Evaluating the Inventory Management Soil Enhancement Tool (IMSET) as an Enhancement to the Farm Safety Net

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Prepared for the South Dakota Farmers Union

November 15, 2025

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Title 1 of the farm bill authorizes the nation's primary tools for addressing multi-year price risk along with other risks not covered by the Federal Crop Insurance Program. With persistent increases in production costs, the current safety net tools (Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC)) are providing less protection over time. Due to input cost increases, reference prices utilized in the calculation of ARC and PLC protect a smaller percentage of a producer's production costs, reducing the effectiveness of the safety net for producers.

To address this reality, the South Dakota Farmers Union is considering approaching Congress with the request to consider utilizing the Inventory Management Soil Enhancement Tool (IMSET) approach as an enhancement to current safety net programs. IMSET is an election that farmers could choose on an annual basis to increase program reference prices while enhancing their land's marginal soil. Specifically, on an annual basis, for each program commodity on their farm, producers would choose what percentage of their cropland (up to 20 percent) they would plant to cover crops and not farm. In exchange, the producer would receive a higher reference price for the remaining acres of that commodity they planted. This approach could prove to reduce available supplies and, depending upon the elasticity of demand for the crop, could increase commodity prices. Arguably, prices could rise enough to potentially result in lower government program outlays.

Modeling Approach

To analyze how producers would likely fair under the IMSET approach, as well as estimate the impact of IMSET on government expenditures, a scoring model was developed employing a similar methodology used by the Congressional Budget Office (CBO) to score policy proposals. This means that price risk is included using 500 random draws of prices that include the historical risk associated with the marketing year average prices for each covered commodity. Importantly, we assume IMSET would take effect in crop year 2026.

Projected 2026 supply and use data for the seven covered commodities (corn, soybeans, wheat, cotton, grain sorghum, rice and peanuts) representing 95% of U.S. crop base was obtained from the January 2025 CBO agricultural baseline. Specifically, the planted and base acreage, percent harvested, actual and program yields, beginning stocks, production, imports, reference prices, marketing loan rates, and marketing year average price data were used to develop an adjusted CBO baseline score assuming all acres for the covered commodity were in PLC. This was done to allow for a more direct comparison between the IMSET proposal and current policy. While IMSET would increase the reference prices which are used in the calculations of both ARC and PLC, reference prices in ARC are only used to replace low market prices in the 5-year average that is used along with a similar calculation on yields to develop the benchmark. In PLC, there is a more direct relationship between the reference prices and potential producer payments.

Obviously, many producers may choose ARC in the future, but this assumption on PLC will facilitate an apples-to-apples comparison.

Developing a new or adjusted baseline was accomplished in two steps. The two-step procedure is required because the January 2025 CBO baseline was developed assuming the program provisions contained in the 2018 Farm Bill. The provisions that were passed this summer in the One Big Beautiful Bill Act (OBBBA) are the relevant provisions for the 2026 crop year against which the IMSET approach should be compared. For comparison purposes, the payments in the first column of Table 1 were obtained from the January 2025 CBO baseline. Those payments were for both ARC and PLC by covered commodity. To develop the new baseline, the first step was to convert all payments to PLC for each covered commodity and simulating payments (Table 1, second column). The final step was to change reference prices and loan rates to those specified in the OBBBA and simulate each covered commodity (Table 1, third column). This is the new or adjusted baseline that changing to the IMSET approach will be evaluated against. It should be pointed out that the OBBBA made significant increases in commodity reference prices that even though they take effect in crop year 2025, producers will not receive them until October 2026. As noted earlier, this analysis assumes IMSET takes effect in crop year 2026, so producers will not receive support until October 2027 (or fiscal year 2028).

Table 1. Baseline and Adjusted Baseline Scores by Covered Commodity, Crop Year 2026 (Fiscal Year 2028).

Commodity	CBO Jan. 2025 Baseline for 2026 (ARC+PLC)	Adjusted Jan. 2025 Baseline for 2026 (All Base Acres in PLC) 2018 FB Provisions	Adjusted Jan. 2025 Baseline for 2026 (All Base Acres in PLC) OBBBA Provisions
	Million Dollars		
Corn	3,919	5,052	6,315
Soybeans	1,075	1,115	2,221
Wheat	655	734	1,928
Seed Cotton	415	420	1,149
Grain Sorghum	176	121	329
Rice	449	166	627
Peanuts	296	272	619
Total	6,985	7,880	13,188

Modeling IMSET

As indicated earlier, IMSET is an approach that combines soil enhancement on acres removed from production with potential government program payment enhancement through higher reference prices on the acres of a farmer's covered commodities that remain in production.

Reference Prices

Several assumptions were made by the authors based upon discussions with representatives from South Dakota Farmers Union. These are:

- Producers would be able to remove 10, 15 or 20 percent of their planted acres of each covered commodity they grow from production to qualify for a higher reference price that increases as more land is removed from production.
- IMSET uses the commodity cost of production to develop the higher reference prices. This study used the national average cost of production (COP) obtained from USDA-ERS for each covered commodity as the basis for establishing reference prices.[1] All the relevant data needed to determine IMSET reference prices is contained in Table 2.
    - It was assumed that the projected USDA COP for crop year 2026 multiplied by 1.1 would be the reference price associated with the 20 percent reduction category. (Column E = Column B multiplied by 1.1). *NOTE: for those concerned about reference prices being above the cost of production, remember that ARC and PLC have a payment factor of 85%. So, the approach yields a reference price that is effectively 93.5% of COP (or 1.1 * 85%).*
    - The reference price for the 15 percent reduction category would get 75 percent of the difference between the 20% reference price and OBBBA effective reference price added to the OBBBA effective reference price. ((Column E – Column A)*.75) plus Column A
    - The reference price for the 10 percent reduction category would receive 50 percent of the difference between the 20% reference price and OBBBA effective reference price added to the OBBBA effective reference price. ((Column E – Column A)*.5) plus Column A

[1] USDA cost of production data can be found here: https://www.ers.usda.gov/data-products/commodity-costs-and-returns

Table 2. Calculated IMSET Reference Prices for Each Covered Commodity.

Commodity	OBBBA 2026 Effective Reference Price (A)	Projected 2026 USDA Cost of Production (B)	Reference Price for 10 Percent Reduction (C)	Reference Price for 15 Percent Reduction (D)	Reference Price for 20 Percent Reduction (E)
Corn ($/bu)	4.42	4.81	4.86	5.07	5.29
Soybeans ($/bu)	10.71	12.04	11.98	12.61	13.24
Wheat ($/bu)	6.35	7.92	7.53	8.12	8.71
Seed Cotton ($/lb)	.42	.50	.48	.52	.55
Grain Sorghum ($/bu)	4.67	7.08	6.23	7.01	7.79
Rice ($/cwt)	16.90	15.90	17.20	17.34	17.49
Peanuts ($/lb)	.315	.3291	.339	.35	.362

Marketing Year Average Prices

CBO Baseline marketing year average prices projected for 2026 were adjusted for each commodity and supply reduction category (10, 15 or 20%). The first step was to reduce the number of planted acres from baseline levels for each of the three IMSET categories. Annual crop production was determined by multiplying harvested acres by the crop yield. Crop production was then added to beginning stocks and imports to determine supply of each commodity for the year. For each IMSET acreage reduction category, a percent change in supply relative to the baseline was calculated. The percent change in supply was multiplied by the price flexibility of demand and the baseline CBO projected price for 2026 for each commodity to determine the marketing year average price for each supply reduction alternative.

