

# Agricultural Markets Situation and Outlook

December 10, 2020

# KC Federal Reserve Agricultural Finance Situation and USDA Net Farm Income Outlook

Bryon Parman

Agricultural Finance Specialist

North Dakota State University

Charts from KC Federal Reserve from:

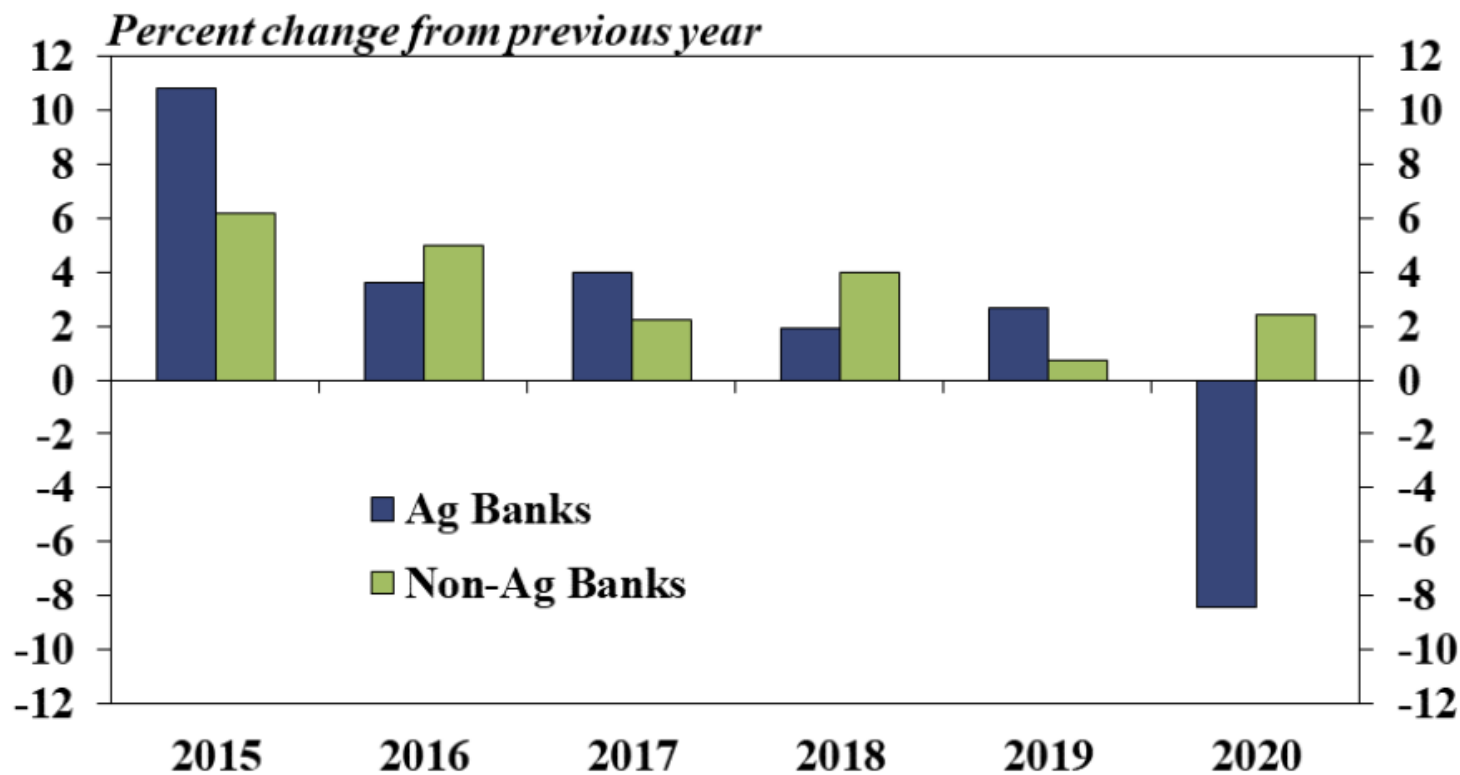
Krietman and Cowley, December 04, 2020 “Ag Banks Trim Farm Lending”

And

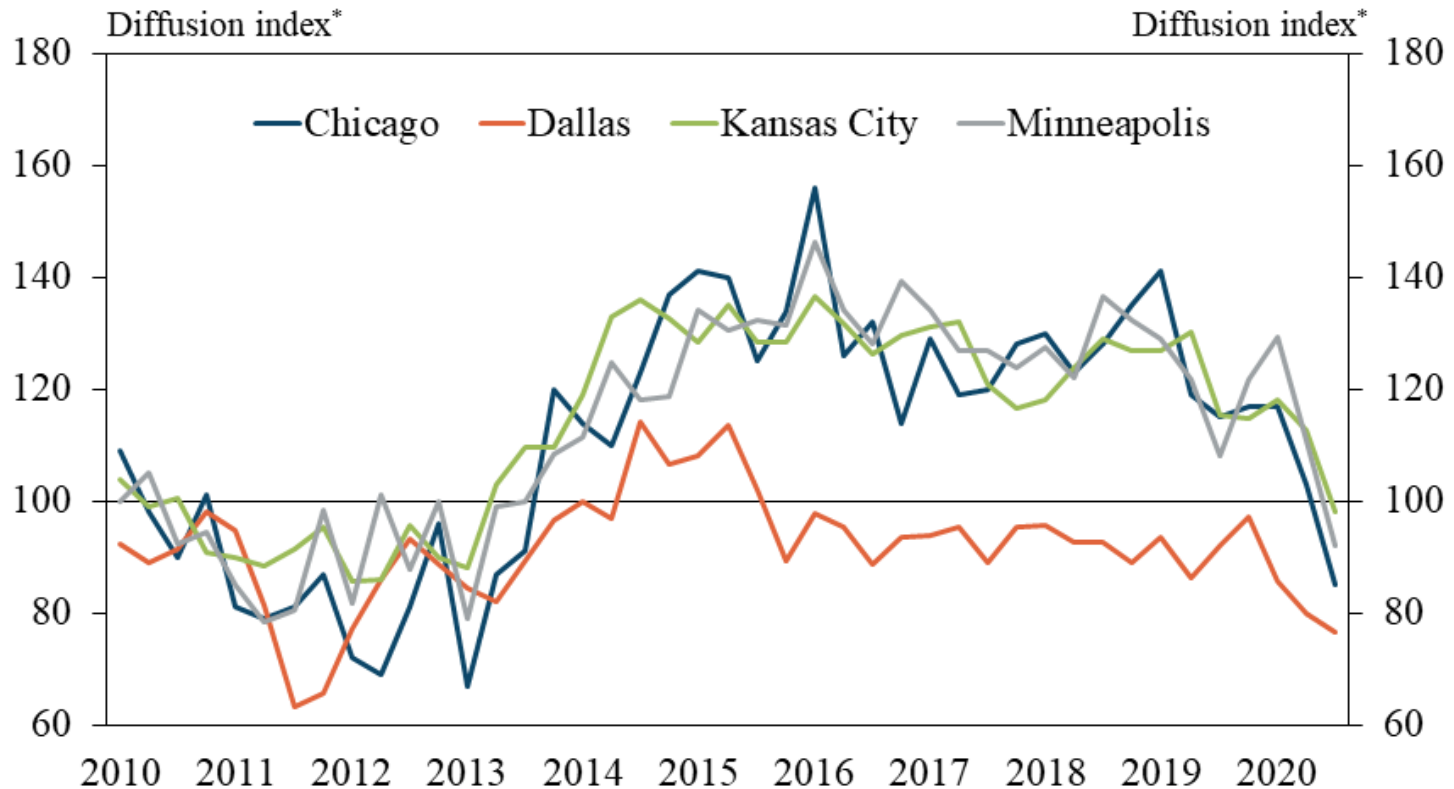
Cowley and Krietman, November 24, 2020 “Ag Credit Conditions Recover in the Third Quarter”

Available online at: <https://www.kansascityfed.org/en/research/indicatorsdata/agfinancedatabook>

