



FARM BILL SUPPORT PROGRAMS: A FARMER PERSPECTIVE – PART 2

AAE 320

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Learning Goals

- Learning Goal: To understand how specific commodity support programs operate for an individual farmer
- Part 1
 - Price Loss Coverage (PLC)
 - Agricultural Risk Coverage (ARC)
- Part 2
 - Marketing Assistance Loans (MAL)
 - Dairy Margin Coverage (DMC)
 - Very Very Briefly
 - Market Facilitation Program (MFP)
 - Coronavirus Food Assistance Program (CFAP, CFAP2)

Marketing Assistance Loans (MAL) and Loan Deficiency Payments (LDP)

Marketing Assistance Loans (MAL) and Loan Deficiency Payments (LDP)

- Crop prices tend to be low around harvest time, but that is also when many operating loans are due
- Marketing Assistance Loans (MAL): low interest loans to help farmers manage cash flow (pay off operating loans), so can wait to sell grain when prices are higher
- Loan Deficiency Payments (LDP): Payments that give farmers a price floor equal to the Loan Rate used for MAL
- MAL-LDP programs meant to work together
- **Not tied to Base Ares or Program Yields but actual production**

Marketing Assistance Loans

- Farmers receive a marketing assistance loan (MAL) from the Commodity Credit Corporation (CCC), using their harvested grain as collateral
 - Your harvested grain, no matter how many acres you grew it on
 - Receive \$/bu in loan equal to the Loan Rate
 - National Loan Rates: Corn \$2.20, Soybeans \$6.20, Wheat \$3.38
 - Each county's loan rates differ from these by a few cents
 - WI tends to be lower: 2020 Dane \$2.15, \$6.21, \$3.36
- Must grow the grain yourself, can't buy from someone else and then enroll it in MAL
- MAL is for up to 9 months

MAL Payback

- Farmer picks a day to “sell” grain used as collateral and payoff loan
 - Actual physical sale may occur later, but not earlier
- Each day, there is a Posted County Price (PCP) for each commodity, official FSA estimate of local price
 - <https://www.fsa.usda.gov/programs-and-services/price-support/pcp-rates/index>
- If $PCP > \text{Loan Rate}$, farmer pays back MAL in full, plus small interest payment
- If $PCP < \text{Loan Rate}$, farmer pays back MAL at Marketing Loan Repayment Rate $\approx PCP$
- Loan Deficiency Payment (LDP) = $\text{Loan Rate} - PCP$
- Simplification: Don't take loan and pay it back, but receive $LDP = \text{Loan Rate} - PCP$, if $PCP < \text{Loan Rate}$
- Program used to be used a lot when lower prices

Think Break #13

1. Suppose you harvested 5,000 bu of soybeans and enrolled all 5,000 bu for a Marketing Assistance Loan

- If soybeans has a \$6.20/bu loan rate, so how much will your MAL be?

2. Suppose you pay back the MAL on Feb 1st when the posted county price for soybeans is \$7.00/bu

- What is your Loan Deficiency Payment?
- How much will you pay back?

3. Suppose instead you pay back the MAL on Feb 15th when the posted county price for soybeans is \$6.00/bu

- What is your Loan Deficiency Payment?
- How much will you pay back?

Think Break #13: Answer

1. How much will your MAL be? $MAL = \$6.20/bu \times 5,000 bu = \$31,000$
2. Suppose you pay back the MAL on Feb 1st when the posted county price for soybeans is \$7.00/bu
 - a. What is your Loan Deficiency Payment? $\$0$
 - b. How much will you pay back? $\$31,000$
3. Suppose instead you pay back the MAL on Feb 15th when the posted county price for soybeans is \$6.00/bu
 - a. What is your Loan Deficiency Payment?
 $\$6.20 - \$6.00 = \$0.20/bu \times 5,000 bu = \$1,000$
 - b. How much will you pay back?
 $Original\ loan - LDP = \$31,000 - \$1,000 = \$30,000$

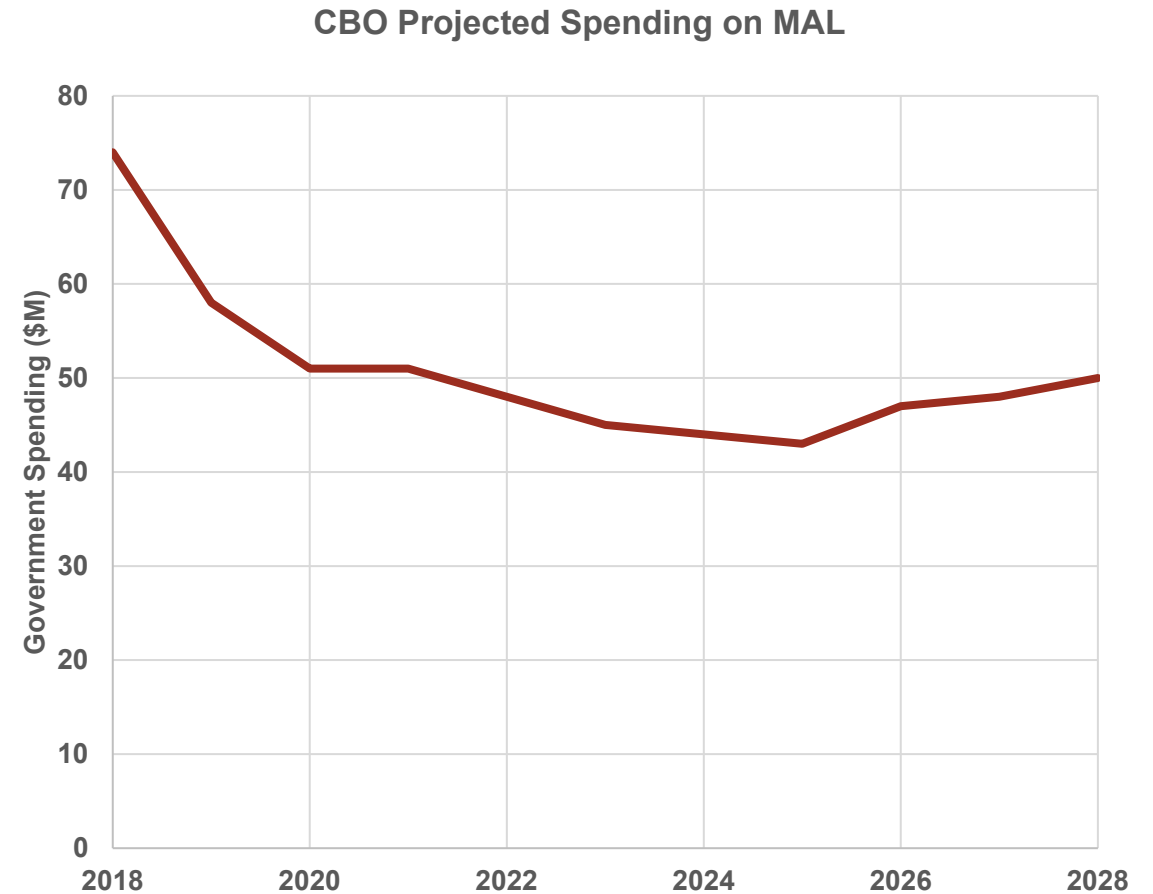
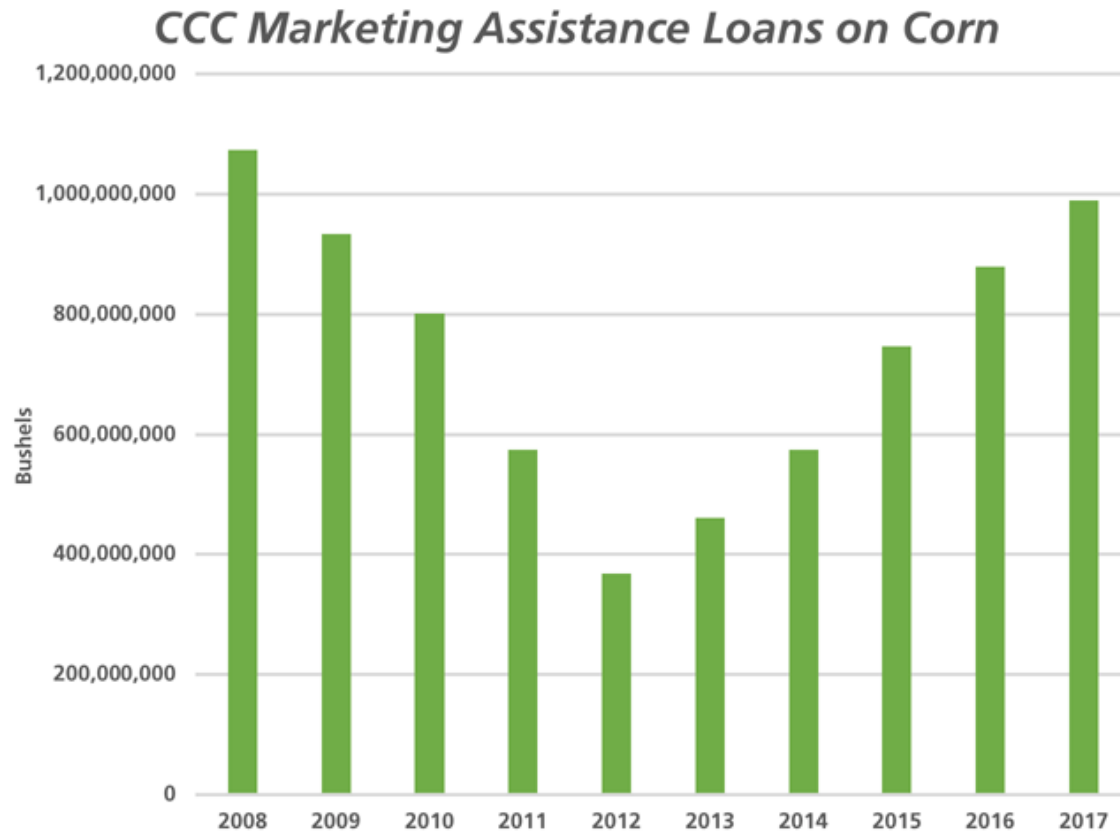
Summary of Loan Deficiency Payments (LDP)

