

Marketing Considerations for 2022

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Row Crop Short Course
12/8/21



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DEPARTMENT OF
AGRICULTURAL ECONOMICS

Overview

- Review 2021 Production
- Explore 2021 Export Potential
- Formulate 2022 Planting Expectations
- Forecast 2022 Price Potential

U.S. Acres Summary, 2017-2021

	2017	2018	2019	2020	2021*
Soybeans					
Total Intended	90.6	89.4	80.6	84.8	87.6
Planted	90.2	89.2	76.1	83.4	87.2
Harvested	89.5	87.6	75.9	82.6	86.4
Corn					
Total Intended	91.1	89.8	101.2	96.8	93.9
Planted	90.2	88.9	89.7	90.7	93.3
Harvested	82.7	81.3	81.3	82.3	85.1
Cotton					
Total Intended	12.9	14.2	14.3	12.5	11.5
Planted	12.7	14.1	13.7	12.1	11.2
Harvested	11.1	10.0	11.5	8.3	9.9

Source: USDA-NASS

U.S. Yield Summary (per acre)

Item	2019/2020	2020/2021 estimate	2021/2022 forecast	Change from 2020/2021
Soybeans <i>(bushels)</i>	47.4	51.0	51.2	0.2
Corn <i>(bushels)</i>	167.5	171.4	177.0	5.6
Cotton <i>(pounds)</i>	831.0	847.0	880.0	33.0
Rice, Total <i>(pounds)</i>	7,473.0	7,619.0	7,756.0	137.0
Wheat <i>(bushels)</i>	51.7	49.7	44.3	-5.4

Source: USDA-WASDE

U.S. Production Summary

Item	2019/2020	2020/2021 estimate	2021/2022 forecast	Change from 2020/2021
Soybeans <i>(million bushels)</i>	3,552	4,216	4,425	209
Corn <i>(million bushels)</i>	13,620	14,111	15,062	951
Cotton <i>(million bales)</i>	19.91	14.61	18.20	3.59
Rice, Total <i>(million cwt)</i>	185	228	194	-33.8
Rice, Long <i>(million cwt)</i>	125.6	170.9	146.7	-24.2
Rice, Med/Short <i>(million cwt)</i>	59.5	56.7	47.1	-9.6
Wheat <i>(million bushels)</i>	1,932	1,828	1,646	-182
Soybean Meal <i>(thousand s.t.)</i>	51,100	50,565	51,709	1144
Soybean Oil <i>(million pounds)</i>	24,911	25,023	25,535	512
Sugar <i>(thousand s.t., raw value)</i>	8,149	9,230	9,332	102