## Chart 2: Total Farm Debt at Commercial Banks, Third Quarter



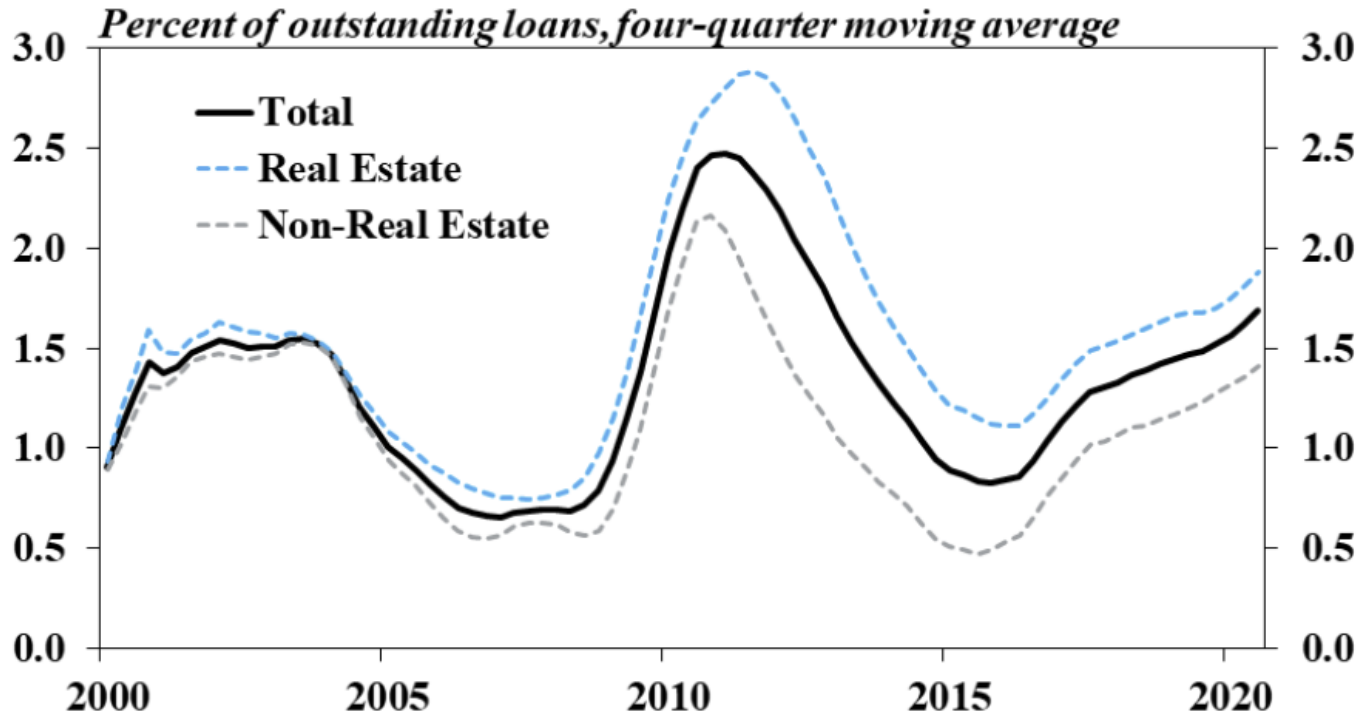
# Chart 1: Farm Loan Demand



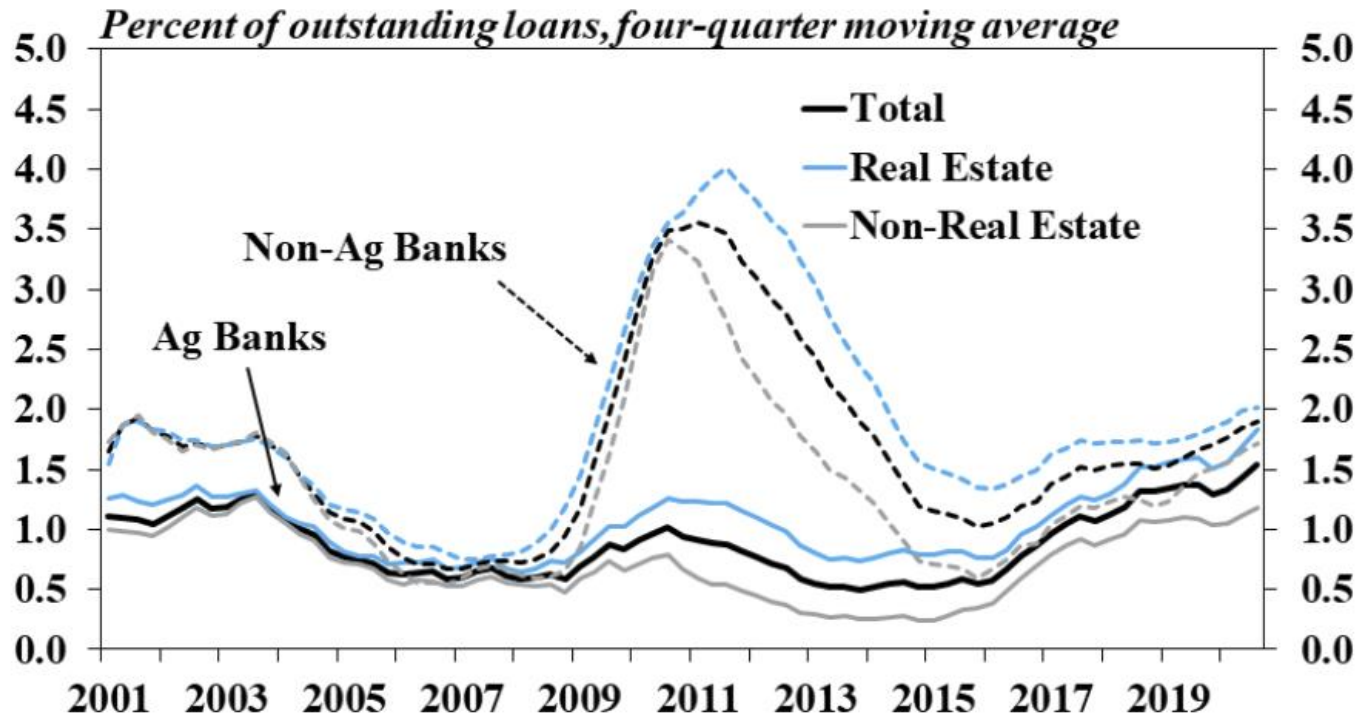
\*Bankers responded by indicating whether loan demand during the current quarter was higher than, lower than or the same as in the year-earlier period. The index numbers are computed by subtracting the percentage of bankers who responded "lower" from the percentage who responded "higher" and adding 100.

Sources: Federal Reserve District Agricultural Credit Surveys (Chicago, Dallas, Kansas City, and Minneapolis).

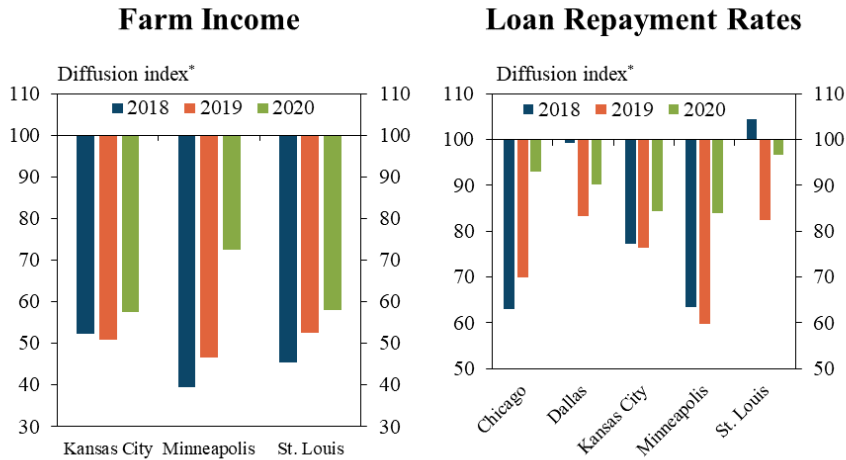
### Chart 3: Non-Performing Farm Loans at Commercial Banks



## Chart 4: Non-Performing Farm Loans, Ag Banks vs. Non-Ag Banks

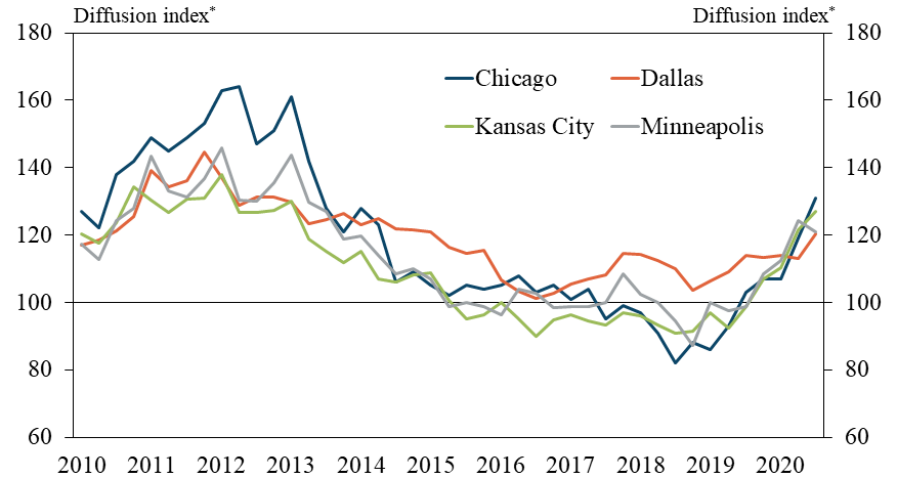


### Chart 3: Agricultural Credit Conditions



\*Bankers responded to each item by indicating whether conditions during the current quarter were higher than, lower than or the same as in the year-earlier period. The index numbers are computed by subtracting the percentage of bankers who responded "lower" from the percentage who responded "higher" and adding 100.  
 Sources: Federal Reserve District Agricultural Credit Surveys (Chicago, Dallas, Kansas City, Minneapolis, and St. Louis).

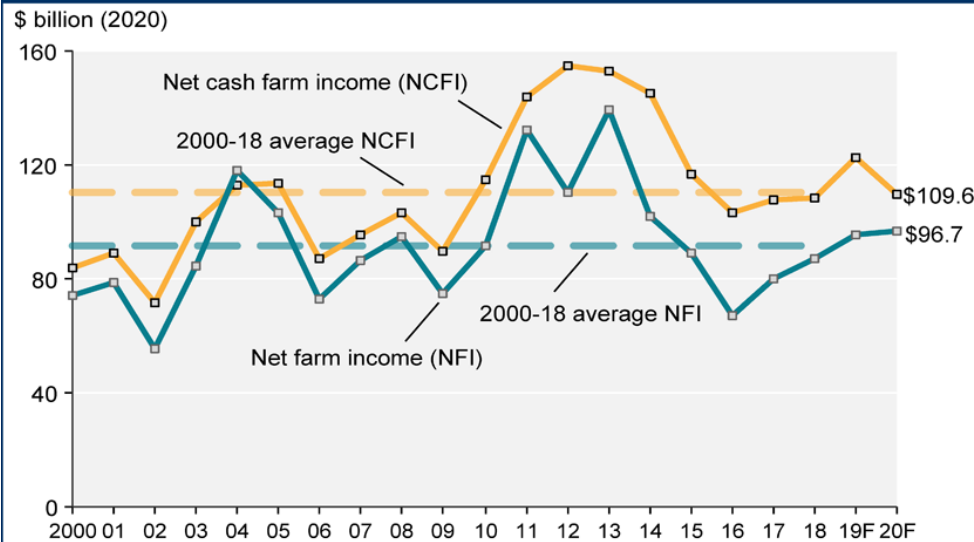
### Chart 2: Availability of Funds



\*Bankers responded by indicating whether availability of funds during the current quarter was higher than, lower than or the same as in the year-earlier period. The index numbers are computed by subtracting the percentage of bankers who responded "lower" from the percentage who responded "higher" and adding 100.  
 Sources: Federal Reserve District Agricultural Credit Surveys (Chicago, Dallas, Kansas City, and Minneapolis).

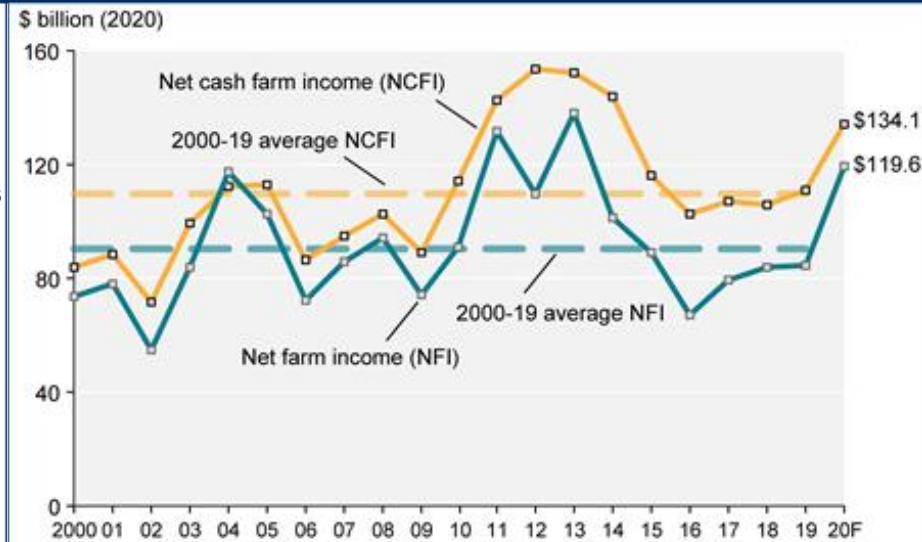
# Net Farm Income Projections from USDA: Feb 2020 and Dec 2020

Net farm income and net cash farm income, 2000–20F



Note: F = forecast. Values are adjusted for inflation using the chain-type GDP deflator, 2020=100.  
Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.  
Data as of February 5, 2020.

