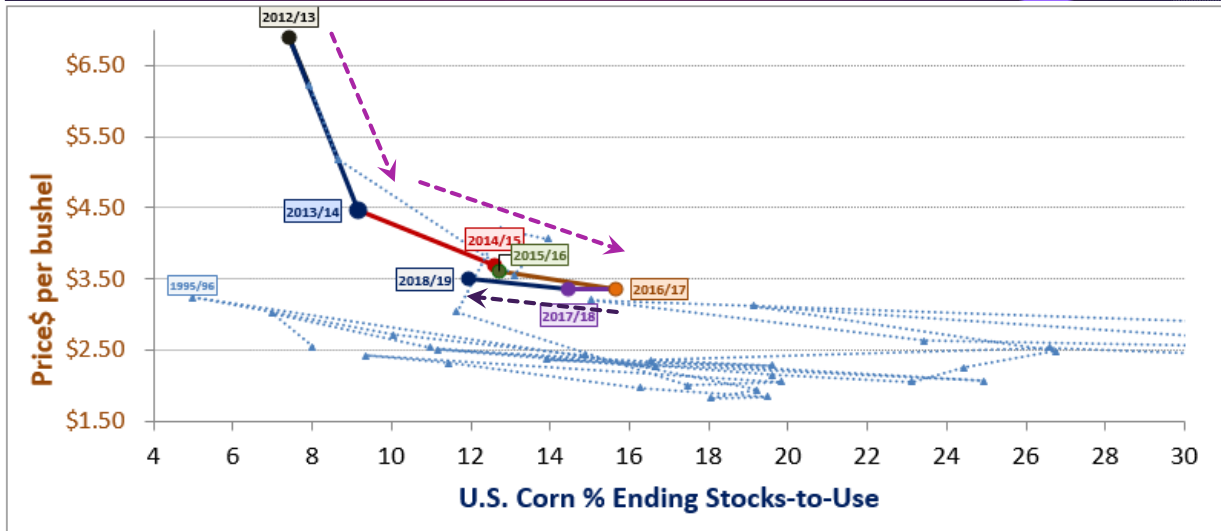
## U.S. Corn % Stocks/Use vs Price\$



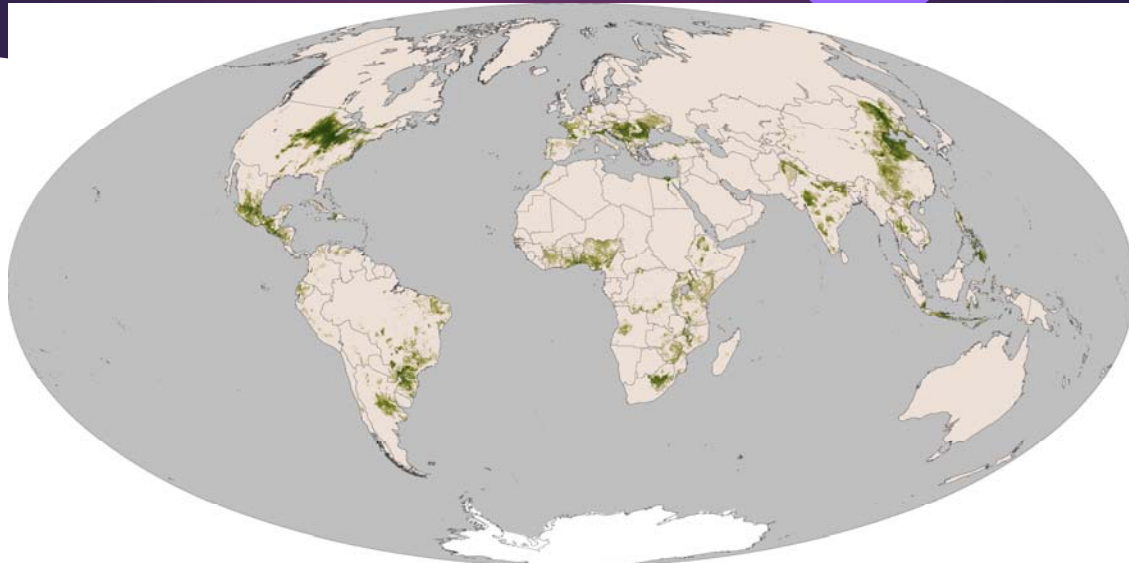


# U.S. Corn % Stocks/Use vs

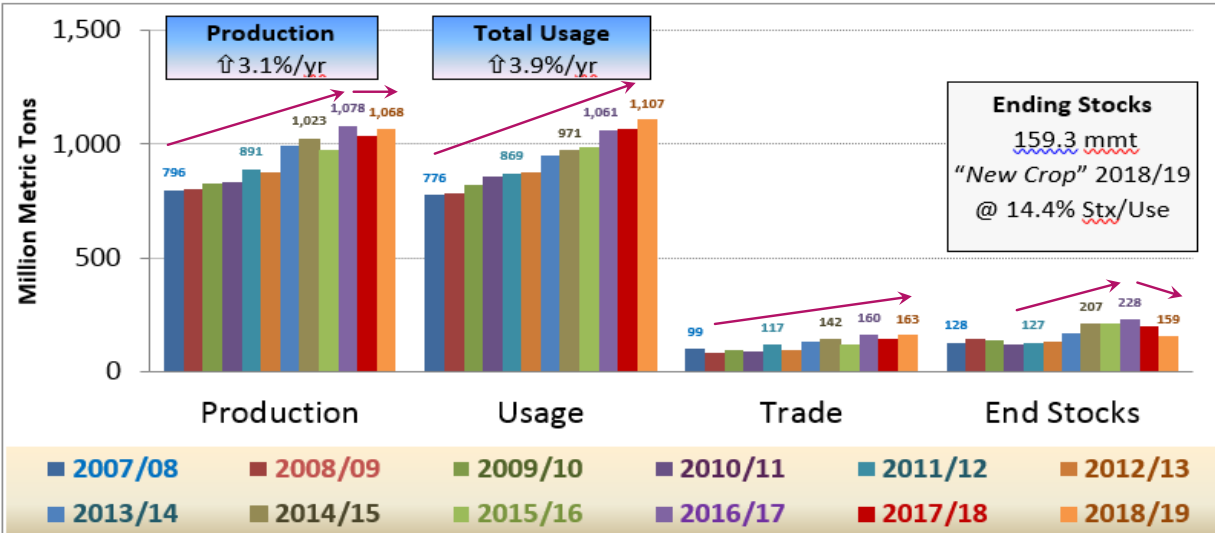
to % Stocks/Use Changes  
@ higher or lower flexibilities



# World Corn (Maize) Production Regions



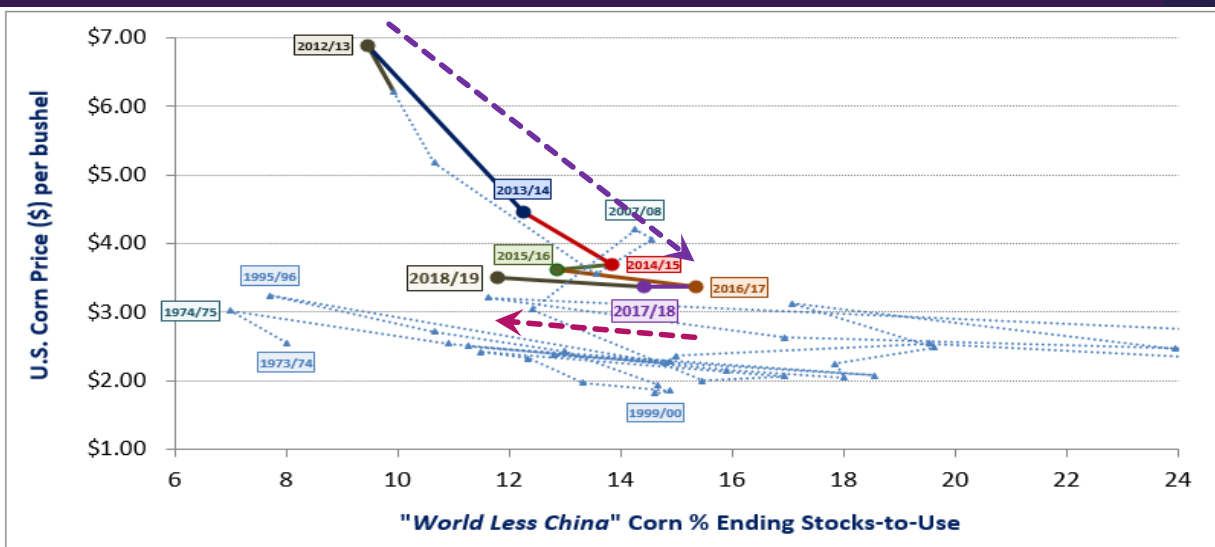
# World Corn Supply, Use & Stocks



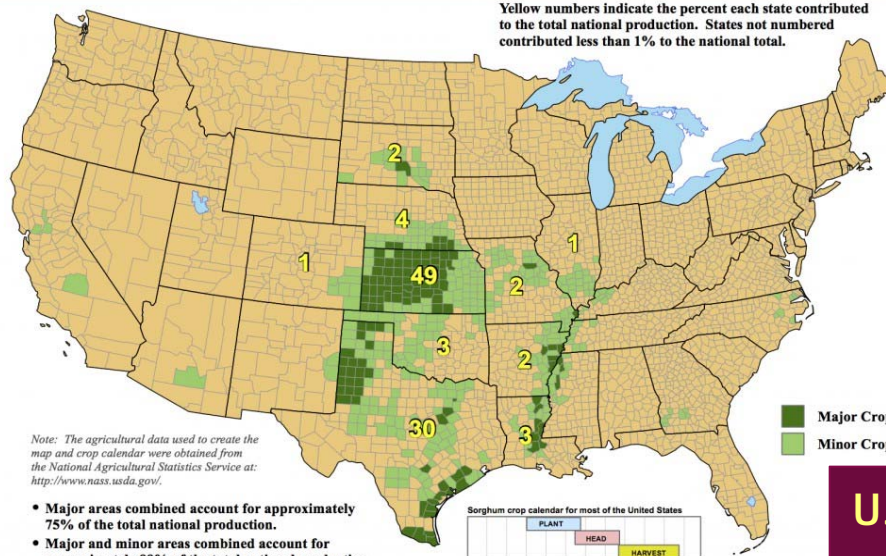
Ernst & Young

# U.S. Corn Price\$ vs World % Stocks-to-Use

MY 1973/74 through "New Crop" MY 2018/19



## United States: Sorghum



Note: The agricultural data used to create the map and crop calendar were obtained from the National Agricultural Statistics Service at: <http://www.nass.usda.gov/>.

- Major areas combined account for approximately 75% of the total national production.
- Major and minor areas combined account for approximately 99% of the total national production.
- Major and minor areas and state production percentages are derived from NASS county- and state-level production data from 2006-2010.



USDA Agricultural Weather Assessments  
World Agricultural Outlook Board

## U.S. Grain Sorghum Production Regions

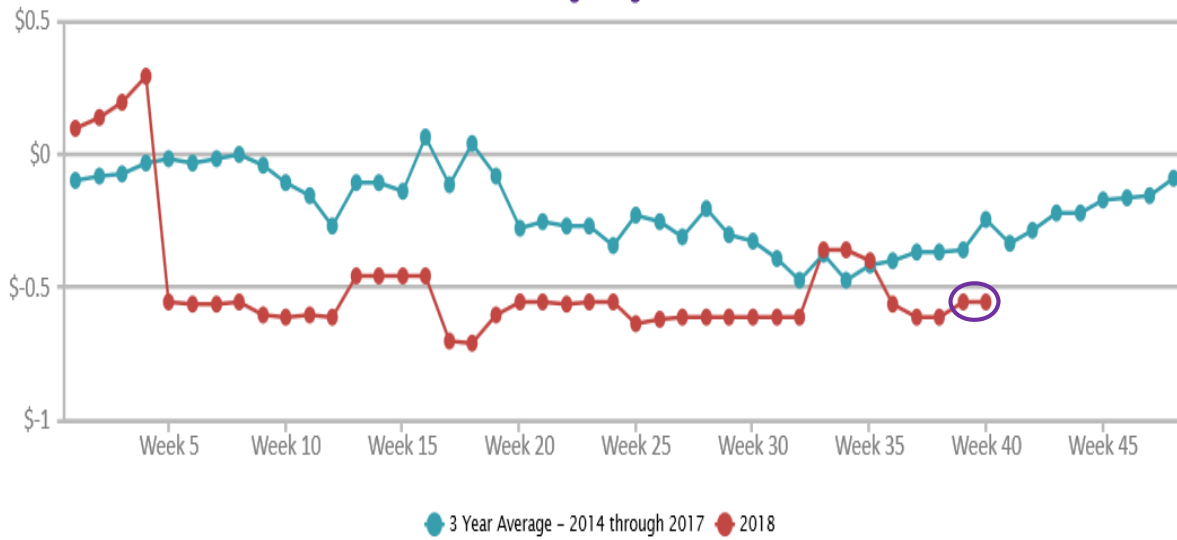
## Sorghum Cash & Futures \$'s

Salina, KS Local Elevators – October 31, 2018



# SALINA, KS: Grain Sorghum Basis - CARGILL

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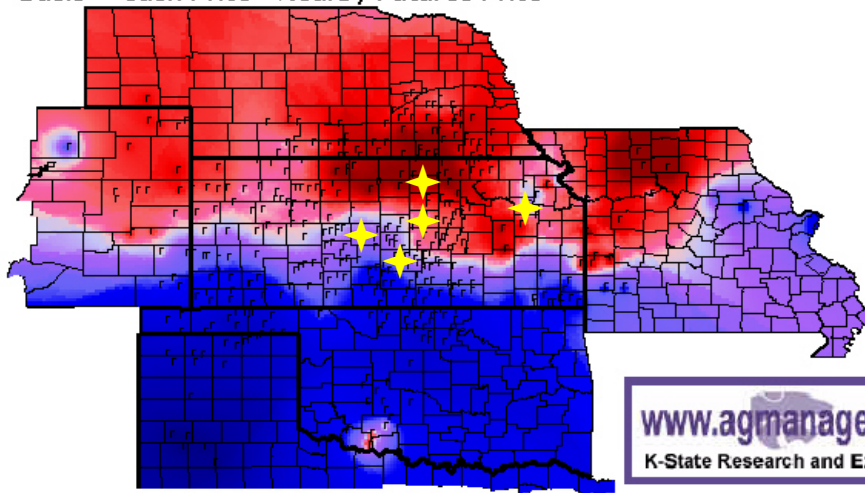


# Grain Sorghum Basis, 10-24-2018

Basis = Cash Price - Nearby Futures Price

CBT Corn  
Dec Futures  
Price: \$3.68

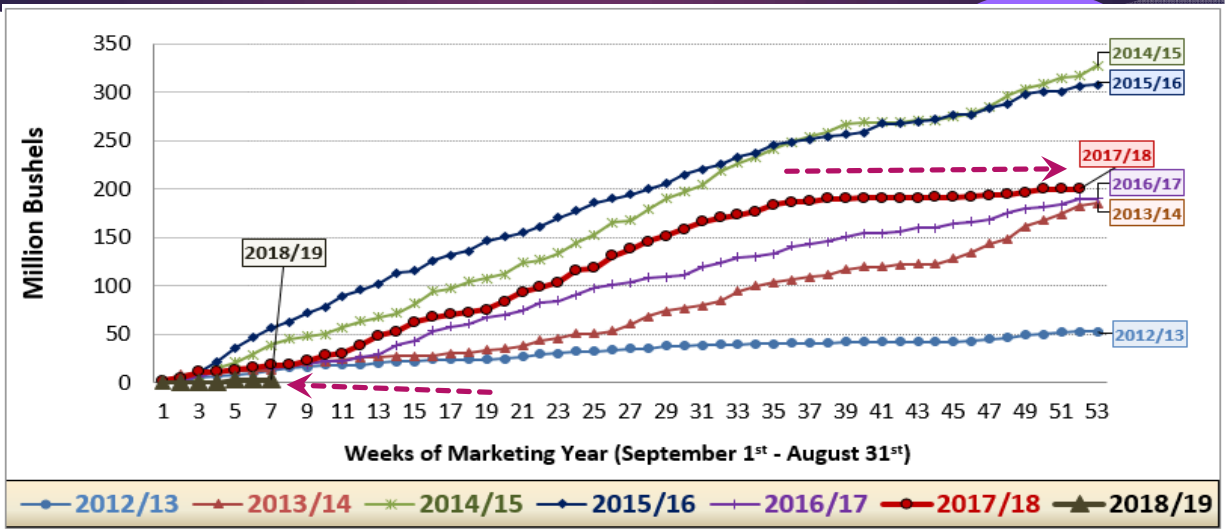
\$/Bushel	
Dark Blue	.10
Blue	-.51
Light Blue	-.54
Very Light Blue	-.62
White	-.65
Light Pink	-.67
Medium Pink	-.68
Red	-.70
Dark Red	-.74
Black	-.80



