

# U.S. Corn & Soybean Markets

## U.S. Spring 2021 Planting Prospects

March 11, 2021



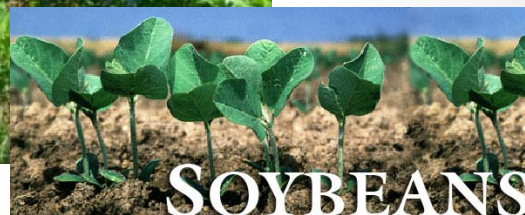
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**Kansas State University**

### What U.S. Farming Expects in 2021.....

#### ☐ 2021 U.S. Spring Plantings ⇒ U.S. Farmers Expectations?

- 1<sup>st</sup> determine South American crop success in Spring 2021
  - **Argentina's** dryness problems & **Brazil's** soybean / 2<sup>nd</sup> crop corn delays
- Soybeans <sup>U.S. 2021</sup> **Up 2%-7%** ⇌ ⬆️⬆️ ≈ **U.S.-China Trade & So. America**
- Corn <sup>U.S. 2021</sup> **Up 1%-4%+** ⇌ ⬆️⬆️ ≈ **Effect on U.S. Ethanol, Feed Use**
- Sorghum <sup>U.S. 2021</sup> **Up 20%** ⇌ ⬆️ ≈ **IF China Imports Continue**
- **HRS Wheat ???** ⇌ **Dry & competing crops in Northern U.S.**

# Soybean Markets



**KANSAS STATE**  
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## Weekly Commodity Futures Price Chart Soybeans (Globex) (CBOT)