Net farm income and net cash farm income, 2000–20F



Note: F = forecast. Values are adjusted for inflation using the Gross Domestic Product chain-type price index, 2020=100.  
Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.  
Data as of December 2, 2020.



# FAPRI Projections for Net Farm

## U.S. farm income

Calendar year	2018	2019	2020	2021	2022	2023	2024	2025
	(Billion dollars)							
Farm receipts	400.6	405.4	391.8	395.5	415.7	430.5	439.8	447.7
Crops	195.1	194.6	193.8	197.7	204.9	210.6	214.8	218.4
Livestock	176.3	176.0	163.2	168.9	180.9	189.0	193.2	196.5
Farm-related	29.1	34.7	34.8	29.0	29.8	30.9	31.9	32.8
Direct government payments	13.7	22.4	32.8	15.3	12.1	10.5	9.5	9.0
Gross cash income	414.2	427.8	424.5	410.8	427.7	441.0	449.3	456.7
Nonmoney income	19.1	18.4	18.9	19.0	18.9	18.9	19.0	19.0
Value of inventory change	-8.2	-13.7	-0.2	-1.5	-0.3	0.0	0.3	0.4
Gross farm income	425.1	432.4	443.3	428.3	446.4	459.9	468.6	476.1
Cash expenses	311.4	317.5	313.9	315.7	325.1	333.1	338.9	345.2
Total expenses	343.8	348.7	344.7	346.2	355.6	363.7	369.6	376.1
Net cash income	102.8	110.3	110.6	95.1	102.7	107.9	110.5	111.6
Net farm income	81.3	83.7	98.6	82.2	90.8	96.2	99.0	100.1
Deflated (2020 \$)	84.7	85.2	98.6	81.2	88.9	92.9	93.9	93.3

# FAPRI Projects US Farm Balance Sheets Will Worsen However due to Real Estate Debt

## U.S. farm balance sheet

Calendar year	2018	2019	2020	2021	2022	2023	2024	2025
<b>Farm assets</b>	(Billion dollars)							
Real estate	2,510	2,546	2,550	2,586	2,561	2,549	2,561	2,559
All other	517	529	534	523	521	515	519	522
<b>Total assets</b>	<b>3,027</b>	<b>3,075</b>	<b>3,084</b>	<b>3,109</b>	<b>3,082</b>	<b>3,065</b>	<b>3,080</b>	<b>3,081</b>
<b>Farm debt</b>								
Real estate	246	267	281	290	295	298	300	301
All other	156	152	149	148	151	155	158	161
<b>Total debt</b>	<b>402</b>	<b>419</b>	<b>430</b>	<b>438</b>	<b>446</b>	<b>453</b>	<b>458</b>	<b>463</b>
<b>Debt/asset ratio</b>	<b>13.3%</b>	<b>13.6%</b>	<b>13.9%</b>	<b>14.1%</b>	<b>14.5%</b>	<b>14.8%</b>	<b>14.9%</b>	<b>15.0%</b>

# Implications of the December WASDE Report

Frayne Olson

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Specialist

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# Pre-report Industry Estimates

## U.S. 2020/21 Ending Stocks (billion bushels)

	All Wheat	Corn	Soybean
Average Trade Estimate	0.874 bill. bu.	1.691 bill. bu.	0.168 bill. bu.
Highest Trade Estimate	0.900 bill. bu.	1.775 bill. bu.	0.190 bill. bu.
Lowest Trade Estimate	0.850 bill. bu.	1.550 bill. bu.	0.120 bill. bu.
USDA November 10, 2020	0.877 bill. bu.	1.702 bill. bu.	0.190 bill. bu.
USDA December 10, 2020	0.862 bill. bu.	1.702 bill. bu.	0.175 bill. bu.

Reuters News and Dec. 10, 2020 USDA-WASDE

# U.S. Corn Export Destinations

(1,000 Metric Ton)

Country	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21*
Mexico	12,558.6	13,539.7	14,974.7	15,461.1	14,172.0	8,942.1
Japan	10,506.6	11,983.4	11,249.8	12,631.8	9,780.7	4,969.1
Colombia	4,629.5	4,438.9	4,965.0	4,672.7	4,851.2	1,904.6
South Korea	3,021.6	5,588.5	5,651.0	3,691.3	2,690.8	993.8
China	184.8	717.9	357.5	259.6	2,110.0	11,320.4
Guatemala	897.1	1,008.9	903.8	1,210.8	1,159.0	715.9
ROW	14,885.9	18,117.5	19,371.9	11,274.8	8,510.1	10,809.4
Total	46,684.1	55,394.8	57,473.7	49,202.1	43,273.8	39,655.3

\* Total **export commitments** as of 12/03/2020

USDA – FAS Export Sales Custom Query

# U.S. Soybean Export Destinations

(1,000 Metric Ton)

Country	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21*
China	29,855.0	36,148.3	27,681.8	13,369.9	16,266.2	30,354.2
EU-27	5,804.9	4,759.6	5,701.1	7,898.1	5,389.4	2,105.6
Mexico	3,252.6	3,665.0	4,231.1	4,918.1	4,622.4	3,158.3
Egypt	295.4	807.2	2,436.5	2,704.7	3,798.2	1,660.7
Japan	2,145.6	2,137.2	2,153.5	2,437.1	2,272.7	992.9
Indonesia	2,028.6	2,296.9	2,424.8	2,435.7	2,219.8	922.8
Taiwan	1,232.9	1,292.7	1,812.0	1,572.0	1,748.6	1,143.2
ROW	6,224.2	7,010.8	9,909.2	11,434.1	8,617.2	12,568.9
Total	50,839.2	58,117.7	56,350.0	46,770.3	44,934.5	52,906.6

\* Total **export commitments** as of 12/03/2020

USDA – FAS Export Sales Custom Query

# U.S. All Wheat Export Destinations

(1,000 Metric Ton)

Country	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21*
Mexico	2,318.1	3,089.7	2,935.0	3,033.6	3,670.0	2,493.4
Philippines	2,118.4	2,729.2	2,474.2	3,046.7	3,141.9	2,448.6
Japan	2,434.0	2,819.7	2,692.7	2,695.4	2,575.4	1,794.5
Nigeria	1,401.2	1,540.4	1,170.7	1,563.9	1,564.4	856.9
South Korea	1,073.7	1,275.5	1,420.4	1,355.3	1,340.8	1,274.6
Taiwan	1,033.7	1,049.1	1,114.4	1,163.9	1,246.4	855.9
Indonesia	607.8	1,083.5	1,141.0	1,381.7	1,061.9	699.6
China	763.5	1,562.7	902.4	42.0	549.5	2,127.0
ROW	7,722.7	11,363.0	8,568.4	9,949.1	9,661.9	6,558.0
<b>Total</b>	<b>19,473.1</b>	<b>26,512.8</b>	<b>22,419.2</b>	<b>24,231.6</b>	<b>24,812.2</b>	<b>19,108.5</b>

\* Total **export commitments** as of 12/03/2020

USDA – FAS Export Sales Custom Query

# Pre-report Industry Estimates

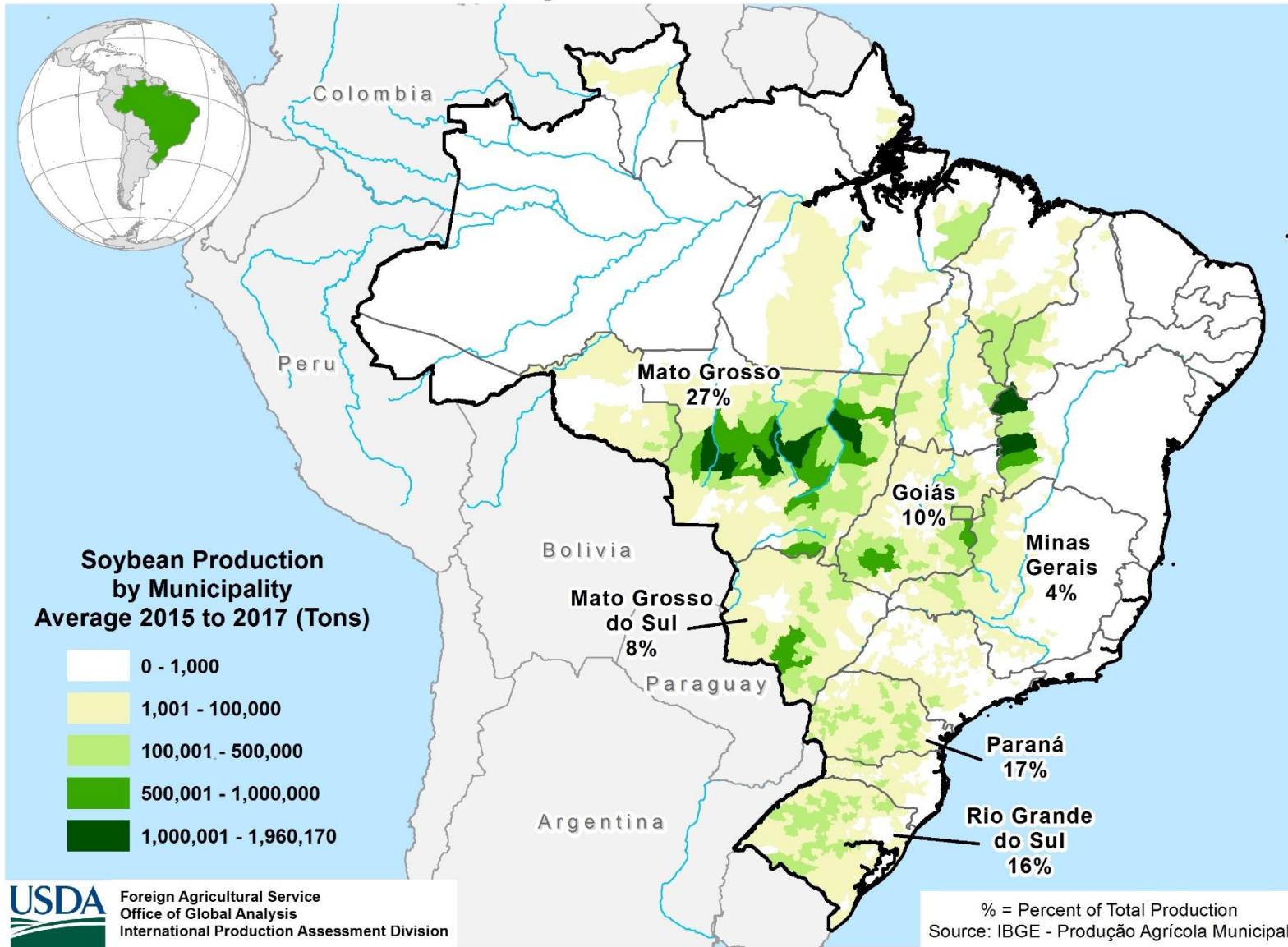
## 2020/21 South American Production (Million Metric Tons)