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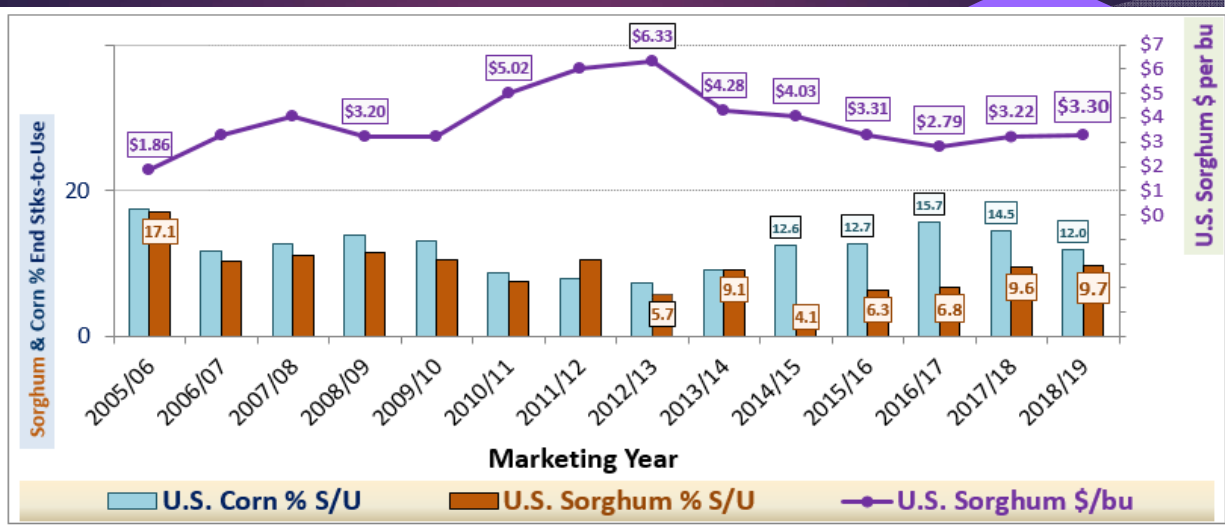
# U.S. Sorghum Exports

Marketing Years 2012/13 thru 2018/19 (as of October 18, 2018)



# U.S. Sorghum Stks/Use & Price\$

Marketing Years 2005/06 thru 2018/19



# Wheat Markets



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## U.S. Wheat Supply-Use

- Market support from **World crop problems** & *higher protein* in the **2018 U.S. HRW crop**
  - Anticipating *lower* U.S. & World **Wheat Stocks**
- Markets *expect* U.S. Wheat Exports to increase
  - **Exports** 2018/19 = 1.025 bln bu (*vs 778 mb – 1.291 bb range since 2008/09*)
  - **Food Use** 2018/19 = 970 mln bu (*vs Level+ Use since MY 2012/13*)
  - **Feed Use** 2018/19 = 110 mln bu (*vs 50 mb MY 2017/18 vs 228-365 mb in 2012-13*)
  - **HRW Exports** 2018/19 = 365 mln bu (*vs 371 mb & 455 mb last 2 years*)

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## U.S. Wheat Stocks.....

- All U.S. Wheat: “*Lower but Large*” Stocks
  - End Stocks 2018/19 ⇒ 956 mln bu (1.099 bb last year)
  - % Stocks/Use 2018/19 ⇒ 44.1% S/U (55.5% Stx/Use last year)
- U.S. HRW Wheat: “*Still Large*” Carryover (also lower)
  - End Stocks 2018/19 ⇒ 424 mln bu (581 mb last year)
  - % Stocks/Use 2017/18 ⇒ 51.5% S/U (76.0% Stx/Use last year)

## 2018 U.S. Wheat Quality & Grades

- HRW Wheat 2018 ⇒ **12.3% protein**, 61.1 lb test, 1.2% defects
  - Versus 11.4% protein, 60.8 lb test wt, 1.1% defects in 2017
- SRW Wheat 2018 ⇒ **10.1% protein**, 57.5 lb test, 1.3% defects
  - Versus 9.5% protein, 58.8 lb test wt, 1.7% defects in 2017
- Soft White Wheat 2018 ⇒ **9.3% protein**, 61.7 lb test, 0.6% defects
  - Versus 9.6% protein, 60.9 lb test wt, 0.6% defects in 2017
- HRS Wheat 2018 ⇒ **14.6% protein**, 61.7 lb test, 0.8% defects
  - Versus 14.6% protein, 61.2 lb test wt, 1.0% defects in 2017

# World Wheat Market Prospects:

Large Supplies  $\Rightarrow$  Less of a "Buyer's Market"

- Lower Supplies - **BUT** - Record Usage Forecast for 2018/19
  - 1<sup>st</sup> year lower after 4 consecutive record high World wheat crops
- **Poorer 2018 crops:** E.U. France-Germany, Australia, & Russia
- More "competitive buying pressure" in World Trade
  - "Tight" supplies among **Top 7 World Wheat Exporters**
  - **NOT MUCH** evidence "YET" of "stronger" U.S. wheat exports

# CME Kansas Hard Red Winter Wheat

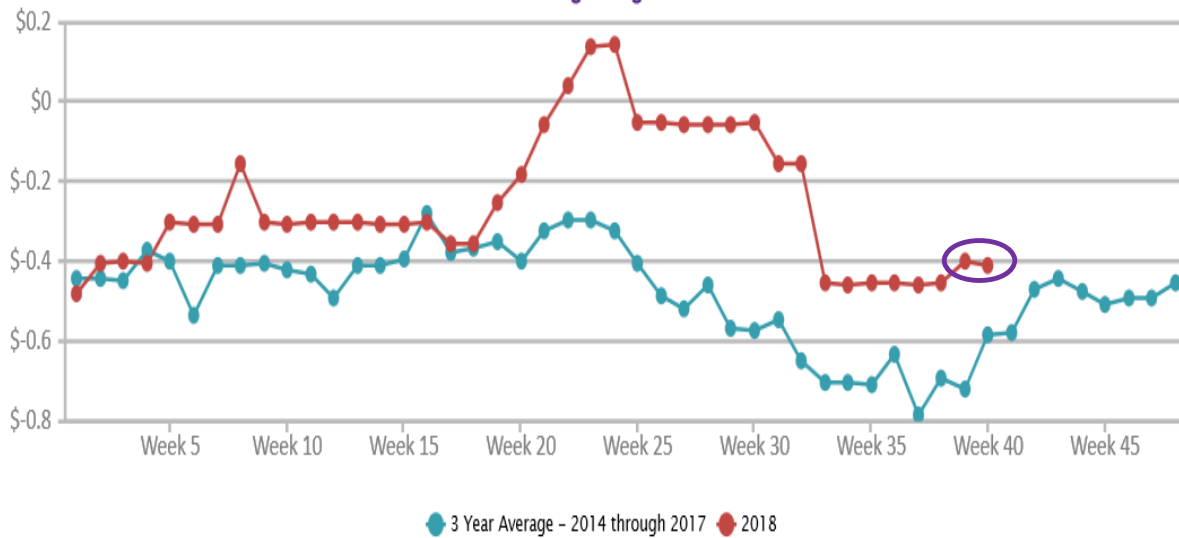
Monthly Chart: September 2009 – October 2018 + 10/31/2018





## SALINA, KS: Hard Red Winter Wheat Basis - CARGILL

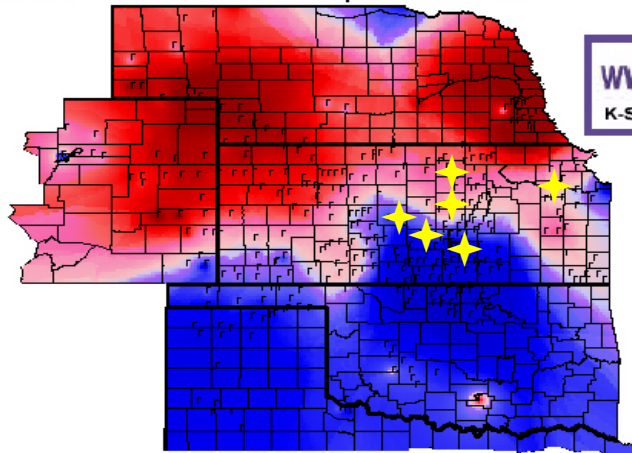
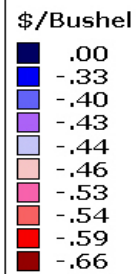
www.AgManager.info



## Wheat Basis, 10-24-2018

Basis = Cash Price - Nearby Futures Price

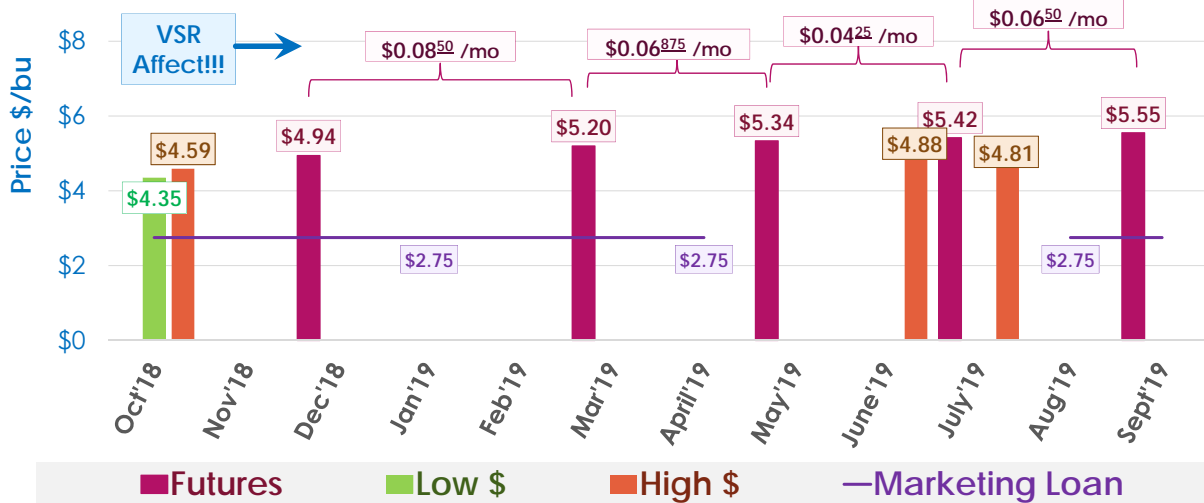
KCBT Dec  
Futures  
Price: \$4.97



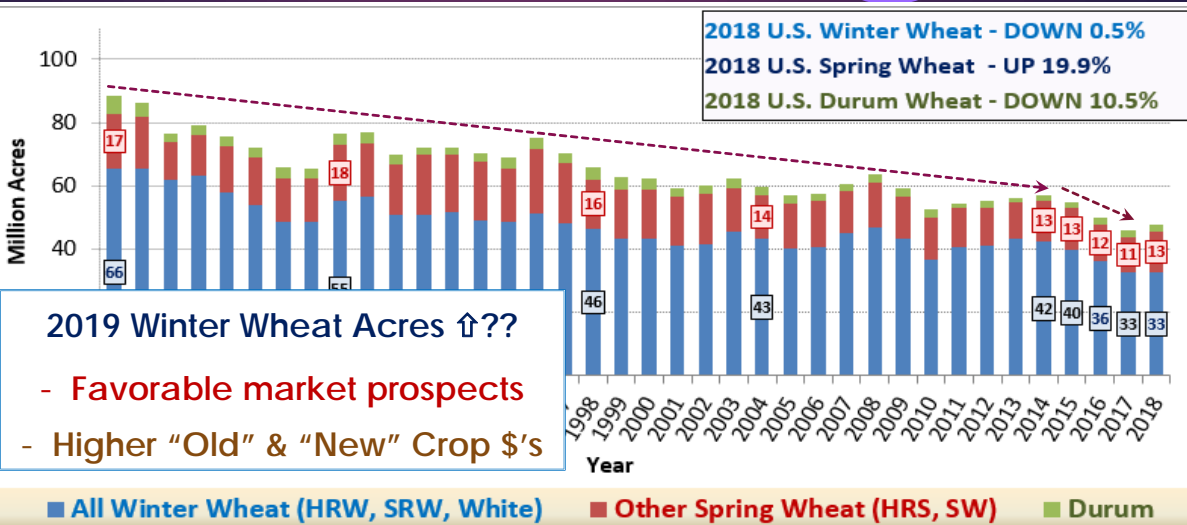
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# Wheat Cash & HRW Wheat Futures

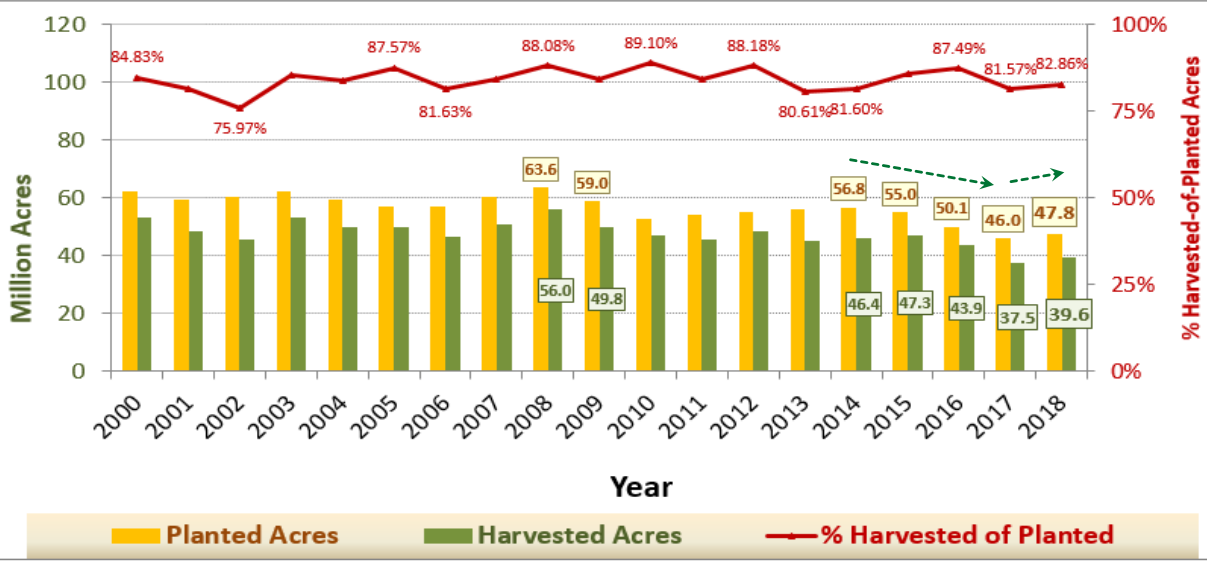
Salina, KS Local Elevators - October 31, 2018