- LDP (\$/harvested bushel)
 - $LDP = \text{Loan Rate} - PCP$, if $PCP < \text{Loan Rate}$
- Depends on local Posted County Price when you “sell” the crop (may not be price actually received when physical sale occurs)
- Can use the grain to feed your livestock after pay back loan
- Depends on how many bushels harvested, not acres harvested
- Gives farmers Loan Rate as minimum price on all bushels enrolled
 - ~ Corn \$2.20, Soybeans \$6.20, Wheat \$3.38

Marketing Assistance Loans (MAL) and Loan Deficiency Payments (LDP)

- Combined programs give farmers a price floor equal to the Loan Rate
 - Reality is that loan rates are so low for corn soybeans and wheat that generally no one expects LDPs, just use MALs as a cheap loan program
- LDPs have been paid in recent years for some classes of wheat and “Southern” crops (peanuts, cotton, rice)
- Based on actual farmer harvested production and local prices (but not actual price you sell for)
 - **MAL/LDPs do not use National MYA prices, Base Acres or Program Yields, but the loan rate, posted county price and actual production**

MAL Used for ~1 Billion bu in 2017 (~ 7% of production)
but actual government cost is far below ARC+PLC cost



Dairy Margin Coverage (DMC)

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- 2018 Farm Bill: new dairy program: Dairy Margin Coverage (DMC)
 - Replaced unpopular Dairy Margin Protection Program (MPP) from the 2014 Farm Bill, which replaced Milk Income Loss Coverage (MILC)
- DMC like MPP, but with tweaked parameters and a new name
- Makes payments in a month when the difference between the USDA's average national All-Milk price and a program-defined fixed feed ration valued at U.S. average prices falls below the margin (Income Over Feed Costs)
 - Margin used to pay fixed costs, overhead, management
- National all milk price is \$16/cwt and the USDA ration cost is \$10/cwt, then the IOFC margin that month is $\$16.00 - \$10.00 = \$6.00$

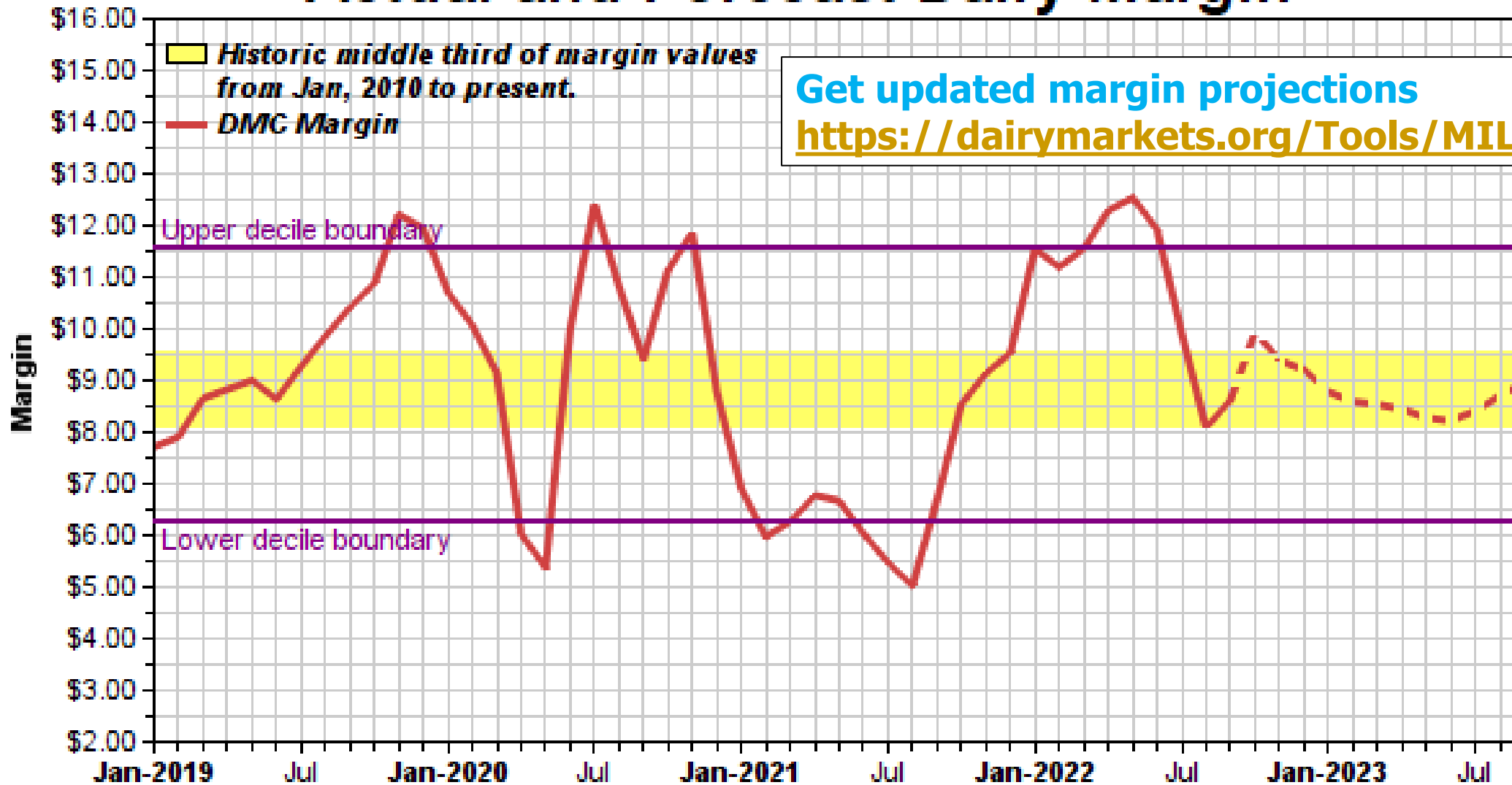
Dairy Margin Coverage (DMC)