	Argentina		Brazil	
	Corn	Soybean	Corn	Soybean
<b>Average Trade Estimate</b>	<b>49.25</b>	<b>50.41</b>	<b>109.09</b>	<b>132.29</b>
Highest Trade Estimate	50.00	51.00	112.00	134.00
Lowest Trade Estimate	48.00	49.00	105.00	130.00
<b>USDA 2019/20 Estimate</b>	<b>51.00</b>	<b>49.00</b>	<b>102.00</b>	<b>126.00</b>
<b>USDA November 10, 2020</b>	<b>50.00</b>	<b>51.00</b>	<b>110.00</b>	<b>133.00</b>
<b>USDA December 10, 2020</b>	<b>49.00</b>	<b>50.00</b>	<b>110.00</b>	<b>133.00</b>

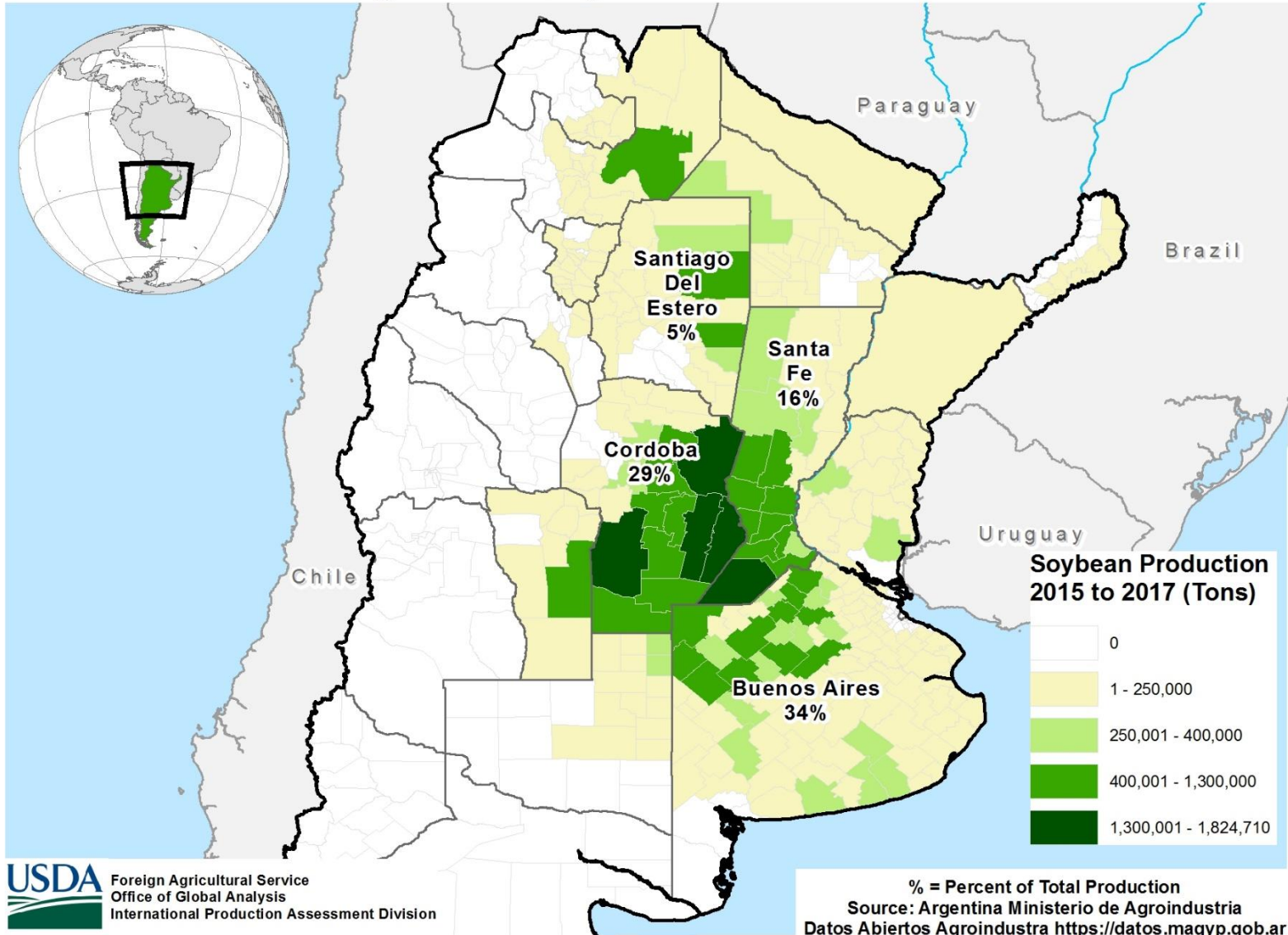
Reuters News and Dec. 10, 2020 USDA-WASDE