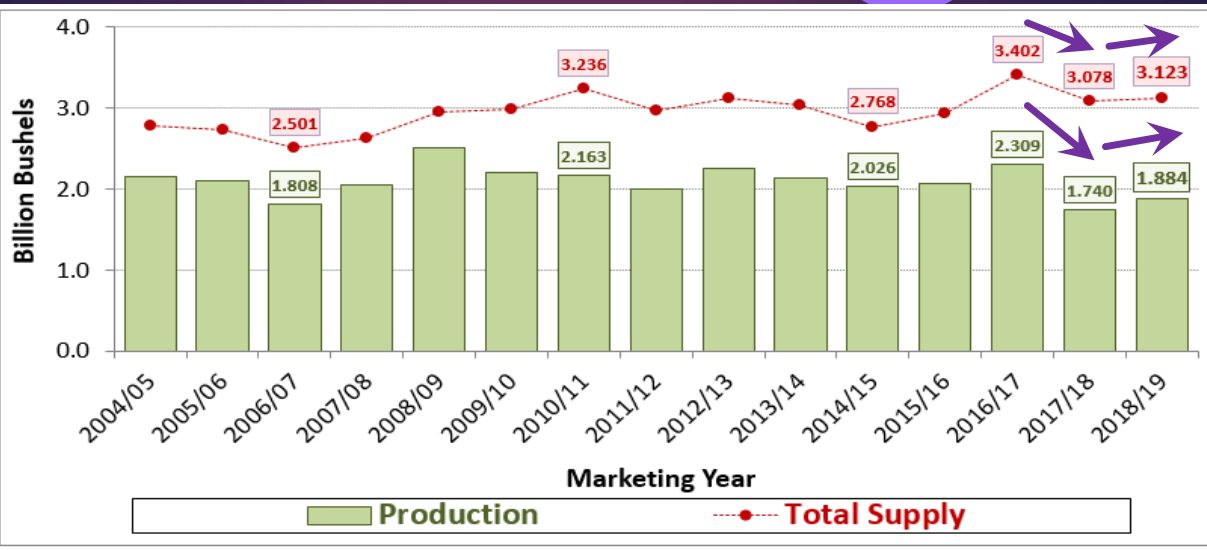
# U.S. Wheat Seeded Acreage



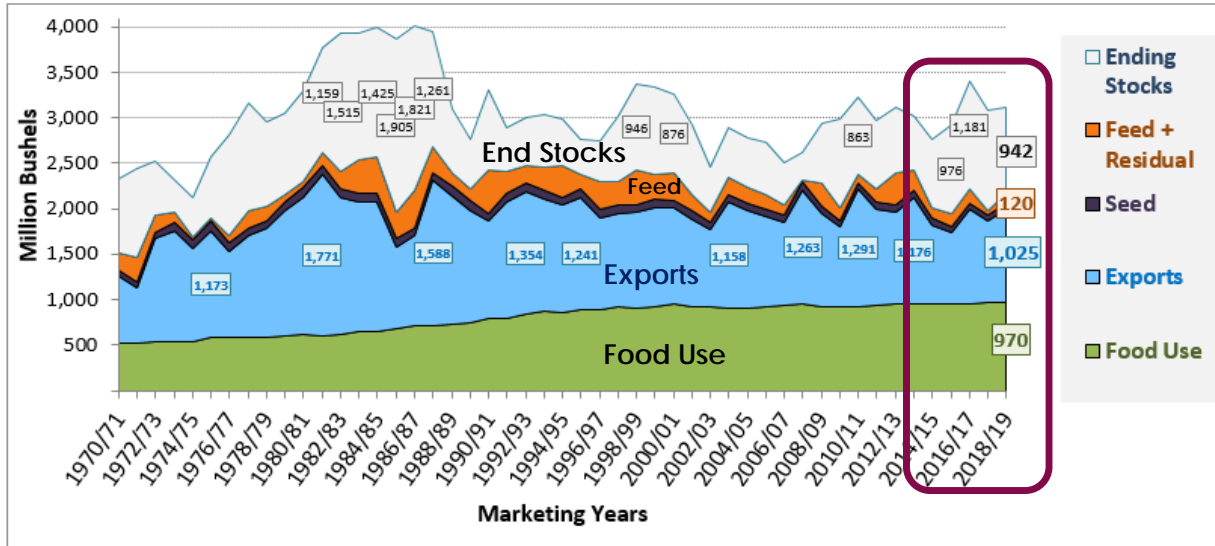
# U.S. Wheat Acreage



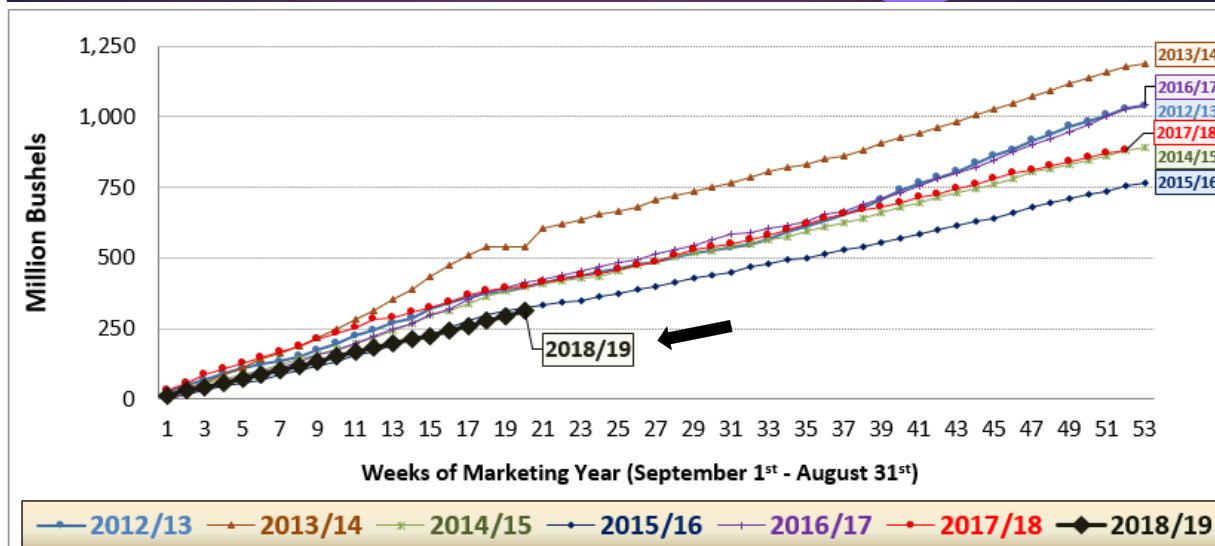
# U.S. Wheat Production & Supplies



# U.S. Wheat Use by Category

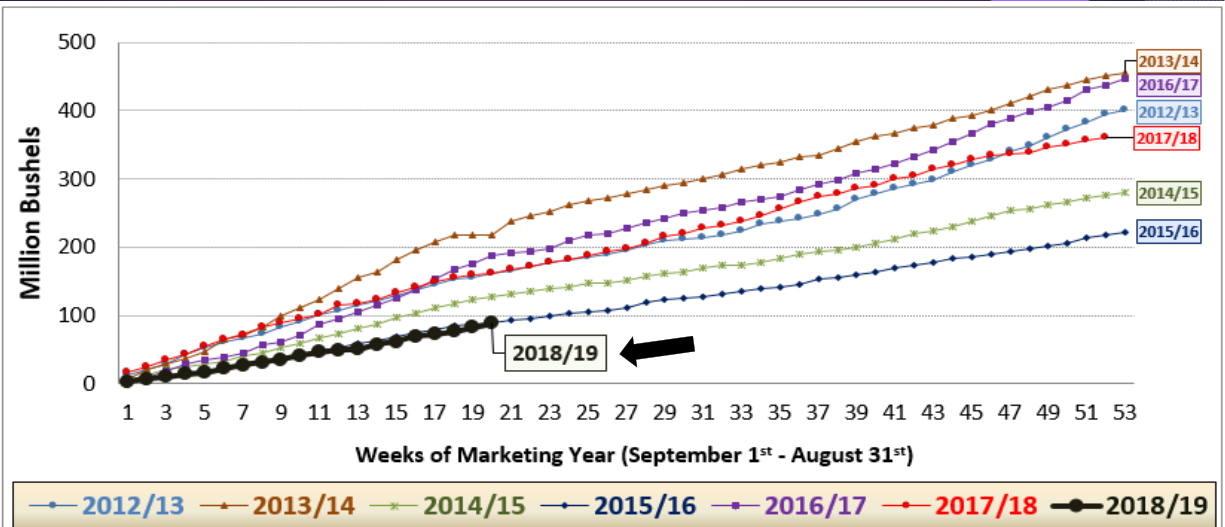


# U.S. All Wheat Exports - Weekly thru October 18, 2018

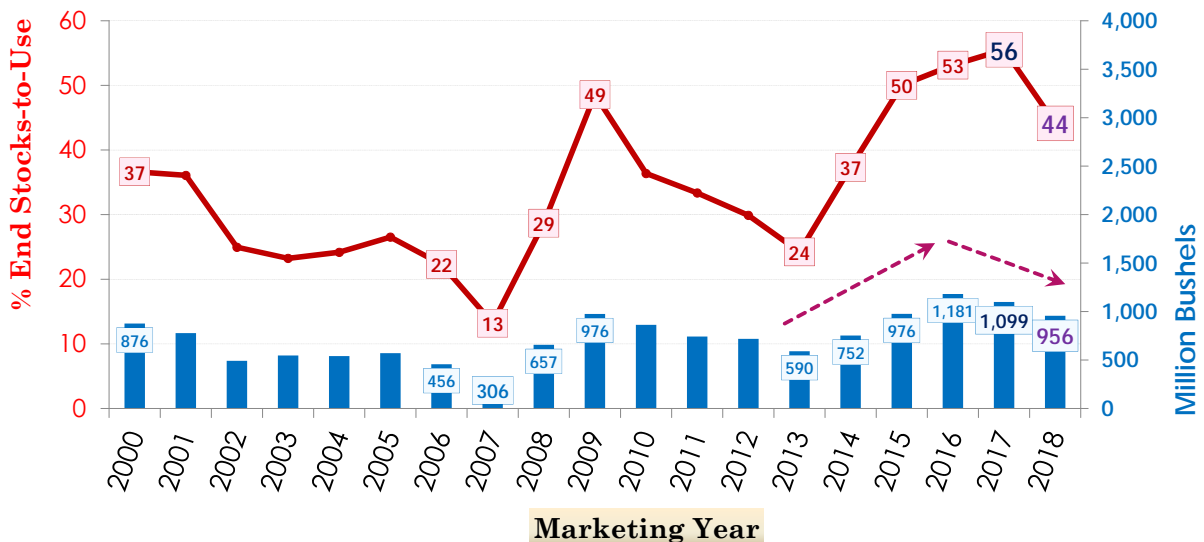


# U.S. Hard Red Winter Wheat Exports

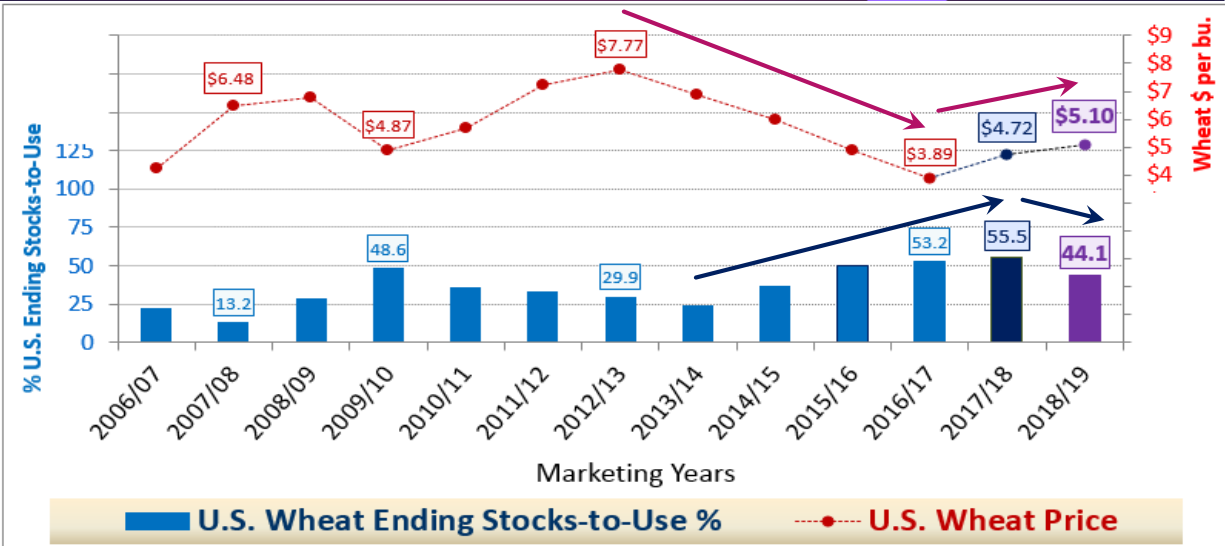
- Weekly through 10/18/2018



# U.S. Wheat Ending Stocks & % Stx/Use

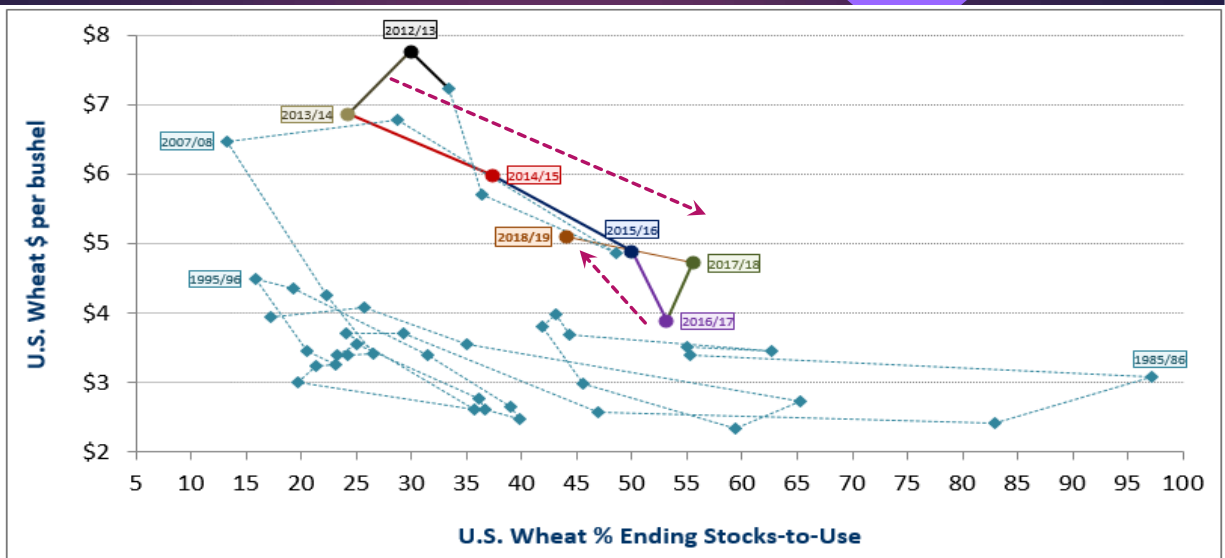


# U.S. Wheat Ending Stocks & Prices

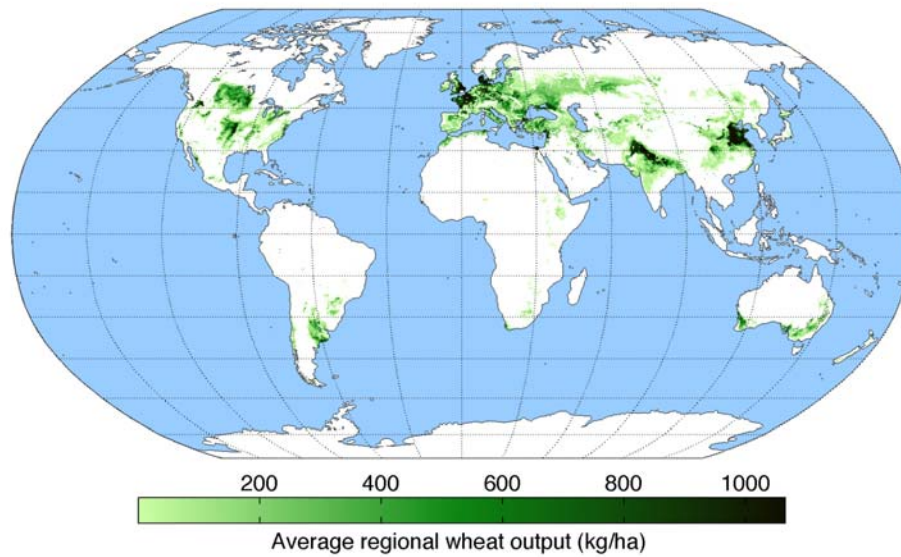


U.S. Wheat Price

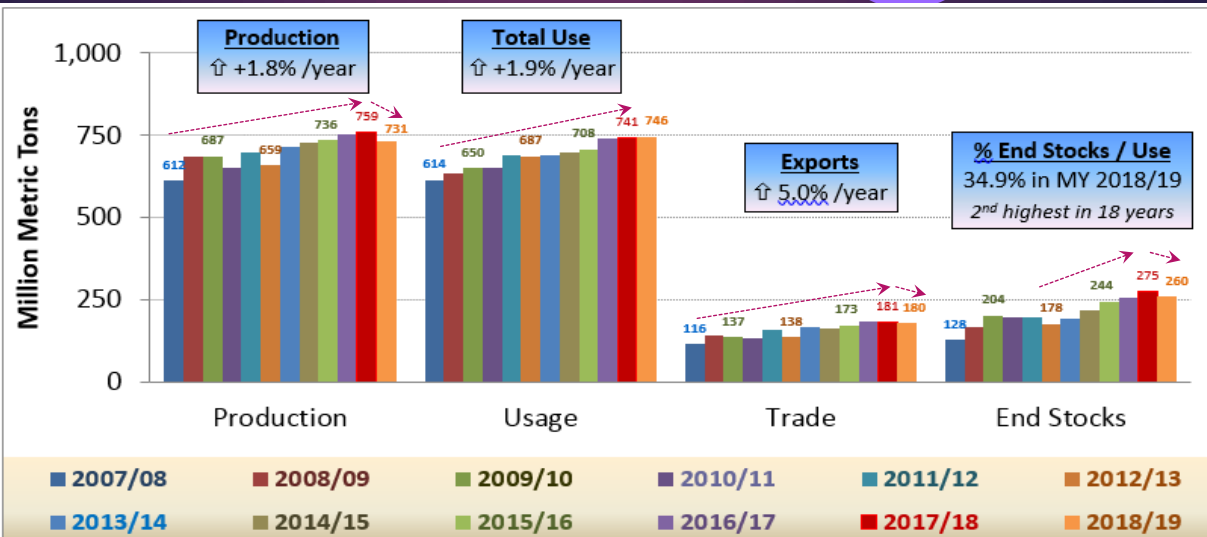
# U.S. Wheat Price vs U.S. Stocks-to-Use



# World Wheat Production Regions

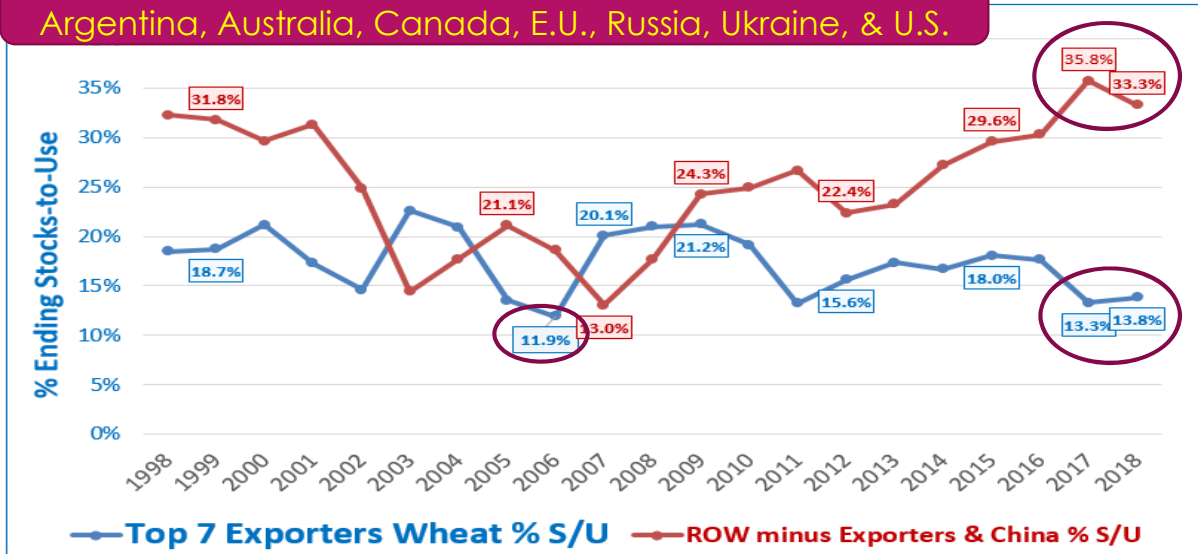


# World Wheat Supply, Use & Stocks



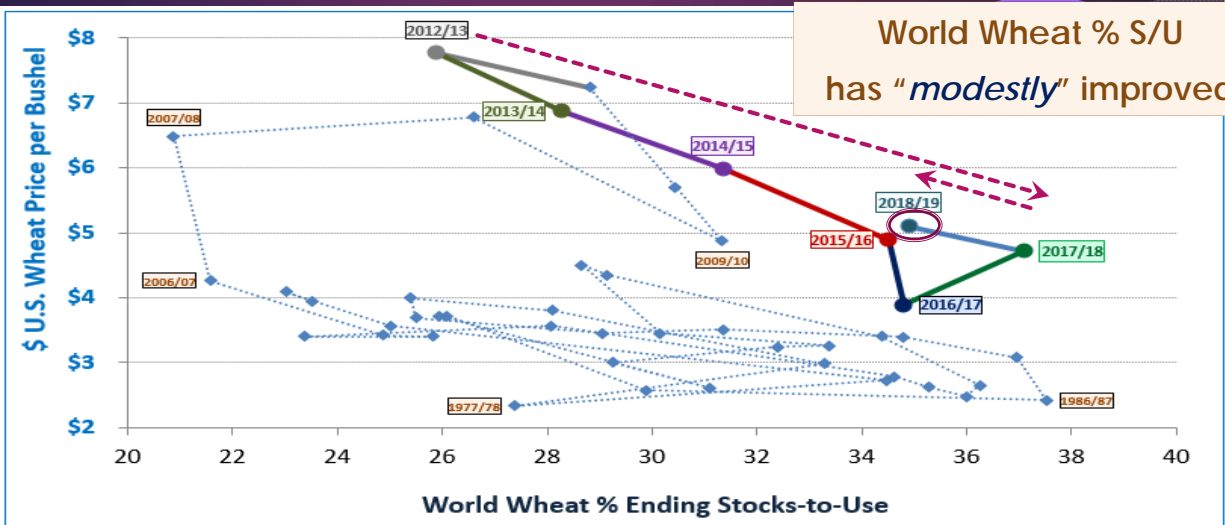
# Wheat Stx/Use: Top 7 Exporters vs ROW

Tight supplies among the Worlds Top 7 Exporters:  
Argentina, Australia, Canada, E.U., Russia, Ukraine, & U.S.



# U.S. Wheat Price (\$) vs World % Stx/Use

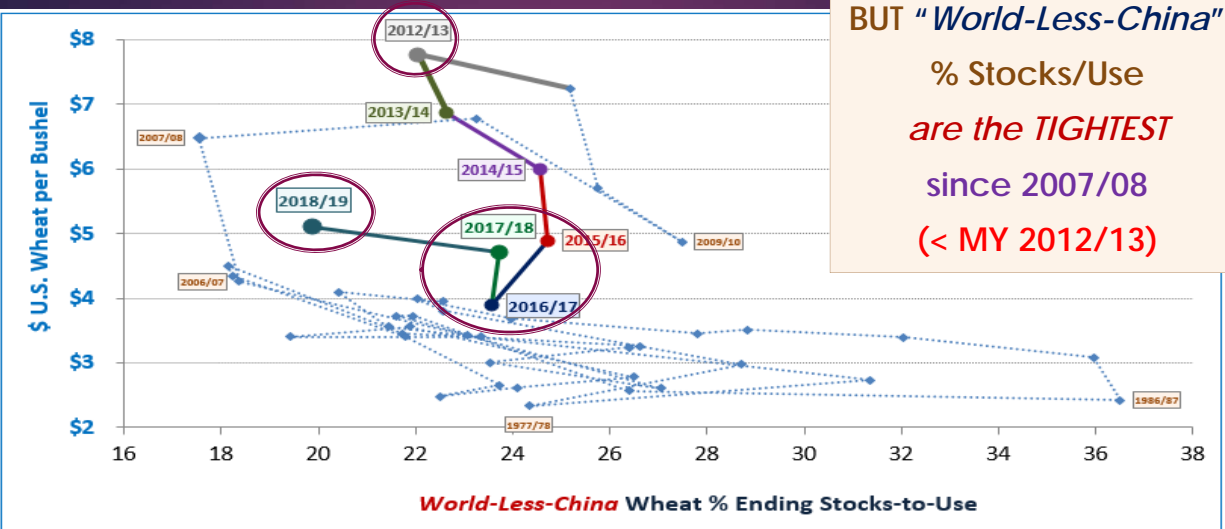
MY 1973/74 – “New Crop” MY 2018/19



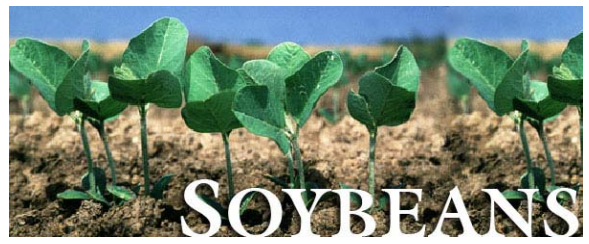


# U.S. Wheat \$ vs Non-China % Stx/Use

MY 1973/74 – “New Crop” MY 2018/19



# Soybean & Cotton Markets



## U.S. Soybean Market Prospects in 2018-19

### A. U.S.-China Trade Dispute

- *HAS* affected U.S. Soybean prices, but so far *LIMITED EFFECT* on U.S. export shipments & forward purchases