The price flexibility is one variable most will not be familiar with. The price flexibility refers to the degree to which a price can change in response to shifts in supply and demand. It measures the responsiveness of a price to changes in market conditions. It is calculated as 1 divided by the Own Price Elasticity of Demand. The Own Price Elasticity of Demand is the percentage change in the quantity demanded of a good divided by the percentage change in price. This shows the responsiveness of the quantity demanded to a change in price. In general, agricultural commodities are more inelastic (small negative number less than one) versus elastic (negative number greater than one). Ag commodities being inelastic means the quantity demanded is less responsive to changes in prices. Table 3 contains the elasticities obtained from the agricultural

economics literature (Appendix A) used in this analysis and the resulting price flexibilties. The larger the price flexibility, the bigger the price change from a given change in supply, indicating the price of corn is the most responsive of the seven commodities.

Table 3. Elasticities of Demand Used in the Analysis.

Commodity	Own Price Elasticity of Demand	Calculated Price Flexibilities
Corn	-.3	-3.33
Soybeans	-.35	-2.86
Wheat	-.4	-2.50
Seed Cotton	-.6	-1.67
Grain Sorghum	-.45	-2.22
Rice	-.6	-1.67
Peanuts	-1.01	-0.99

Once the new marketing year average prices were determined the models were then simulated 500 times drawing different prices to simulate risk. For example, the 2026 baseline corn price projected by CBO is $4.05/bu. Figure 1 displays 500 simulated corn prices with an average of $4.05 that were used to add risk to the baseline analysis. Similar prices were used to simulate the three IMSET alternatives for corn around the new estimated prices of $5.23, $5.83 and $6.42 for the 10, 15 and 20 percent reduction alternatives. This same approach was used for each of the seven commodities analyzed in this study.

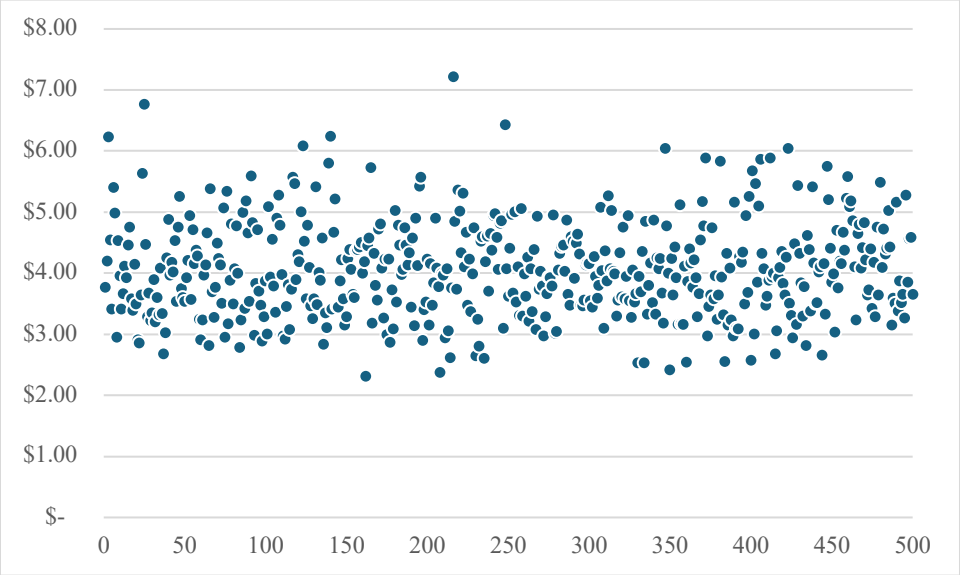

Figure 1. 500 Simulated Values for the Baseline Corn Price.

Results

The IMSET approach was analyzed looking at commodity market returns and government payments for a future year (2026) and by evaluating the results if it had been in place in the past in both a relatively low-price year (2018) and a relatively high price year (2023).

Projections for 2026

The IMSET approach is to allow producers to voluntarily remove acres in exchange for a higher reference price. While this decision would be made by thousands of individuals each with different objectives in mind, whether it be soil health, removing less productive acres, looking for higher reference prices or a combination of these. This analysis assumes that, all else being equal, producers will seriously consider removing land from production if their total receipts (market and government) are higher than the adjusted baseline.

Table 4 shows the differences in planted and base acres under the baseline from what would be planted for each of the IMSET scenarios by commodity for 2026. All commodities but soybeans plant less than their base under the baseline. While an individual farmer's decision about idling acreage isn't that significant, if adopted nationwide, the IMSET approach could lead to a significant reduction in planted acres.

Table 4. Comparison of Planted and Base Acres from the Baseline with IMSET Planted Acres by Commodity.

Commodity	CBO 2026 Planted Acres	2026 Base Acres	IMSET Planted Acres		
			10%	15%	20%
	---------- Million Acres ----------				
Corn	91.00	94.50	81.90	77.35	72.80
Soybeans	86.00	53.50	77.40	73.10	68.80
Wheat	45.00	61.80	40.50	38.25	36.00
Seed Cotton	10.60	12.00	9.54	9.01	8.48
Grain Sorghum	6.5	8.50	5.85	5.53	5.20
Rice	2.78	4.65	2.50	2.36	2.22
Peanuts	1.60	2.45	1.44	1.36	1.28
Total	243.48	237.40	219.13	206.95	194.78

Tables 5-11 contain the model results for the seven commodities covered in this analysis (corn, soybeans, wheat, seed cotton, grain sorghum, rice and peanuts). The results for corn in Table 5 will be discussed below in the context of explaining the tables. The first column of each table represents the January 2025 CBO baseline parameters adjusted in two ways 1) all base is enrolled in PLC and 2) the higher OBBBA reference prices and loan rates are used in payment calculations.

The three IMSET scenarios (10, 15 and 20% land set-asides) are displayed in the next three columns of each commodity's table. At the top indicated in red are the planted acres after each of the scenario percentages is removed. The harvested acres and actual yields were used to calculate production. This was then added to beginning stocks and imports to determine annual supply. **Note: the authors assumed that imports would not change in response to buyers having to pay higher prices resulting from land being removed from production.** In the current political environment, this assumption seems entirely plausible; however, economic theory would suggest imports would rise which would reduce the potential impact on prices from IMSET. The estimated market returns and government costs contained in this report should both be considered the best-case scenario.

The change in supply relative to the baseline is indicated in red. This number, along with the demand elasticity (indicated in blue), is used in the estimation of market prices for the IMSET scenarios (indicated in green). The next section lists reference prices used in the analysis along with USDA-ERS cost of production used to develop the IMSET reference prices also indicated in green.

The bottom three sections summarize results for each commodity. The first section of the results indicates that, without risk included, corn payments under the adjusted baseline would be $4.3 billion while the three IMSET alternatives would not generate any PLC payments as the marketing year average price is above the reference price for all three scenarios. Once the model was simulated with 500 random draws of risky prices, the estimated adjusted baseline cost increased to $6.3 billion and the 10, 15 and 20 percent IMSET scenarios would cost, $2.3, $1.3 and $0.83 billion, respectively. This provides a more robust picture of the future costs of the program. As can be seen in Table 5, because of the higher prices (albeit on a smaller crop) the market returns were significantly higher for the three IMSET scenarios than the adjusted baseline. When added together, total returns are projected to be highest for the 20 percent scenario while each IMSET scenario is higher than the adjusted baseline.