# Brazil: Soybean Production



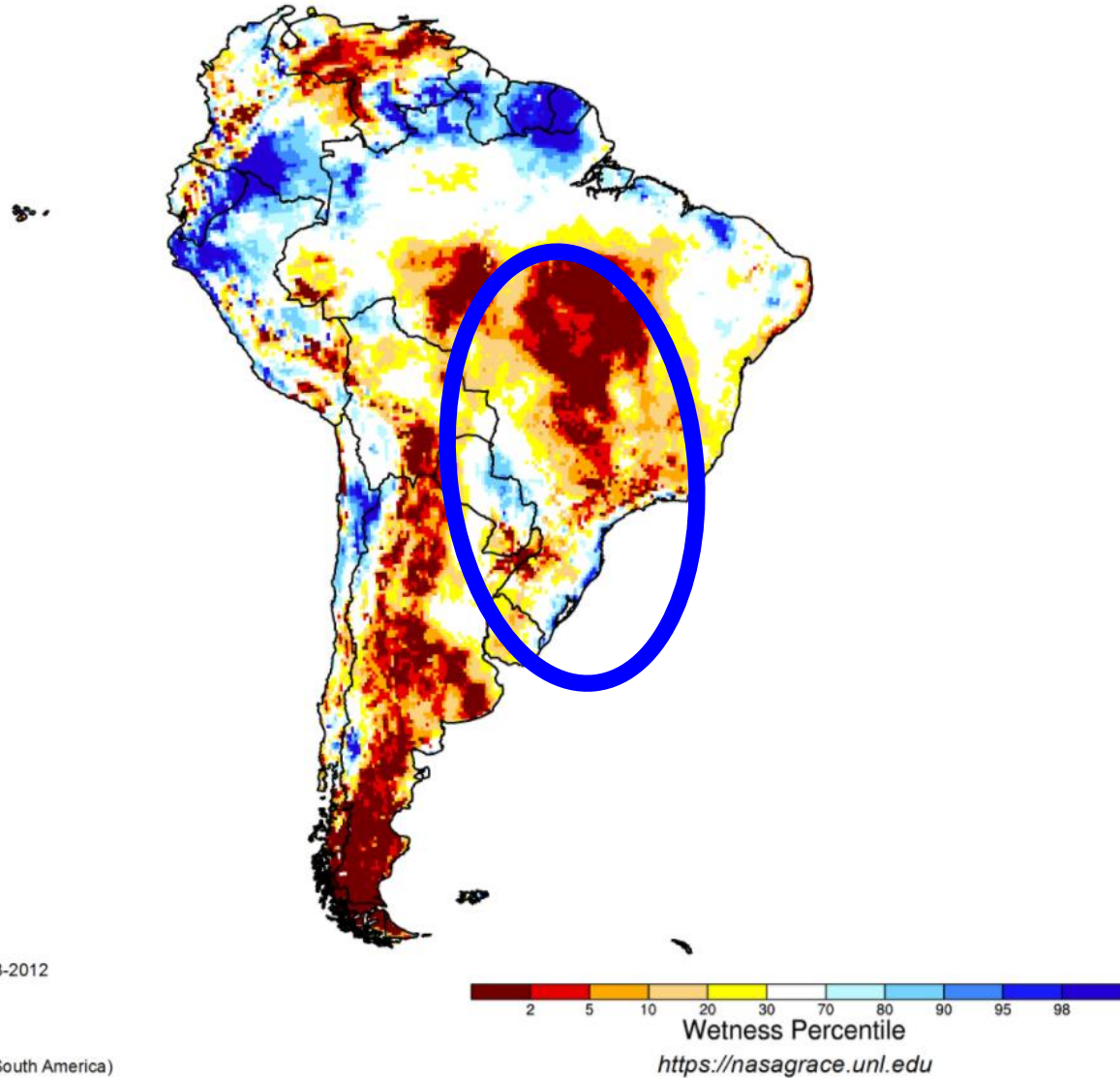
# Argentina: Soybean Production





# GRACE-Based Root Zone Soil Moisture Drought Indicator

December 07, 2020



Wetness percentiles are relative to the period 1948-2012

The root zone is defined as the top 1 meter of soil

Cell Resolution 0.25 degrees

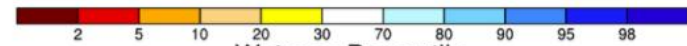
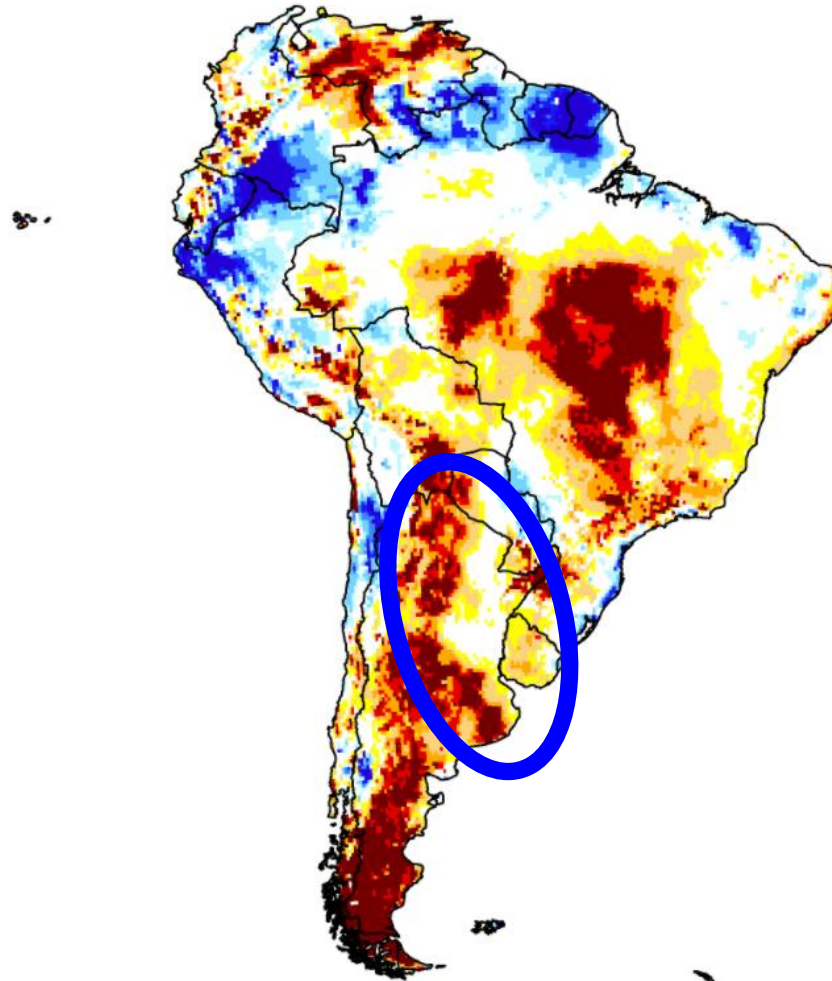
Projection of this document is Albers Equal Area (South America)





# GRACE-Based Root Zone Soil Moisture Drought Indicator

December 07, 2020



Wetness percentiles are relative to the period 1948-2012

The root zone is defined as the top 1 meter of soil

Cell Resolution 0.25 degrees

Projection of this document is Albers Equal Area (South America)

<https://nasagrace.unl.edu>

USDA – WASDE and Annual  
Production Report Released  
at  
11:00 am CT  
Tuesday, January 12, 2020

# LIVESTOCK PRICE SITUATION AND OUTLOOK

Tim Petry

Extension Livestock Marketing  
Economist

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[www.ndsu.edu/livestockeconomics](http://www.ndsu.edu/livestockeconomics)



# Agriculture By the Numbers

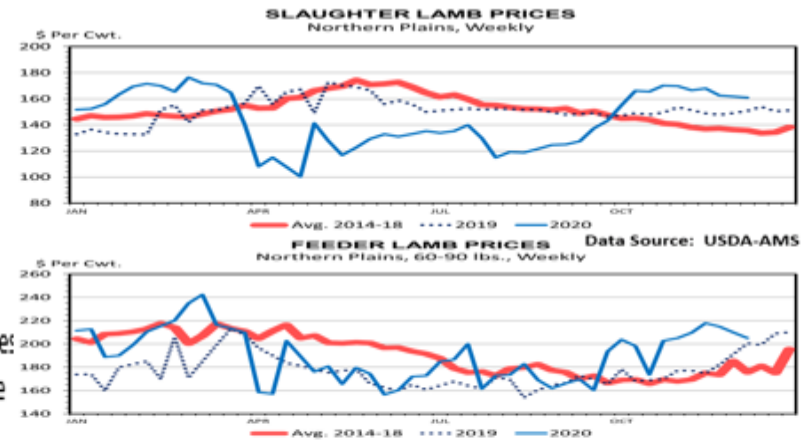
DECEMBER 2020

## Lamb Prices Recover After COVID-19 Disruptions

Tim Petry, NDSU Extension Livestock Marketing Economist

Like most livestock commodities, the sheep industry experienced significant disruptions due to the COVID-19 pandemic.

Slaughter and feeder lamb prices started 2020 above previous years' levels through early March. Prices were expected to continue to be supported by a number of bullish factors. Cattle and hog prices were also expected to perform better than previous years.



[www.ag.ndsu.edu/farmmanagement/agriculture-by-the-numbers-newsletter](http://www.ag.ndsu.edu/farmmanagement/agriculture-by-the-numbers-newsletter)



**STEERS - Medium and Large 1 (Per Cwt / Actual Wt)**

**HEIFERS - Medium and Large 1 (Per Cwt / Actual Wt)**

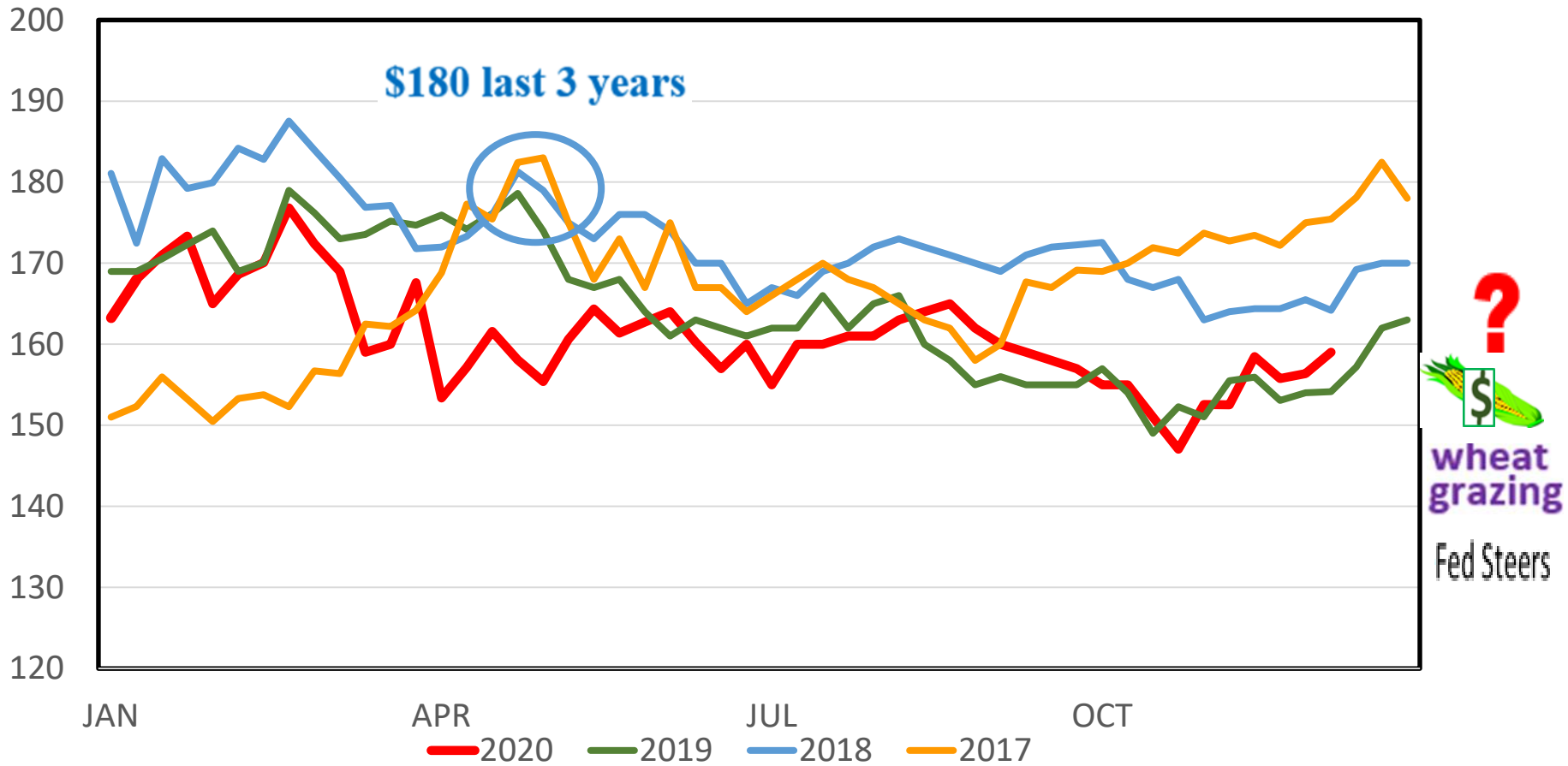
<u>Head</u>	<u>Wt Range</u>	<u>Avg Wt</u>	<u>Price Range</u>	<u>Avg Price</u>	<u>Head</u>	<u>Wt Range</u>	<u>Avg Wt</u>	<u>Price Range</u>	<u>Avg Price</u>
2	325	325	203.00	203.00	102	356-397	377	151.00-166.00	159.43
85	355-398	383	184.00-213.00	197.93	258	401-446	429	147.00-170.00	157.34
201	408-448	433	170.00-205.00	188.61	264	450-497	478	135.00-158.00	146.25
469	450-498	475	159.00-190.50	177.83	795	501-549	526	136.00-155.50	147.08
838	507-549	532	152.50-179.00	166.61	768	551-595	577	127.50-146.50	138.61
1371	555-599	580	144.00-167.50	159.02	606	602-649	626	125.00-142.00	136.01
1266	600-648	625	140.50-159.50	152.00	507	650-699	683	125.50-138.75	132.24
1099	650-697	670	136.00-155.25	148.14	301	704-748	716	118.50-137.50	132.11
655	700-748	722	136.00-149.25	142.59	48	751-798	769	122.00-125.50	124.06
304	750-795	773	130.00-149.00	142.39	14	818-849	831	124.00-125.50	124.84
81	812-829	820	124.50-140.00	131.59	22	869-898	887	120.00-127.00	124.78
5	877	877	133.50	133.50	5	924	924	120.50	120.50
					5	965	965	122.00	122.00

[www.ams.usda.gov/market-news/feeder-and-replacement-cattle-auctions#North%20Dakota](http://www.ams.usda.gov/market-news/feeder-and-replacement-cattle-auctions#North%20Dakota)