Source: USDA-WASDE

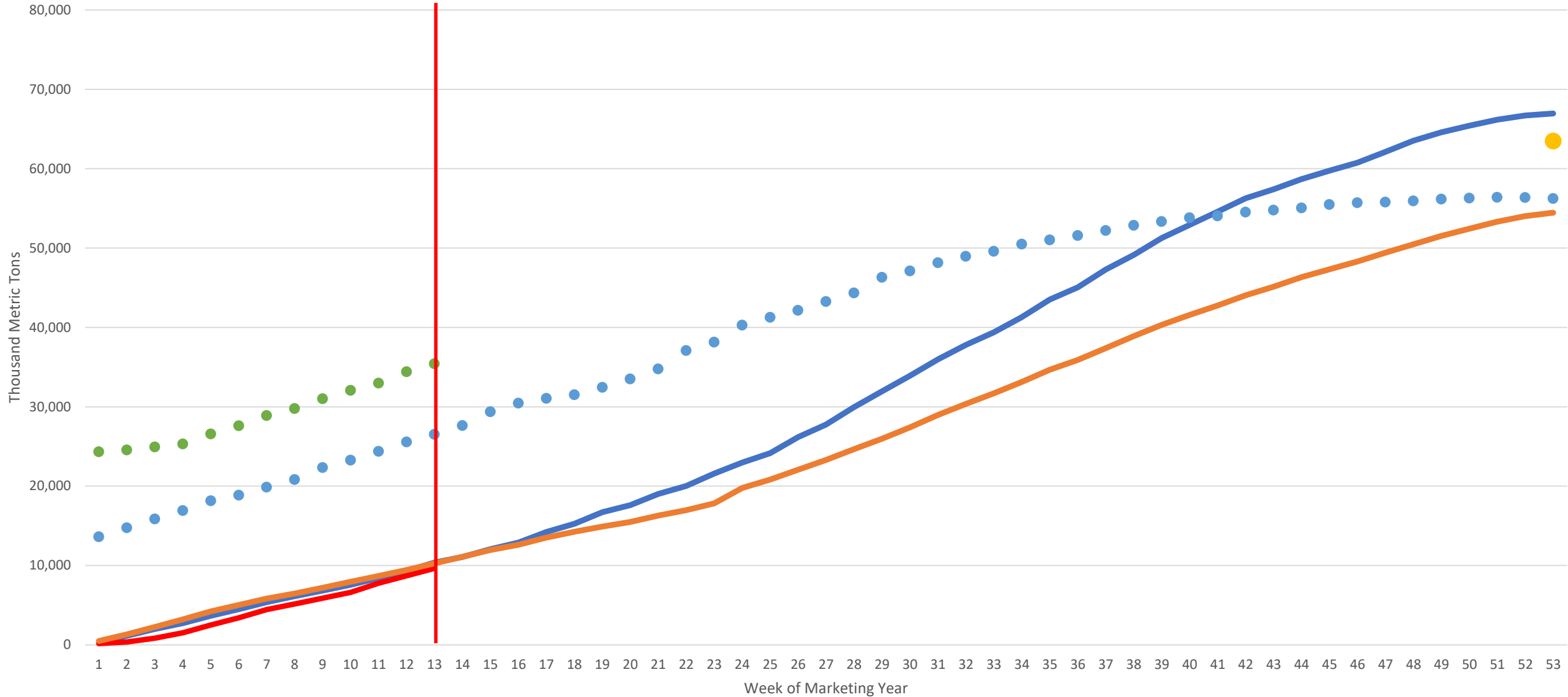
U.S. Export Summary

Item	2019/2020	2020/2021 estimate	2021/2022 forecast	Change from 2020/2021
Soybeans <i>(million bushels)</i>	1,679.0	2,265.0	2,050.0	-215
Corn <i>(million bushels)</i>	1,777.0	2,753.0	2,500.0	-253
Cotton <i>(million bales)</i>	15.5	16.4	15.5	-0.87
Rice, Total <i>(million cwt)</i>	94.2	93.9	90.0	-3.9
Rice, Long <i>(million cwt)</i>	64.8	65.1	64.0	-1.1
Rice, Med/Short <i>(million cwt)</i>	29.4	28.8	26.0	-2.8
Wheat <i>(million bushels)</i>	969.0	992.0	860.0	-132

