

**Coronavirus Food Assistance Program (CFAP) Additional Assistance
Cost-Benefit Analysis
January 11, 2020**

Executive Summary

The Coronavirus Food Assistance Program (CFAP 1 and CFAP 2) rules were published in the Federal Register on May 21, 2020, and September 22, 2020, respectively. Both CFAP 1 and CFAP 2 assist producers of agricultural commodities marketed in 2020 who face continuing market disruptions, reduced farm-level prices, and increased production and marketing costs due to COVID-19. These additional costs are associated with declines in demand, surplus production, or disruptions to shipping patterns and marketing channels.

In implementing these CFAP programs, the Farm Service Agency (FSA) collected data and received feedback from staff and the agricultural industry. Additional analysis was conducted using the new data. Based on this analysis, FSA has determined that additional CFAP assistance and other changes are being made to ensure that payments accurately reflect revenue and sales losses, and to clarify certain provisions appearing in CFAP 2.

These changes (referred to as “CFAP Additional Assistance”), along with the associated gross and net estimated outlays, are shown in Table 1. Payments for Item 1 (the “top up” for hog producers) and Item 2 (payments to contract livestock producers) will draw on Coronavirus Aid, Relief, and Economic Security Act (CARES) funding. Payments for Items 3, 4, and 5 (all payments referenced as CFAP 2 payments or modified CFAP 2 payments) draw on Commodity Credit Corporation (CCC) funding that remains given CFAP 1 and CFAP 2 payments. These payments are authorized by the Commodity Credit Corporation (CCC) Charter Act (Section 5 (b), (d) and (e)).

Estimated gross outlays for CFAP Additional Assistance are estimated at \$3.10 billion (see Table 1). After taking into account payment limitations, net outlays are estimated at \$2.28 billion. Payments to contract swine, chicken, egg, and turkey producers account for 87 percent of the estimated total.

The Farm Service Agency (FSA), which implemented CFAP 1 and 2, will start accepting CFAP Additional Assistance applications for contract growers and turfgrass sod and pullet producers on January 19, 2021. Producers who did not apply by the CFAP 1 deadline are not eligible for the swine top-up payment. The other items shown in Table 1 do not require any additional application on the part of the producer.

Net payments represent benefits to producers, which is the government cost of the program. Outlays shown in Table 1 are estimated at expected maximum levels. Some producers must take additional actions under this rule if they are interested in receiving benefits; these producers include livestock contract growers and turfgrass sod and pullet producers. These producers realize administrative costs associated with participation, which are estimated at \$4.15 million.

Table 1. Summary of CFAP Additional Assistance Regulatory Changes and Estimated Costs

Item	Gross Estimated Outlays (in billion \$)	Net Estimated Outlays (in billion \$)
Item 1—Provide a “top up” inventory payment to swine producers eligible for CFAP 1	\$0.81	\$0.15
Item 2—Assist contract producers of swine, chickens, eggs, and turkeys	\$1.98	\$1.98
Item 3— Include turfgrass sod, pullets, and by-products of live animals as “sales-based commodities” for CFAP 2 eligibility.	\$0.21	\$0.10
Item 4— Include 2019 crop insurance indemnities and 2019 Non-Insured Crop Disaster Assistance Program (NAP) and Wildfire and Hurricane Indemnity Program Plus (WHIP+) payments to the producer’s 2019 sales to compute CFAP 2 payments	\$0.08	\$0.03
Item 5— Change the calculation for price-trigger commodities with respect to Agricultural Risk Coverage-County Option (ARC-CO).	\$0.02	\$0.02
Item 6— Clarify that reptiles and bees are ineligible for CFAP 2.	No change in outlays	No change in outlays
Item 7—Make minor corrections to the definitions of “fruits” and “tree nuts” in 9.201 and 9.202(c).	No change in outlays	No change in outlays
Total	\$3.10	\$2.28

Economic Analysis by Item

The CFAP Additional Assistance rule identifies seven specific items. These items are discussed in turn in this section; each estimate is independent of the other estimates.

Item 1-- Provide a “top up” inventory payment to swine producers eligible for CFAP 1¹

For the swine (hog and pig) sector, markets continue to be affected by shifts in consumption. A large proportion of U.S. meat consumption occurs away from home relative to many other commodities, and while spending on away-from-home eating is up compared to the early days of the pandemic, it was down 16.5 percent in September 2020 relative to September 2019.² While pounds of total use could still increase this year based on USDA’s *World Agricultural Supply and Demand Estimates* (WASDE) forecasts, these forecasts are not for the value of meat consumed. As a result, shifts in more consumption of pork at home versus away from home, for example, is not differentiated in the WASDE pounds-of-total-use forecast.

These disruptions are reflected in futures prices. Generic lean hog futures prices at the end of November 2020 were 5.4 percent lower than on January 2, 2020.³ Based on market analysis the combination of CFAP 1 and CFAP2 payments for hog producers did not effectively address the continued downward pressure on prices as compared to other sectors. As such, the “top up” inventory payments smooth out that differential by effectively increasing the payment rate from 25 percent to 50 percent. The economic loss for swine was \$68 per head, resulting in a payment rate of \$17 per head ($0.25 \times \68). CARES funding, as available, will be used to increase the CFAP 1 payment rates for swine from 25 percent to 50 percent. The swine total rate increases from \$17 per head to \$34 per head (Table 2).

¹ A “top up” payment to beef cattle producers is mandated by the Consolidated Appropriations Act, 2021 and will be addressed in future rulemaking.

² USDA, Economic Research Service, Food Expenditure Series dataset, accessed November 25, 2020. See the constant dollars series in the monthly sales of food dataset at <https://www.ers.usda.gov/data-products/food-expenditure-series/>.

³ The Chicago Mercantile Exchange (CME) stock ticker for the Generic 1st lean hog future is LH1 (the underlying contract is LHZ0).