TFC Commodity Charts

**ZS - Soybeans (Globex) - Weekly Chart**

03/11/2021 O: 1441.5 H: 1460 L: 1400.75 C: 1413.5 Vol: 210417 OI: 867822

Session Change: -28.000



## Monthly Commodity Futures Price Chart Soybeans (Globex) (CBOT)

TFC Commodity Charts

ZS - Soybeans (Globex) - Monthly Chart

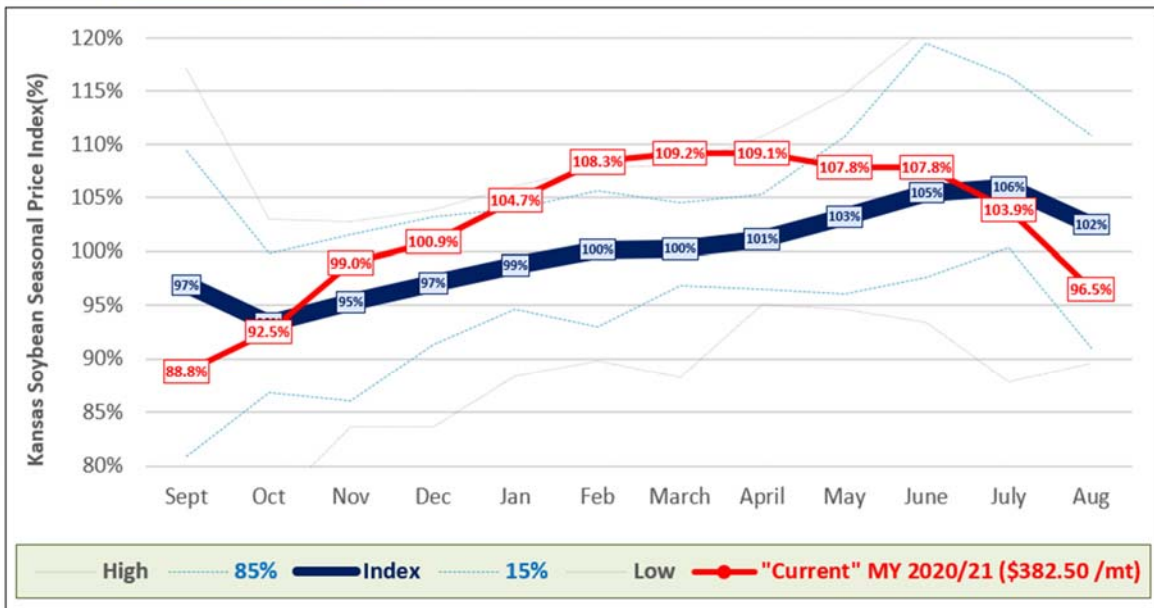
Session Change: -1.500

03/11/2021 O: 1415 H: 1460 L: 1380.75 C: 1413.5 Vol: 203148 OI: 858440



## U.S. (Kansas) Soybean Seasonal Price Index (MY 1999/00 – MY 2019/20) plus "Current Crop" MY 2020/21 Estimates as of March 11, 2021 (KSU [www.AgManager.info](http://www.AgManager.info) & USDA

<https://www.quickstats.nass.usda.gov/>)

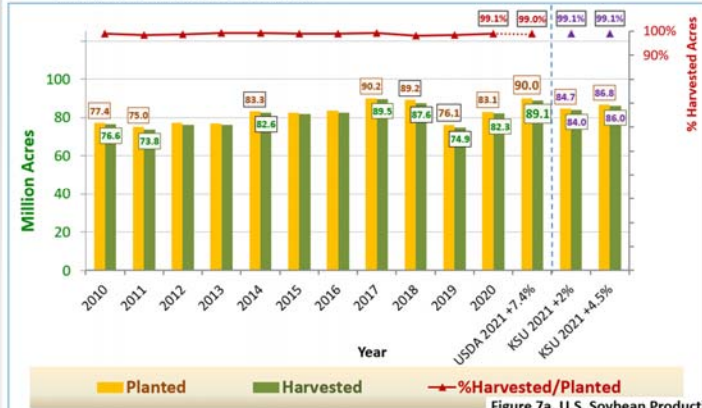




**U.S. Soybean Supply-Demand Balance Sheet: "Old Crop" MY 2019/20 and "New Crop" MY 2020/21 as of the March 9, 2021 USDA WASDE reports, with USDA Outlook Conference & KSU Soybean Market Scenarios**

| Item                                 | USDA<br>MY 2020/21<br>"Old Crop"-Scenario #1<br>March WASDE | KSU<br>MY 2020/21<br>"Old Crop"-Scenario #2<br>+20 mb Exports | USDA<br>MY 2021/22<br>"Old Crop"-Scenario #3<br>March WASDE<br>+7.4% Planted Acres | KSU<br>MY 2020/21<br>"Old Crop"-Scenario #4<br>+2% Planted Acres | KSU<br>MY 2020/21<br>"Old Crop"-Scenario #5<br>+4.5% Planted Acres |
|--------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------------------------------|
| % Probability of Occurring (KSU)     | 65% <sup>KSUest</sup>                                       | 35% <sup>KSUest</sup>                                         | 65% <sup>KSUest</sup>                                                              | 15% <sup>KSUest</sup>                                            | 20% <sup>KSUest</sup>                                              |
| Planted Area (million acres)         | 83.084                                                      | 83.084                                                        | +7.35% 90.000                                                                      | +2.0% 84.746                                                     | +4.5% 86.832                                                       |
| Harvested Area (million acres)       | 82.318                                                      | 82.318                                                        | +8.3% 89.100                                                                       | +2.0% 83.966                                                     | +4.5% 86.033                                                       |
| % Harvested/Planted Area             | 99.08%                                                      | 99.08%                                                        | 99.00%                                                                             | 99.08%                                                           | 99.08%                                                             |
| Yield / harvested acre (bu/ac)       | 50.2                                                        | 50.2                                                          | 50.8                                                                               | 50.0                                                             | 50.0                                                               |
| Beginning Stocks (million bushels)   | 525                                                         | 525                                                           | 120                                                                                | 120                                                              | 120                                                                |
| Production (million bu.)             | 4,135                                                       | 4,135                                                         | 4,525                                                                              | 4,198                                                            | 4,302                                                              |
| Imports (million bu.)                | 35                                                          | 35                                                            | 35                                                                                 | 35                                                               | 35                                                                 |
| Total Supply (million bu.)           | 4,695                                                       | 4,695                                                         | 4,680                                                                              | 4,353                                                            | 4,457                                                              |
| Domestic <u>Crushings</u>            | 2,200                                                       | 2,200                                                         | 2,210                                                                              | 2,070                                                            | 2,120                                                              |
| Exports                              | 2,250                                                       | 2,270                                                         | 2,200                                                                              | 2,070                                                            | 2,120                                                              |
| Seed                                 | 103                                                         | 103                                                           | 100                                                                                | 100                                                              | 100                                                                |
| Residual                             | 22                                                          | 22                                                            | 20                                                                                 | 13                                                               | 17                                                                 |
| Total Use                            | 4,575                                                       | 4,595                                                         | 4,534                                                                              | 4,253                                                            | 4,357                                                              |
| Ending Stocks                        | 120                                                         | 100                                                           | 145                                                                                | 100                                                              | 100                                                                |
| % Ending Stocks-to-Use               | 2.62%                                                       | 2.18%                                                         | 3.20%                                                                              | 2.35%                                                            | 3.63%                                                              |
| Days of Supply<br>(% S/U x 365 days) | 9.6 days                                                    | 7.9 days                                                      | 11.68 days                                                                         | 8.58 days                                                        | 13.27 days                                                         |
| U.S. Avg. Farm Price (\$/bu)         | \$11.15                                                     | \$12.15                                                       | \$11.25                                                                            | \$12.00                                                          | \$11.00                                                            |