Source: USDA-WASDE

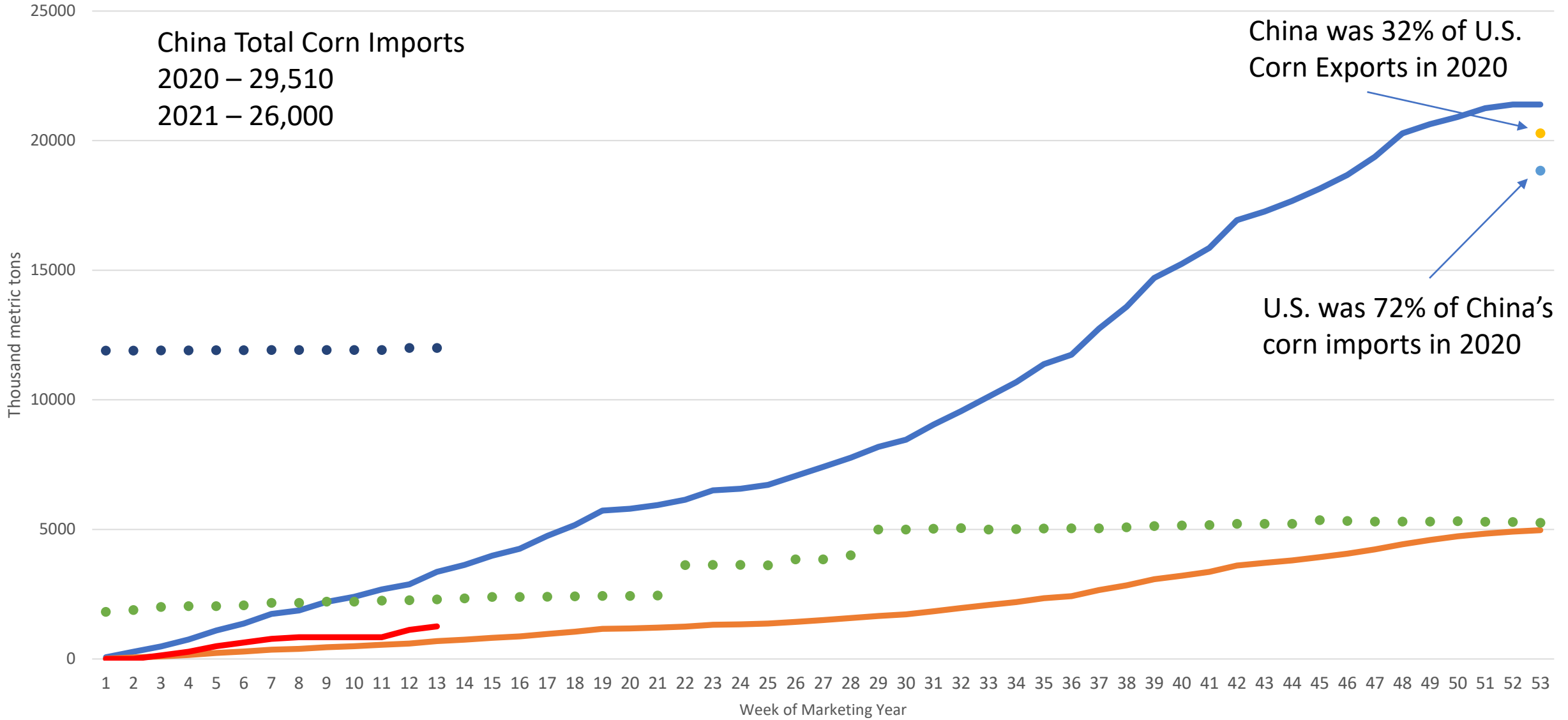
Marketing Year:
Sep - Aug

U.S. Accumulated Corn Exports & Total Commitments



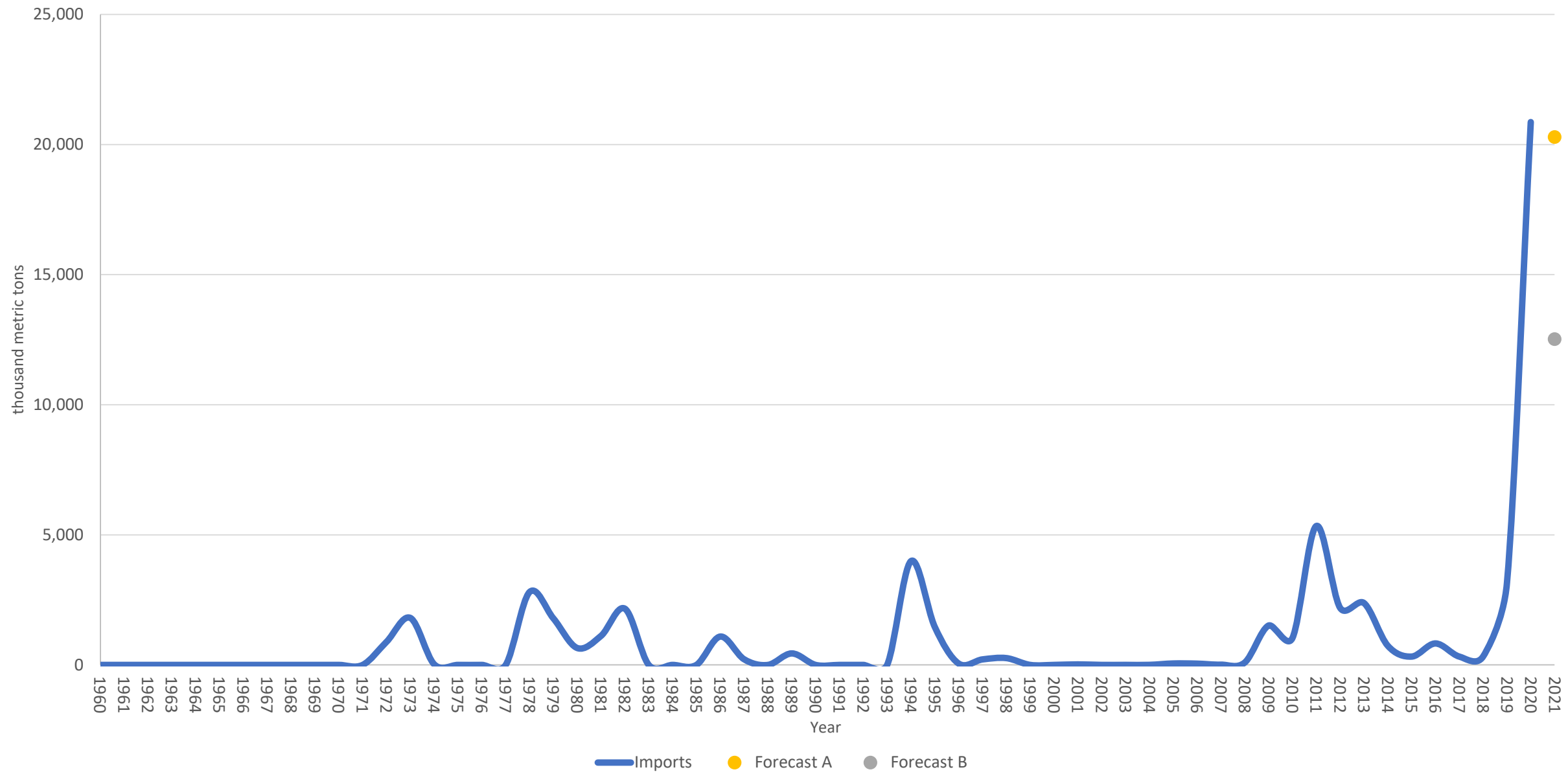
— 2020 Accum. Exports — 2021 Accum. Exports — 5 Year Ave. Accum. Exports ● 2021 Export Forecast ● 5-year Commit Average ● 2021 Commitments