- Farmer chooses
 - 1) Margin Guarantee (All Milk Price – Feed Cost)
 - \$4.00/cwt to \$9.50/cwt in 50¢ increments
 - 2) % of Production to Cover (Payment Rate)
 - % of monthly production paid for if the Actual Margin < Guarantee
 - 25% to 95% in 5% increments
- Margins are checked each month and payments made accordingly
- Voluntary program with annual coverage decisions
 - Enroll until 2023 for 25% premium discount
- Farmer gets \$4/cwt margin for free, pay for higher margin, with higher premium for production over 5 million pounds

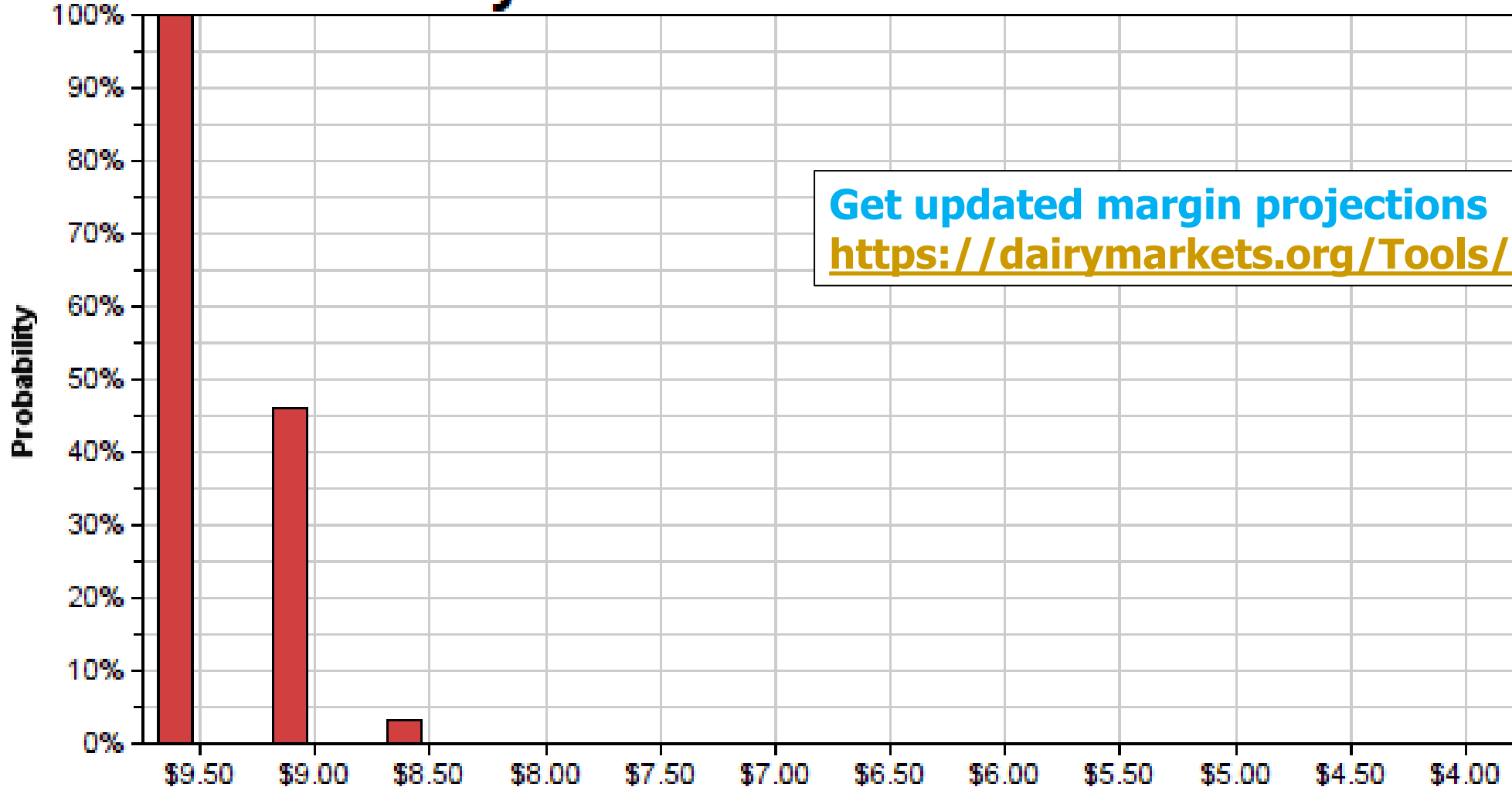
DMC Example Payment Calculation

- Suppose your farm produces 3 million pounds of milk per year (30,000 cwt)
 - About 111 cows at 27,000 lbs/yr per cow
- For 2020, you bought the maximum \$9.50 margin guarantee and the maximum coverage of 95% of your production at \$0.15/cwt
 - Annual Cost = $30,000 \text{ cwt} \times 95\% \times \$0.15/\text{cwt} = \$4,275$
- Suppose in March 2020 the actual announced dairy margin (income over feed costs) is \$9.05, which triggers a DMC payment
- Your payment would be $\$9.50 - \$9.05 = \underline{\$0.45/\text{cwt}}$
- Your average monthly production is $30,000 \text{ cwt} / 12 = 2,500 \text{ cwt}$, but your covered production is $95\% \times 2,500 \text{ cwt} = \underline{2,375 \text{ cwt}}$
- You would be paid $\$0.45/\text{cwt} \times 2,375 \text{ cwt} = \$1,068.75$ for March 2020

Actual and Forecast Dairy Margin



Probability of DMC Net Benefit* for 2022



Get updated margin projections

<https://dairymarkets.org/Tools/MILC-MPP.html>



■ New Tier 1

■ Tier 2

* Indemnity payments minus premiums.

Updated 11/23/22

DMC Premium Costs (\$/cwt)

Coverage Level	Tier 1 Premium per cwt for covered production history of 5 mil lbs. or less	Tier 2 Premium per cwt, all years for covered production history over 5 mil lbs.
\$4.00	None	None
\$4.50	\$0.0025	\$0.0025
\$5.00	\$0.005	\$0.005
\$5.50	\$0.030	\$0.100
\$6.00	\$0.050	\$0.310
\$6.50	\$0.070	\$0.650
\$7.00	\$0.080	\$1.107
\$7.50	\$0.090	\$1.413
\$8.00	\$0.100	\$1.813
\$8.50	\$0.105	N/A
\$9.00	\$0.110	N/A
\$9.50	\$0.150	N/A

- 5 million pounds at 27,000 pounds per cow per year = 185 cows
- \$9.50 margin, 5 million pounds, cover 95% of production and \$0.15/cwt = \$7,125 per year
- Cost to cover production above 5 million pounds rises quickly after the \$5.50 margin

Dairy Margin Coverage (DMC) Enrollment

- Enrollment for each calendar year, opens in October, closes in December
- 2022: adjusting premiums and the formula for feed rations

	% Dairies Enrolled		Payments (\$ Million)	
Year	US	WI	US	WI
2019	80.9%	84.5%	\$301	\$66.5
2020	49.9%	50.3%	\$210	\$50.4
2021	75.4%	78.9%	\$1,080	\$242.7
2022	73.0%	77.4%	\$84.6*	\$19.2*

*As of Nov 7, 2022

*As of Nov 7, 2022

Source: <https://www.fsa.usda.gov/programs-and-services/dairy-margin-coverage-program/program-enrollment-information/index>

Dairy Margin Coverage (DMC) Resources

- USDA FSA page:
<https://www.fsa.usda.gov/programs-and-services/dairy-margin-coverage-program/index>
- Program on Dairy Markets and Policy has tons of dairy information, including DMC and DMC decision tools
<https://dairymarkets.org/>

Select Year: 2021 ▼ Annual Historic Production: 6,000,000 Coverage Percentage: 95% ▼

Tier 1 Coverage Level: \$9.50 Tier 2 Coverage Level: \$8.00

Coverage Level	Choice (\$/cwt)	Covered Prod History (lbs)	Total Premium (\$/cwt)
\$9.50	\$0.1500	5,000,000	\$7,500.00
\$8.00	\$1.8130	700,000	\$12,691.00
		5,700,000	\$20,191.00