Table 2. Comparison of Original CFAP 1 Inventory Rates and New Rates for Swine

			Original Rate	New Rate
Livestock – Swine	Pigs: Less Than 120 Pounds	Head	\$17.00	\$34.00
	Hogs: 120 Pounds or More	Head	\$17.00	\$34.00

The top-up inventory payment is calculated as the difference between the new rate (using the 50 percent factor) and the original rate (using the 25 percent factor), multiplied by the producer's inventory on the CFAP 1 application. In filing a CFAP 1 application, the producer chose the highest livestock inventory between April 16, 2020, and May 14, 2020. A new application for the top-up payment is not needed. Producers who did not apply for CFAP 1 earlier in the year are not eligible for the top-up payment.⁴

The inventory payment limitation rules are identical to those used for CFAP 1. If a producer has reached the payment limit under CFAP 1, that producer will not receive an additional payment under the top-up. USDA estimates that less than 4 percent of swine applicants will not receive any top-up payment due to already reaching the payment limit under CFAP 1.

As shown in Table 3, estimated gross top-up payments are \$810 million (column E). This estimate reflects the difference between the use of a 50 percent factor (multiplying 0.5 times the economic loss times the inventory, as reflected in column D) and a 25 percent factor (multiplying 0.25 times the economic loss times the inventory, as shown in column C). Inventory numbers (column B) are obtained from CFAP 1 application data. Net payments, based on FSA data as of December 18, 2020, are estimated at \$150 million.

Table 3. Estimated Top-Up Inventory Payments for Swine Producers

	Economic Loss (\$ per head)	Inventory ^a (million head)	Original CFAP 1 Gross Payments Using a 25% Factor (billion \$)	CFAP 1 Gross Payments Using a 50% Factor (billion \$)	Estimated Gross Top-Up Payment (billion \$)	Estimated Net Top-Up Payment (accounting for payment limitations) ^b (billion \$)
	A	B	C	D	E	F
Swine	\$68	47.4	0.81	1.61	0.81	0.15

^a Inventory numbers are from CFAP 1 applications, not accounting for inventory not paid due to payment limitations or eligibility limitations. ^b Net data are obtained from the December 18, 2020 FSA stress test.

⁴ For most applicants, the deadline was September 11, 2020. FSA allowed a few exceptions to this deadline for those affected by hurricanes and wildfires.

Item 2-- Assist contract producers of swine, chickens, eggs, and turkeys

USDA is assisting contract swine, chicken, egg, and turkey growers in CFAP Additional Assistance as certain growers have been affected by market disruptions resulting from COVID-19. Contract growers were not included in CFAP 1 because the impact was not known at the time the rule was published on May 21, 2020. The impacts to certain contract growers include: delayed delivery of young poultry and hogs to contract producers, decreased housing densities, additional costs for keeping animals longer than typical durations, and damage caused by animals too large for housing. These costs were raised when CFAP 2 was published on September 22, 2020;⁵ however, these producers could not be assisted with CFAP 2's CCC funding and the impacts they faced were substantial (see Appendix A). Contract growers were not eligible for CFAP 2 as CCC funding could only be used to transition to a more orderly marketing system and contract growers do not market the animals they raise.

To be eligible for a contract grower payment, a producer must demonstrate a drop in revenue between 2019 and 2020. Contract grower payments aim to compensate for losses due to COVID-19 and not pre-COVID-19 reductions in production capacity. Only those producers who grow or produce an eligible commodity under contract for, or on behalf of, another person or entity and are not entitled to a share from sales proceeds of the commodity are eligible. To calculate the revenue loss in Table 4 (see column D), average prices for January 13-17, 2020 are used to value 2019 production⁶ (see column A), and are \$80.75/cwt, \$0.90/lb, and \$1.16/lb for hogs, broilers, and turkeys, respectively. Average prices over April 6-10, 2020 are used to value producer's 2020 production (see column B), and are \$46.00/cwt, \$0.51/lb, and \$1.20/lb for hogs, broilers, and turkeys, respectively.⁷ In aggregate, swine and broiler producers are estimated to have realized the largest revenue declines, at 42 percent and 43 percent, respectively (see column D). While layer, pullet, shell egg, and turkey producers are not estimated to have realized a revenue loss in aggregate, individual producers may qualify if they provide evidence of their revenue loss.

As shown in Table 4, estimated gross payments to contract livestock producers are \$1.98 billion (column G). This estimate is based on the producer's 2019 to 2020 revenue change (column C), multiplied by an 80 percent factor, producing the results shown in column E. Contractor payments are being implemented by FSA based on the producer's 2019 to 2020 revenue change rather than on 2019 sales to more precisely target individual contract producer losses. Finally, relative per-animal payments to contract vs. non-contract growers under FSA's Livestock

⁵ For articles addressing the impact of COVID-19 on contract broiler producers, see Maples, Joshua G., Jada M. Thompson, John D. Anderson, and David P. Anderson. "Estimating Covid-19 Impacts on the Broiler Industry." *Applied Economic Perspectives and Policy*. September 9, 2020. <https://onlinelibrary.wiley.com/doi/10.1002/aepp.13089>.

Also see: Lawrence, Maggie. "New State Program Supports Poultry Growers Impacted by Pandemic," Auburn University Extension. October 1, 2020. For swine, see: "How is COVID-19 Impacting Minnesota's Pork Industry?" July 10, 2020. SwineWeb.

⁶ National production was taken from the USDA's *World Agricultural Supply and Demand Estimates*. For Table 3, national sales are multiplied by the share that is grown under contract—which is 43 percent, 96 percent, and 81 percent for swine, broilers, and turkeys, respectively, to arrive at the data in columns A and B. Additionally, 33 percent of layers, 62 percent of pullets and 20 percent of eggs are produced under contract.

⁷ These prices will not be used in implementation but are used here to calculate a cost estimate. In practice, producers will certify their revenue to FSA.

Indemnity Program (LIP) (column F) are used to calculate estimated gross and net payments (columns G and H, respectively).