U.S. Corn Accumulated Exports & Total Commitments to China

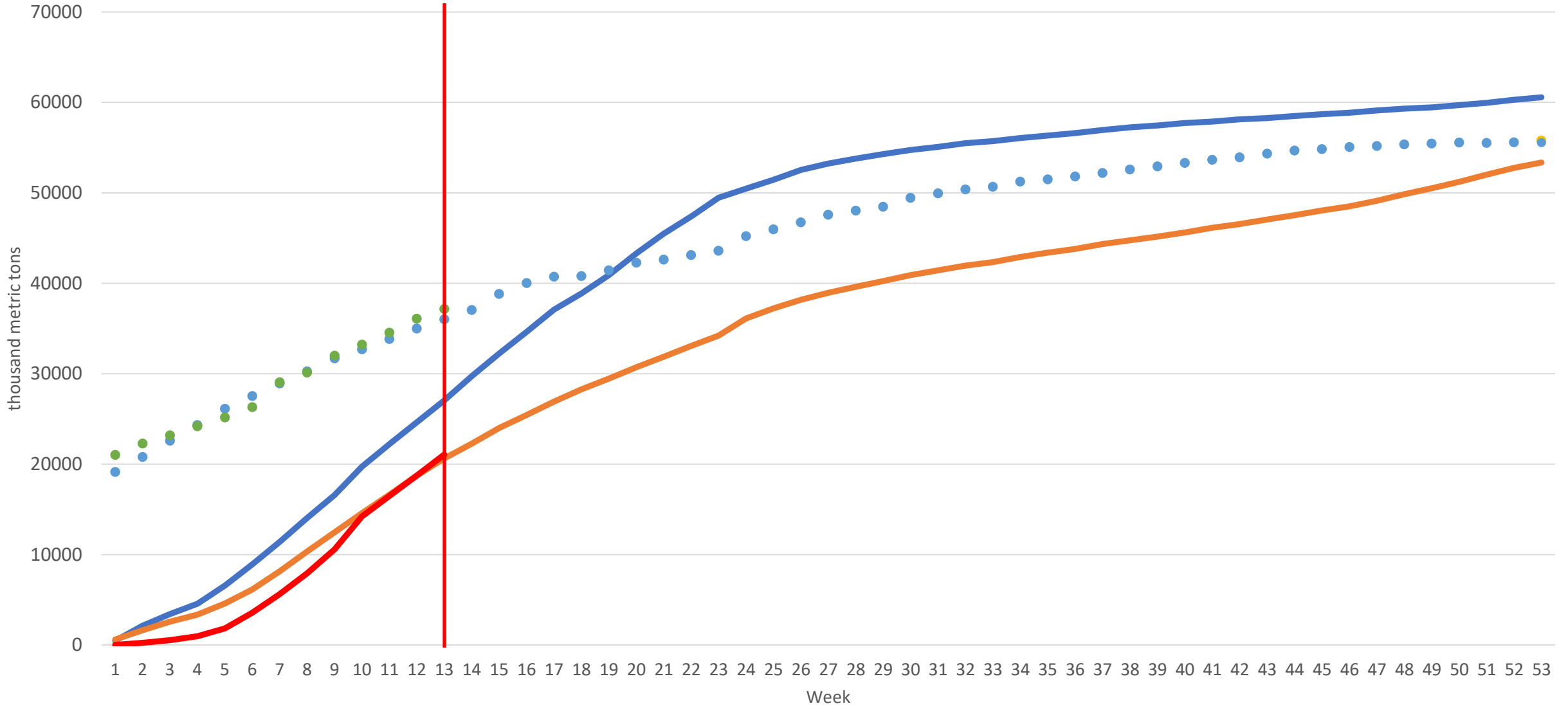


— 2020
 — 5 year average
 — 2021
 ● Forecast A
 ● Forecast B
 ● 5-Year Ave. Commitments
 ● 2021 Commitments