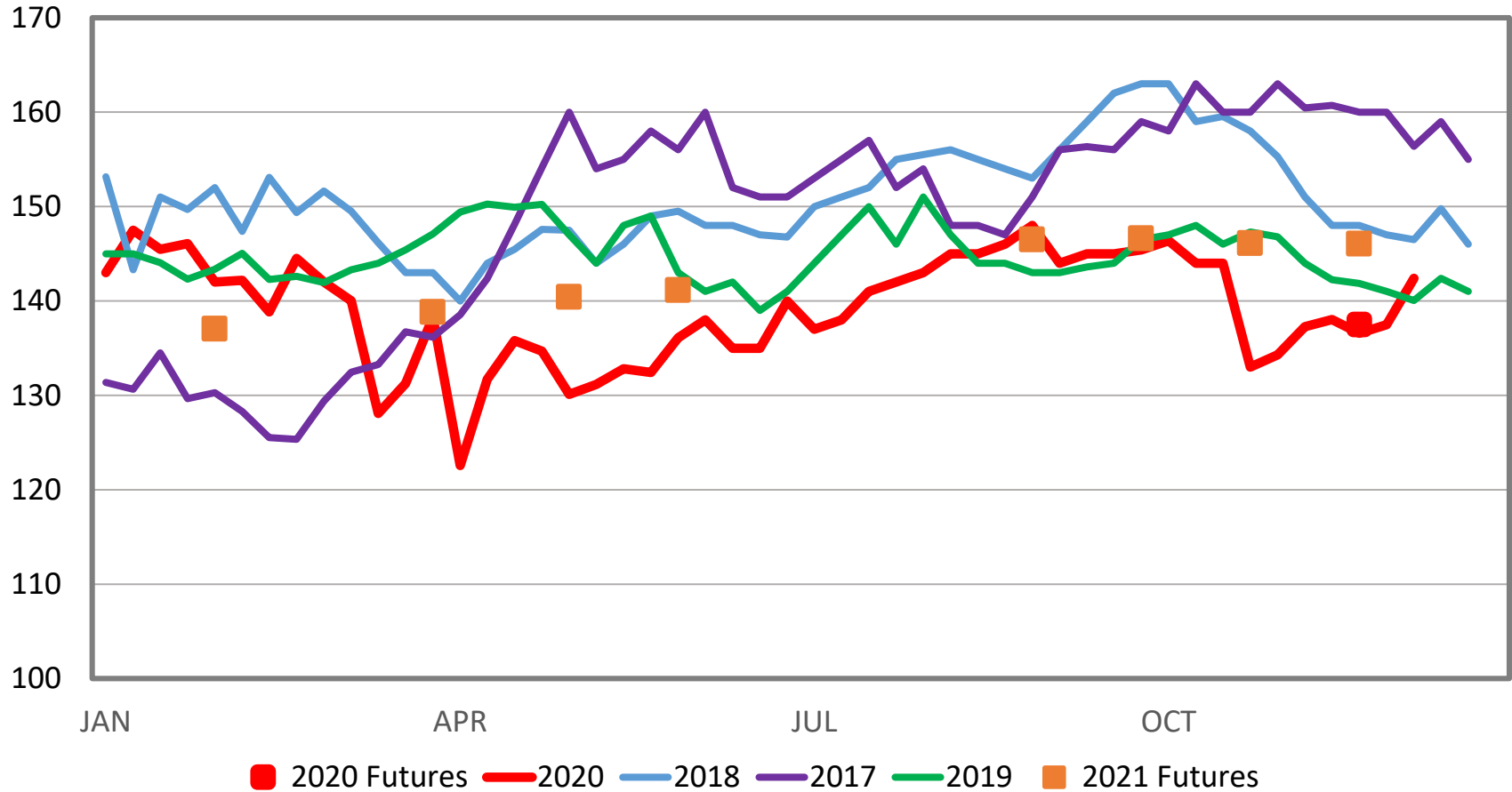
# MED. FRAME #1 STEER CALF PRICES

## 550-600 Pounds, N.D., Weekly

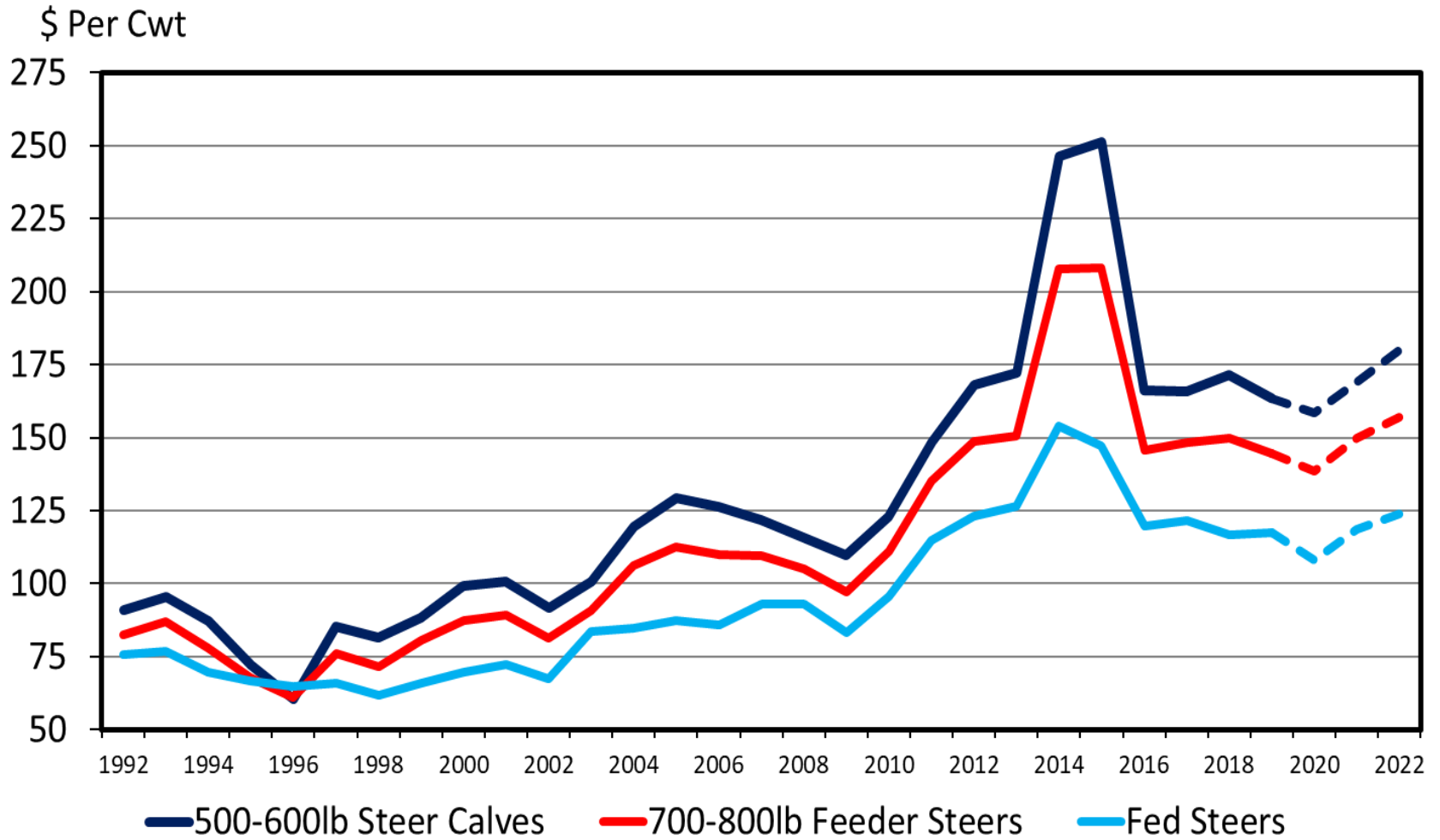


# MED. & LRG. #1 FEEDER STEER PRICES

## 750-800 Pounds, N.D., Weekly



## 2021 CATTLE PRICES BACK TO 2018 LEVELS AND INCREASING AVERAGE ANNUAL CATTLE PRICES



**Data Source: USDA-AMS    Forecasts by LMIC**

# Questions?

## HAPPY HOLIDAYS!



**NDSU**

EXTENSION AGRIBUSINESS  
EXTENDING KNOWLEDGE >> CHANGING LIVES

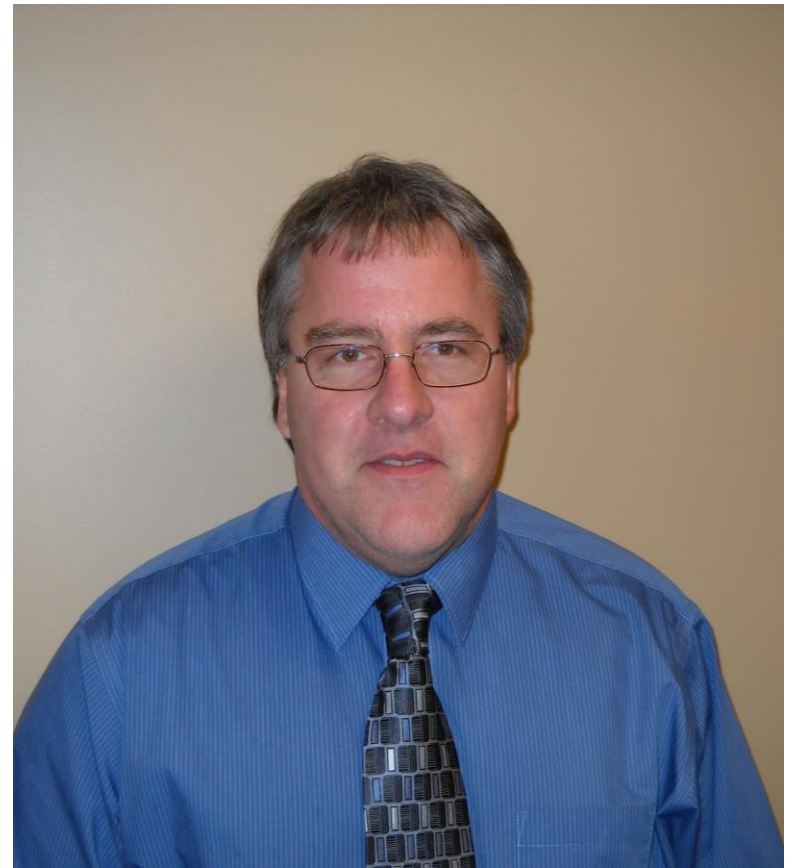
# Hospitality Economic Resiliency Grants PLUS

Ron Haugen

Extension Farm Management Specialist

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# **Hospitality Economic Resiliency Grant PLUS**

**Apply at:**

**North Dakota Department of Commerce**

**NDSU**

EXTENSION AGRIBUSINESS

# Hospitality Economic Resiliency Grant PLUS

- The **Hospitality ERG PLUS** will focus on businesses in the *lodging sector*. These businesses continue to suffer from the continued impact of the COVID-19 pandemic
- **Ineligible Businesses Include:** Private vacation rentals, Bed and Breakfasts, Air BNBs, Campgrounds

# Hospitality Economic Resiliency Grant PLUS

- Must have physical location in North Dakota
- Have experienced negative financial impact due to COVID-19
- A lodging entity that derives a least of 51% of their sales from lodging
- Must have a current lodging license



# Hospitality Economic Resiliency Grant PLUS

- **Eligible Expenses:**
- Wages and salaries
- Health Benefits or Insurance Plans
- COVID safety training
- Worker's Comp
- **NOT PAYROLL TAXES**

# Hospitality Economic Resiliency Grant PLUS

- **Eligible Expenses:**

- Mortgage, Rent
- Utilities
- Business Insurance
- Marketing
- Equipment to prepare food or drink; ovens, dishwashers, etc.
- Repairs

# Hospitality Economic Resiliency Grant PLUS

- Lodging establishments may apply for up to \$40,000.
- Applicants with more than one eligible lodging establishment may apply for up to \$80,000
- Not more than \$40,000 per location.