Table 4. Estimated Contract Grower Payments for Swine, Chickens, Eggs, and Turkeys

	2019 sales revenue (billion \$)	2020 sales revenue (billion \$)	2019 to 2020 revenue change (billion \$)	Percent revenue change (billion \$)	2019 to 2020 revenue change times 80 percent	LIP Contractor Factor ^a (percent)	Estimated Gross Contract Grower Payment (billion \$)	Estimated Net Contract Grower Payment (billion \$)
	A	B	C	D	E	F	G	H
Hogs	\$9.6	\$5.6	-\$4.0	-41.6%	-\$3.19	15%	\$0.48	\$0.48
Broilers	\$38.3	\$21.9	-\$16.5	-43.0%	-\$13.18	11%	\$1.46	\$1.46
Layers	\$0.1	\$0.1	\$0.0	-26.1%	-\$0.02	6%	\$0.001	\$0.001
Pullets	\$0.5	\$0.5	\$0.0	7.4%	\$0.03	11%	\$0.000	\$0.000
Turkey	\$5.5	\$5.6	\$0.1	2.6%	\$0.12	11%	\$0.000	\$0.000
Shell Eggs	\$0.5	\$0.5	\$0.0	7.4%	\$0.03	100%	\$0.000	\$0.000
Dried Eggs	\$0.8	\$0.7	\$0.0	-5.9%	-\$0.04	100%	\$0.037	\$0.037
Frozen Eggs	\$0.0	\$0.0	\$0.0	-12.7%	\$0.00	100%	\$0.001	\$0.001
Liquid Eggs	\$0.0	\$0.0	\$0.0	-22.5%	\$0.00	100%	\$0.001	\$0.001
Total			-\$20		-\$16.25		\$1.98	\$1.98

^a As an example, LIP 2020 compensation to contract broiler, pullet, and turkey producers is 11 percent of the compensation paid the poultry owner. Given there are no LIP rates for eggs, 100 percent is assumed for the LIP Contractor Factor.

Because of the lack of data and the subsequent uncertainty over revenue change at the contractor level, sensitivity analysis was conducted to provide perspective. Producers often enter a production contract to reduce price risk. The approach above is based on market data, as data do not exist to estimate the differences in revenue to production contract producers between 2019 and 2020, using compensation specifically received by these producers. In practice, contract producers' compensation may be less variable than seen in market prices. For example, hog production contracts range from paying the producer a fixed payment per capacity space to sharing revenue between the producer and owner based on their relative share of input costs.⁸ Producer revenue under the former would not be sensitive to price or most other risk, at least in the short run, while producer revenue under the revenue-sharing approach would be subject to some price risk, the level of which would depend on contract provisions (such as stipulations for a minimum price).

⁸ For an overview of types of hog production contracts, see https://swine.extension.org/producing-and-marketing-hogs-under-contract/#Production_Contracts, <https://porkgateway.org/resource/producing-and-marketing-hogs-under-contract/> and <https://agriflifeextension.tamu.edu/library/marketing-risk-management/contracts-as-a-risk-management-tool/>.

To address these different situations, sensitivity analysis for a range of 2019 to 2020 price shocks is provided in Table 5. The zero percent shock means that 2020 prices are unchanged from 2019; this scenario is a proxy for assuming that contract producer revenue is completely insensitive to price change. The 100 percent shock is equivalent to assuming producer returns were fully sensitive to the market price shocks (subject to the LIP contractor factor), resulting in the same payments as in Table 4.

With no price change in Table 5 (column A), revenue loss is solely a function of 2019 to 2020 production change and only small payments (\$31 million) are triggered. At 20 percent of the 2019 to 2020 price change, payments are reduced from \$1.983 billion to \$310 million (column B). At 80 percent of the price change (column E), payments are \$1.564 billion. These results suggest that the accuracy of the contract payment estimates depends on the extent to which price changes are passed from the integrator to the contract producer. These results suggest that the payments in Table 4 are an upper bound to payments, which are based on the individual producer's actual 2019 to 2020 revenue change. Additionally, available evidence suggests some contract producers may have received a lower volume of animals in 2020 due to the pandemic.

Table 5. Sensitivity Analysis of Contract Grower Payments to the 2019 to 2020 Market Price Change

	Total Estimated Net Contract Grower Payment (billion \$)					
	No price change	20% of price change	40% of price change	60% of price change	80% of price change	100% of price change (actual price change)
	A	B	C	D	E	F
Hogs	\$0.000	\$0.068	\$0.170	\$0.273	\$0.376	\$0.479
Broilers	\$0.000	\$0.219	\$0.530	\$0.842	\$1.153	\$1.464
Layers	\$0.000	\$0.000	\$0.000	\$0.001	\$0.001	\$0.001
Pullets	\$0.001	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
Turkey	\$0.004	\$0.001	\$0.000	\$0.000	\$0.000	\$0.000
Shell Eggs	\$0.010	\$0.002	\$0.000	\$0.000	\$0.000	\$0.000
Dried Eggs	\$0.016	\$0.020	\$0.024	\$0.029	\$0.033	\$0.037
Frozen Eggs	\$0.000	\$0.000	\$0.000	\$0.001	\$0.001	\$0.001
Liquid Eggs	\$0.000	\$0.000	\$0.000	\$0.000	\$0.001	\$0.001
Total	\$0.031	\$0.310	\$0.726	\$1.145	\$1.564	\$1.983

Item 3— Include turfgrass sod, pullets, byproducts of live animals, water buffalo, and yak as “sales-based commodities” for CFAP 2 eligibility.

Upon implementation of CFAP 2, FSA became aware that certain commodities had experienced COVID-19 market disruptions but had not been explicitly included in the initial CFAP 2 rule. For example, turfgrass sod was not included in the initial CFAP 2 rule, but evidence from USDA interaction with the industry indicates that the quantity of sod sold in the first six months of 2020 declined by 14 percent relative to the prior year given disruptions to new home construction and other factors. Revenue had declined by a similar percentage. Similarly, pullets (young layer hens which have not reached maturity) have been affected by COVID-19 disruptions and were not included in the original CFAP 2 rule. Water buffalo, yak, and “other livestock products” were also not explicitly included but, according to industry sources, suffered similar COVID-19 disruptions as other livestock and FSA is clarifying in this rule that these species and products are eligible.