The bottom portion of the table provides an indication of the reduction in planted acres relative to the baseline and the residual after base acres are subtracted from planted acres. Finally, the payment per acre is presented for the baseline and three IMSET scenarios (note: the baseline pays on base acres while the IMSET approach is to pay on planted acres).

Table 5. Projected Market and Government Revenues for the Baseline and IMSET Alternatives for Corn in 2026.

Corn	Jan CBO Baseline 2026	IMSET 10 Percent	IMSET 15 Percent	IMSET 20 Percent
		Million Acres		
Base Acres	94.5	94.5	94.5	94.5
Planted Acres	91.000	81.9	77.35	72.8
Harvested Acres	83.356	75.02	70.85	66.68
Harvested %	92%	92%	92%	92%
		Bushels per Acre		
Harvested Yield	183.3	183.3	183.3	183.3
Payment Yield	145.0	145.0	145.0	145.0
		Million Bushels		
Production	15,279.2	13,751.2	12,987.3	12,223.3
Beginning Stocks	2,109	2,109	2,109	2,109
Imports	25	25	25	25
Supply	17,413	15,885	15,121	14,357
Change in Supply		-8.8%	-13.2%	-17.5%
Market Price	$ 4.05	$ 5.23	$ 5.83	$ 6.42
Price Elasticity from Literature	-0.3			
Statutory Reference Price	$ 4.10	$ 4.10	$ 4.10	$ 4.10
OBBBA Effective Ref Price	$ 4.42	$ 4.42	$ 4.42	$ 4.42
ERS National COP	$ 4.81	$ 4.81	$ 4.81	$ 4.81
IMSET Effective Ref Price (COP*1.1)	$ 5.29	$ 4.86	$ 5.07	$ 5.29
Marketing Loan	$ 2.42	$ 2.42	$ 2.42	$ 2.42
Estimated Payments		Million $		
Baseline	$ 4,309			
IMSET		$ -	$ -	$ -
Estimated Producer Receipts Using Average Prices		Million $		
Market	$ 61,881	$ 71,982	$ 75,675	$ 78,463
Government Payments	$ 4,309	$ -	$ -	$ -
Total	$ 66,190	$ 71,982	$ 75,675	$ 78,463
Estimated Producer Receipts Simulating 500 Outcomes		Million $		
Market	$ 61,881	$ 71,982	$ 75,675	$ 78,463
Government Payments	$ 6,315	$ 2,322	$ 1,381	$ 830
Total	$ 68,195	$ 74,303	$ 77,055	$ 79,293
Prob of Pmt	71%	38%	27%	19%
		Million Acres		
Reduction in Planted Acres	0.0	-9.1	-13.7	-18.2
Planted Acres Minus Base Acres	-3.5	-12.6	-17.2	-21.7
Payment per Base (Baseline) or Planted (IMSET) Acre	$ 66.82	$ 28.35	$ 17.85	$ 11.40

Table 6. Projected Market and Government Revenues for the Baseline and IMSET Alternatives for Soybeans in 2026.

Soybeans	Jan CBO Baseline 2026	IMSET 10 Percent	IMSET 15 Percent	IMSET 20 Percent
		Million Acres		
Base Acres	53.5	53.5	53.5	53.5
Planted Acres	86.000	77.4	73.1	68.8
Harvested Acres	85.140	76.63	72.37	68.11
Harvested %	99%	99%	99%	99%
		Bushels per Acre		
Harvested Yield	53.0	53.0	53.0	53.0
Payment Yield	41.2	41.2	41.2	41.2
		Million Bushels		
Production	4,512	4,061	3,836	3,610
Beginning Stocks	435	435	435	435
Imports	20	20	20	20
Supply	4,967	4,516	4,291	4,065
Change in Supply		-9.1%	-13.6%	-18.2%
Market Price	$ 9.90	$ 12.47	$ 13.75	$ 15.04
Price Elasticity from Literature	-0.35			
Statutory Reference Price	$ 10.00	$ 10.00	$ 10.00	$ 10.00
OBBBA Effective Ref Price	$ 10.71	$ 10.71	$ 10.71	$ 10.71
ERS National COP	$ 12.04	$ 12.04	$ 12.04	$ 12.04
IMSET Effective Ref Price (COP*1.1)	$ 13.24	$ 11.98	$ 12.61	$ 13.24
Marketing Loan	$ 6.82	$ 6.82	$ 6.82	$ 6.82
Estimated Payments		Million $		
Baseline	$ 1,518			
IMSET		$ -	$ -	$ -
Estimated Producer Receipts Using Average Prices		Million $		
Market	$ 44,673	$ 50,641	$ 52,755	$ 54,290
Government Payments	$ 1,518	$ -	$ -	$ -
Total	$ 46,191	$ 50,641	$ 52,755	$ 54,290
Estimated Producer Receipts Simulating 500 Outcomes		Million $		
Market	$ 44,673	$ 50,641	$ 52,755	$ 54,290
Government Payments	$ 2,221	$ 1,862	$ 1,372	$ 1,015
Total	$ 46,894	$ 52,503	$ 54,128	$ 55,304
Prob of Pmt	67%	42%	33%	28%
		Million Acres		
Reduction in Planted Acres	0.0	-8.6	-12.9	-17.2
Planted Acres Minus Base Acres	32.5	23.9	19.6	15.3
Payment per Base (Baseline) or Planted (IMSET) Acre	$ 41.51	$ 24.06	$ 18.78	$ 14.75

Table 7. Projected Market and Government Revenues for the Baseline and IMSET Alternatives for Wheat in 2026.

Wheat	Jan CBO Baseline 2026	IMSET 10 Percent	IMSET 15 Percent	IMSET 20 Percent
		Million Acres		
Base Acres	61.8	61.8	61.8	61.8
Planted Acres	45.000	40.5	38.25	36
Harvested Acres	37.000	33.30	31.45	29.60
Harvested %	82%	82%	82%	82%
		Bushels per Acre		
Harvested Yield	49.4	49.4	49.4	49.4
Payment Yield	41.0	41.0	41.0	41.0
		Million Bushels		
Production	1,827.8	1,645.0	1,553.6	1,462.2
Beginning Stocks	738	738	738	738
Imports	120	120	120	120
Supply	2,686	2,503	2,412	2,320
Change in Supply		-6.8%	-10.2%	-13.6%
Market Price	$ 5.60	$ 6.55	$ 7.03	$ 7.51
Price Elasticity from Literature	-0.4			
Statutory Reference Price	$ 6.35	$ 6.35	$ 6.35	$ 6.35
OBBBA Effective Ref Price	$ 6.35	$ 6.35	$ 6.35	$ 6.35
ERS National COP	$ 7.92	$ 7.92	$ 7.92	$ 7.92
IMSET Effective Ref Price (COP*1.1)	$ 8.71	$ 7.53	$ 8.12	$ 8.71
Marketing Loan	$ 3.72	$ 3.72	$ 3.72	$ 3.72
Estimated Payments		Million $		
Baseline	$ 1,615			
IMSET		$ 1,381	$ 1,456	$ 1,514
Estimated Producer Receipts Using Average Prices		Million $		
Market	$ 10,236	$ 10,779	$ 10,921	$ 10,975
Government Payments	$ 1,615	$ 1,381	$ 1,456	$ 1,514
Total	$ 11,851	$ 12,160	$ 12,377	$ 12,489
Estimated Producer Receipts Simulating 500 Outcomes		Million $		
Market	$ 10,236	$ 10,779	$ 10,921	$ 10,975
Government Payments	$ 1,928	$ 1,594	$ 1,661	$ 1,710
Total	$ 12,164	$ 12,373	$ 12,581	$ 12,684
Prob of Pmt	78%	80%	81%	81%
		Million Acres		
Reduction in Planted Acres	0.0	-4.5	-6.8	-9.0
Planted Acres Minus Base Acres	-16.8	-21.3	-23.6	-25.8
Payment per Base (Baseline) or Planted (IMSET) Acre	$ 31.20	$ 39.35	$ 43.41	$ 47.49

Table 8. Projected Market and Government Revenues for the Baseline and IMSET Alternatives for Seed Cotton in 2026.