### B. USDA forecasts U.S. Exports to be *large despite* Tariffs

- Foreign buyer "*switching*" between *U.S.* & *South America*, & some "*trans-shipments*" have occurred among countries

### C. Market Focus in Fall-Winter 2018-19

- *So. America* crop prospects – their response to high 2018 \$'s

## U.S. Soybean Supply-Use

- Soybean crop record high in September Crop Report
- Large Global Soybean Stocks limit Price\$'s
- Low Price\$'s DO support "*New Crop*" MY 2018/19 Use \*\*\*
  - Soy Crush <sup>2018/19</sup> = 2.070 bln bu (*Record* – vs 2.055 bb last year)
  - Exports <sup>2018/19</sup> = 2.060 bln bu (*Down* – vs 2.130 & 2.166 bb last 2 years)
  - Total Use <sup>2018/19</sup> = 4.268 bln bu (*Down* – vs 4.321 bb last year)
  - SBM Exports <sup>2018/19</sup> = 13.500 mln tons (vs 14.4 & 11.6 mln tons last 2 years)

# U.S. Soybean & Cotton Stocks.....

- Soybean: "**Large**" Stocks & % S/U

- End Stocks 2018/19 ⇒ 845 mln bu (High vs 395 mb last year)
- % Stocks/Use 2018/19 ⇒ 19.8% S/U (High vs 9.1% last year)

- Cotton: "**Large**" 2018 Crop & "**Growing**" Stocks

- Production 2018/19 ⇒ 19.7 mln bales (20.9 & 17.2 mb last 2 years)
- End Stocks 2018/19 ⇒ 4.7 mln bales (4.3 & 2.75 mb last 2 years)
- % Stocks/Use 2018/19 ⇒ 24.6% S/U (22.6% & 15.1% last 2 years)



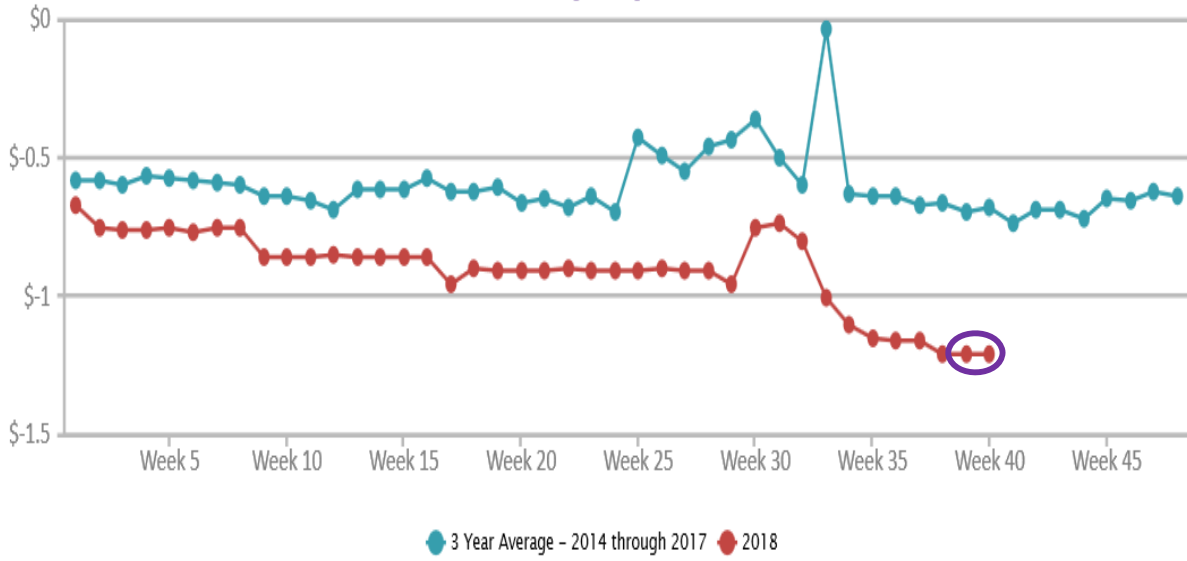
## CME Soybean Futures

Monthly Chart: August 2009 through October 2018 + 10/31/2018



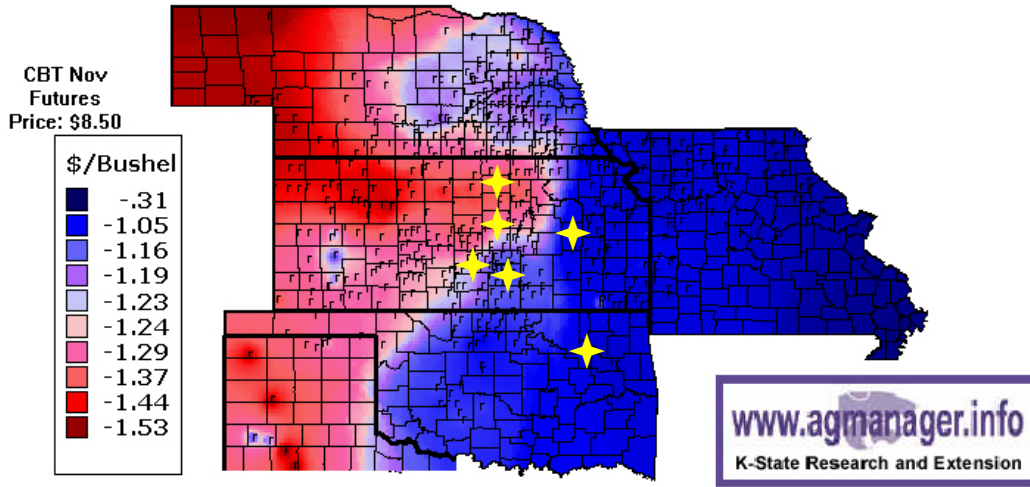
# SALINA, KS: Soybeans Basis - CARGILL

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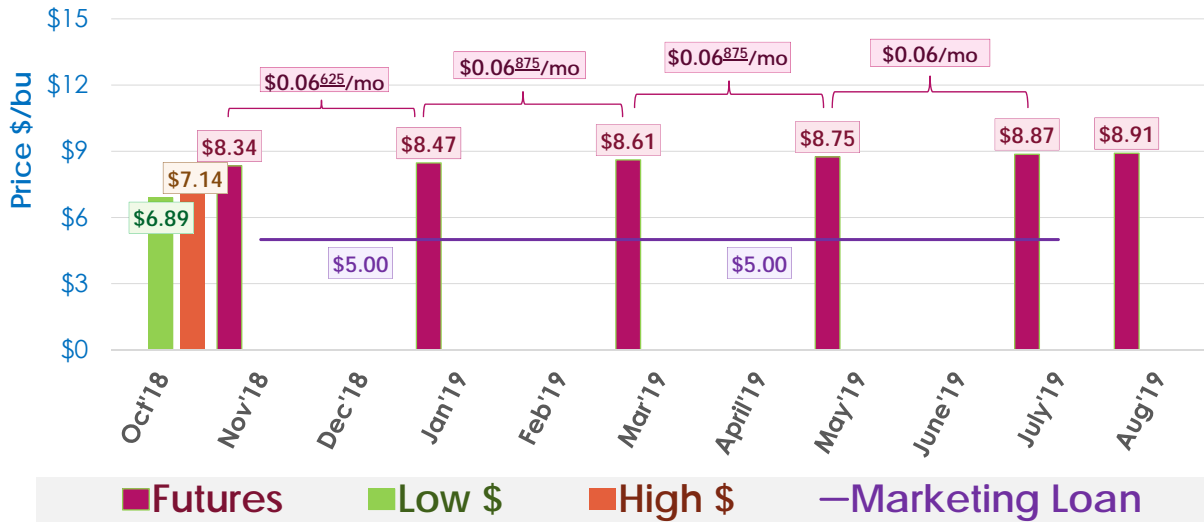
# Soybean Basis, 10-24-2018