The payment estimation approach used for these commodities is the same percentage-of-sales approach that is used for “sales-based commodities” in the original CFAP 2 rule. The estimate for each commodity is calculated as: Quarters 2-4 (75 percent of the year) times (60 percent of 2019 sales having sales decreases in 2020) times (the 27 percent average sales decrease for crops that had 2019-to-2020 decreases) times the value of sales (from the 2017 Census of Agriculture). This estimate is then multiplied by the 80-percent coverage level to arrive at an estimated total gross payment.

Total gross payments for turfgrass sod, as shown in Table 6, are estimated at \$111.5 million and are based on the 2017 Census of Agriculture value of farm sales of \$1.15 billion. Net payments, using the specialty crop aggregate net-to-gross payment factor of 0.439 appearing in the original CFAP 2 cost-benefit assessment, are estimated at \$48.9 million.

Total gross payments for pullets are estimated at \$66.9 million. This estimate is based on multiplying the quantity of sales from the 2017 Census of Agriculture (220.5 million head), by the price per pullet (regular size: 4.26 to 6.25 lbs.) as estimated for the Livestock Indemnity Program for 2020 (\$3.12/head) and following the calculations noted above. Net payments, using the aggregate net-to-gross factor of 0.439⁹ appearing in the original CFAP 2 cost-benefit assessment, are estimated at \$29.4 million.

The “other livestock products” category in the 2017 Census of Agriculture includes beeswax, breeding fees, embryos, fur or pelts, horns, manure sold, semen, and other unspecified animal products.¹⁰ The 2017 value of farm sales, the basis for the calculations, is \$290.6 million. Gross estimated payments are \$28.2 million and net estimated payments (using the 0.903 factor used for minor livestock in the original CFAP 2 cost-benefit assessment) are \$25.5 million (Table 6).

⁹ Both the turfgrass sod and pullet industries are fairly concentrated and this factor is the most representative for concentrated industries.

¹⁰ Equine are not eligible for CFAP; as a result, equine products are also ineligible. Also, note that equine are not included in the “other livestock products” category in the Census.

Table 6. Estimated Payments for Turfgrass Sod, Pullets, and “Other” Livestock Products

Category	Value of Farm Sales Based on 2017 Census of Agriculture (million \$)	Gross Total Estimated Payments (million \$)	Estimated Net Payments after Payment Limitations (million \$)
Turfgrass Sod	\$1,150.0	\$111.5	\$48.9
Pullets	\$688.0	\$66.9	\$29.4
Other livestock products	\$290.6	\$28.2	\$25.5
Total		\$206.6	\$103.8

No estimates are provided for water buffalo and yak due to the small size of those industries. The 2017 Census of Agriculture includes water buffalo as part of the bison category; the industry estimates approximately 5,000 head of water buffalo in the United States. Similarly, the president of the International Yak Association estimates that there are about 5,000 yak in the United States.¹¹ The additional payments are negligible and are not included here.

Item 4— Include 2019 crop insurance indemnities and 2019 NAP and WHIP+ payments to the producer’s 2019 sales to compute CFAP 2 payments.

This change affects only specialty (sales-based) crops. CFAP 2 uses a producer’s 2019 sales to approximate the value that he or she would have expected to market in 2020 in the absence of COVID-19. With this change, the calculation now includes crop insurance indemnities, Non-Insured Crop Disaster Assistance Program (NAP) payments, and Wildfire and Hurricane Indemnity Program Plus (WHIP+) payments to more accurately represent what a producer would expect to have marketed in 2020. It does so by taking into account commodities that would have been marketed in 2019 if not for losses covered by crop insurance, NAP, and WHIP+.

To conduct the estimation, crop insurance indemnities and NAP and WHIP+ payments for 2019 losses are added to 2019 farm sales for the sales-based crops: dry edible beans, lentils, dry edible peas, chickpeas, fruits, vegetables, nuts, and honey (see column A of Table 7). The

¹¹ See: <https://www.denverpost.com/2019/01/25/colorado-yak-ranching-national-western/> and <https://www.grit.com/animals/water-buffalo-herds-growing-in-the-united-states>.

payment estimation approach is based on the percentage-of-sales approach that is used for “sales-based commodities” in the original CFAP 2 rule.

That approach, modified for insurance indemnities and NAP and WHIP+ payments, is now: consideration of market disruption for Quarters 2-4 (75 percent of the year) times (60 percent of 2019 sales having decreases in 2020) times (the 27 percent average decrease for crops that had 2019-to-2020 decreases) times ((the value of sales) + indemnities (from RMA) + NAP payments (from FSA’s Enterprise Data Warehouse) + WHIP+ payments (from FSA’s National Payment Services). This estimate is then multiplied by the 80-percent coverage level to arrive at the estimated total payment.

The increase in gross outlays due to this change is \$76.0 million (column D). Applying the aggregate net-to-gross factor (0.439) used for sales-based commodities in the original CFAP 2 cost-benefit assessment results in a net outlay increase of \$33.4 million.

Table 7. Impact of Adding Crop Insurance, NAP, and WHIP+ Payments to the Sales-Based Calculation

Commodity	2019 Farm Sales Plus Indemnities and NAP and WHIP+ Payments (million \$)	Updated Gross Total Estimated Payments (million \$)	Original Gross Estimated Payments (from CFAP 2 CBA) (million \$)	Difference in Total Gross Estimated Payments (million \$)
	A	B	C	D
Dry Edible Beans	\$622.7	\$60.5	\$52.6	\$7.9
Lentils	\$78.9	\$7.7	\$7.7	\$0.0
Dry Edible Peas	\$254.4	\$24.7	\$20.6	\$4.1
Chickpeas	\$117.1	\$11.4	\$11.4	\$0.0
Fruit, Vegetables, and Nuts	\$6,105.0	\$4,584.0	\$4,520.0	\$64.0
Honey	\$0.6	\$0.09	\$0.06	\$0.03
Difference				\$76.0

Item 5— Change the calculation for price-trigger commodities with respect to Agricultural Risk Coverage-County Option (ARC-CO).