Seed Cotton	Jan CBO Baseline 2026	IMSET 10 Percent	IMSET 15 Percent	IMSET 20 Percent
		Million Acres		
Base Acres	12	12	12	12
Planted Acres	10.600	9.54	9.01	8.48
Harvested Acres	8.268	7.44	7.03	6.61
Harvested %	78%	78%	78%	78%
		Pounds per Acre		
Harvested Yield	859	859	859	859
Payment Yield	1,768	1,768	1,768	1,768
		Million 480 lb Bales		
Production	14.8	13.3	12.6	11.8
Beginning Stocks	4.1	4.1	4.1	4.1
Imports	0.0	0.0	0.0	0.0
Supply	18.9	17.5	16.7	16.0
Change in Supply		-7.8%	-11.7%	-15.6%
Market Price	$ 0.35	$ 0.40	$ 0.42	$ 0.45
Price Elasticity from Literature	-0.6			
Statutory Reference Price	$ 0.42	$ 0.42	$ 0.42	$ 0.42
OBBBA Effective Ref Price	$ 0.42	$ 0.42	$ 0.42	$ 0.42
ERS National COP	$ 0.50	$ 0.50	$ 0.50	$ 0.50
IMSET Effective Ref Price (COP*1.1)	$ 0.55	$ 0.48	$ 0.52	$ 0.55
Marketing Loan	$ 0.30	$ 0.30	$ 0.30	$ 0.30
Estimated Payments		Million $		
Baseline	$ 1,190			
IMSET		$ 1,194	$ 1,244	$ 1,281
Estimated Producer Receipts Using Average Prices		Million $		
Market	$ 2,514	$ 2,557	$ 2,554	$ 2,535
Government Payments	$ 1,190	$ 1,194	$ 1,244	$ 1,281
Total	$ 3,704	$ 3,751	$ 3,799	$ 3,816
Estimated Producer Receipts Simulating 500 Outcomes		Million $		
Market	$ 2,514	$ 2,557	$ 2,554	$ 2,535
Government Payments	$ 1,149	$ 1,203	$ 1,258	$ 1,295
Total	$ 3,663	$ 3,760	$ 3,812	$ 3,830
Prob of Pmt	90%	93%	93%	94%
		Million Acres		
Reduction in Planted Acres	0.0	-1.1	-1.6	-2.1
Planted Acres Minus Base Acres	-1.4	-2.5	-3.0	-3.5
Payment per Base (Baseline) or Planted (IMSET) Acre	$ 95.75	$ 126.08	$ 139.61	$ 152.69

Table 9. Projected Market and Government Revenues for the Baseline and IMSET Alternatives for Grain Sorghum in 2026.

Grain Sorghum	Jan CBO Baseline 2026	IMSET 10 Percent	IMSET 15 Percent	IMSET 20 Percent
		Million Acres		
Base Acres	8.5	8.5	8.5	8.5
Planted Acres	6.500	5.85	5.525	5.2
Harvested Acres	5.800	5.22	4.93	4.64
Harvested %	89%	89%	89%	89%
		Bushels per Acre		
Harvested Yield	70	70	70	70
Payment Yield	62	62	62	62
		Million Bushels		
Production	406.0	365.4	345.1	324.8
Beginning Stocks	40	40	40	40
Imports	0	0	0	0
Supply	446	405	385	365
Change in Supply		-9.1%	-13.7%	-18.2%
Market Price	$ 4.05	$ 4.87	$ 5.28	$ 5.69
Price Elasticity from Literature	-0.45			
Statutory Reference Price	$ 4.40	$ 4.40	$ 4.40	$ 4.40
OBBBA Effective Ref Price	$ 4.67	$ 4.67	$ 4.67	$ 4.67
ERS National COP	$ 7.08	$ 7.08	$ 7.08	$ 7.08
IMSET Effective Ref Price (COP*1.1)	$ 7.79	$ 6.23	$ 7.01	$ 7.79
Marketing Loan	$ 2.42	$ 2.42	$ 2.42	$ 2.42
Estimated Payments Using Average Prices		Million $		
Baseline	$ 278			
IMSET		$ 419	$ 504	$ 575
Estimated Producer Receipts Using Average Prices		Million $		
Market	$ 1,644	$ 1,779	$ 1,822	$ 1,848
Government Payments	$ 278	$ 419	$ 504	$ 575
Total	$ 1,922	$ 2,198	$ 2,325	$ 2,423
Estimated Producer Receipts Simulating 500 Outcomes		Million $		
Market	$ 1,644	$ 1,779	$ 1,822	$ 1,848
Government Payments	$ 329	$ 436	$ 516	$ 584
Total	$ 1,973	$ 2,215	$ 2,338	$ 2,432
Prob of Pmt	78%	92%	94%	95%
		Million Acres		
Reduction in Planted Acres	0.0	-0.6	-1.0	-1.3
Planted Acres Minus Base Acres	-2.0	-2.7	-3.0	-3.3
Payment per Base (Baseline) or Planted (IMSET) Acre	$ 38.69	$ 74.51	$ 93.37	$ 112.38

Table 10. Projected Market and Government Revenues for the Baseline and IMSET Alternatives for Rice in 2026.

Rice	Jan CBO Baseline 2026	IMSET 10 Percent	IMSET 15 Percent	IMSET 20 Percent
		Million Acres		
Base Acres	4.646	4.646	4.646	4.646
Planted Acres	2.775	2.498	2.359	2.220
Harvested Acres	2.725	2.45	2.32	2.18
Harvested %	98%	98%	98%	98%
		Pounds per Acre		
Harvested Yield	7,674	7,674	7,674	7,674
Payment Yield	6,385	6,385	6,385	6,385
		Million CWTS		
Production	209.1	188.2	177.7	167.3
Beginning Stocks	46.7	46.7	46.7	46.7
Imports	49.3	49.3	49.3	49.3
Supply	305.1	284.2	273.7	263.3
Change in Supply		-6.9%	-10.3%	-13.7%
Market Price	$ 14.54	$ 16.20	$ 17.03	$ 17.86
Price Elasticity from Literature	-0.6			
Statutory Reference Price	$ 16.90	$ 16.90	$ 16.90	$ 16.90
OBBBA Effective Ref Price	$ 16.90	$ 16.90	$ 16.90	$ 16.90
ERS National COP	$ 15.90	$ 15.90	$ 15.90	$ 15.90
IMSET Effective Ref Price (COP*1.1)	$ 17.49	$ 17.20	$ 17.34	$ 17.49
Marketing Loan	$ 7.70	$ 7.70	$ 7.70	$ 7.70
Estimated Payments		Million $		
Baseline	$ 595			
IMSET		$ 135	$ 40	$ -
Estimated Producer Receipts Using Average Prices		Million $		
Market	$ 3,041	$ 3,049	$ 3,027	$ 2,988
Government Payments	$ 595	$ 135	$ 40	$ -
Total	$ 3,636	$ 3,184	$ 3,067	$ 2,988
Estimated Producer Receipts Simulating 500 Outcomes		Million $		
Market	$ 3,041	$ 3,049	$ 3,027	$ 2,988
Government Payments	$ 627	$ 209	$ 152	$ 111
Total	$ 3,668	$ 3,258	$ 3,180	$ 3,099
Prob of Pmt	84%	64%	51%	41%
		Million Acres		
Reduction in Planted Acres	0.00	-0.28	-0.42	-0.56
Planted Acres Minus Base Acres	-1.87	-2.15	-2.29	-2.43
Payment per Base (Baseline) or Planted (IMSET) Acre	$ 135.06	$ 83.55	$ 64.63	$ 50.15