China Corn Imports from the U.S., 1960-2021

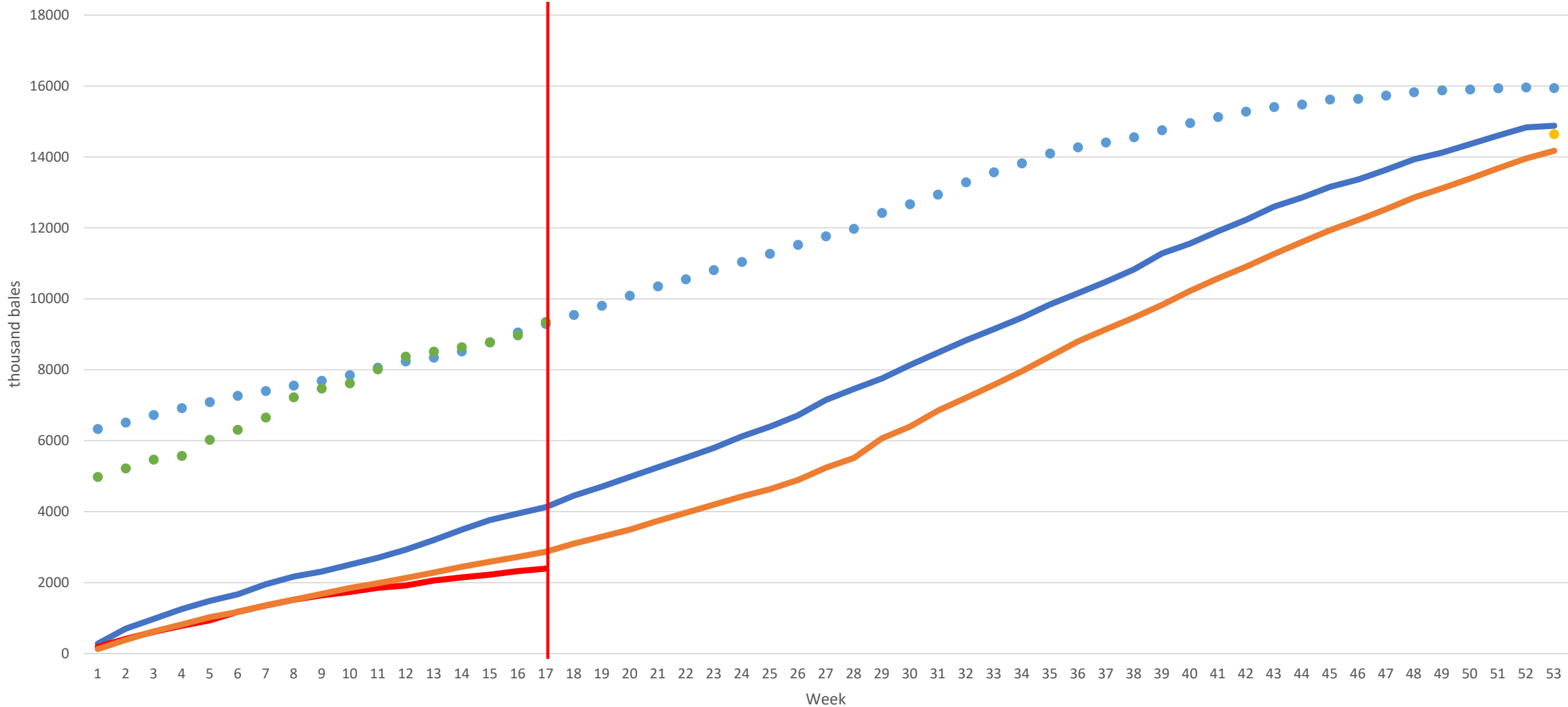


U.S. Soybeans Accumulated Exports & Total Commitments



— 2020 — 5 Year Averag — 2021 ● 2021 Forecast ● 5-Year Average Commitmetn ● 2021 Total Commitments

U.S. Cotton Accumulated Exports & Total Commitments



— 2020 — 2021 — 5 Year Average ● 2021 Forecast ● 5 Year Ave. Commitments ● 2021 Total Commitments