This change affects price-trigger commodities. As published in the original CFAP 2 rule on September 22, 2020, payments are calculated using the 2019 ARC-CO benchmark yield multiplied by 85 percent when FSA is unable to obtain a 2020 Actual Production History (APH) approved yield. With this change, the calculation will use 100 percent of the ARC-CO benchmark yield when the applicant:

- Has coverage for the crop under an Area Risk Protection Insurance Plan, Margin Protection Plan, Stacked Income Protection Plan, Whole-Farm Revenue Protection, or Supplemental Coverage Option under the Federal Crop Insurance Act (7 U.S.C. 1501-1524);
- Is a landlord of the applicable acreage and their share of the crop is insured by the tenant under a policy or plan of insurance under the Federal Crop Insurance Act;
- Is a tenant of the applicable acreage and their share of the crop is insured by the landlord under a policy or plan of insurance under the Federal Crop Insurance Act; or
- Is a joint venture and the crop is insured by one of the members under a policy or plan of insurance under the Federal Crop Insurance Act.

In these situations, FSA does not have a 2020 APH yield for the CFAP 2 applicant because the insurance plan does not require calculation of an APH approved yield or because the record of the APH approved yield would not be associated with the CFAP 2 applicant. However, the crop was insured in these situations and using 100 percent of the ARC-CO benchmark yield is intended to treat producers with crop insurance coverage but without an available 2020 APH approved yield in a way that is more similar to other producers who had crop insurance.

Using crop insurance administrative data, an estimated 5.6 million acres¹² are affected by this change (and have met the criteria above and had payments based on 85 percent of the 2019 ARC-CO benchmark yield). Increasing the substitute benchmark yield from 85 to 100 percent for producers who meet the specified criteria above increases payments by \$3.58 per acre, from \$20.33 per acre¹³ to \$23.91 per acre. Gross estimated payments are expected to increase by \$20.0 million (\$3.58 per acre multiplied by 5.6 million acres). Net estimated payments, using the net-to-gross outlay estimate for price-trigger crops from the original CFAP 2 cost-benefit assessment of 0.930, are \$18.7 million.

¹² The 5.6 million acres are about 2.3 percent of the 2020 total planted acres of the crop price-trigger commodities as reported by USDA's National Agricultural Statistics Service (NASS).

¹³ The original CFAP 2 cost-benefit assessment implies an average CFAP 2 payment of \$23.83 per acre. (This is calculated as the row-crop price-trigger cost of \$5.73 billion divided by 2020 NASS planted acreage for these crops—wheat, upland cotton, corn, sorghum, sunflowers, soybeans, and barley—of 240.456 million acres.) When analyzing the crop insurance data for the situations noted above, some crops are more affected than others; re-weighting the data accordingly results in a \$20.33 per acre payment, rather than \$23.83 per acre.

Item 6— Clarify that reptiles and bees are ineligible for CFAP 2.

USDA is amending the definition of “other livestock” to clarify that reptiles and bees are ineligible for CFAP 2. According to FSA, the main reptile categories that will be excluded are alligators and turtles. Reptiles and bees were not included in the original CFAP 2 cost-benefit assessment calculations. This is a clarifying change which has no associated savings.

Item 7— Make minor corrections to the definitions of “fruits” and “tree nuts” in 9.201 and 9.202(c).

There are no costs associated with the minor fruit and tree nut changes. These changes ensure that the various category definitions are correct. For example, pecans were listed as a fruit in the original CFAP 2 rule and are now correctly listed as a tree nut. Similar changes are being made to correct for other minor errors.

Respondent Reporting Cost Estimate

The value of the total annual burden on respondents is based on the estimated number of total annual responses, the estimated average time per response, and the respondent cost per hour. This analysis is in two parts; the first accounts for reporting costs to participating contract growers and the second is associated with producers of turfgrass sod and pullets. The total estimated respondent burden cost for the two categories below is \$4.15 million (\$1.5 million for contract growers and \$2.65 million for the addition of turfgrass sod and other producers).

Contract Growers—Based on data from the Census of Agriculture, the estimated number of respondents is 21,950. The public reporting for this information collection is estimated to average approximately 0.69098 hour per response, including the time associated with the potential for a producer spot check.

Estimated Number of Respondents: 21,950.

Estimated Number of Responses Per Respondent: 1.8542 (includes multiple forms).

Estimated Total Responses: 40,700.

Estimated Average Time Per Response: 0.69098 hours.

Estimated Total Time for Responses: 28,123 hours.

Respondent cost per hour was estimated using U.S. Bureau of Labor Statistics Occupational Employment and Wages¹⁴ data—specifically, Standard Occupational Classification code 11-9013 for Farmers, Ranchers, and Other Agricultural Managers. The U.S. mean hourly wage for this category, as measured by the Bureau of Labor Statistics, is \$41.35. Fringe benefits for all

¹⁴ U.S. Department of Commerce. Bureau of Labor Statistics. “Occupational Employment Statistics. Sector 11: Agriculture, Forestry, Fishing, and Hunting.” See https://www.bls.gov/oes/current/naics2_11.htm.

private industry workers are an additional 29.9 percent,¹⁵ or \$12.36, resulting in a total of \$53.71 per hour.

The estimated cost is \$1.5 million (\$53.71 per hour times 28,123 hours).

Producers of turfgrass sod and pullets (new applications)¹⁶ and changes for prior CFAP 2 applicants—Based on data from the Census of Agriculture, the estimated number of respondents is 181,600. The public reporting for this information collection is estimated to average approximately 0.67867 hour per response, including the time associated with the potential for producer spot check.

Estimated Number of Respondents: 181,600

Estimated Number of Responses Per Respondent: 1.6034 (includes multiple forms).

Estimated Total Responses: 291,179.

Estimated Average Time Per Response: 1.69603 hours.

Estimated Total Time for Responses: 49,385 hours.

Respondent cost per hour was estimated using U.S. Bureau of Labor Statistics Occupational Employment and Wages¹⁷ data—specifically, Standard Occupational Classification code 11-9013 for Farmers, Ranchers, and Other Agricultural Managers. The U.S. mean hourly wage for this category, as measured by the Bureau of Labor Statistics, is \$41.35. Fringe benefits for all private industry workers are an additional 29.9 percent,¹⁸ or \$12.36, resulting in a total of \$53.71 per hour.