Basis = Cash Price - Nearby Futures Price

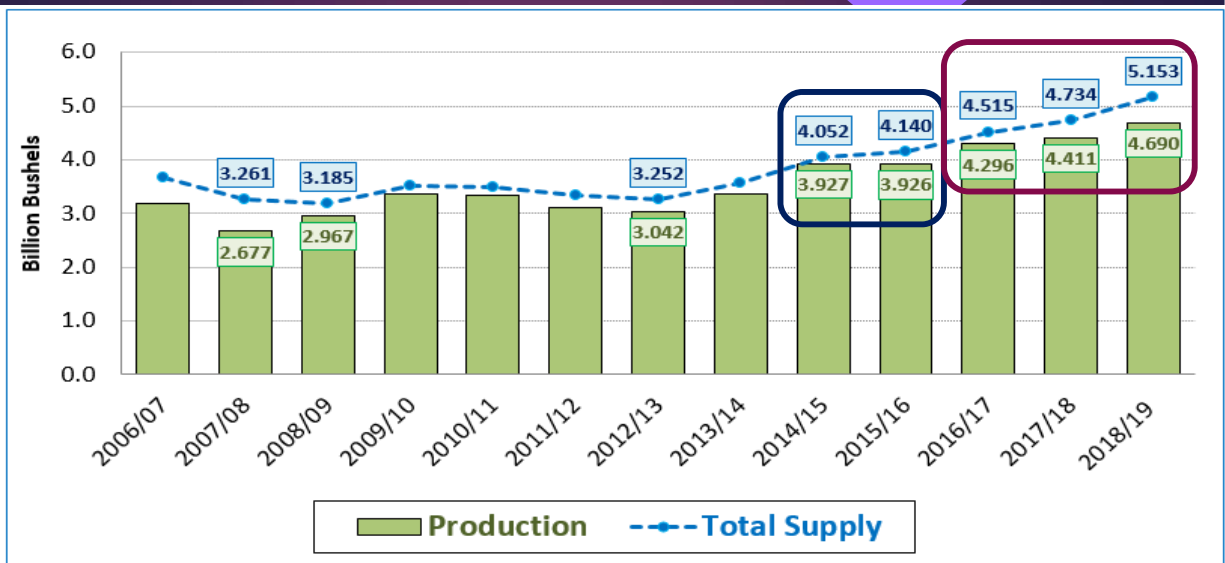


# Soybean Cash & Futures Price\$'s

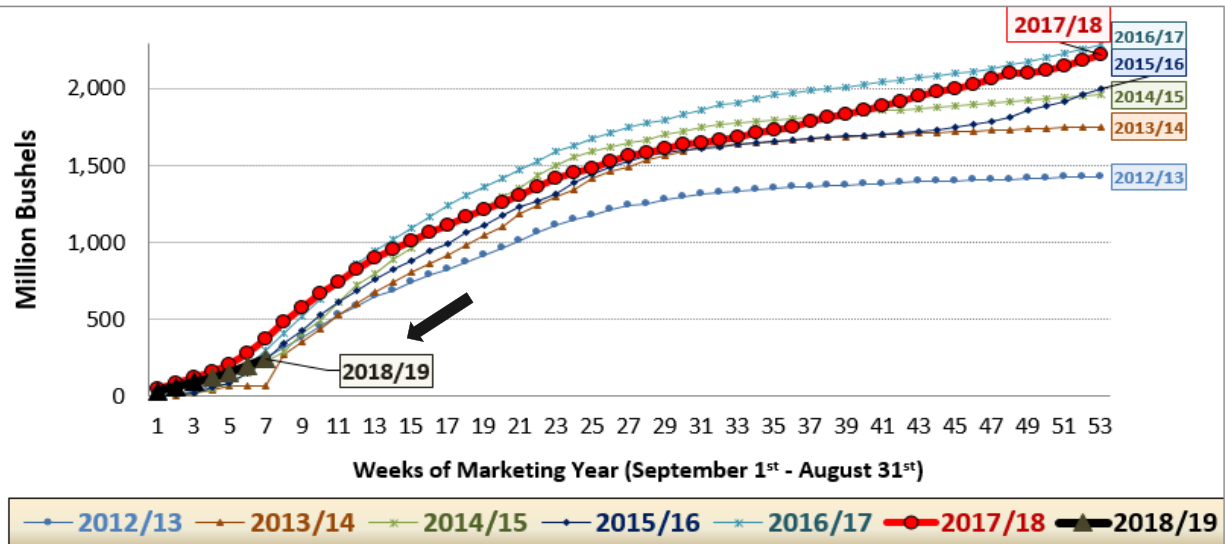
Salina, KS Local Elevators - October 31, 2018



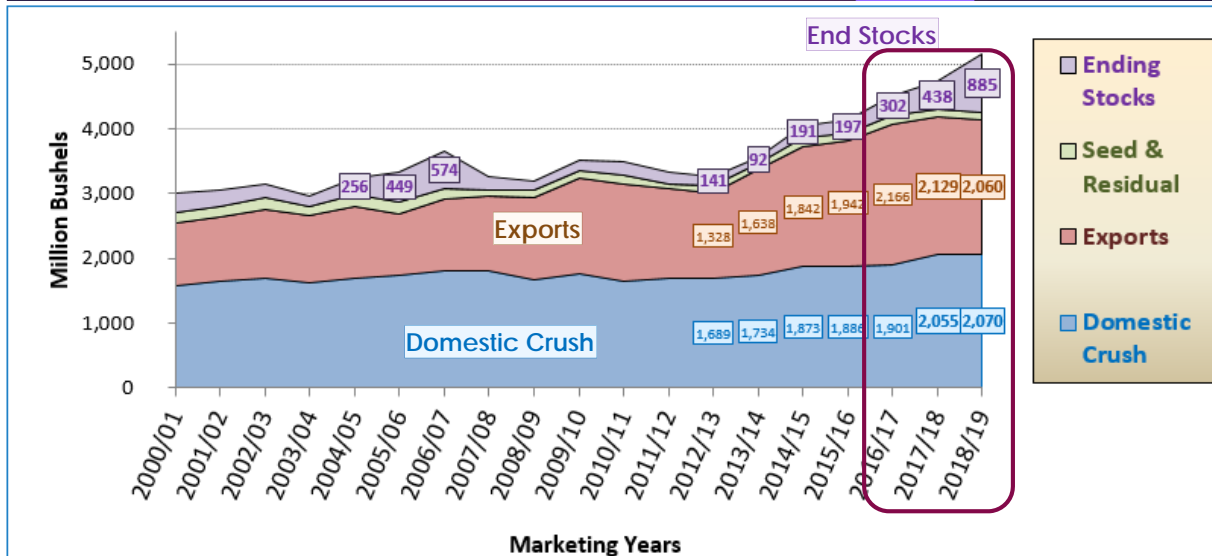
# U.S. Soybean Production & Supplies



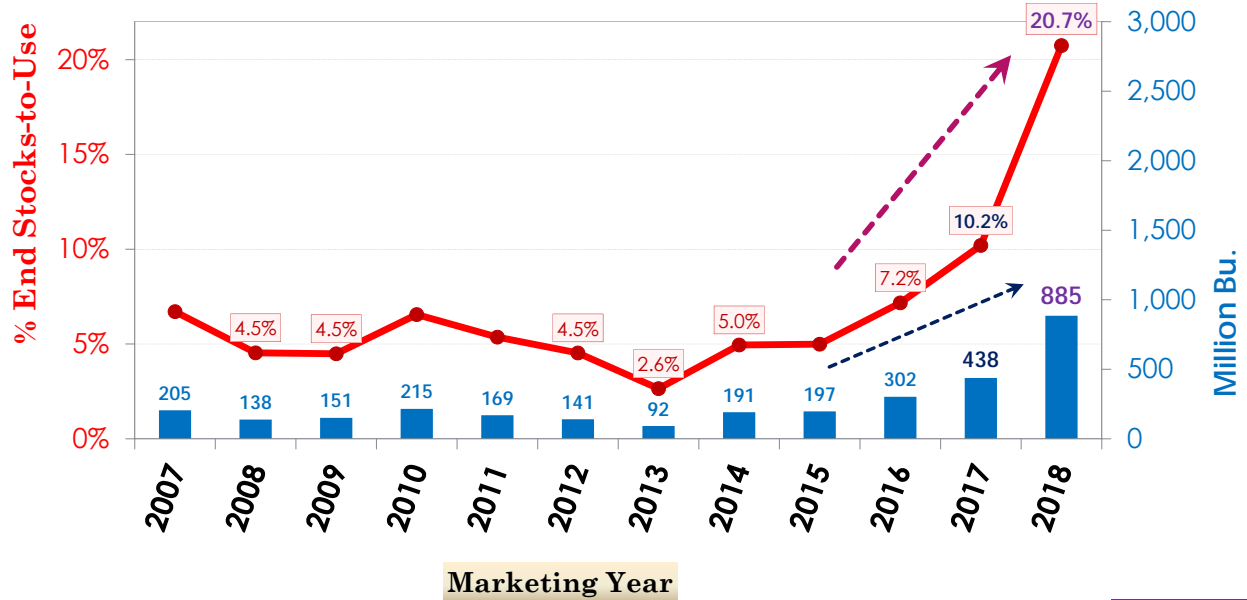
# U.S. Soybean Exports - Cumulative Weekly