**Figure 5. U.S. Soybean Planted & Harvested Acreage: 2007-2021** as of the March 9, 2021 USDA WASDE reports, USDA Outlook Conference & KSU Projections for 2021



**Figure 7a. U.S. Soybean Production & Total Supplies: MY 2010/11 thru Projected "Next Crop" MY 2021/22** as of the March 9, 2021 USDA WASDE Report, USDA Outlook Conference & KSU Projections



Figure 9b. U.S. Soybean Exports for MY 2012/13 & MY 2016/17 through "New Crop" MY 2020/21 as of recent USDA FAS Weekly Export reports through the week of March 4, 2021

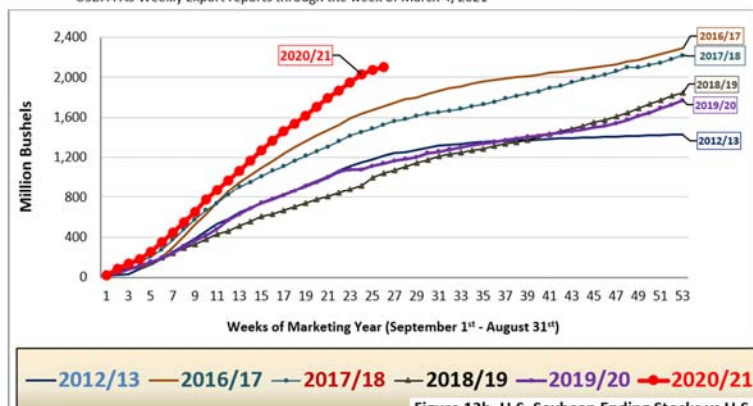


Figure 12b. U.S. Soybean Ending Stocks vs U.S. Avg. Cash Prices: MY 2009/10 – "New Crop" MY 2021/22 as of the March 9, 2021 USDA WASDE Report, USDA Outlook Conf & KSU forecast scenarios.



World Soybean Usage & Ending Stocks: MY 2008/09 through "Current" MY 2020/21 as of the March 9, 2021 WASDE Report