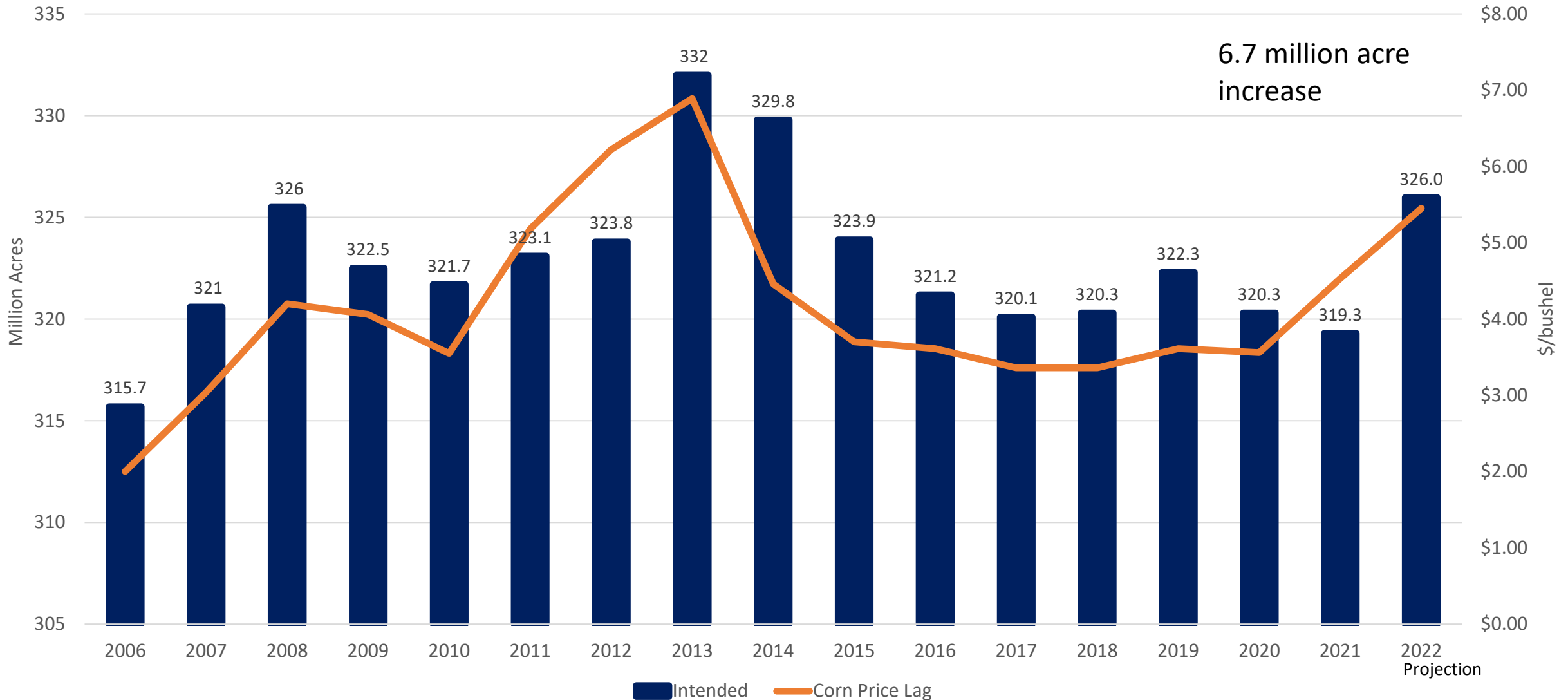
U.S. Stocks-to-Use and Price, 2017-2021

	2017	2018	2019	2020	2021*
Soybeans					
Stocks-to-Use	10.2%	22.9%	13.3%	5.7%	7.8%
Avg. Farm Price (\$/bu)	\$9.33	\$8.48	\$8.57	\$10.80	\$12.10
Corn					
Stocks-to-Use	14.5%	15.5%	13.7%	8.3%	10.1%
Avg. Farm Price (\$/bu)	\$3.36	\$3.61	\$3.56	\$4.53	\$5.45
Cotton					
Stocks-to-Use	8.4%	7.2%	7.4%	8.7%	7.3%
Avg. Farm Price (\$/lb)	\$0.72	\$0.72	\$0.62	\$0.66	\$0.90

Source: USDA-NASS

2022 Planting Expectations

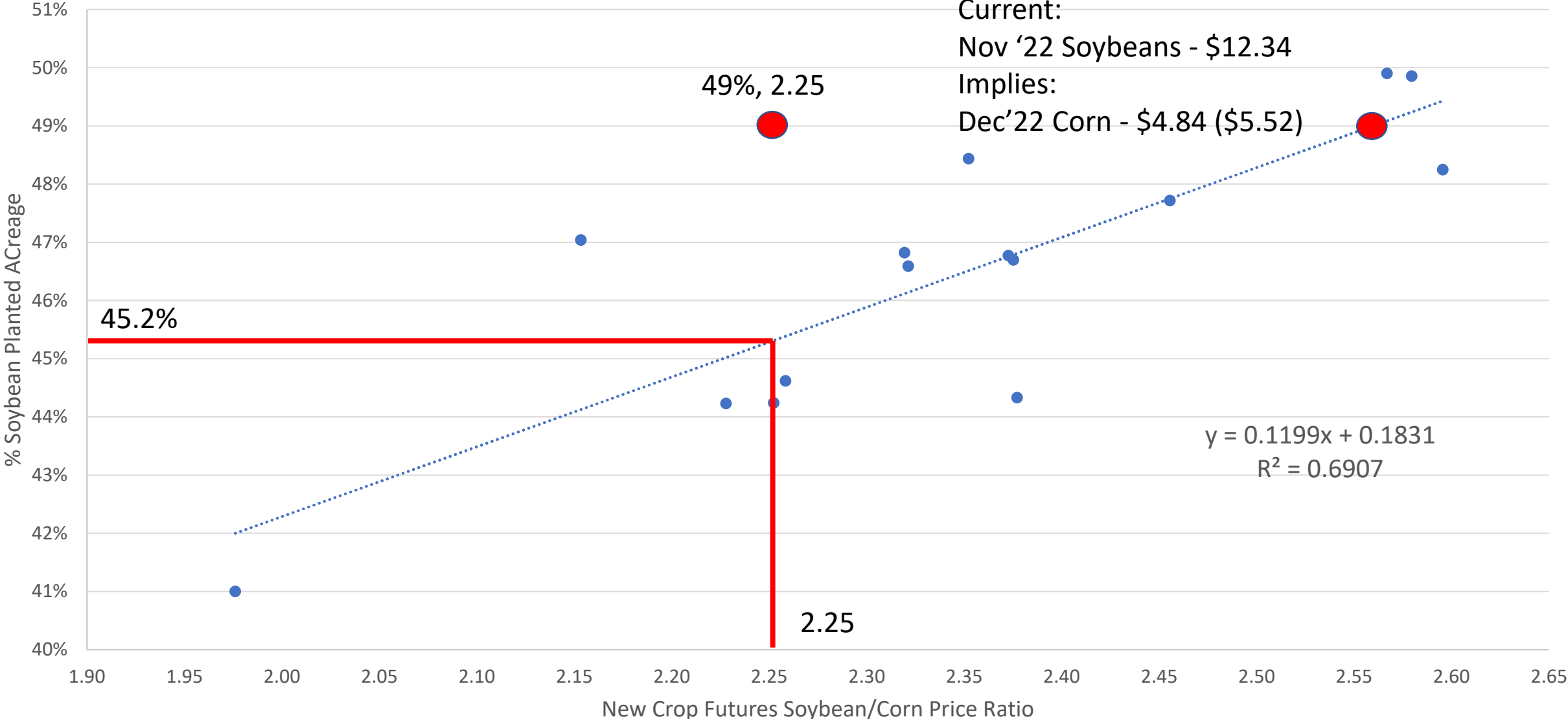
Intended Total Planted Crop Acreage in the U.S. and the Price of Corn in the Previous Year