# U.S. Soybean Use & End Stocks

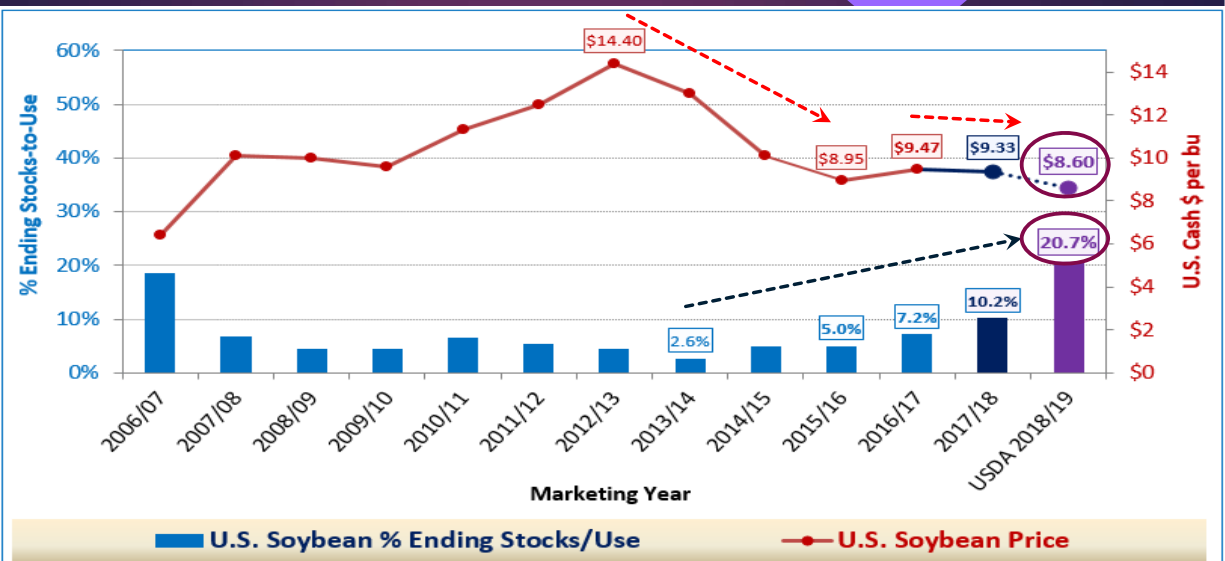


# U.S. Soybean Ending Stocks & % Stx/Use



Ernst & Young

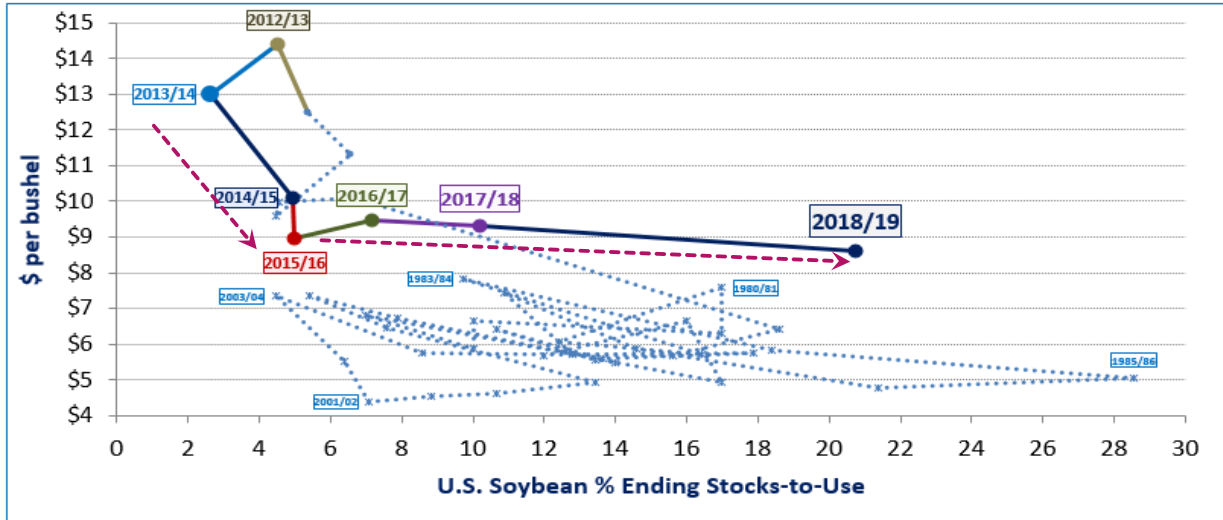
# U.S. Soybean % Stocks/Use vs Price\$



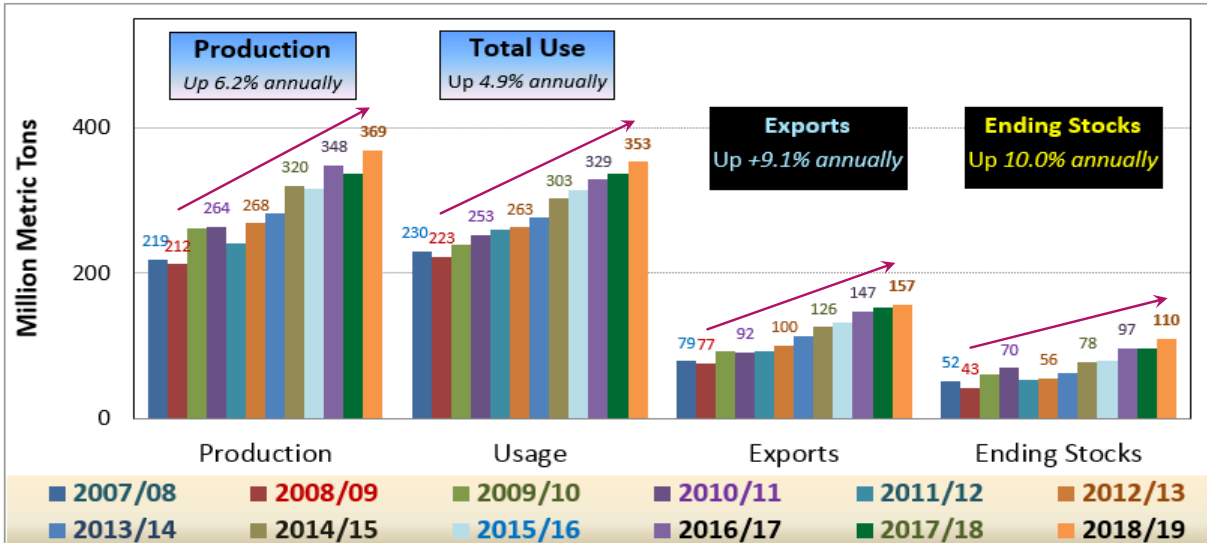
# U.S. Soybean \$ vs U.S. Stocks-to-Use



MY 1973/74 through "New Crop" MY 2018/19



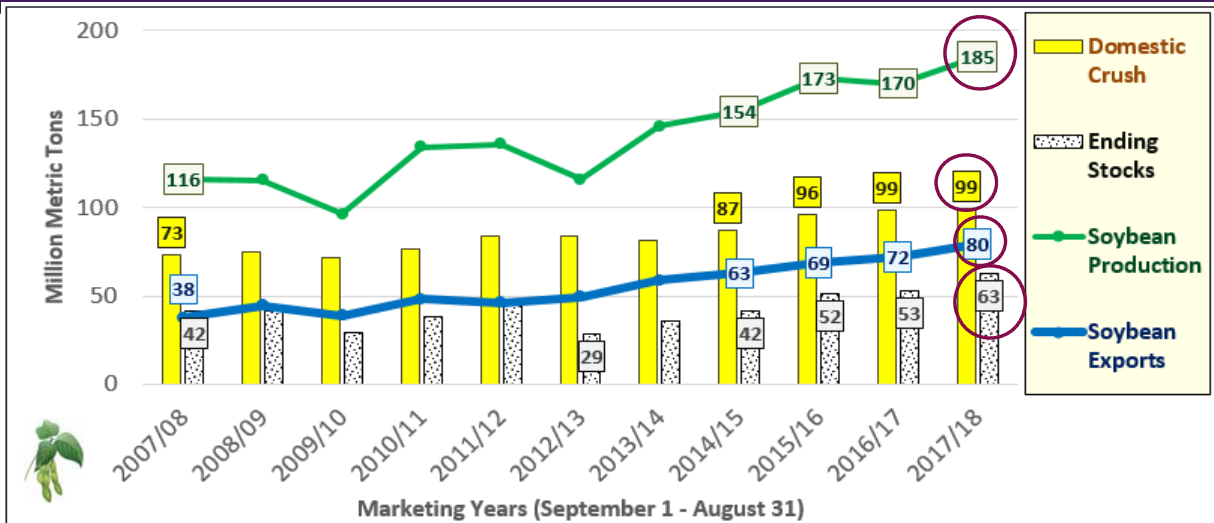
# World Soybean Supply, Use & Stocks





# So. America Soybean Supply-Demand

MY 2007/08 through "New Crop" MY 2018/19

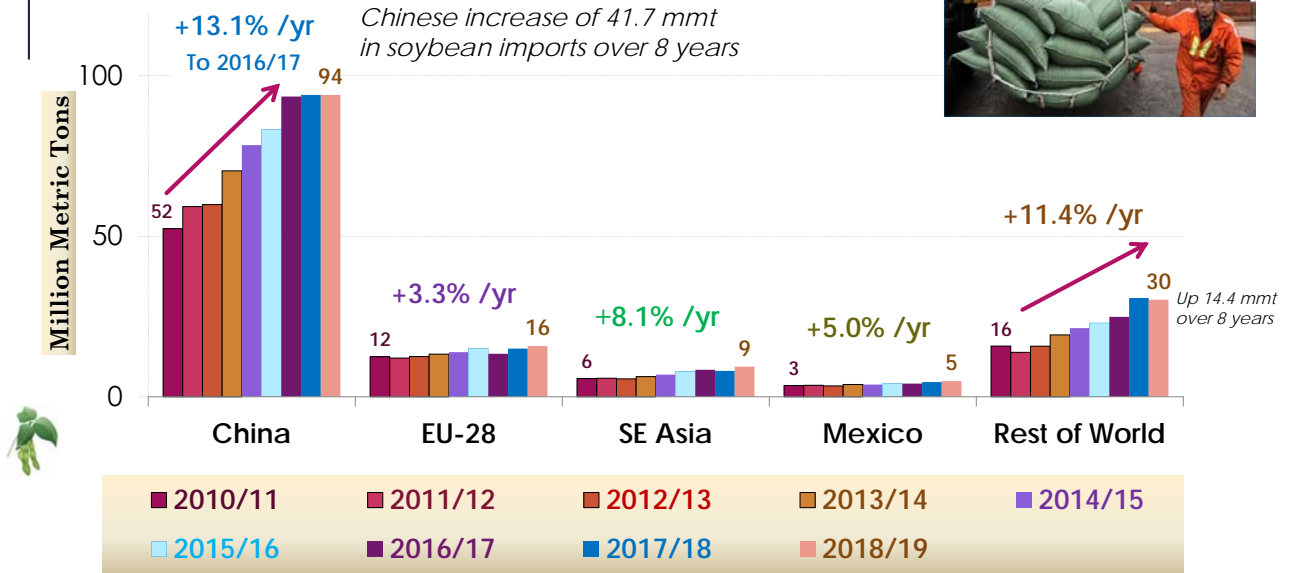


# China Soybean Supply-Demand

MY 2007/08 through "New Crop" MY 2018/19



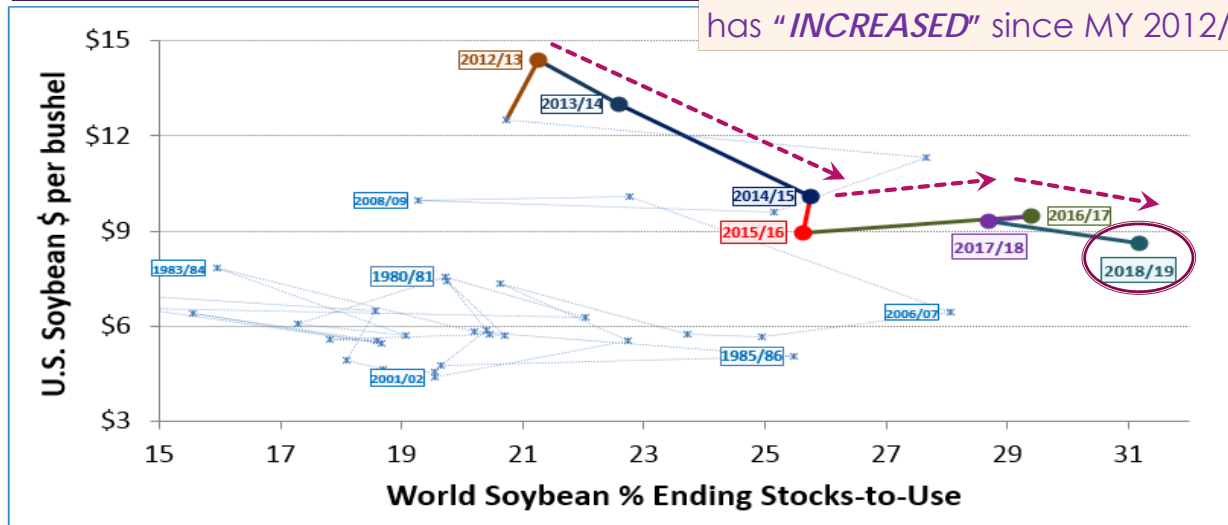
# Soybean Importer Purchases



# U.S. Soybean Price (\$) vs World % Stx/Use

MY 1973/74 – “New Crop” MY 2018/19

World % Stocks/Use has “**INCREASED**” since MY 2012/13



# World Cotton Supply and Demand

Item	2017/2018 estimate	2018/2019 forecast	Change from September 10	Change from 2017/2018
----- Million bales -----				
Beginning stocks	80.8	80.9	-2.9	**
Production	123.5	121.7	-0.3	-1.9
Total Supply	204.4	202.5	-3.2	-1.8
Consumption	123.3	127.8	-0.2	4.5
Trade	40.7	41.5	-0.3	0.7
Ending Stocks	80.9	74.4	-3.0	-6.4
<b>Addendum</b>				
China ending stocks	38.0	29.9	--	-8.2

October 11, 2018

# U.S. Cotton Supply and Demand

Item	2017/2018 estimate	2018/2019 forecast	Change from September 10	Change from 2017/2018
Planted area (million acres)	12.61	14.04	--	1.43
Harvested area (million acres)	11.10	10.53	-0.03	-0.58
Yield (pounds per acre)	905	901	6	-4
----- Million bales -----				
Beginning stocks	2.75	4.30	--	1.55
Production	20.92	19.76	0.08	-1.16
Imports	0.00	0.01	--	**
Total supply	23.68	24.07	0.08	0.39
Mill use	3.23	3.40	**	0.18
Exports	15.85	15.50	-0.20	-0.35
Total use	19.07	18.90	-0.20	-0.17
Unaccounted	0.30	0.17	-0.02	-0.14
Ending stocks	4.30	5.00	0.30	0.70
----- Percent -----				
Stocks to use ratio	22.5	26.5	1.8	3.9
----- Cents per pound -----				
Average market price	68.00	69.00/77.00	-2.00	5.00

-- No change. \*\* Rounds to zero.

October 11, 2018

# Farm Financial Trends in Kansas

Kansas Farm Management Association (KFMA) Info

Financial Analysis  
Results

## Farm Financial Trends in Kansas

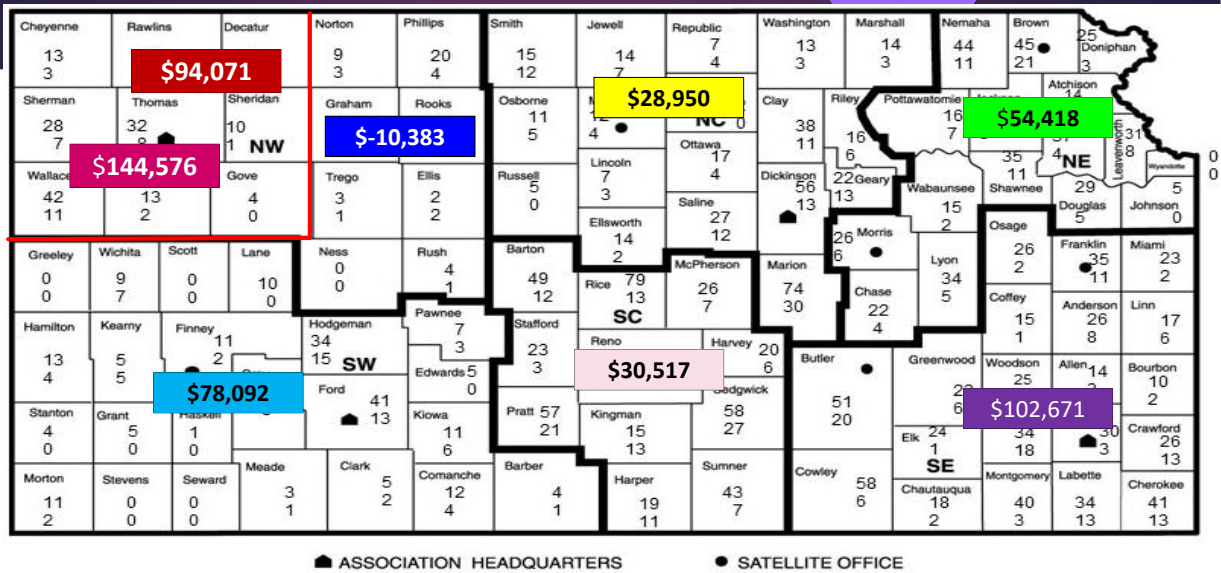
Kansas Farm Management Association (KFMA) Info

# Map & Office Locations



**KANSAS FARM MANAGEMENT ASSOCIATION**

*Building Strong Relationships - Producing Excellence*

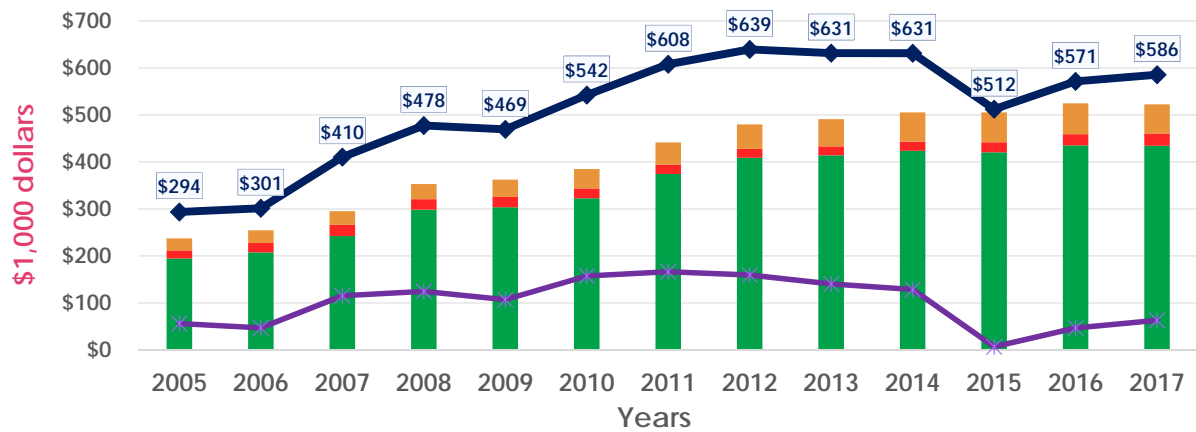


## A. Trend Financial Analysis (KFMA: 2013-2017)

	2013	2014	2015	2016	2017
Value of Farm Production	\$631 K	\$631 K	\$512 K	\$571 K	\$586 K
Operating Expense (no interest)	\$414 K	\$421 K	\$420 K	\$435 K	\$434 K
Interest Expense	\$19 K	\$19 K	\$21 K	\$24 K	\$26 K
Depreciation Expense	\$58 K	\$62 K	\$64 K	\$65 K	\$62 K
<b>Total Farm Expense</b>	<b>\$523 K</b>	<b>\$524 K</b>	<b>\$505 K</b>	<b>\$502 K</b>	<b>\$491 K</b>

# Farm Income vs Expenses (2005-2017)

Annual Averages for Kansas Farm Management Association Farms



■ Cash Operating Expenses   
 ■ Interest   
 ■ Depreciation  
◆ Value of Farm Production   
 ✱ Net Farm Income