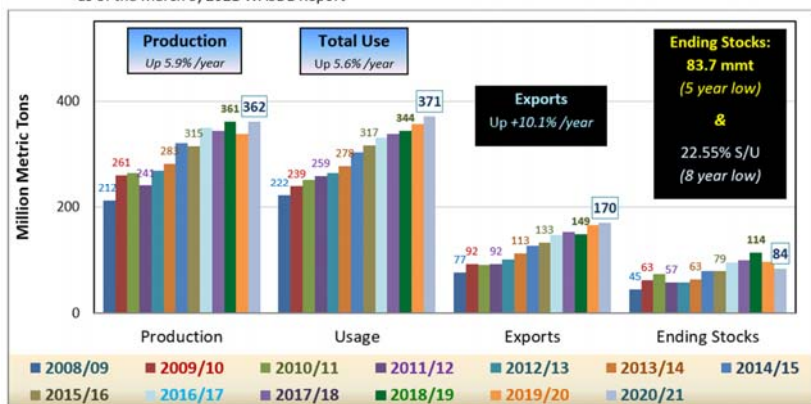
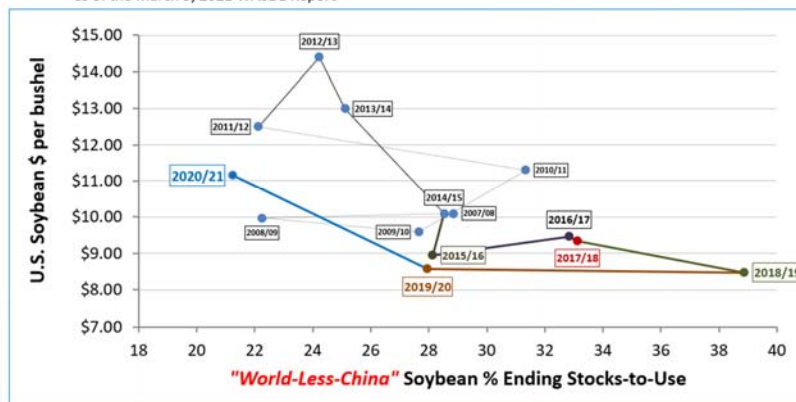


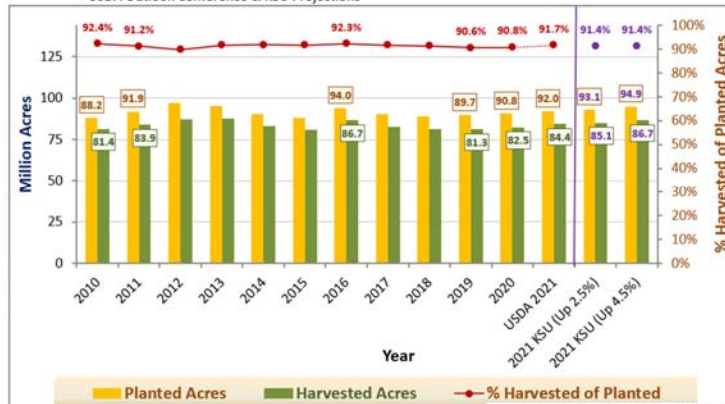
Figure 17a. U.S. Soybean Price vs "World-Less-China" % Stocks-to-Use: MY 1973/74 - "Current" MY 2020/21 as of the March 9, 2021 WASDE Report



**U.S. Corn Supply-Demand Balance Sheet: Projected "Current Crop" MY 2020/21 & "New Crop" MY 2021/22** as of the March 9, 2021 USDA WASDE report & 2021 USDA Outlook Conference, with Alternative KSU Marketing Year Scenarios