Planting Expectations

- What are prices telling us?
- Soybean/Corn Price Ratio
 - Indicator of total soybean/corn acreage split
 - Lower the ratio = market favors corn
 - Breakeven ~2.3
- Corn/Cotton Price Ratio
 - Indicator of potential cotton acreage
 - Lower ratio = more cotton acreage

Relationship between 1st Quarter New Crop Soybean/Corn Price Ratio & Percentage of Soybeans Planted vs. Corn



U.S. Acres Summary, 2017-2022

	2018	2019	2020	2021*	2022**
Corn and Soybeans					
Total Intended	179.2	181.7	181.7	181.5	182
Corn					52%
Total Intended	89.8	101.2	96.8	93.9	95.0
Prevented	0.9	11.4	6.1	0.6	1.0
Planted	81.3	81.3	82.3	85.1	94.0
Soybeans					48%
Total Intended	89.4	80.6	84.8	87.6	87.8
Prevented	0.3	4.4	1.5	0.3	0.5
Planted	87.6	75.9	82.6	86.4	87.2

Source: USDA-NASS

U.S. Corn Supply and Demand

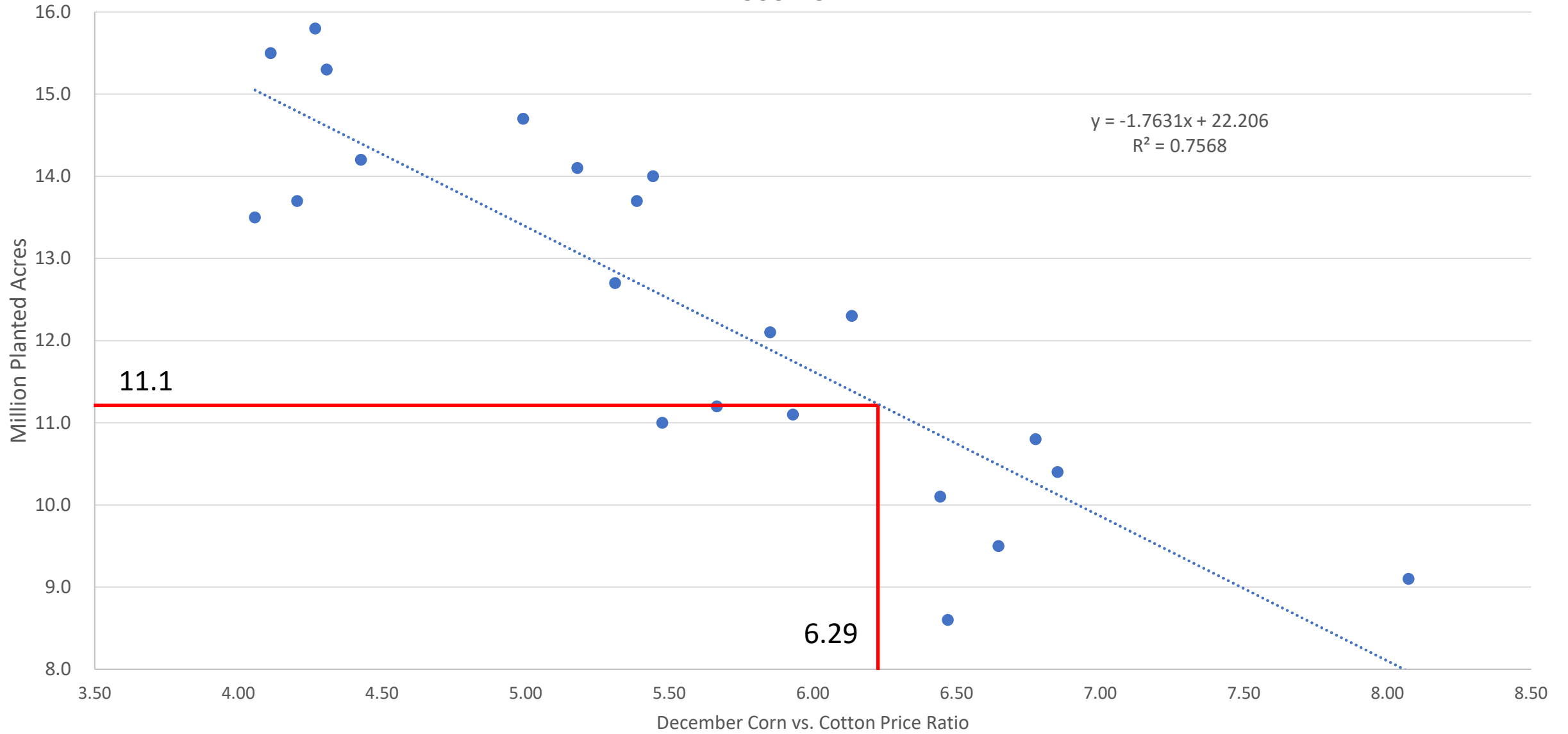
Projection

Item	2020/2021	2021/2022	2022/23
Planted area (million acres)	90.7	93.3	94
Harvested area (million acres)	82.3	85.1	87
Yield (bushels per acre)	171.4	177	179.5
----- <i>Million bushels</i> -----			
Beginning stocks	1,919	1,236	1,493
Production	14,111	15,062	15,616
Imports	24	25	25
Total Supply	16,055	16,323	17,134
Feed and residual	5,601	5,650	5,700
Food, seed, and industrial	6,465	6,680	6,730
Ethanol	5,028	5,250	5,300
Domestic Use	12,066	12,330	12,430
Exports	2,753	2,500	2,450
Total use	14,819	14,830	14,880
Ending Stocks	1,236	1,493	2,254
----- <i>Percent</i> -----			
Stocks to use ratio	8.3	10.1	15.2
----- <i>Dollars per bushel</i> -----			
Average market price	4.53	5.45	4.25-4.75

U.S. Soybeans Supply and Demand

Item	2020/2021	2021/2022	2022/2023
Planted area (million acres)	83.4	87.2	87.8
Harvested area (million acres)	82.6	86.4	86.7
Yield (bushels per acre)	51	51.2	51.0
----- <i>Million bushels</i> -----			
Beginning stocks	525	256	340
Production	4,216	4,425	4,421
Imports	20	15	15
Total Supply	4,761	4,696	4,777
Crushings	2,141	2,190	2,290
Exports	2,265	2,050	2,050
Seed	101	102	103
Residual	(3)	15	15
Total use	4,505	4,356	4,458
Ending Stocks	256	340	319
----- <i>Percent</i> -----			
Stocks to use ratio	5.7	7.8	7.1%
----- <i>Dollars per bushel</i> -----			