TIER 1			TIER 2	
Coverage Level	Choice	Premium	Choice	Premium
\$9.50	<input checked="" type="radio"/> \$0.1500	\$7,500.00		
\$9.00	<input type="radio"/> \$0.1100	\$5,500.00		
\$8.50	<input type="radio"/> \$0.1050	\$5,250.00		
\$8.00	<input type="radio"/> \$0.1000	\$5,000.00	<input checked="" type="radio"/> \$1.8130	\$12,691.00
\$7.50	<input type="radio"/> \$0.0900	\$4,500.00	<input type="radio"/> \$1.4130	\$9,891.00
\$7.00	<input type="radio"/> \$0.0800	\$4,000.00	<input type="radio"/> \$1.1070	\$7,749.00
\$6.50	<input type="radio"/> \$0.0700	\$3,500.00	<input type="radio"/> \$0.6500	\$4,550.00
\$6.00	<input type="radio"/> \$0.0500	\$2,500.00	<input type="radio"/> \$0.3100	\$2,170.00
\$5.50	<input type="radio"/> \$0.0300	\$1,500.00	<input type="radio"/> \$0.1000	\$700.00
\$5.00	<input type="radio"/> \$0.0050	\$250.00	<input type="radio"/> \$0.0050	\$35.00
\$4.50	<input type="radio"/> \$0.0025	\$125.00	<input type="radio"/> \$0.0025	\$17.50
\$4.00	<input type="radio"/> \$0.0000	\$0.00	<input type="radio"/> \$0.0000	\$0.00

Source: <https://dmc.dairymarkets.org/#/>

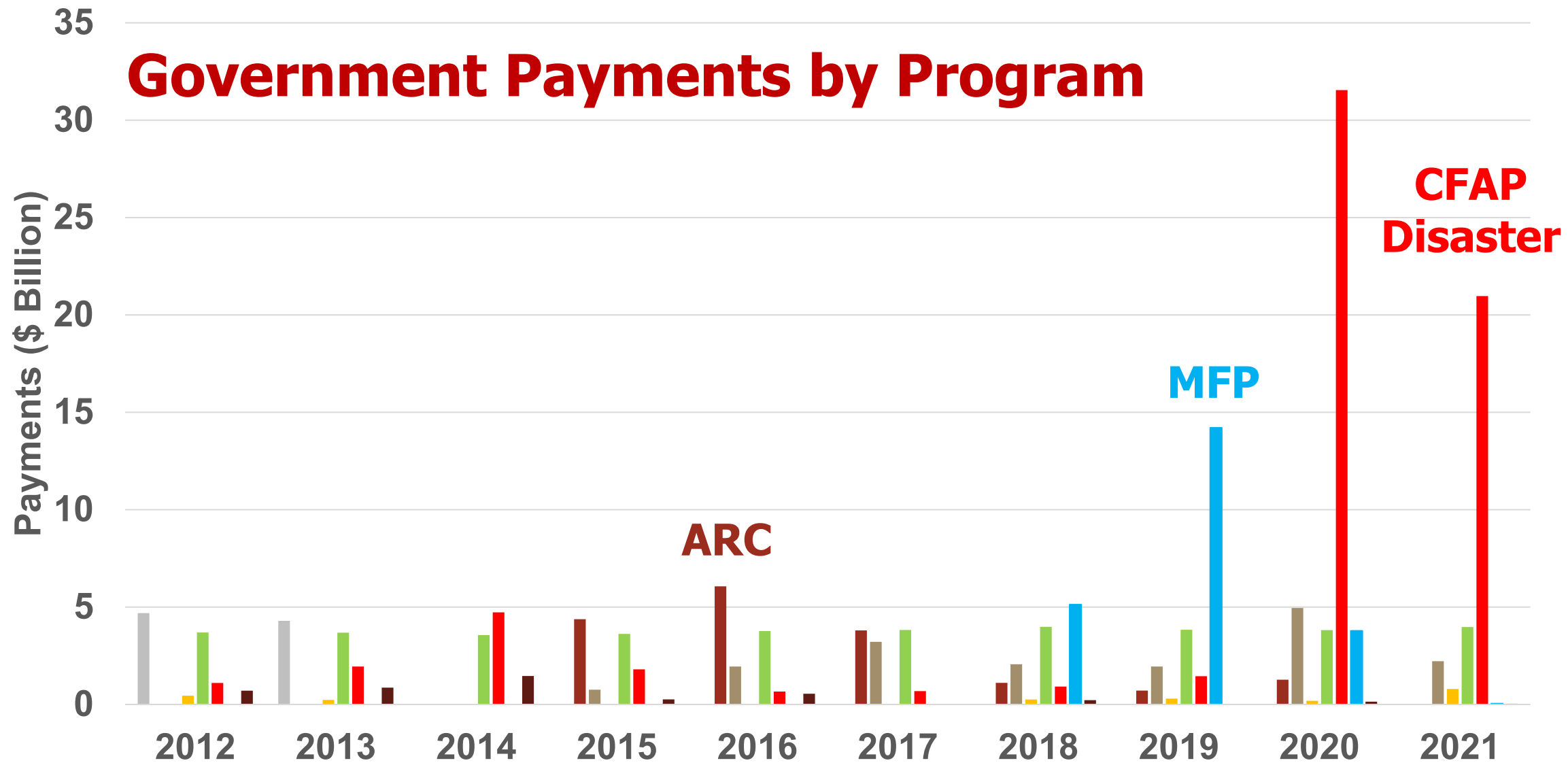
Market Facilitation Program (MFP)

Market Facilitation Program (MFP)

- In 2018, trade wars led to tariffs on US ag exports and large price declines for several ag commodities
 - Already low prices and low farm income before trade war
- Administration created the Market Facilitation Program
 - Outside of Farm Bill and usual legislative process, but authorized by CCC
- Rules were developed and payments announced for 2018
- MFP payments announced in 2019, developed different rules
- MFP is broader than just payments to farmers:
 - Food Purchase & Distribution Program: buy surplus of affected commodities
 - Trade Promotion Program: restore lost markets, develop new export markets



Government Payments by Program



MFP 2018 Covered Commodities

- MFP provides payments to eligible producers of:
- Non-Specialty Crops: alfalfa hay, barley, canola, corn, crambe, dried beans, dry peas, extra-long staple cotton, flaxseed, lentils, long grain and medium grain rice, millet, mustard seed, oats, peanuts, rapeseed, rye, safflower, sesame seed, small and large chickpeas, sorghum, soybeans, sunflower seed, temperate japonica rice, triticale, upland cotton, and wheat
- Specialty Crops: almonds, cranberries, cultivated ginseng, fresh grapes, fresh sweet cherries, hazelnuts, macadamia nuts, pecans, pistachios, and walnuts
- Livestock: dairy and hogs

MFP Eligibility

- Produce one or more of these commodities, and must either:
 - 1) Have an average AGI for tax years 2015-2017 < \$900,000 OR
 - 2) Derive at least 75% of AGI from farming or ranching
- Producers also must:
 - Comply with the provisions of the “Highly Erodible Land and Wetland Conservation” regulations, often called Conservation Compliance provisions
 - Have a farm serial number with USDA's Farm Service Agency
- Notice: did not need base acres