| Item                                     | USDA<br>MY 2020/21<br>"Old Crop"-Scenario #1<br>March WASDE | KSU<br>MY 2020/21<br>"Old Crop"-Scenario #2<br>More Exports &<br>Less Ethanol/Feed | USDA<br>MY 2021/22<br>"New Crop"-Scenario #3<br>2021 USDA Outlook<br>Conference | KSU<br>MY 2021/22<br>"New Crop"-Scenario #4<br>+2.5% Planted Acres<br>175 bu/ac Yield | KSU<br>MY 2021/22<br>"New Crop"-Scenario #5<br>+4.5% Planted Acres<br>175 bu/ac Yield |
|------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| % Probability of Occurring (KSU)         | 65% <sup>KSUest</sup>                                       | 35% <sup>KSUest</sup>                                                              | 50% <sup>KSUest</sup>                                                           | 30% <sup>KSUest</sup>                                                                 | 20% <sup>KSUest</sup>                                                                 |
| Planted Area (million acres)             | 90.819                                                      | 90.819                                                                             | +1.0% 92.000                                                                    | +2.5% 93.089                                                                          | +4.5% 94.906                                                                          |
| Harvested Area (million acres)           | 82.527                                                      | 82.467                                                                             | +2.3% 84.400                                                                    | 85.084                                                                                | 86.744                                                                                |
| % Harvested/Planted Area                 | 90.9%                                                       | 90.8%                                                                              | 91.7%                                                                           | 91.4%                                                                                 | 91.4%                                                                                 |
| Yield / harvested acre (bu/ac)           | 172.0                                                       | 172.0                                                                              | 179.5                                                                           | ** 175.0                                                                              | ** 175.0                                                                              |
| Million Bushels                          |                                                             |                                                                                    |                                                                                 |                                                                                       |                                                                                       |
| Beginning Stocks (million bushels)       | 1,919                                                       | 1,919                                                                              | 1,502                                                                           | 1,502                                                                                 | 1,502                                                                                 |
| Production (million bu.)                 | 14,182                                                      | 14,182                                                                             | 15,150                                                                          | ** 14,890                                                                             | ** 15,180                                                                             |
| Imports (million bu.)                    | 25.0                                                        | 25.0                                                                               | 25.0                                                                            | 25.0                                                                                  | 25.0                                                                                  |
| <b>Total Supply (million bu.)</b>        | <b>16,127</b>                                               | <b>16,127</b>                                                                      | <b>16,677</b>                                                                   | <b>16,417</b>                                                                         | <b>16,707</b>                                                                         |
| Ethanol for fuel Use (million bu.)       | 4,950                                                       | 4,900                                                                              | 5,200                                                                           | ** 5,000                                                                              | ** 5,000                                                                              |
| Food & Industrial Use (mln bu.)          | 1,393                                                       | 1,393                                                                              | 1,393                                                                           | 1,393                                                                                 | 1,393                                                                                 |
| Seed Use (million bu.)                   | 31.8                                                        | 31.8                                                                               | 31.8                                                                            | 31.8                                                                                  | 31.8                                                                                  |
| Exports (million bu.)                    | 2,600                                                       | 2,750                                                                              | 2,650                                                                           | 2,650                                                                                 | 2,650                                                                                 |
| Feed & Residual Use (million bu.)        | 5,650                                                       | 5,60                                                                               | 5,850                                                                           | ** 5,750                                                                              | ** 5,750                                                                              |
| <b>Total Use (million bu.)</b>           | <b>14,625</b>                                               | <b>14,700</b>                                                                      | <b>15,125</b>                                                                   | <b>14,825</b>                                                                         | <b>14,825</b>                                                                         |
| Ending Stocks (million bu.)              | 1,502                                                       | 1,427                                                                              | 1,552                                                                           | 1,592                                                                                 | 1,882                                                                                 |
| % Ending Stocks-to-Use                   | 10.27%                                                      | 9.71%                                                                              | 10.26%                                                                          | 10.74%                                                                                | 12.69%                                                                                |
| Days of Supply (% S/U x 365 days)        | 37.5 days                                                   | 35.4 days                                                                          | 37.4 days                                                                       | 39.2 days                                                                             | 46.3 days                                                                             |
| U.S. Corn Average Farm Price (\$/bushel) | \$4.30                                                      | \$4.45                                                                             | \$4.20                                                                          | \$4.10                                                                                | \$3.75                                                                                |

**Figure 5a. U.S. Corn Acreage for Years 2010 Through 2021** as of the March 9, 2021 USDA Reports + USDA Outlook Conference & KSU Projections



**Figure 6. U.S. Corn Yield Trend for 2005-2021** as of the March 9, 2021 USDA Reports + USDA Outlook Conference & KSU Projections