Table 11. Projected Market and Government Revenues for the Baseline and IMSET Alternatives for Peanuts in 2026.

Peanuts	Jan CBO Baseline 2026	IMSET 10 Percent	IMSET 15 Percent	IMSET 20 Percent
		Thousand Acres		
Base Acres	2,451	2,451	2,451	2,451
Planted Acres	1,600	1,440	1,360	1,280
Harvested Acres	1,560	1,404	1,326	1,248
Harvested %	98%	98%	98%	98%
		Pounds per Acre		
Harvested Yield	3,892	3,892	3,892	3,892
Payment Yield	3,600	3,600	3,600	3,600
		Million Pounds		
Production	6,071.5	5,464.4	5,160.8	4,857.2
Beginning Stocks	2,299.0	2,299.0	2,299.0	2,299.0
Imports	115.0	115.0	115.0	115.0
Supply	8,485.5	7,878.4	7,574.8	7,271.2
Change in Supply		-7.2%	-10.7%	-14.3%
Market Price	$ 0.2289	$ 0.245	$ 0.253	$ 0.261
Price Elasticity from Literature	-1.01			
Statutory Reference Price	$ 0.315	$ 0.315	$ 0.315	$ 0.315
OBBBA Effective Ref Price	$ 0.315	$ 0.315	$ 0.315	$ 0.315
ERS National COP	$ 0.3291	$ 0.3291	$ 0.3291	$ 0.3291
IMSET Effective Ref Price (COP*1.1)	$ 0.362	$ 0.339	$ 0.350	$ 0.362
Marketing Loan	$ 0.195	$ 0.195	$ 0.195	$ 0.195
Estimated Payments Using Average Prices		Million $		
Baseline	$ 646			
IMSET		$ 412	$ 404	$ 394
Estimated Producer Receipts Using Average Prices		Million $		
Market	$ 1,390	$ 1,339	$ 1,307	$ 1,269
Government Payments	$ 646	$ 412	$ 404	$ 394
Total	$ 2,036	$ 1,751	$ 1,711	$ 1,664
Estimated Producer Receipts Simulating 500 Outcomes		Million $		
Market	$ 1,390	$ 1,339	$ 1,307	$ 1,269
Government Payments	$ 619	$ 405	$ 401	$ 394
Total	$ 2,009	$ 1,744	$ 1,708	$ 1,663
Prob of Pmt	100%	100%	100%	100%
		Thousand Acres		
Reduction in Planted Acres	0	-160	-240	-320
Planted Acres Minus Base Acres	-851	-1011	-1091	-1171
Payment per Base (Baseline) or Planted (IMSET) Acre	$ 252.69	$ 281.27	$ 294.66	$ 307.44

Summary

Corn and soybeans are drastically better off in terms of total returns (market and government) under the IMSET scenarios with the 20 percent scenario having the highest income. Wheat, seed cotton and grain sorghum are slightly better off under the IMSET scenarios, with total receipts getting progressively higher to the 20 percent scenario. Rice and peanuts are both worse off under the IMSET approach relative to the baseline. A couple of points jump out when looking at the results:

- The lower the demand elasticity the larger the price response for the IMSET scenarios. Corn and beans had the two lowest demand elasticities.
- The cost of production for the commodity is incredibly important in the IMSET approach. Grain sorghum has an unusually high USDA-ERS cost of production, so its use in setting IMSET reference prices almost guarantees IMSET would be favored over the baseline. On the other hand, the USDA-ERS cost of production for rice is $1/cwt below the OBBBA effective reference price. This results in a relatively minor increase in reference prices for the IMSET scenarios for rice, generating less government payments than the baseline. The OBBBA reference price for the six other commodities are all below their USDA-ERS cost of production, which means 1.1 multiplied by the COP would generate IMSET reference prices that are significantly higher than the baseline for those commodities.
- Overall, it appears that without imports increasing to offset the reduction in supply, the higher market prices resulting from the IMSET approach would generate higher market income than the baseline that more than offsets the lower government payments relative to the baseline (Table 12). The assumption that imports are held constant is critical in the analysis of the IMSET approach. In the past, the U.S. has had relatively low tariff rates on agricultural commodities of 4 percent (Ribera and Young)[2]. As mentioned earlier, the current administration has increased tariffs for most if not all U.S. trading partners. In addition, there are transportation costs that must be borne by exporting countries seeking to sell in the U.S. Table 13 provides the change in prices relative to the baseline associated with each of the IMSET scenarios by commodity. Regardless of administration, future tariffs plus transportation costs would need to be below these price increases for significant imports to be brought into the U.S. market. The differences in percentages across commodities is a result of different demand elasticities for the commodities and the amount of imports that were projected in the CBO baseline for 2026.
- It is also important to note that these results are very sensitive to participation and slippage assumptions, given this is a voluntary set-aside (incentivized by higher reference prices on the planted acres). For example, where corn and soybean producers may not expect much benefit from the higher reference price, they may decide not to participate—instead hoping that others will set aside acres and drive prices higher (i.e., the classic free-rider problem). Similarly, if growers set aside their least productive acres, the impact on production may be considerably smaller (with the price effect being similarly

[2] Ribera, L. and L. Young. "How Do U.S. Tariff Rates Compare to Other WTO Countries?" Southern Ag Today, February 6, 2025. Available at: https://southernagtoday.org/2025/02/06/how-does-u-s-tariff-rates-compare-to-other-wto-countries/

impacted). In other words, despite the best intentions, the results could vary widely.

Table 12. Comparison of IMSET Market, Government and Total Receipts Relative to the Baseline.