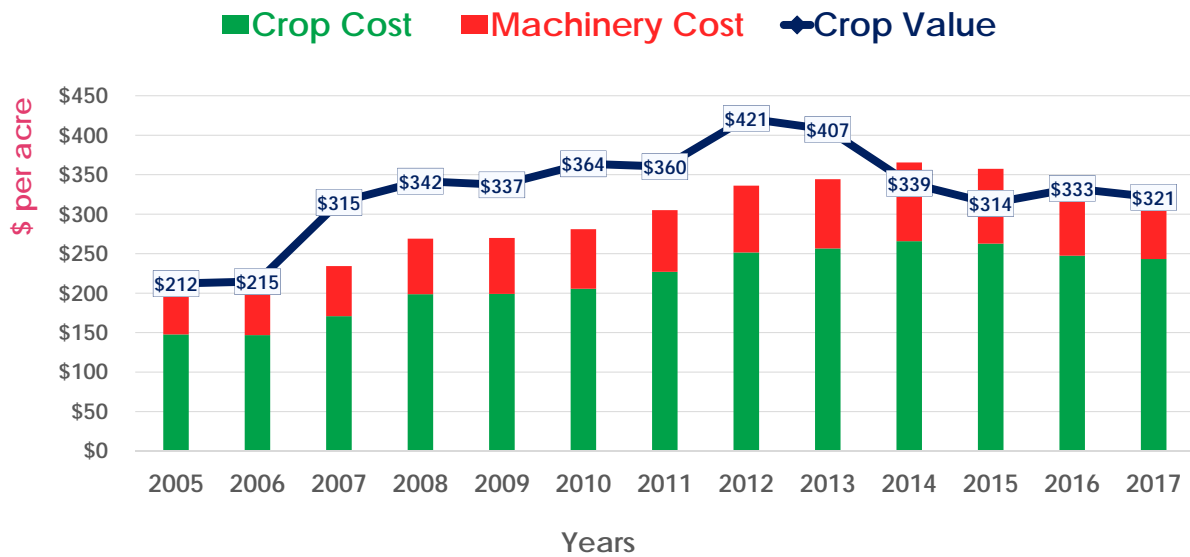
## B. Trend Financial Analysis (KFMA: 2013-2017)

\$Value per \$100 of Farm Production

	2013	2014	2015	2016	2017
Operating Expense / \$100	\$65.57	\$66.65	\$82.09	\$76.19	\$74.18
Interest Expense / \$100	\$3.01	\$3.08	\$4.17	\$4.16	\$4.46
Depreciation Expense / \$100	\$9.19	\$9.88	\$12.42	\$11.47	\$10.61
<b>Total Expense / \$100</b>	<b>\$77.77</b>	<b>\$79.60</b>	<b>\$98.68</b>	<b>\$91.82</b>	<b>\$89.25</b>
Net Farm Income / \$100	\$22.23	\$20.40	\$1.32	\$8.18	\$10.75

# Farm Expenses Breakdown (2005-2017)

Kansas Farm Management Association Farms



## C. Trend Financial Analysis (KFMA: 2013-2017)

Farm Financial Balance Sheet (End of Year)

	2013	2014	2015	2016	2017
Total Liabilities	\$500 K	\$542 K	\$593 K	\$609 K	\$634 K
Total Assets	\$2,206 K	\$2,339 K	\$2,715 K	\$2,797 K	\$2,778 K
Total Equity (Net Worth)	\$1,706 K	\$1,797 K	\$2,122 K	\$2,187 K	\$2,143 K
Debt / Asset (%)	22.7%	23.2%	21.8%	21.8%	22.8%
Current Assets / Liabilities (%)	319%	278%	220%	230%	215%

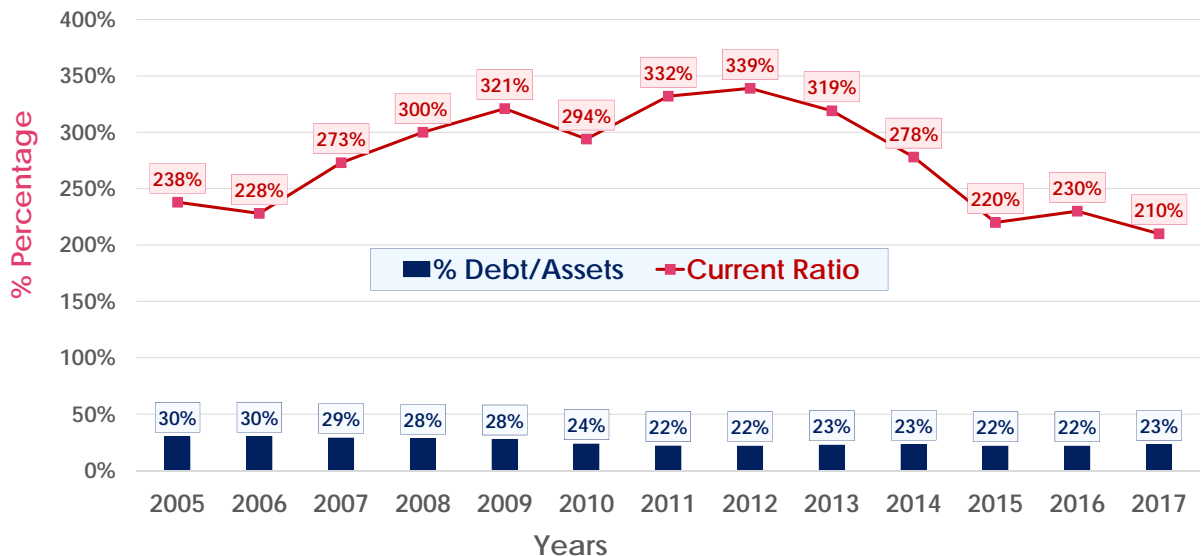
# Farm Income vs Expenses (2005-2017)

Annual Averages for Kansas Farm Management Association Farms



# Farm Income vs Expenses (2005-2017)

Annual Averages for Kansas Farm Management Association Farms



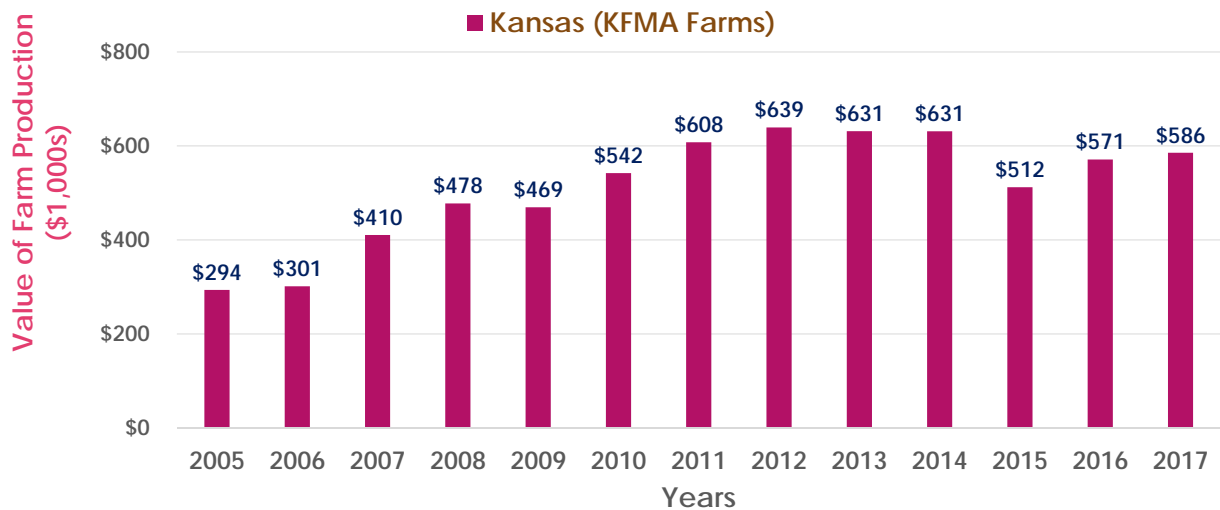


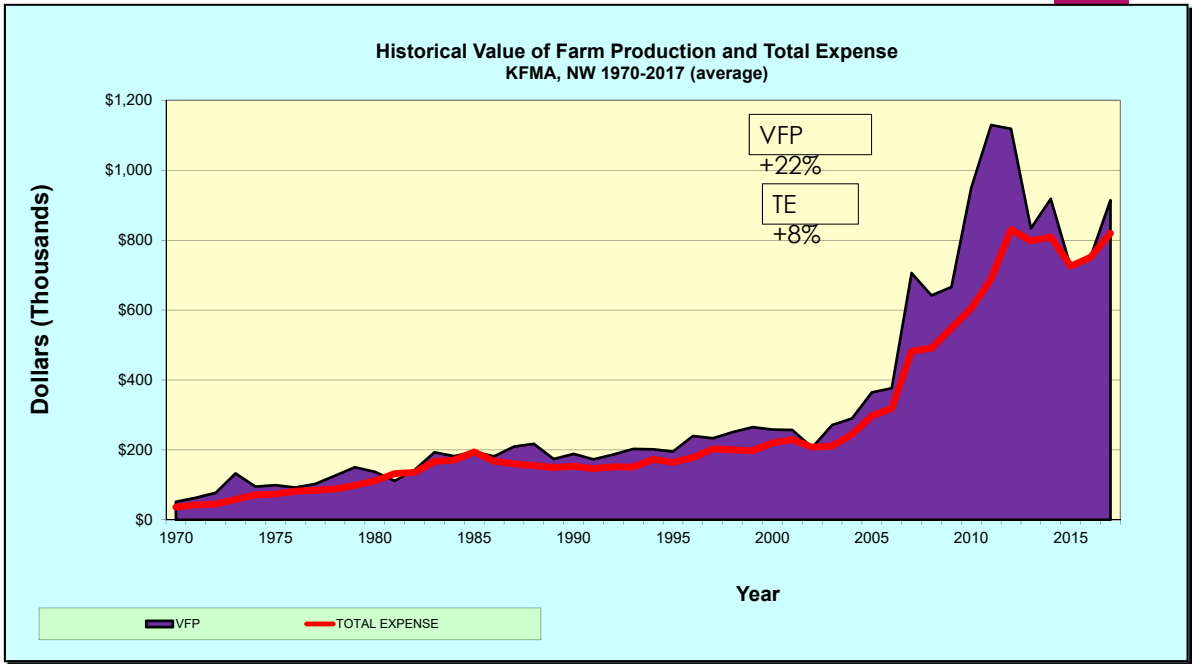
VALUE OF FARM PRODUCTION\*

YEAR	NW	SW	NC	SC	NE	SE	STATE
2017	\$913,916	\$515,227	\$438,562	\$492,699	\$538,949	\$663,985	\$585,568
2016	\$760,276	\$565,633	\$448,755	\$465,791	\$510,570	\$669,697	\$571,318
2015	\$713,536	\$609,099	\$404,917	\$471,367	\$428,476	\$552,447	\$512,153
2014	\$900,844	\$584,452	\$507,768	\$519,782	\$634,234	\$691,238	\$631,171
2013	\$853,846	\$586,088	\$529,903	\$613,685	\$627,783	\$644,814	\$631,437
<b>5-Year Avg</b>	<b>\$828,484</b>	<b>\$572,100</b>	<b>\$465,981</b>	<b>\$512,665</b>	<b>\$548,002</b>	<b>\$644,436</b>	<b>\$586,329</b>

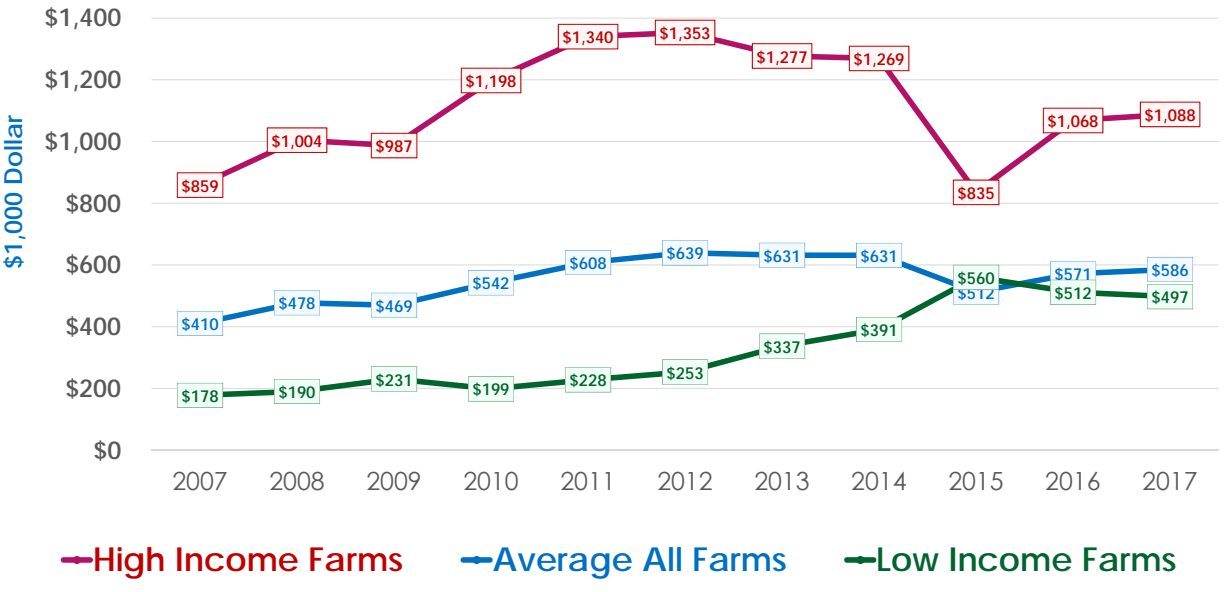
## Value of Farm Production in KS (2005-2017)

Kansas Farm Management Association Farms

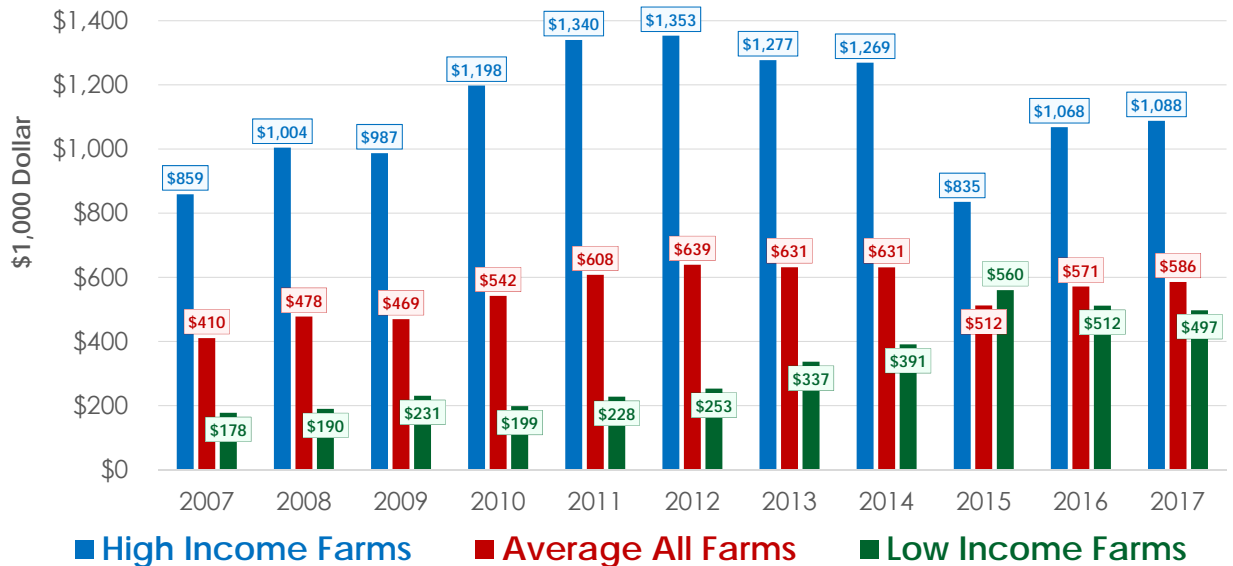




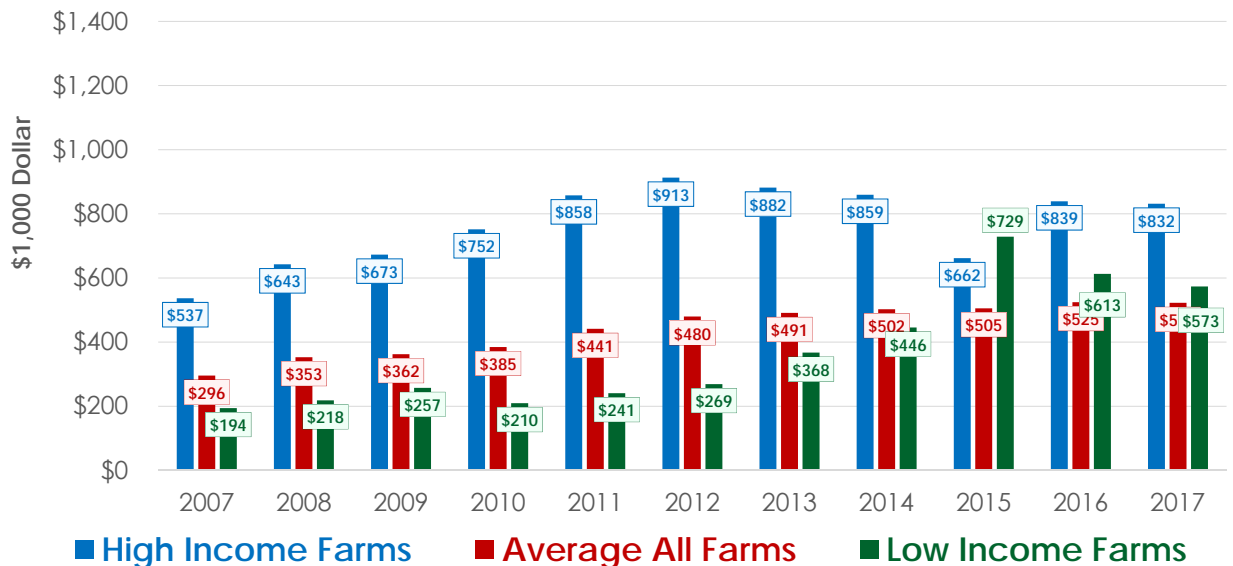
## Value of Farm Production (KFMA: 2007-2017)