The estimated cost is \$2.65 million (\$53.71 per hour times 49,385 hours).

Alternative Considered

Numerous items listed in Table 1 clarify, provide a more accurate measure, or correct an inequity associated with CFAP. There is no mandate, however, to cover additional crops (Item 3 in Table 1). Hence, one alternative is to not cover turfgrass sod, pullets, and byproducts of live animals. Eliminating payments for these three commodity categories would reduce gross payments by \$0.21 billion and net payments by \$0.10 billion.

Appendix A

¹⁵ U.S. Department of Commerce. Bureau of Labor Statistics. “Employer Costs for Employee Compensation.” News release. March 19, 2020. <https://www.bls.gov/news.release/ecec.htm>.

¹⁶ FSA has been accepting applications from water buffalo, yak, and by-product live animal producers. This rule is clarifying eligibility for water buffalo, yak, and by-product live animal producers.

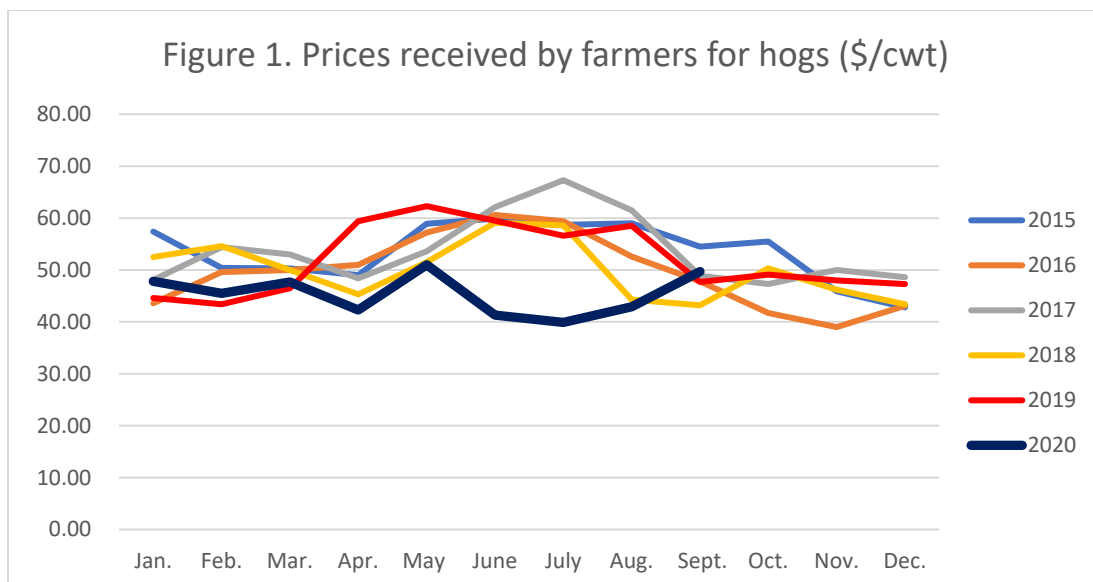
¹⁷ U.S. Department of Commerce. Bureau of Labor Statistics. “Occupational Employment Statistics. Sector 11: Agriculture, Forestry, Fishing, and Hunting.” See https://www.bls.gov/oes/current/naics2_11.htm.

¹⁸ U.S. Department of Commerce. Bureau of Labor Statistics. “Employer Costs for Employee Compensation.” News release. March 19, 2020. <https://www.bls.gov/news.release/ecec.htm>.

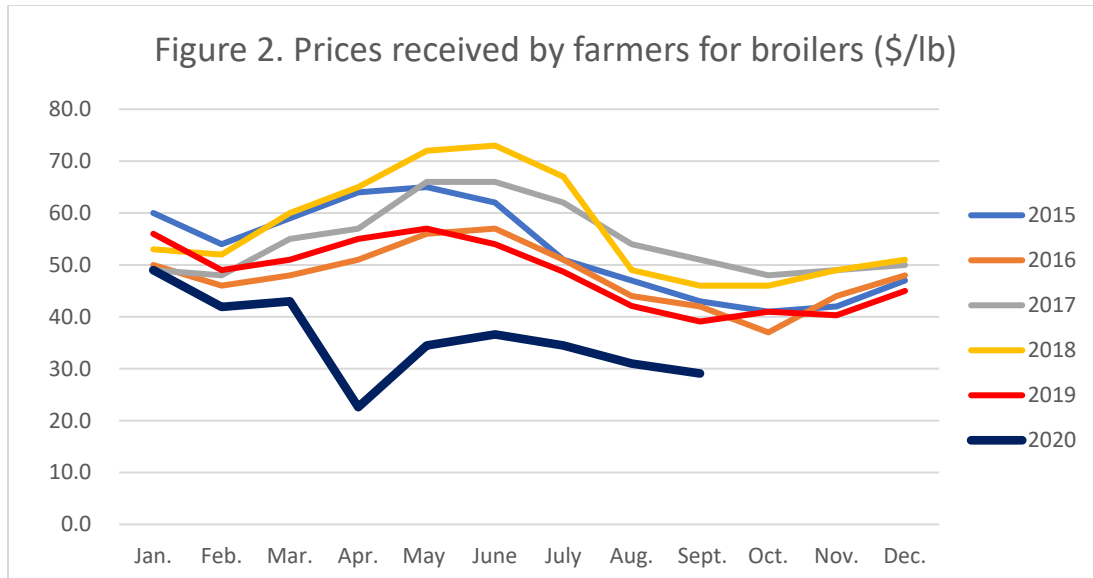
Market Impacts and Contract Producers

We do not have price data specific to contract producers and in substitution, we focus on market data. We expect the returns to contract production to generally follow market prices, albeit with some lag. Falling prices are suggestive of weak demand relative to supply and are likely to be reflected in missed turns and/or reduced animal densities for contract producers.