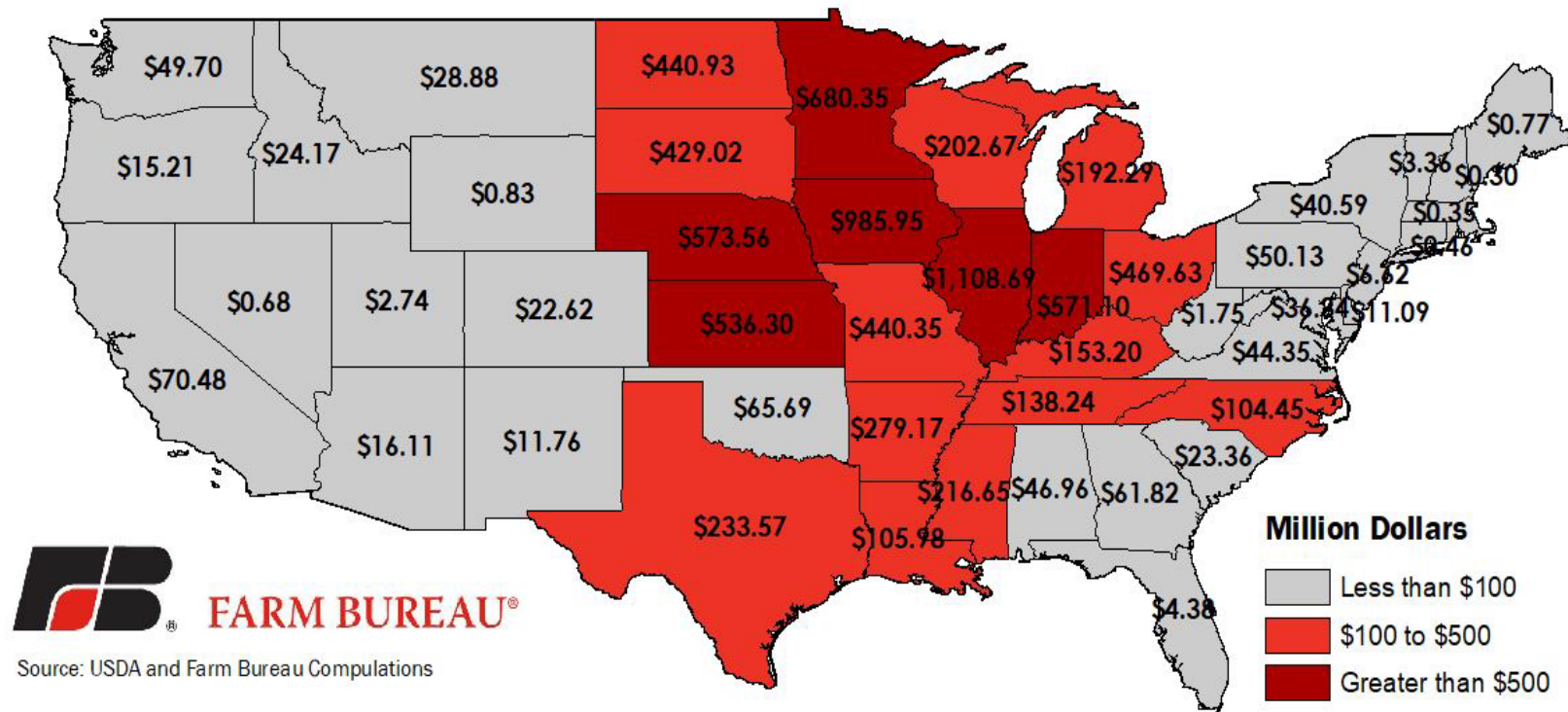
MFP Payments

- 2018: MFP payments based on farmer's production of affected commodities:
 - Soybeans = \$1.62/bu, Wheat = \$0.14/bu, Corn = \$0.01/bu
 - Dairy = \$0.12/cwt
- 2019: MFP payments based on total acres of affected commodities a farmer planted, each county had a different rate
 - Acres instead of production (was it decoupled?)
- Specialty crops were also paid on per acre basis
 - Cranberry and Ginseng the major WI crops

MFP Payments for 2018

**Figure 1. Total Market Facilitation Program Payments,
U.S. \$8.5 Billion**

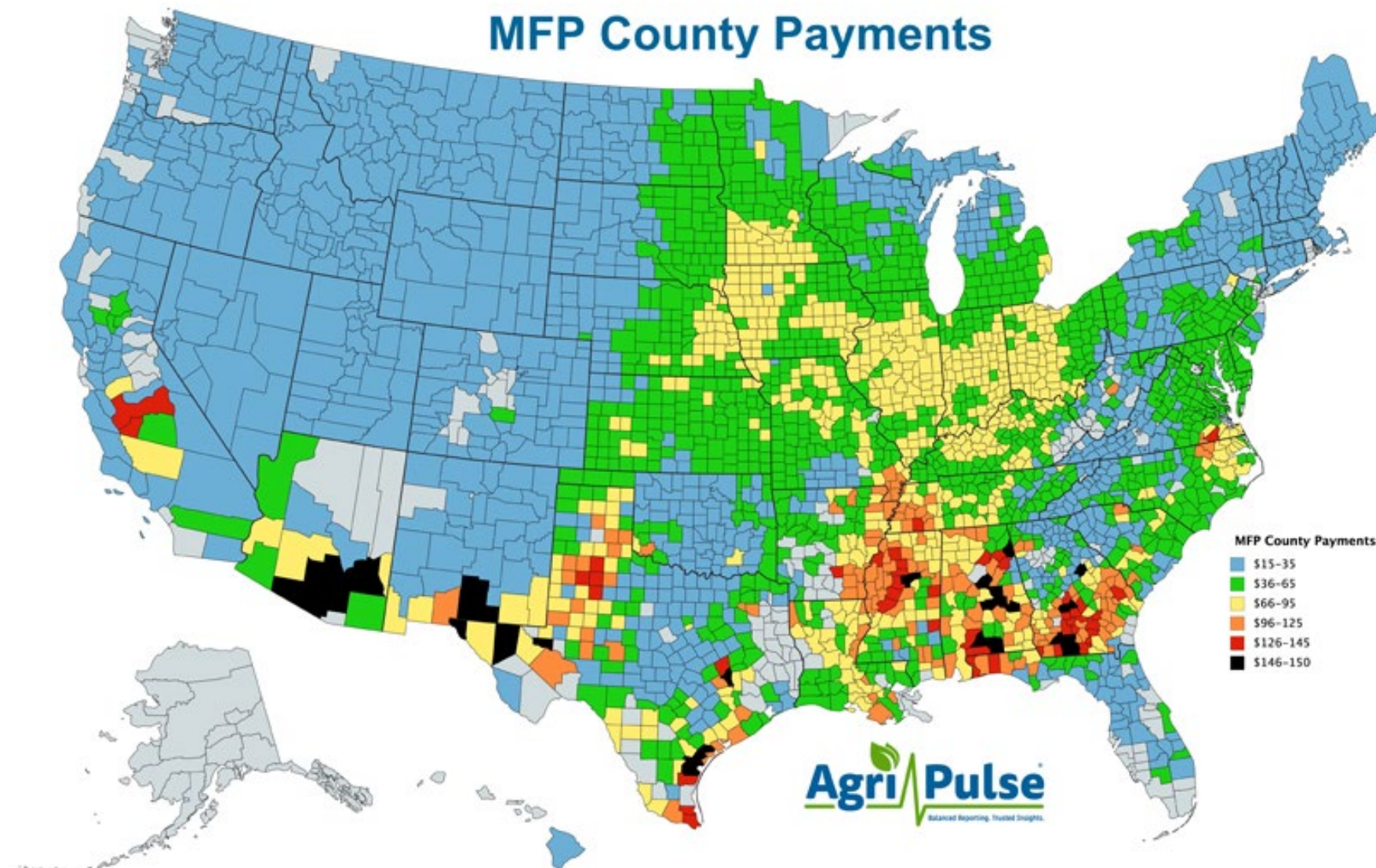
As of May 13, 2019, Includes Corn, Cotton, Dairy, Sweet Cherries, Hogs, Shelled Almonds, Sorghum, Soybeans and Wheat