## Value of Farm Production (KFMA: 2007-2017)



## Total Farm Expenses (KFMA: 2007-2017)



### ACCRUAL NET FARM INCOME\*

YEAR	NW	SW	NC	SC	NE	SE	STATE
2017	\$94,071	\$78,092	\$28,950	\$30,517	\$54,418	\$102,671	\$62,944
2016	\$2,898	\$39,210	\$36,262	(\$3,847)	\$48,932	\$110,402	\$46,717
2015	(\$2,603)	\$45,384	\$12,420	(\$7,523)	(\$11,351)	\$18,380	\$6,744
2014	\$113,731	\$110,316	\$103,609	\$58,613	\$152,864	\$185,398	\$128,731
2013	\$48,966	\$105,061	\$137,633	\$151,464	\$160,350	\$162,281	\$140,356
<b>5-Year Avg</b>	<b>\$51,413</b>	<b>\$75,613</b>	<b>\$63,775</b>	<b>\$45,845</b>	<b>\$81,043</b>	<b>\$115,826</b>	<b>\$77,098</b>

## "Cash" vs "Accrual" Basis Accounting

### A. Cash Accounting

- Only records **CASH sales &/or services** in the accounting period
  - Revenue is **ONLY** recorded in the period when the product is sold or service given is paid for
- Expenditures are recorded in the period they are **PAID FOR** (& maybe *NOT when they are actually bought or used*)

### □ Cash Accounting Advantages & Disadvantages

- Advantage      ➔ EASY to use & calculate taxes with
- Disadvantage   ➔ Revenue & expenses MAY be recorded in a year *other than* when they occurred

## B. Accrual Accounting

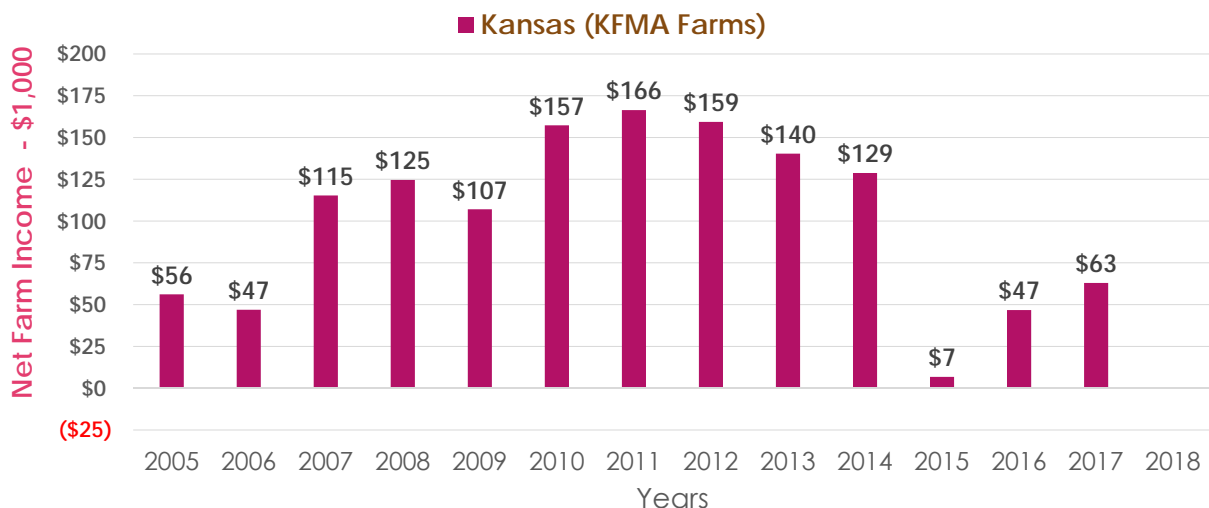
- Records as **Revenue** the VALUE of all products produced & all services provided during a year – no matter when the cash is actually received
- How inventories of grain, feed, & livestock are valued / handled
  - Inventories are assigned a value & recorded as revenue in the year they are produced
  - Farm expenditures are assigned to the year the operation occurred rather than the year they were paid for

### □ Accrual Accounting Advantages & Disadvantages

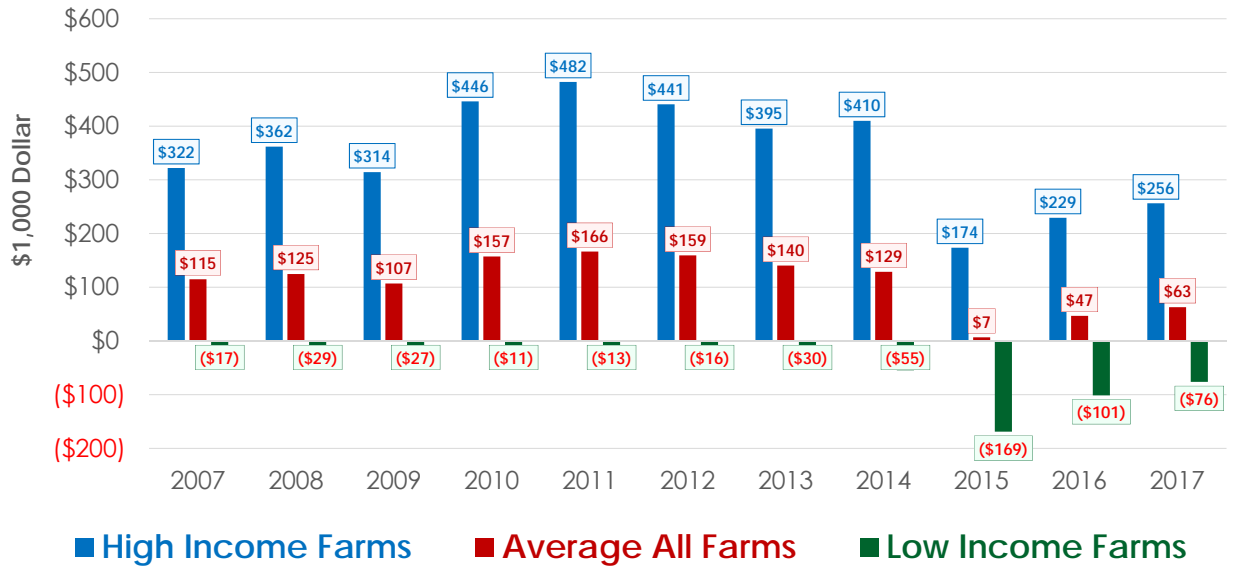
- **Advantage** ➔ Provides an accurate analysis business finances
- **Disadvantage** ➔ More complex – valuing revenues, timing of costs, etc.

## Net Farm Income in Kansas (2005-2017)

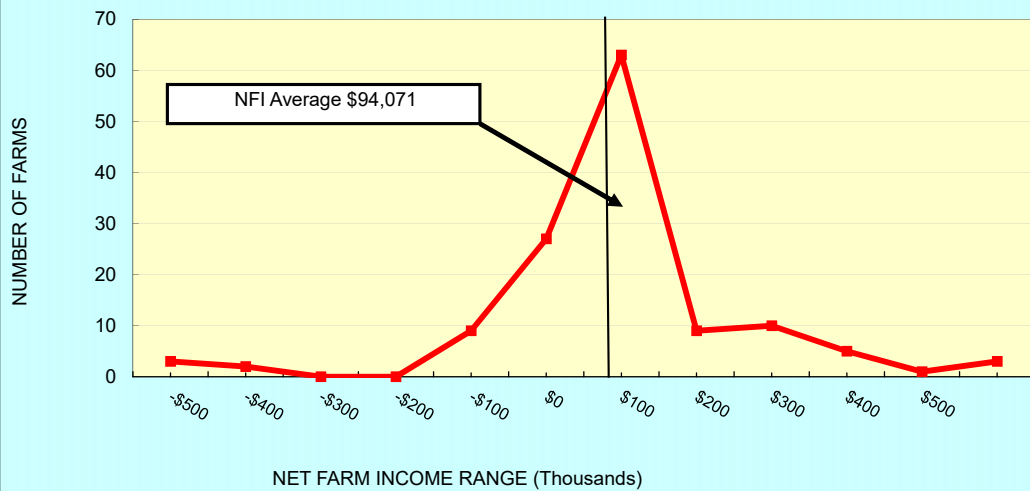
Kansas Farm Management Association Farms



# Net Farm Income (KFMA: 2007-2017)

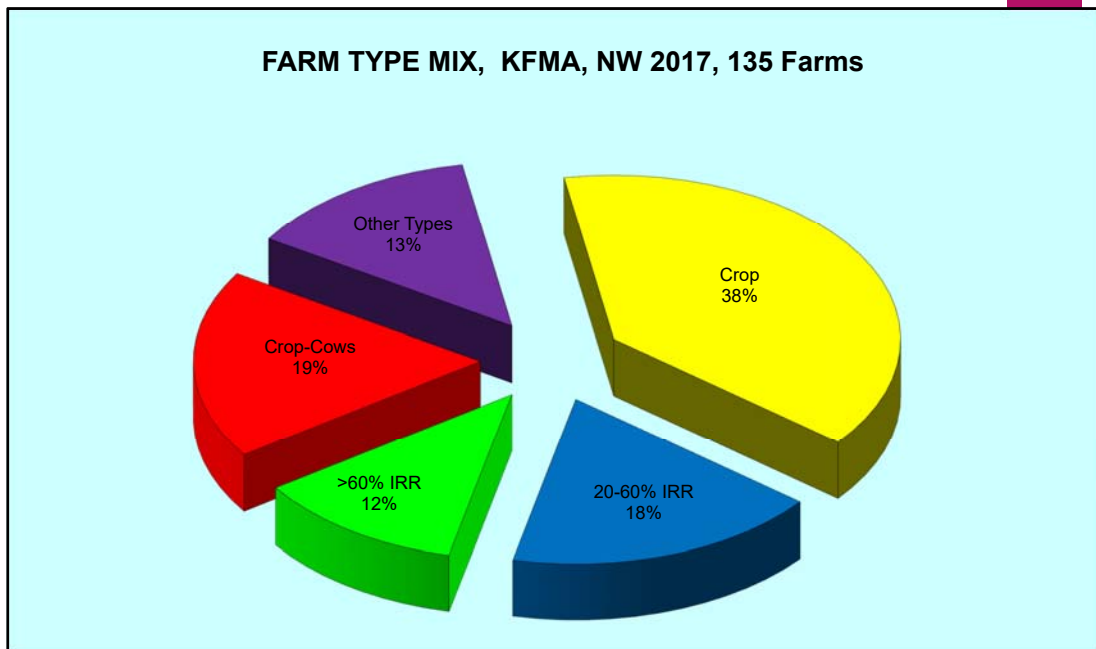


## NET FARM INCOME DISTRIBUTION KFMA, NW, 2017



## % of Farms in Net Income Groups (KFMA-2017)

	NW %	SW %	NC %	SC %	NE %	SE %	STATE %
Over \$400,000 Net Income	5.19 %	1.61 %	1.62 %	1.36 %	1.02 %	5.33 %	2.81 %
\$350,000 - \$400,000	2.22 %	0.00 %	0.00 %	0.00 %	1.02 %	1.64 %	0.87 %
\$300,000 - \$350,000	1.48 %	0.00 %	0.00 %	0.00 %	2.04 %	2.05 %	1.07 %
\$250,000 - \$300,000	2.96 %	6.45 %	0.40 %	0.68 %	2.04 %	2.87 %	2.04 %
\$200,000 - \$250,000	4.44 %	11.29 %	1.62 %	0.68 %	5.10 %	3.69 %	3.59 %
\$150,000 - \$200,000	2.96 %	4.84 %	2.83 %	8.16 %	8.16 %	6.97 %	5.72 %
\$100,000 - \$150,000	3.70 %	9.68 %	10.53 %	6.80 %	8.67 %	11.07 %	8.83 %
\$50,000 - \$100,000	16.30 %	17.74 %	13.77 %	14.97 %	13.27 %	19.26 %	15.71 %
\$0 - \$50,000	30.37 %	24.19 %	32.39 %	29.93 %	24.49 %	26.23 %	28.32 %
\$0 - \$50,000 Loss	14.81 %	19.35 %	25.51 %	25.85 %	22.45 %	14.34 %	20.56 %
Greater than \$50,000 Loss	15.56 %	4.84 %	11.34 %	11.56 %	11.73 %	6.56 %	10.48 %
<b>TOTAL NUMBER OF FARMS</b>	<b>135</b>	<b>62</b>	<b>247</b>	<b>147</b>	<b>196</b>	<b>244</b>	<b>1,031</b>
<b>AVERAGE NET FARM INCOME</b>	<b>\$94,071</b>	<b>\$78,092</b>	<b>\$28,950</b>	<b>\$30,517</b>	<b>\$54,418</b>	<b>\$102,671</b>	<b>\$62,944</b>



## Net Income by Type of Farm (KFMA: 2013-2017)

Type of Farm	No. of Farms (2017)	Net Income per Operator					5-year avg
		2017	2016	2015	2014	2013	
All Farms	1,031	\$64,261	\$47,280	\$6,930	\$129,889	\$144,793	\$97,331
Crop Dryland	652	53,658	59,772	8,451	95,355	161,069	97,945
Crop 20-60% Irrigated**	100	101,102	52,205	168	--	--	--
Crop >60% Irrigated	35	75,070	(20,703)	76,515	138,078	125,628	132,734
Cowherd	30	23,844	(801)	63,847	185,114	92,539	92,513
Crop-Cowherd	97	22,879	3,736	22,453	153,616	73,005	69,734
Backgrounding	9	228,202	60,198	(26,832)	290,716	6,397	79,764
Crop – Backgrounding	19	88,085	(43,196)	(128,197)	315,025	71,719	56,278
Crop – Background-Finish	6	197,232	139,515	(189,821)	351,249	158,097	111,432
Crop – Beef	21	67,284	32,014	(15,056)	270,851	162,540	144,531
Dairy	19	81,003	6,338	82,018	219,677	74,268	90,565
Crop – Dairy	5	89,763	(13,288)	49,652	162,707	188,187	100,984
General Farm	21	47,401	64,688	(60,768)	280,661	101,507	88,825



# Questions?

**Daniel O'Brien – Extension Ag Economist**

Blog: [www.ksugrains.wordpress.com](http://www.ksugrains.wordpress.com)

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