Figures 1 and 2 track monthly cash prices received by farmers for hogs and broilers from January 2015 through September 2020 (the most recent date for USDA's monthly cash prices are available). These show that prices for January through September 2020 were weak compared to the same months in previous years. These two commodities show declining prices when COVID-19 first notably impacted U.S. markets in the March/April period. While hog prices demonstrated some recovery starting in September, prices were particularly weak from May to August, a time of year when hog prices tend to rise. Broiler prices were particularly low compared to previous years.



Source: National Agricultural Statistics Service, USDA.



Source: National Agricultural Statistics Service, USDA.

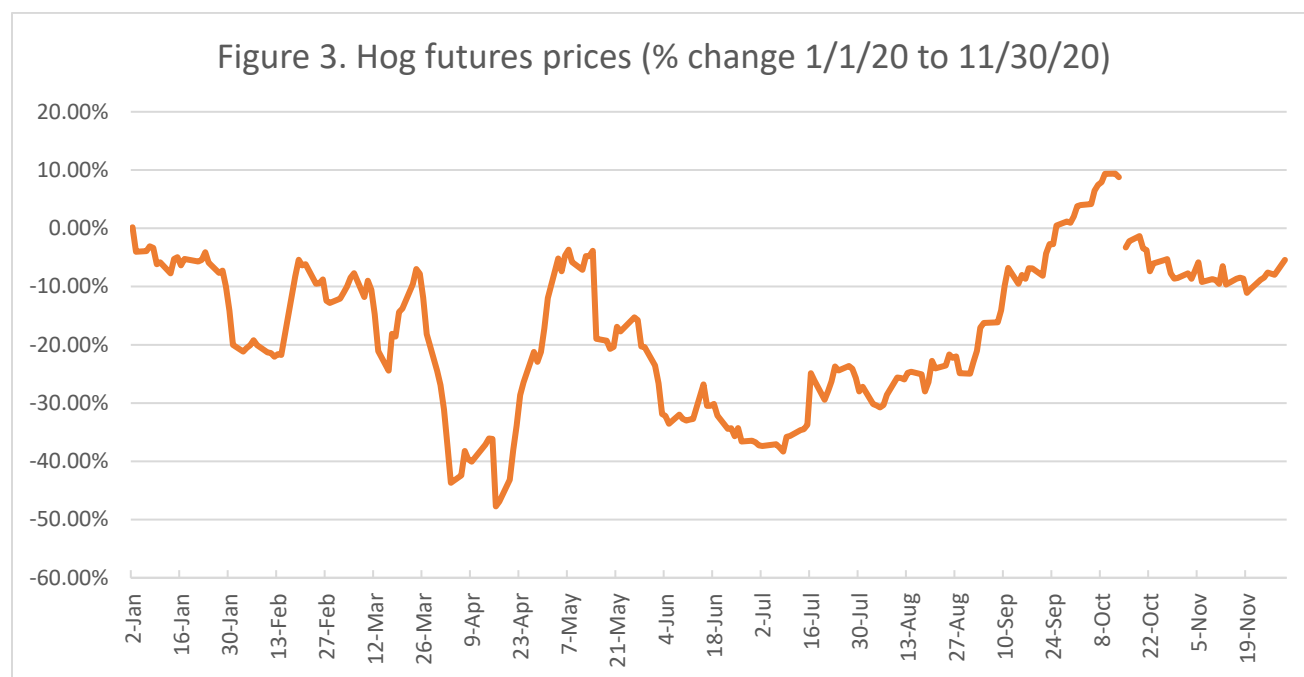
USDA's *World Agricultural Supply and Demand Estimates* (WASDE) projections made in January 2020 would not have incorporated expected impacts of COVID-19, while those projections made after the COVID-19 pandemic began in March 2020 would reflect disrupted markets. Table A reports USDA's projections for 2020 average annual livestock prices, as produced in the January, May, September, and November WASDE reports. Between January (before COVID-19 impacted markets) and May 2020, USDA's projected prices fell by 20.9 percent for barrows and gilts and 17.5 percent for broilers. Between May and November 2020, prices for barrows and gilts were down 21.1 percent and broilers were down 17 percent compared to the January projections.

Table A. Comparison of January, May, September, and November 2020 USDA Price Projections

	Jan. Proj.	May Proj.	Sept. Proj.	Nov. Proj.	Percent change Jan vs. May	Percent change Jan vs. Sept	Percent change Jan vs. Nov.
Barrows and Gilts (\$/cwt)	54.50	43.10	39.40	43.00	-20.92%	-27.71%	-21.10%
Broilers (Cents/lb.)	86.50	71.40	70.90	71.80	-17.46%	-18.03%	-16.99%
Turkeys (Cents/lb.)	92.50	104.60	105.80	106.40	13.08%	14.38%	15.03%
Shell Eggs (Cents/doz.)	95.50	129.50	114.90	116.70	35.60%	20.31%	22.20%

Source: *World Agricultural Supply and Demand Estimates*, World Agricultural Outlook Board, USDA.

Figure 3, depicting changes in nearby futures prices for hogs relative to the beginning of the year, demonstrate a similar pattern of price weakness. Note that the analysis in the body of the Cost-Benefit Assessment does not project any payments for turkey and shell eggs based on available data and is consistent with price projections for these commodities. Any payments for these commodities are likely to be negligible and would be due to individual contractor experiences with missed turns or extended down time.