				IMSET								
Commodity	2026 CBO Baseline Assuming 100% PLC			10%			15%			20%		
	Market	Government	Total	Market	Government	Total	Market	Government	Total	Market	Government	Total
	----	$ Billion	----	----	$ Billion	----	----	$ Billion	----	----	$ Billion	----
Rice	$ 3.04	$ 0.63	$ 3.67	$ 3.05	$ 0.21	$ 3.26	$ 3.03	$ 0.15	$ 3.18	$ 2.99	$ 0.11	$ 3.10
Corn	$ 61.88	$ 6.31	$ 68.20	$ 71.98	$ 2.32	$ 74.30	$ 75.67	$ 1.38	$ 77.06	$ 78.46	$ 0.83	$ 79.29
Upland Cotton	$ 2.51	$ 1.15	$ 3.66	$ 2.56	$ 1.20	$ 3.76	$ 2.55	$ 1.26	$ 3.81	$ 2.54	$ 1.29	$ 3.83
Wheat	$ 10.24	$ 1.93	$ 12.16	$ 10.78	$ 1.59	$ 12.37	$ 10.92	$ 1.66	$ 12.58	$ 10.97	$ 1.71	$ 12.68
Soybeans	$ 44.67	$ 2.22	$ 46.89	$ 50.64	$ 1.86	$ 52.50	$ 52.76	$ 1.37	$ 54.13	$ 54.29	$ 1.01	$ 55.30
Grain Sorghum	$ 1.64	$ 0.33	$ 1.97	$ 1.78	$ 0.44	$ 2.22	$ 1.82	$ 0.52	$ 2.34	$ 1.85	$ 0.58	$ 2.43
Peanuts	$ 1.39	$ 0.62	$ 2.01	$ 1.34	$ 0.41	$ 1.74	$ 1.31	$ 0.40	$ 1.71	$ 1.27	$ 0.39	$ 1.66
Totals	$ 125.38	$ 13.19	$ 138.57	$ 142.13	$ 8.03	$ 150.16	$ 148.06	$ 6.74	$ 154.80	$ 152.37	$ 5.94	$ 158.31

Table 13. Percent Change in Marketing Year Average Prices Relative to the Baseline for the IMSET Scenarios by Commodity.

	Baseline Marketing Year Average Price in 2026	Percent Increase in Marketing Year Average Prices for each IMSET Scenario		
		10%	**15%**	**20%**
Corn	$4.05/bu	29.2%	43.9%	58.5%
Soybeans	$9.90/bu	26.0%	38.9%	51.9%
Wheat	$5.60/bu	14.6%	21.9%	29.2%
Seed Cotton	$0.35/lb	13%	19.5%	26.0%
Grain Sorghum	$4.05/bu	20.2%	30.3%	40.5%
Rice	$14.54/cwt	11.4%	17.1%	22.8%
Peanuts	$0.2289/lb	7.8%	10.6%	14.2%

Historical Analysis of 2018 and 2023

Two historical years were modeled to analyze how the IMSET proposal would have performed in the past under low and high price scenarios. The first year chosen was 2018 to represent a low price scenario. Marketing year average corn, soybeans and wheat prices were $3.66, $8.48 and $5.16/bu, respectively. The second year chosen to represent a high price scenario was 2023. In 2023, marketing year average prices for corn, soybeans and wheat were $4.55, $12.40 and $6.96/bu, respectively. The published CBO January baselines for each year were used to obtain baseline supply parameters as before.

Historical USDA-ERS COP data were used to generate the IMSET reference prices. All of the tables highlight the COP used because there are real inconsistencies in the data. For example, the wheat COP published by USDA-ERS in 2018 was $6.58/bu where the 2023 COP was $9.68. Based on the formula used to develop IMSET reference prices, it should not be surprising there would be significant government payments in 2023 even though it was a relatively high price year for wheat.

The same demand elasticities were used to estimate new marketing year average prices for each of the three supply reduction alternatives. Neither of these models were simulated as the calculated prices were used as actuals.

Tables 14-20 reflect the low-price scenario for each commodity in 2018. Putting the IMSET program in place for 2018 would not have generated any payments for corn or rice while the baseline had payments of $841 and $364 million, respectively. Soybeans didn't receive any payments under the baseline and would not under IMSET. Wheat, seed cotton, and grain sorghum all generated government payments in the range of payments under the baseline. Peanuts saw lower payments under IMSET than the baseline.

Other than rice and peanuts, market receipts increased by enough to offset lower payments, resulting in total receipts that were higher than the baseline. This can be seen quite easily in Table 21. The rice cost of production estimates are low during this time period, resulting in very little help from the IMSET approach.

Tables 22-28 contain the results evaluating the IMSET approach for a high price year (2023). As one would expect, given relatively high prices the baseline only had government payments for peanuts, as 2023 was not a high price year for peanuts. The IMSET scenarios would have generated payments for wheat, seed cotton, grain sorghum and peanuts. As under the low-price scenario, market prices under IMSET are high and generate higher total returns than the baseline (Table 29).

Table 14. Historical Evaluation of Low Price Scenario for Corn in 2018.

Corn	Jan CBO Baseline 2018	10 Percent	15 Percent	20 Percent
		Million Acres		
Base Acres	94.866	94.866	94.866	94.866
Planted Acres	91.500	82.35	77.775	73.2
Harvested Acres	83.826	75.44	71.25	67.06
Harvested %	92%	92%	92%	92%
		Bushels per Acre		
Harvested Yield	173.0	173.0	173.0	173.0
Payment Yield	115.9	115.9	115.9	115.9
		Million Bushels		
Production	14,501.9	13,051.7	12,326.6	11,601.5
Beginning Stocks	2,352	2,352	2,352	2,352
Imports	50	50	50	50
Supply	16,904	15,454	14,729	14,004
Change in Supply		-8.6%	-12.9%	-17.2%
Market Price	$ 3.61	$ 4.64	$ 5.16	$ 5.67
Price Elasticity from Literature	-0.3			
Statutory Reference Price	$ 3.70	$ 3.70	$ 3.70	$ 3.70
Effective Ref Price	$ 3.70	$ 3.70	$ 3.70	$ 3.70
ERS National COP	$ 3.74	$ 3.74	$ 3.74	$ 3.74
IMSET Effective Ref Price (COP*1.1)	$ 4.11	$ 3.91	$ 4.01	$ 4.11
Marketing Loan	$ 1.95	$ 1.95	$ 1.95	$ 1.95
Estimated Payments		Million $		
Baseline	$ 841			
IMSET		$ -	$ -	$ -
Estimated Producer Receipts		Million $		
Market	$ 52,352	$ 60,591	$ 63,587	$ 65,835
Government Payments	$ 841	$ -	$ -	$ -
Total	$ 53,193	$ 60,591	$ 63,587	$ 65,835
Payment per Base (Baseline) or Planted (IMSET) Acre	$ 8.87	$ -	$ -	$ -

Table 15. Historical Evaluation of Low Price Scenario for Soybeans in 2018.

Soybeans	Jan CBO Baseline 2018	10 Percent	15 Percent	20 Percent
		Million Acres		
Base Acres	53.6	53.6	53.6	53.6
Planted Acres	88.800	79.92	75.48	71.04
Harvested Acres	87.900	79.11	74.72	70.32
Harvested %	99%	99%	99%	99%
		Bushels per Acre		
Harvested Yield	48.2	48.2	48.2	48.2
Payment Yield	37.4	37.4	37.4	37.4
		Million Bushels		
Production	4,237	3,813	3,601	3,389
Beginning Stocks	530	530	530	530
Imports	25	25	25	25
Supply	4,792	4,368	4,156	3,944
Change in Supply		-8.8%	-13.3%	-17.7%
Market Price	$ 8.48	$ 10.62	$ 11.69	$ 12.76
Price Elasticity from Literature	-0.35			
Statutory Reference Price	$ 8.40	$ 8.40	$ 8.40	$ 8.40
Effective Ref Price	$ 8.40	$ 8.40	$ 8.40	$ 8.40
ERS National COP	$ 9.36	$ 9.36	$ 9.36	$ 9.36
IMSET Effective Ref Price (COP*1.1)	$ 10.30	$ 9.35	$ 9.82	$ 10.30
Marketing Loan	$ 5.00	$ 5.00	$ 5.00	$ 5.00
Estimated Payments		Million $		
Baseline	$ -			
IMSET		$ -	$ -	$ -
Estimated Producer Receipts		Million $		
Market	$ 35,928	$ 40,504	$ 42,111	$ 43,264
Government Payments	$ -	$ -	$ -	$ -
Total	$ 35,928	$ 40,504	$ 42,111	$ 43,264
Payment per Base (Baseline) or Planted (IMSET) Acre	$ -	$ -	$ -	$ -

Table 16. Historical Evaluation of Low Price Scenario for Wheat in 2018.