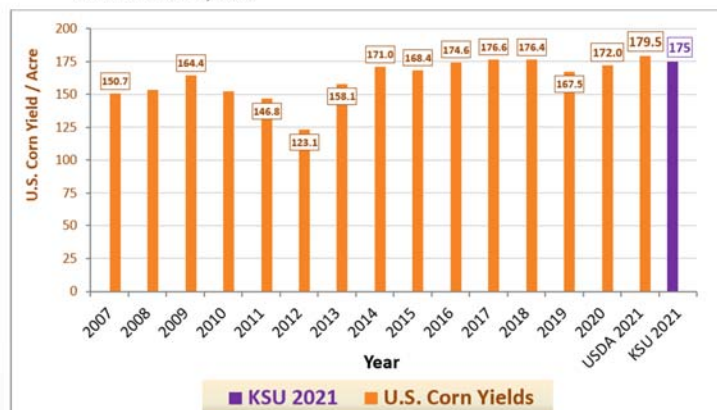
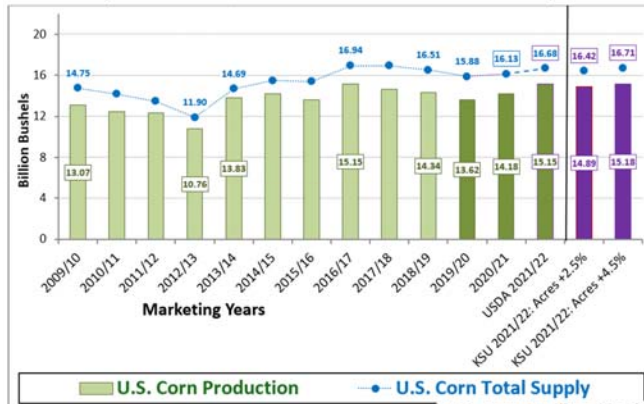




Figure 7. U.S. Corn Production & Total Supplies: MY 2009/10 thru "New Crop" MY 2021/22 as of the March 9, 2021 USDA WASDE + USDA Outlook Conference & KSU Projections