# Hospitality Economic Resiliency Grant PLUS

**Applications close:**

**Friday, December 18th, 2020 - 5:00 p.m. CST**

# Energy Outlook

David Ripplinger

Bioproducts/Bioenergy Economics Specialist

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# Key Points

Passenger travel, and gasoline and ethanol demand is weakening

Appears to be more than the seasonal difference

Corn-ethanol production is quite high! As are ethanol stocks!

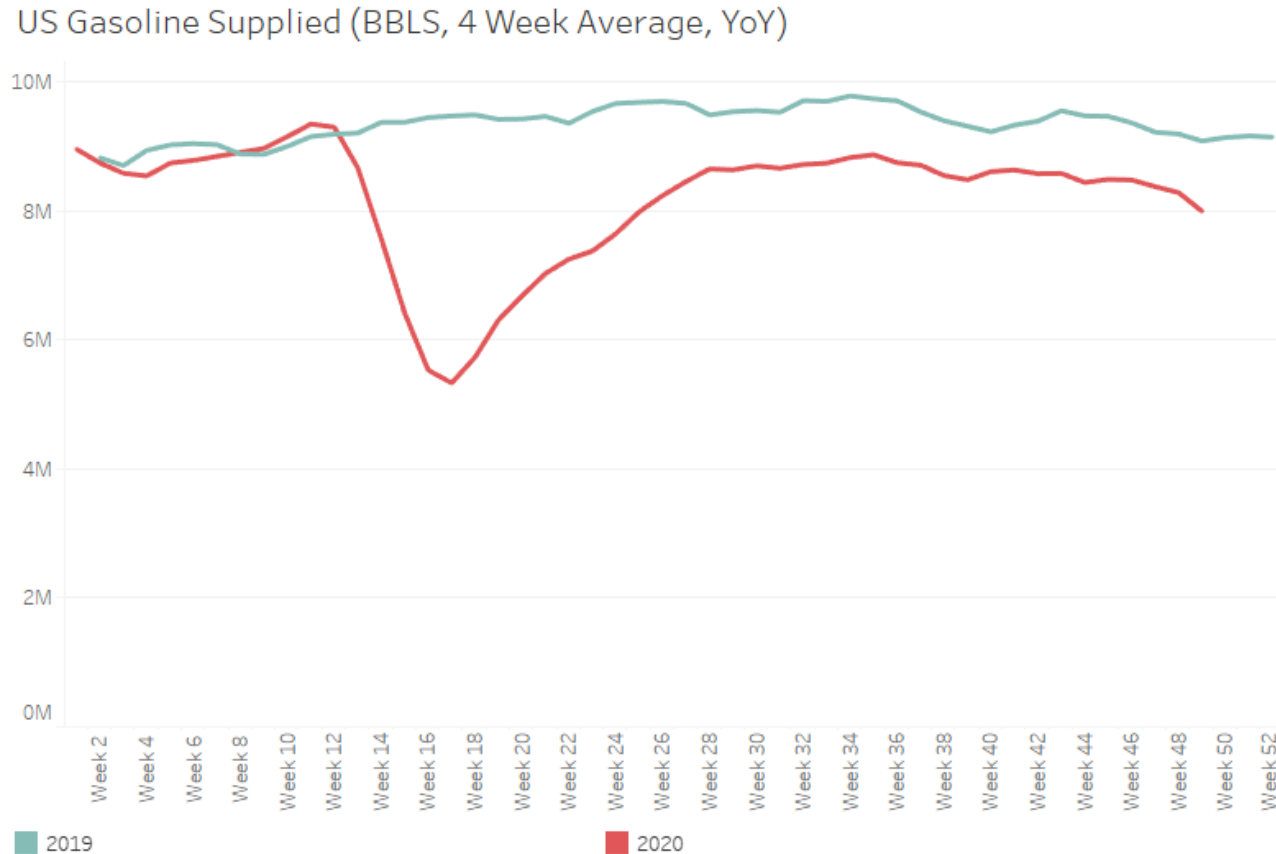
Ethanol price has held steady in light of this.

Margins are low, if not negative.

Ethanol cannot support corn at its current price.

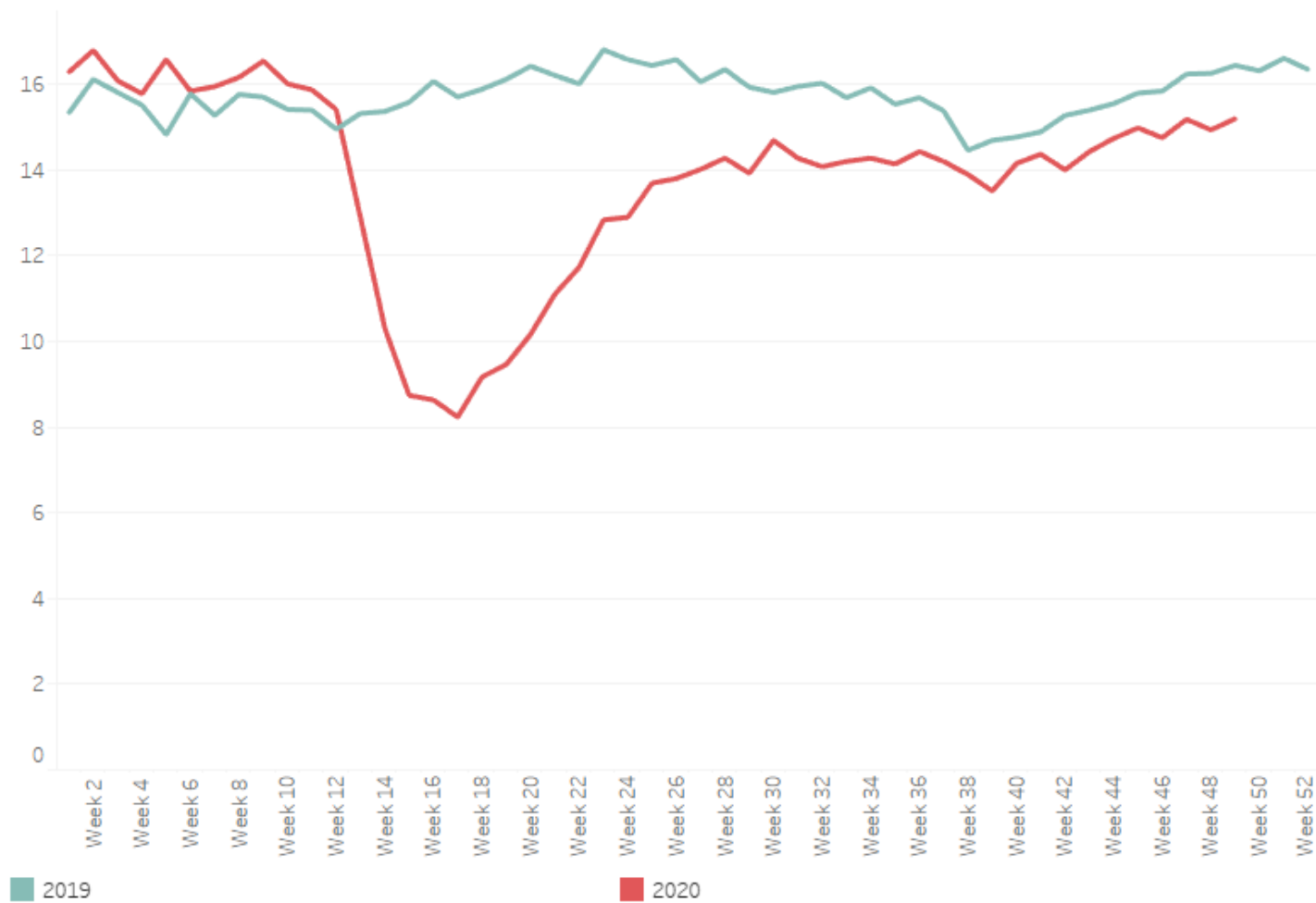
WTI price remains in the mid-40 dollar range, too low to spur a significant increase in activity in the Bakken

Motor gasoline supplied averaged 7.99 million barrels a day for the four week period ending December 4<sup>th</sup>. Down more than a million gallons/day from a year previous. (EIA)