Wheat	Jan CBO Baseline 2018	10 Percent	15 Percent	20 Percent
		Million Acres		
Base Acres	63.1	63.1	63.1	63.1
Planted Acres	45.500	40.95	38.675	36.4
Harvested Acres	38.700	34.83	32.90	30.96
Harvested %	85%	85%	85%	85%
		Bushels per Acre		
Harvested Yield	47.5	47.5	47.5	47.5
Payment Yield	37.8	37.8	37.8	37.8
		Million Bushels		
Production	1,838.3	1,654.4	1,562.5	1,470.6
Beginning Stocks	1,010	1,010	1,010	1,010
Imports	130	130	130	130
Supply	2,978	2,794	2,703	2,611
Change in Supply		-6.2%	-9.3%	-12.3%
Market Price	$ 5.16	$ 5.96	$ 6.35	$ 6.75
Price Elasticity from Literature	-0.4			
Statutory Reference Price	$ 5.50	$ 5.50	$ 5.50	$ 5.50
OBBBA Effective Ref Price	$ 5.50	$ 5.50	$ 5.50	$ 5.50
ERS National COP	$ 6.58	$ 6.58	$ 6.58	$ 6.58
IMSET Effective Ref Price (COP*1.1)	$ 7.24	$ 6.37	$ 6.80	$ 7.24
Marketing Loan	$ 2.94	$ 2.94	$ 2.94	$ 2.94
Estimated Payments		Million $		
Baseline	$ 689			
IMSET		$ 543	$ 558	$ 568
Estimated Producer Receipts		Million $		
Market	$ 9,485	$ 9,854	$ 9,929	$ 9,930
Government Payments	$ 689	$ 543	$ 558	$ 568
Total	$ 10,175	$ 10,397	$ 10,487	$ 10,498
Payment per Base (Baseline) or Planted (IMSET) Acre	$ 10.92	$ 13.26	$ 14.43	$ 15.60

Table 17. Historical Evaluation of Low Price Scenario for Cotton in 2018.

Seed Cotton	Jan CBO Baseline 2018	10 Percent	15 Percent	20 Percent
		Million Acres		
Base Acres	12.796	12.796	12.796	12.796
Planted Acres	12.800	11.52	10.88	10.24
Harvested Acres	10.880	9.79	9.25	8.70
Harvested %	85%	85%	85%	85%
		Pounds per Acre		
Harvested Yield	840	840	840	840
Payment Yield	1,737	1,737	1,737	1,737
		Million 480 lb Bales		
Production	19.0	17.1	16.2	15.2
Beginning Stocks	5.923	5.923	5.923	5.923
Imports	0.005	0.005	0.005	0.005
Supply	25.0	23.1	22.1	21.2
Change in Supply		-7.6%	-11.4%	-15.3%
Market Price	$ 0.345	$ 0.39	$ 0.41	$ 0.43
Price Elasticity from Literature	-0.6			
Statutory Reference Price	$ 0.3670	$ 0.3670	$ 0.3670	$ 0.3670
Effective Ref Price	$ 0.3670	$ 0.3670	$ 0.3670	$ 0.3670
ERS National COP	$ 0.4740	$ 0.4740	$ 0.4740	$ 0.4740
IMSET Effective Ref Price (COP*1.1)	$ 0.52	$ 0.44	$ 0.48	$ 0.52
Marketing Loan	$ 0.25	$ 0.25	$ 0.25	$ 0.25
Estimated Payments		Million $		
Baseline	$ 415.64			
IMSET		$ 941	$ 1,157	$ 1,341
Estimated Producer Receipts		Million $		
Market	$ 3,153	$ 3,198	$ 3,191	$ 3,164
Government Payments	$ 416	$ 941	$ 1,157	$ 1,341
Total	$ 3,569	$ 4,140	$ 4,348	$ 4,505
Payment per Base (Baseline) or Planted (IMSET) Acre	$ 32.48	$ 81.72	$ 106.35	$ 130.97

Table 18. Historical Evaluation of Low Price Scenario for Grain Sorghum in 2018.

Grain Sorghum	Jan CBO Baseline 2018	10 Percent	15 Percent	20 Percent
		Million Acres		
Base Acres	8.726	8.726	8.726	8.726
Planted Acres	6.500	5.85	5.525	5.2
Harvested Acres	5.675	5.11	4.82	4.54
Harvested %	87%	87%	87%	87%
		Bushels per Acre		
Harvested Yield	67.3	67.3	67.3	67.3
Payment Yield	60.4	60.4	60.4	60.4
		Million Bushels		
Production	381.9	343.7	324.6	305.5
Beginning Stocks	25	25	25	25
Imports	1	1	1	1
Supply	408	370	350	331
Change in Supply		-9.4%	-14.1%	-18.7%
Market Price	$ 3.26	$ 3.94	$ 4.28	$ 4.62
Price Elasticity from Literature	-0.45			
Statutory Reference Price	$ 3.95	$ 3.95	$ 3.95	$ 3.95
Effective Ref Price	$ 3.95	$ 3.95	$ 3.95	$ 3.95
ERS National COP	$ 5.62	$ 5.62	$ 5.62	$ 5.62
IMSET Effective Ref Price (COP*1.1)	$ 6.18	$ 5.07	$ 5.62	$ 6.18
Marketing Loan	$ 1.95	$ 1.95	$ 1.95	$ 1.95
Estimated Payments		Million $		
Baseline	$ 309			
IMSET		$ 339	$ 382	$ 418
Estimated Producer Receipts		Million $		
Market	$ 1,245	$ 1,354	$ 1,389	$ 1,411
Government Payments	$ 309	$ 339	$ 382	$ 418
Total	$ 1,554	$ 1,692	$ 1,771	$ 1,829
Payment per Base (Baseline) or Planted (IMSET) Acre	$ 35.42	$ 57.88	$ 69.11	$ 80.34

Table 19. Historical Evaluation of Low Price Scenario for Rice in 2018.