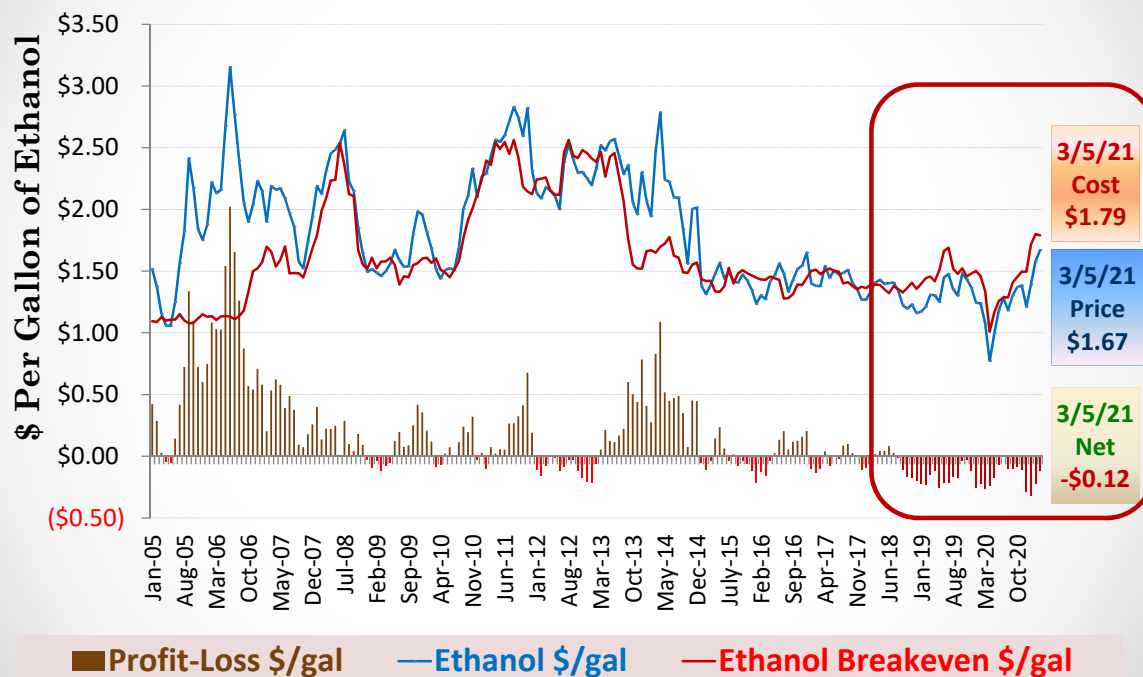


U.S. Corn Ending Stocks & % Ending Stocks-to-Use for MY 2005/06 through "New Crop" MY 2020/21: as of the March 9, 2021 USDA WASDE report & USDA Outlook Conference

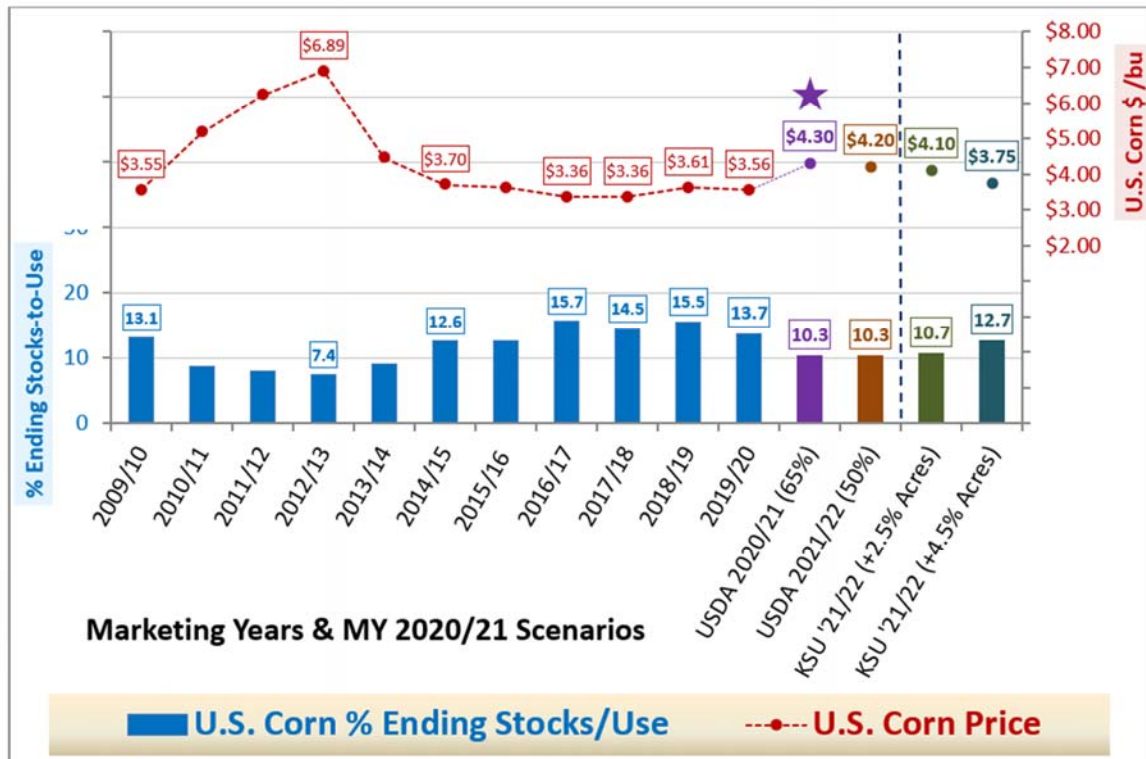


## Ethanol Price, Cost & Profits

ISU Ethanol Plant Model (January 2005 – March 5, 2021)



**Figure 13a. U.S. Corn Percent Ending Stocks vs U.S. Average Cash Corn Prices, MY 2009/10 – projected “Current Crop” MY 2020/21:** as of the March 9, 2021 USDA WASDE report, USDA Outlook Conference & KSU alternative Supply-Demand & Price scenarios



## Questions?



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