**2018 MFP payments exceeded \$200 Million in WI:
Soybeans \$166 Million, Dairy \$28 Million, Corn \$5 Million**

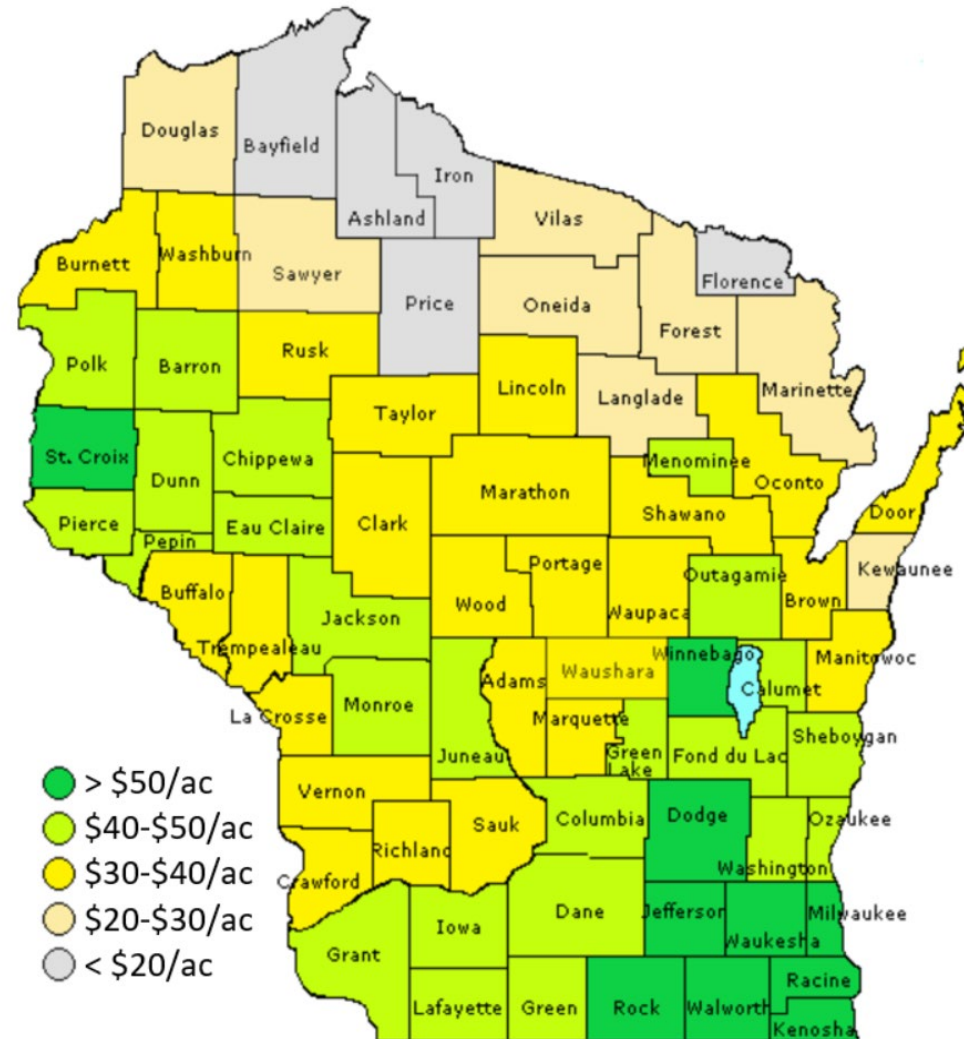
<https://www.fb.org/market-intel/mapping-8.5-billion-in-trade-assistance>

MFP Payment Rates for 2019



<https://www.agri-pulse.com/articles/12457-map-a-look-at-where-the-mfp-payments-are-going>

2019 MFP Payment Rates in WI



<https://renk.aae.wisc.edu/2019/08/05/market-facilitation-program-what-it-means-for-wisconsin-producers/>

Market Facilitation Program (MFP)

- MFP a temporary (ad hoc) program outside of the Farm Bill to give farmers a major influx of money when needed
 - FSA quickly created program in 2018, then changed rules for 2019
- Key point: It was temporary: the budgetary authority (\$30 Billion) is almost fully spent and trade war (hopefully) ending
 - With pandemic, Congress increased the budgetary authority again for CFAP, CFAP2
 - Several WI crops are still suffering from trade war tariffs

Coronavirus Food Assistance Program (CFAP)

Coronavirus crisis puts hog farmers in uncharted territory: Killing their healthy livestock

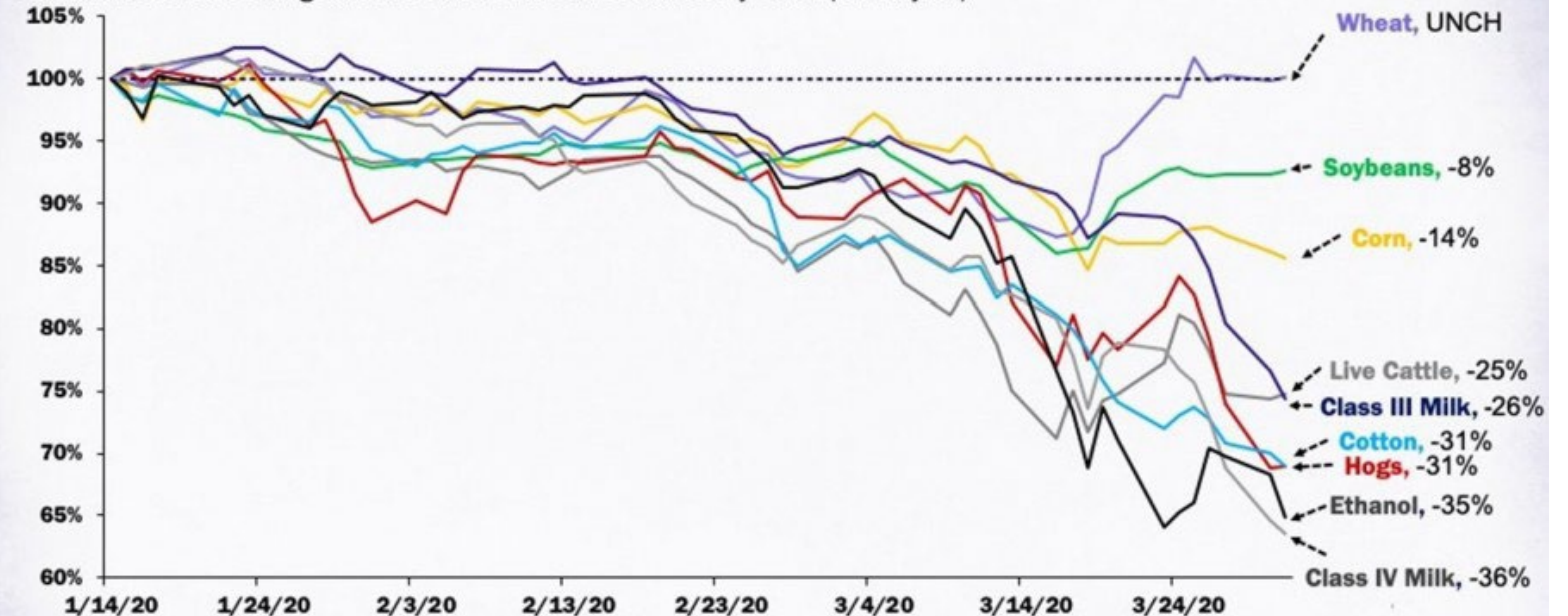
"It's an absolute last resort that is probably the hardest decision farmers will make in their farming careers," the head of a pork producers association said of euthanizing herds.