Source: Energy Information Administration

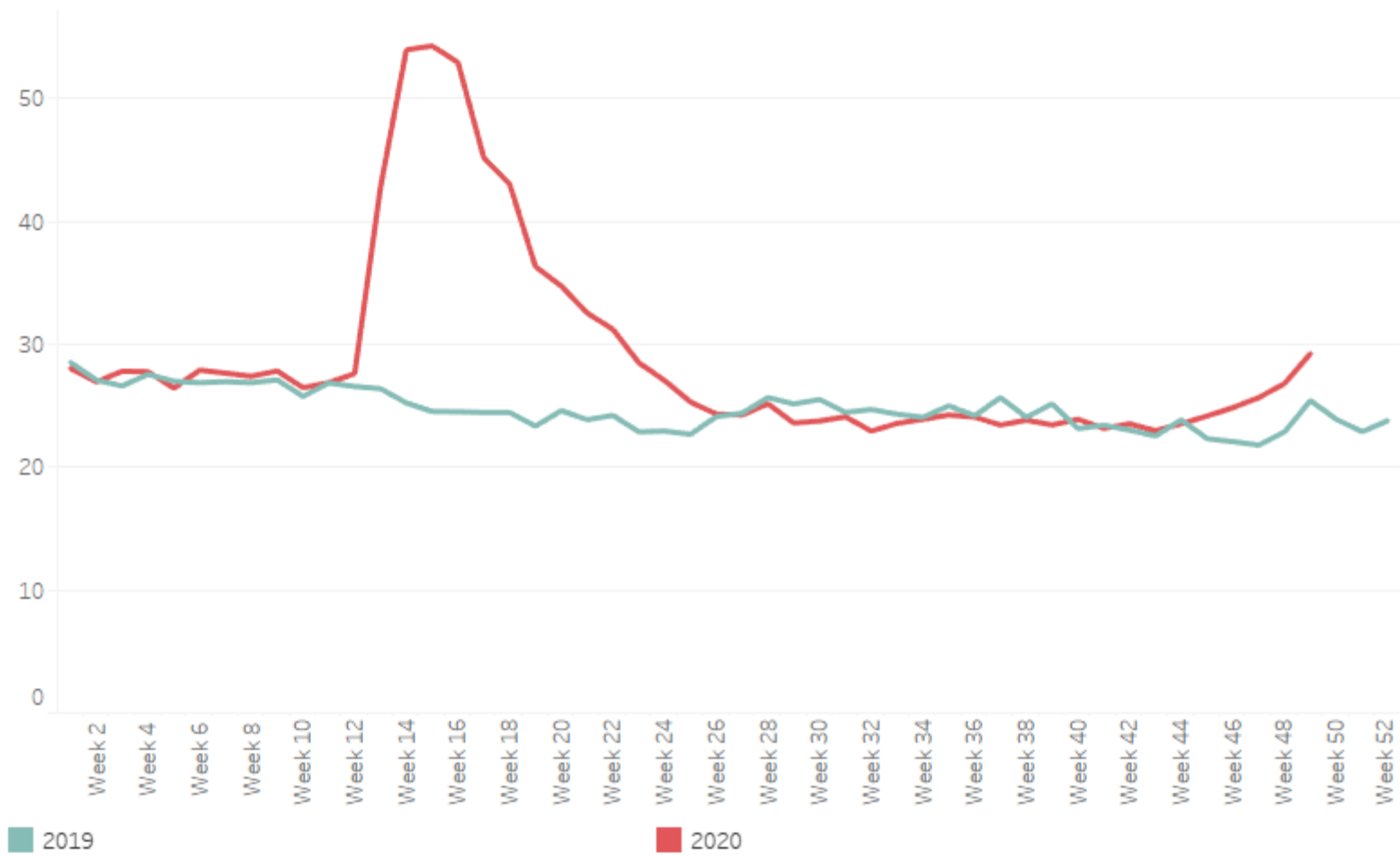
# US Ethanol Production (Annualized basis, billion gallons)



Source: Energy Information Administration

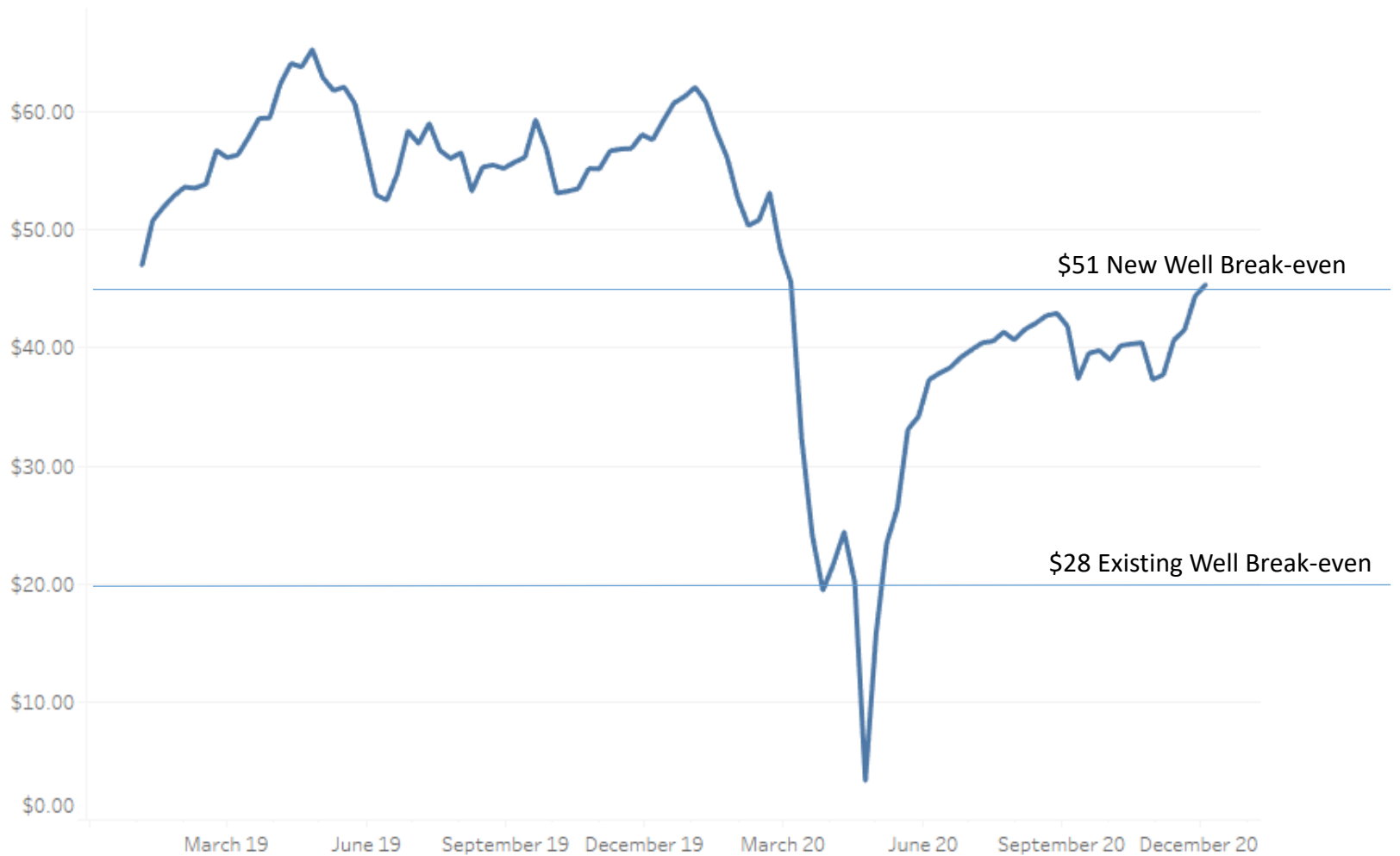


# Ethanol Days in Storage



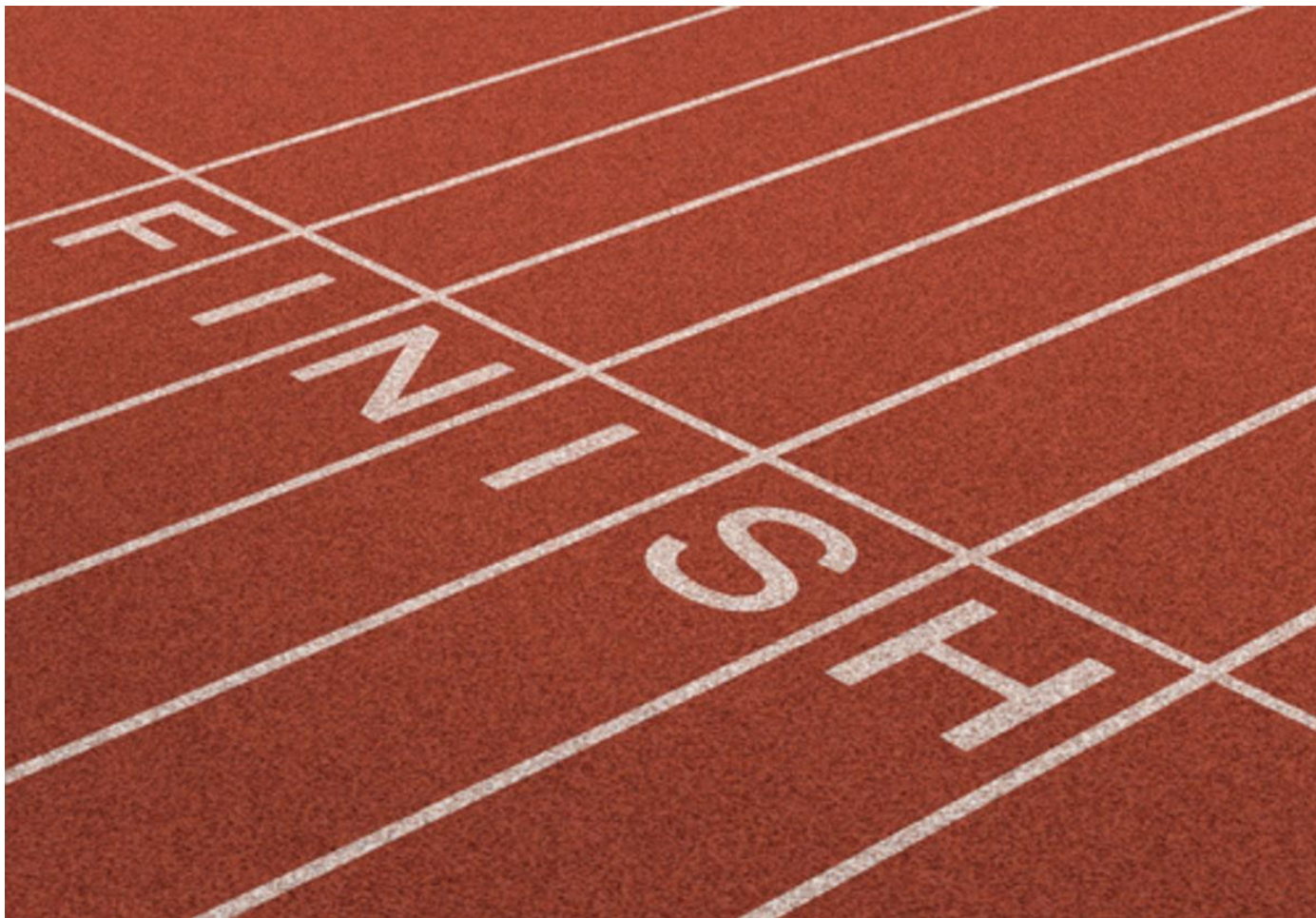
Source: Energy Information Administration

# WTI Spot Price



Source: Energy Information Administration

Only 21 more days until 2021!



Please use the Q&A tool  
to ask questions

The next webinar is scheduled for 1 pm CT  
Thursday, January 14<sup>th</sup>

For the slides and recording of this webinar please  
visit [ag.ndsu.edu/farmmanagement/outlook](http://ag.ndsu.edu/farmmanagement/outlook)

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EXTENSION AGRIBUSINESS