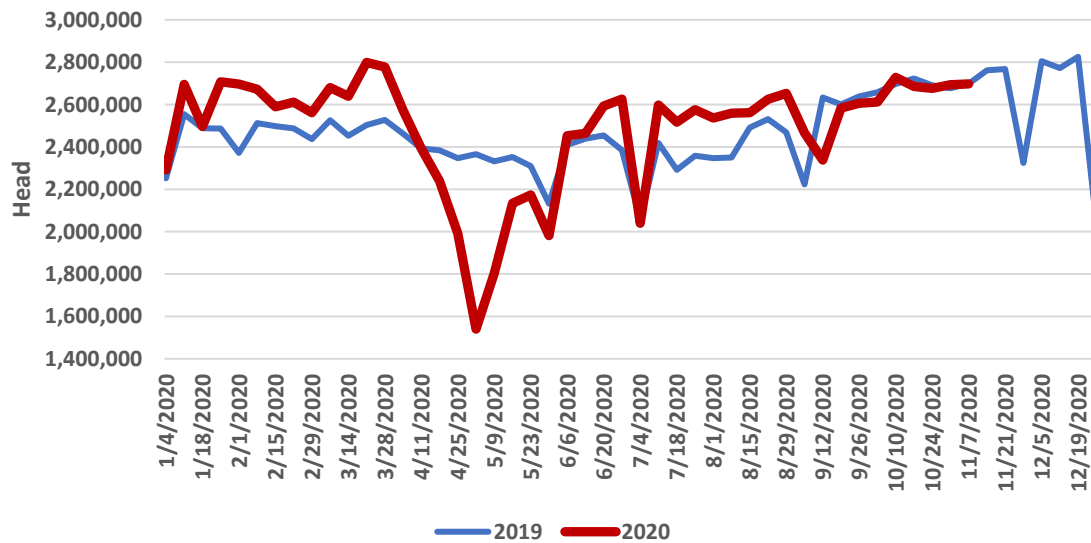
Source: Generic lean hogs (live) futures contract, Bloomberg.

Other data. Figures 4 to 6 present federally inspected slaughter data for hogs and broilers for 2019 and 2020. Figures 5 and 6 show massive declines in hog slaughter from March-May 2020 compared to the same period in 2019, likely reflecting shutdowns and/or slowdowns in packing plants due to COVID. Broiler slaughter appears less impacted in 2020 and is within 1 percent of 2019 slaughter. Nonetheless, with the significant price declines for 2020 shown in figure 3, broiler revenue will still be down overall.

Table B presents broiler placements for weeks 1 to 47 of 2019 and 2020. (Note that darker shades in the table reflect more significant declines.) According to NASS data, 96 percent of broiler production is contracted; as a result, these data largely reflect contract operations. While placements over weeks 1 to 47 fell in aggregate by one percent from the specified weeks in 2019 to 2020, there was substantial regional variation, with placements falling 9 percent in Delaware and 10 percent in Louisiana. Growers that do not get enough birds placed may risk a significant reduction in revenues, and they can face a liquidity risk from not having cash to meet the

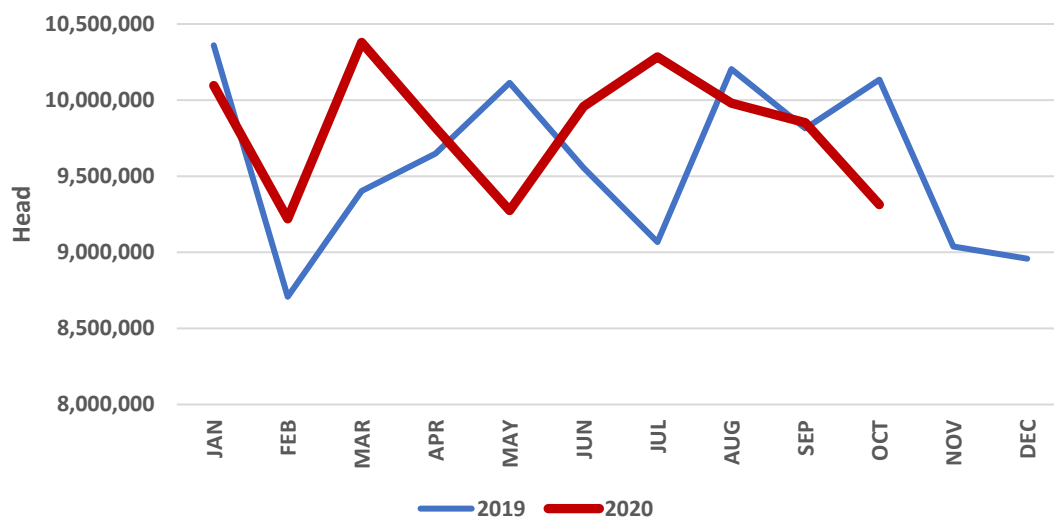
monthly mortgage payment.¹⁹ The last column values the placements at the fair market value (\$0.35/head) used in determining the payment rates for the Livestock Indemnity Program.

Figure 4. Weekly Federally Inspected Hog Slaughter



Source: National Agricultural Statistics Service, USDA.

Figure 5. Monthly Federally Inspected Broiler Slaughter



Source: National Agricultural Statistics Service, USDA.

¹⁹ <https://www.ers.usda.gov/amber-waves/2014/august/financial-risks-and-incomes-in-contract-broiler-production/>

Table B. Broiler Placements and Associated Losses

	2019	2020	Difference in Head	Difference %	Losses
Grand Total, US	8,238,923,000	8,159,315,000			-\$76,787,013
<i>States with losses</i>					
Arkansas	1,044,898,000	994,024,000	-50,874,000	-5%	-\$17,636,320
Delaware	242,171,000	220,777,000	-21,394,000	-9%	-\$7,416,587
Georgia	1,292,429,000	1,242,685,000	-49,744,000	-4%	-\$17,244,587
Kentucky	288,722,000	282,177,000	-6,545,000	-2%	-\$2,268,933
Louisiana	152,689,000	137,556,000	-15,133,000	-10%	-\$5,246,107
Maryland	263,812,000	253,106,000	-10,706,000	-4%	-\$3,711,413
Mississippi	722,989,000	681,308,000	-41,681,000	-6%	-\$14,449,413
Missouri	277,168,000	274,384,000	-2,784,000	-1%	-\$965,120
Oklahoma	203,196,000	194,505,000	-8,691,000	-4%	-\$3,012,880
South Carolina	236,343,000	229,790,000	-6,553,000	-3%	-\$2,271,707
Virginia	268,751,000	261,355,000	-7,396,000	-3%	-\$2,563,947

Source: National Agricultural Statistics Service, USDA and Office of the Chief Economist, USDA. Note: weeks 1-47 are compared for each year.