Coronavirus Food Assistance Program (CFAP) part of the CARES Act that passed March 27, 2020

Impact of COVID-19 on U.S. Commodity Futures Prices

Cumulative Percent Change in Price Since Outbreak Confirmed By China (January 14)

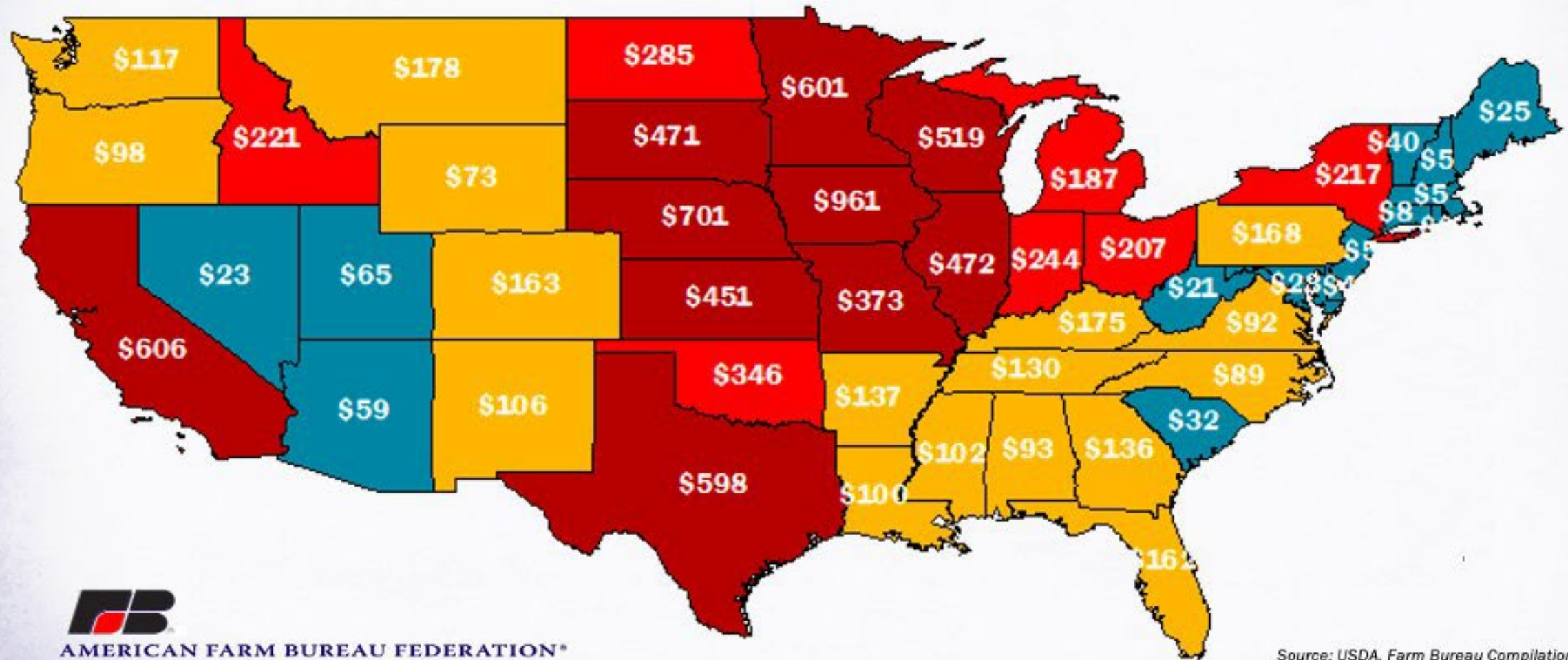


Coronavirus Food Assistance Program (CFAP)

- USDA partnered with local distributors to buy and distribute food boxes (like a federally sponsored food bank)
- Direct support to farmers: crop and livestock
- For farmers, CFAP sign up ran May 26, 2020 to Sept 11, 2020
- Farmers certified their 2019 production inventory as of Jan 15, received payments for crops that suffered > 5% price decline
 - Crops: Corn \$0.335/bu, Soybeans \$0.475/bu, Oats \$0.16/bu, many more
 - Convert silage inventory to grain equivalents
 - Dairy \$4.71/cwt for milk production Q1 2020, \$1.47/cwt for Q2 2020
 - Cattle: payments varied with live weight, but as high as \$250/head