Average market price	10.8	12.1	\$10-\$12

December New Crop Corn and Cotton Price Ratio 1st Quarter Average vs. Cotton Planted Acreage,
2000-2021



U.S. Cotton Supply and Demand

Projections

Item	2020/2021	2021/2022	2022/23*
Planted area (million acres)	12.09	11.19	12.0
Harvested area (million acres)	8.27	9.92	9.50
Yield (pounds per acre)	847	880	889
----- <i>Million bales</i> -----			
Beginning stocks	7.25	3.15	3.4
Production	14.61	18.2	17.6
Imports	0	0.01	0
Total Supply	21.86	21.35	21.0
Mill use	2.4	2.5	2.5
Exports	16.37	15.5	15.0
Total use	18.77	18	17.5
Unaccounted	-0.06	-0.05	-0.05
Ending Stocks	3.15	3.4	3.45
----- <i>Percent</i> -----			
Stocks to use ratio	16.8	18.9	19.7
----- <i>Cents per Pound</i> -----			
Average market price	66.3	90	75-90

Neutral-tightening
Stocks

2022 Pre-harvest marketing

- Current new-crop (2022) futures prices:
 - Corn (Dec22): \$5.52/bu
 - Soybeans (Nov22): \$12.32/bu
 - Cotton (Dec22): \$0.89/lb
- Do new-crop forward sales pay?
 - We don't know what the price will be in Fall 2022
 - We can look historical pre-harvest marketing period prices to gage tendencies

New-Crop Corn Futures Deviations from Harvest-time Price in Week of Dec 1, 2000 - 2021

Year Dec Jan Feb Mar Apr May June July Aug Sep Oct Nov Dec



Negative

Positive

Figure 1. Best fit alternatives for marketing tools by market conditions*

1. Basis contract
2. Sell Cash Bushels and Buy Call Option
3. Minimum Price contract (fixed basis)

Basis Weakens

1. Cash sale now
2. Forward Contract

**Futures
Prices Up**

Expected
Change

**Futures Prices
Down**

1. Store & wait
2. Delayed price contract
3. Minimum price contract (open basis)

Basis Strengthens

1. Hedge
2. Non-roll hedge to arrive
3. Buy put option

*Adopted from: "Commonly Used Grain Contracts". Ag Decision Maker. File A2-73. Iowa State University Extension and Outreach

Conclusions

- Keep an eye on exports
- Market is currently saying plant corn vs. soybeans
- Cotton acreage likely up (~12 million acres)
- Inputs up significantly, but commodity prices also higher

Thanks!

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