\$9.9 Billion in Coronavirus Food Assistance Program Direct Payments

As of September 13, 2020, Million Dollars



AMERICAN FARM BUREAU FEDERATION®

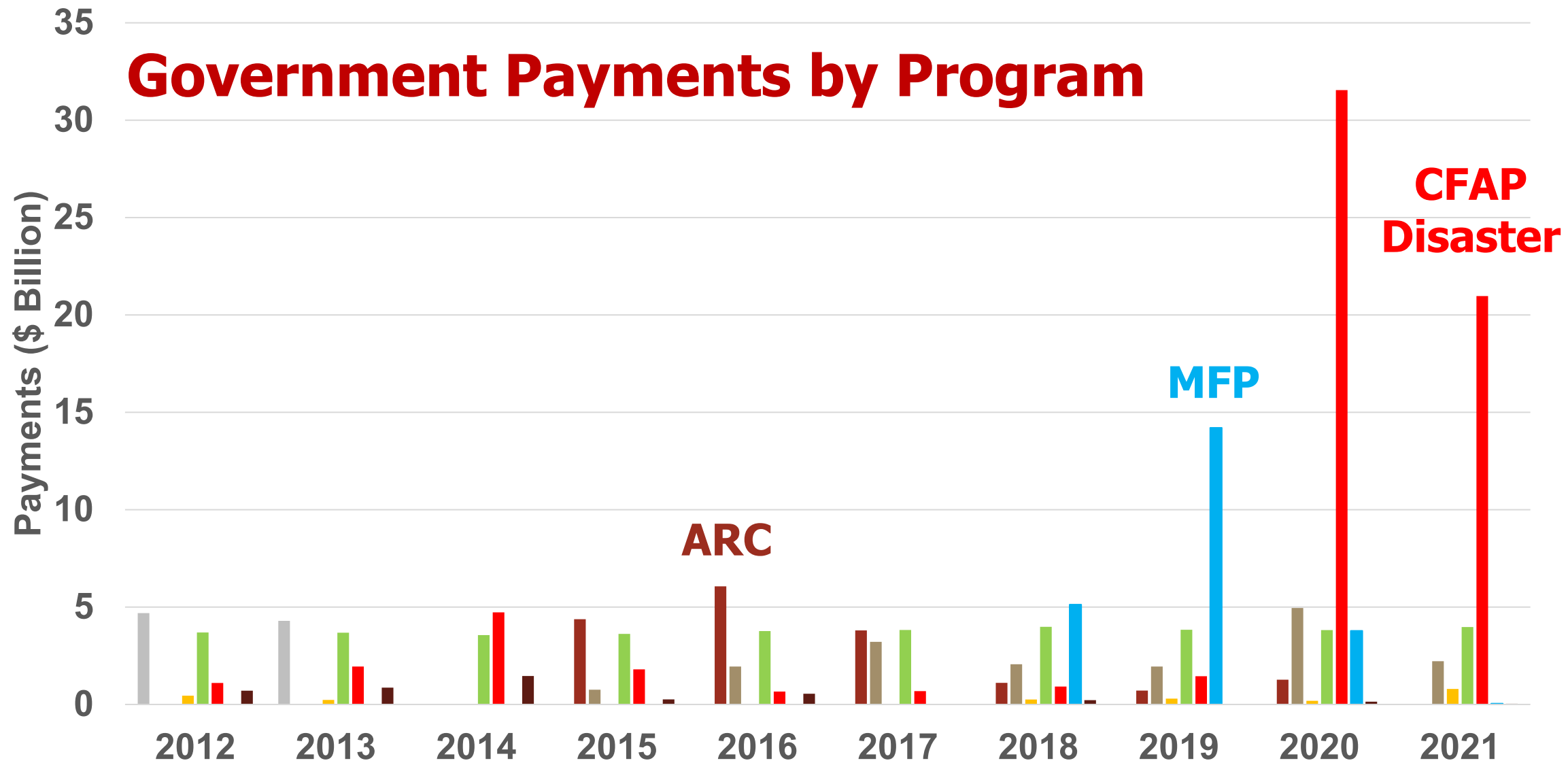
Source: USDA, Farm Bureau Compilations

CFAP2: An Additional \$14 Billion

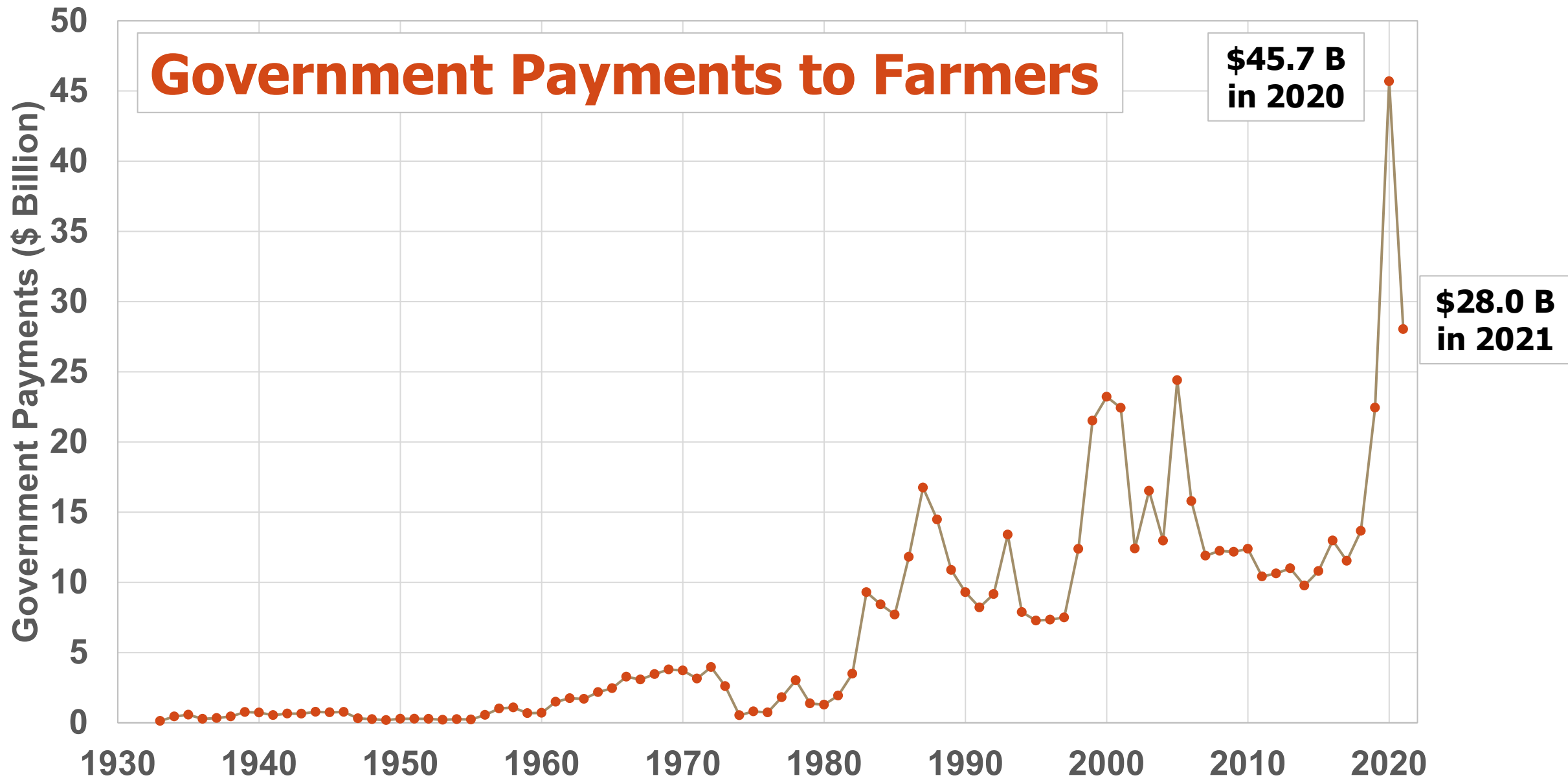
- CFAP2 passed Sep 17, 2020
- Enrollment Sep 21 to Dec 11, 2020
- Eligible crops/livestock: “If you grow it, likely can get a payment for it!”
- Row crops 2020 production x payment rate
 - Corn \$0.232/bu, Soybean \$0.3132/bu, Wheat \$0.3942/bu
- Flat rate row crops or acreage-based crops paid \$15/ac: Alfalfa
- Dairy: \$2.16/cwt Apr 1 to Dec 31 milk production (dairy goats too!)
- Beef: Max inventory Apr 16 to Aug 31, 2020 @ \$55/head
 - Most other livestock per head as well
- Specialty Crops: payments based on 2019 sales: 10.6% to 8.8%



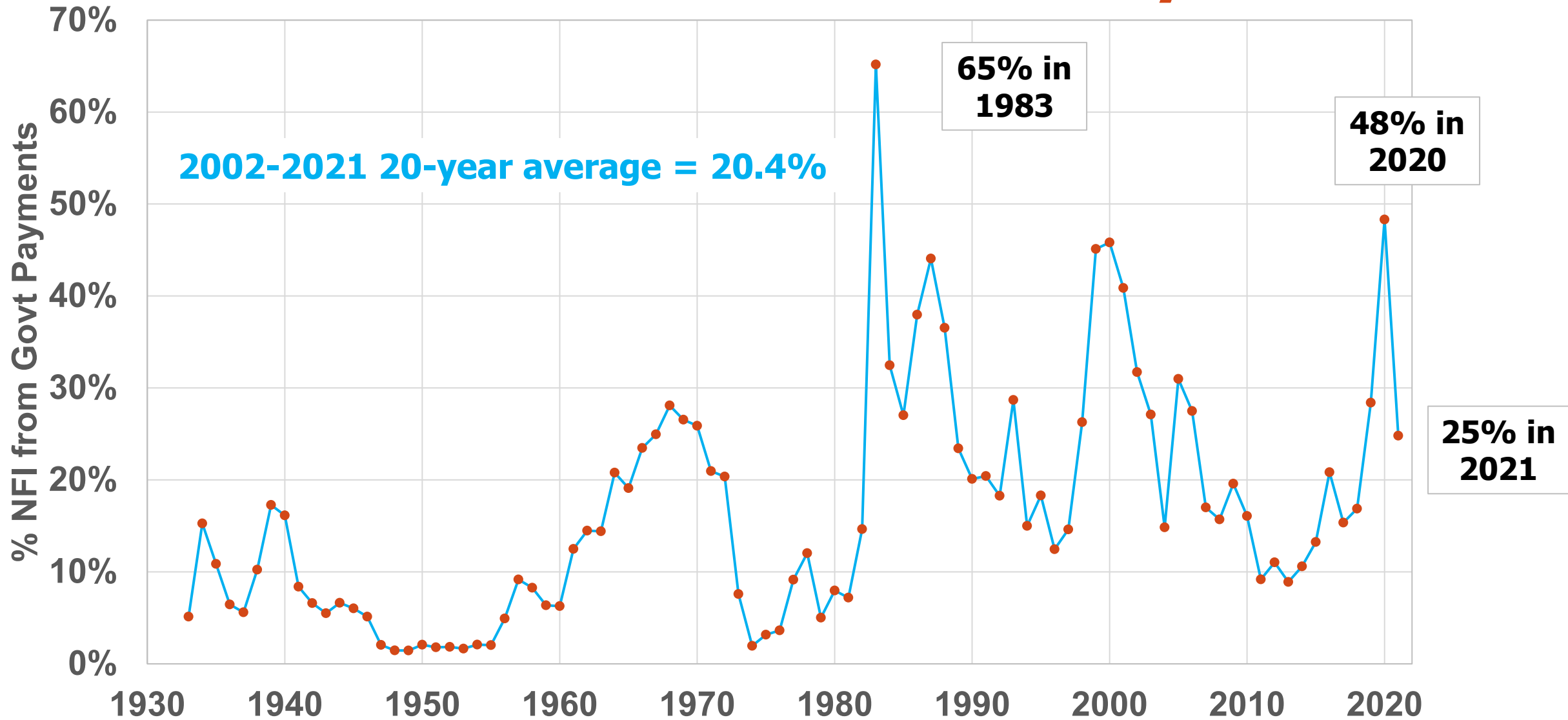
Government Payments by Program



Government Payments to Farmers



% NFI from Government Payments



Summary

- MAL are a part of the Farm Bill going way back: low interest loans to help farms cash flow operating loans & market more effectively
- MFP and CFAP (1 & 2): Example of rapid response by USDA to create a new program quickly
- Farmer perspective: another acronym and new set of rules to learn, all part of the job: take advantage of programs as they come
- Why government payments average about 20% of farm income