Rice	Jan CBO Baseline 2018	10 Percent	15 Percent	20 Percent
		Million Acres		
Base Acres	4.933	4.933	4.933	4.933
Planted Acres	2.832	2.5488	2.4072	2.2656
Harvested Acres	2.810	2.53	2.39	2.25
Harvested %	99%	99%	99%	99%
		Pounds per Acre		
Harvested Yield	7,651	7,651	7,651	7,651
Payment Yield	6,196	6,196	6,196	6,196
		Million CWTS		
Production	215.0	193.5	182.7	172.0
Beginning Stocks	29.2	29.2	29.2	29.2
Imports	24.0	24.0	24.0	24.0
Supply	268.2	246.7	235.9	225.2
Change in Supply		-8.0%	-12.0%	-16.0%
Market Price	$ 12.60	$ 14.28	$ 15.13	$ 15.97
Price Elasticity from Literature	-0.6			
Statutory Reference Price	$ 14.00	$ 14.00	$ 14.00	$ 14.00
Effective Ref Price	$ 14.00	$ 14.00	$ 14.00	$ 14.00
ERS National COP	$ 11.62	$ 11.62	$ 11.62	$ 11.62
IMSET Effective Ref Price (COP*1.1)	$ 12.78	$ 13.39	$ 13.09	$ 12.78
Marketing Loan	$ 6.50	$ 6.50	$ 6.50	$ 6.50
Estimated Payments		Million $		
Baseline	$ 364			
IMSET		$ -	$ -	$ -
Estimated Producer Receipts		Million $		
Market	$ 2,709	$ 2,764	$ 2,764	$ 2,746
Government Payments	$ 364	$ -	$ -	$ -
Total	$ 3,073	$ 2,764	$ 2,764	$ 2,746
Payment per Base (Baseline) or Planted (IMSET) Acre	$ 73.73	$ -	$ -	$ -

Table 20. Historical Evaluation of Low Price Scenario for Peanuts in 2018.

Peanuts	Jan CBO Baseline 2018	10 Percent	15 Percent	20 Percent
		Thousand Acres		
Base Acres	2,840	2840	2840	2840
Planted Acres	1,475	1327.5	1253.75	1180
Harvested Acres	1,438	1294.20	1222.30	1150.40
Harvested %	97%	97%	97%	97%
		Pounds per Acre		
Harvested Yield	4,080.0	4,080.0	4,080.0	4,080.0
Payment Yield	3,443.0	3,443.0	3,443.0	3,443.0
		Million Pounds		
Production	5,867.0	5,280.3	4,987.0	4,693.6
Beginning Stocks	2,689.0	2,689.0	2,689.0	2,689.0
Imports	90.0	90.0	90.0	90.0
Supply	8,646.0	8,059.3	7,766.0	7,472.6
Change in Supply		-6.8%	-10.2%	-13.6%
Market Price	$ 0.12	$ 0.13	$ 0.14	$ 0.14
Price Elasticity from Literature	-1.01			
Statutory Reference Price	$ 0.2675	$ 0.2675	$ 0.2675	$ 0.2675
Effective Ref Price	$ 0.2675	$ 0.2675	$ 0.2675	$ 0.2675
ERS National COP	$ 0.2250	$ 0.2250	$ 0.2250	$ 0.2250
IMSET Effective Ref Price (COP*1.1)	$ 0.248	$ 0.258	$ 0.253	$ 0.248
Marketing Loan	$ 0.1775	$ 0.1775	$ 0.1775	$ 0.1775
Estimated Payments		Million $		
Baseline	$ 748			
IMSET		$ 311	$ 275	$ 242
Estimated Producer Receipts		Million $		
Market	$ 722	$ 693	$ 675	$ 655
Government Payments	$ 748	$ 311	$ 275	$ 242
Total	$ 1,470	$ 1,004	$ 950	$ 897
Payment per Base (Baseline) or Planted (IMSET) Acre	$ 263.39	$ 234.12	$ 219.49	$ 204.86

Table 21. Summary of Results for the Low Price Scenario.

Commodity	Baseline			10%			15%			20%		
	Market	Government	Total	Market	Government	Total	Market	Government	Total	Market	Government	Total
Rice	$ 2,709	$ 364	$ 3,073	$ 2,764	$ -	$ 2,764	$ 2,764	$ -	$ 2,764	$ 2,746	$ -	$ 2,746
Corn	$ 52,352	$ 841	$ 53,193	$ 60,591	$ -	$ 60,591	$ 63,587	$ -	$ 63,587	$ 65,835	$ -	$ 65,835
Upland Cotton	$ 3,153	$ 416	$ 3,569	$ 3,198	$ 941	$ 4,140	$ 3,191	$ 1,157	$ 4,348	$ 3,164	$ 1,341	$ 4,505
Wheat	$ 9,485	$ 689	$ 10,175	$ 9,854	$ 543	$ 10,397	$ 9,929	$ 558	$ 10,487	$ 9,930	$ 568	$ 10,498
Soybeans	$ 35,928	$ -	$ 35,928	$ 40,504	$ -	$ 40,504	$ 42,111	$ -	$ 42,111	$ 43,264	$ -	$ 43,264
Grain Sorghum	$ 1,245	$ 309	$ 1,554	$ 1,354	$ 339	$ 1,692	$ 1,389	$ 382	$ 1,771	$ 1,411	$ 418	$ 1,829
Peanuts	$ 722	$ 748	$ 1,470	$ 693	$ 311	$ 1,004	$ 675	$ 275	$ 950	$ 655	$ 242	$ 897
Totals	$ 105,594	$ 3,367	$ 108,961	$ 118,957	$ 2,134	$ 121,091	$ 123,646	$ 2,372	$ 126,018	$ 127,005	$ 2,568	$ 129,573

Table 22. Historical Evaluation of High Price Scenario for Corn in 2023.

Corn	Jan CBO Baseline 2023	10 Percent	15 Percent	20 Percent
		Million Acres		
Base Acres	93.7	93.7	93.7	93.7
Planted Acres	93.000	83.7	79.05	74.4
Harvested Acres	85.188	76.68	72.42	68.16
Harvested %	92%	92%	92%	92%
		Bushels per Acre		
Harvested Yield	178.5	178.5	178.5	178.5
Payment Yield	145.0	145.0	145.0	145.0
		Million Bushels		
Production	15,206.1	13,687.4	12,927.0	12,166.6
Beginning Stocks	1,180	1,180	1,180	1,180
Imports	35	35	35	35
Supply	16,421	14,902	14,142	13,382
Change in Supply		-9.2%	-13.9%	-18.5%
Market Price	$ 4.55	$ 5.95	$ 6.65	$ 7.36
Price Elasticity from Literature	-0.3			
Statutory Reference Price	$ 3.70	$ 3.70	$ 3.70	$ 3.70
Effective Ref Price	$ 3.70	$ 3.70	$ 3.70	$ 3.70
ERS National COP	$ 4.89	$ 4.89	$ 4.89	$ 4.89
IMSET Effective Ref Price (COP*1.1)	$ 5.38	$ 4.54	$ 4.96	$ 5.38
Marketing Loan	$ 2.20	$ 2.20	$ 2.20	$ 2.20
Estimated Payments		Million $		
Baseline	$ -			
IMSET		$ -	$ -	$ -
Estimated Producer Receipts		Million $		
Market	$ 69,188	$ 81,476	$ 86,029	$ 89,513
Government Payments	$ -	$ -	$ -	$ -
Total	$ 69,188	$ 81,476	$ 86,029	$ 89,513
Payment per Base (Baseline) or Planted (IMSET) Acre	$ -	$ -	$ -	$ -

Table 23. Historical Evaluation of High Price Scenario for Soybeans in 2023.

Soybeans	Jan CBO Baseline 2023	10 Percent	15 Percent	20 Percent
		Million Acres		
Base Acres	52.53	52.53	52.53	52.53
Planted Acres	87.500	78.75	74.375	70
Harvested Acres	86.625	77.95	73.62	69.29
Harvested %	99%	99%	99%	99%
		Bushels per Acre		
Harvested Yield	52.0	52.0	52.0	52.0
Payment Yield	41.1	41.1	41.1	41.1
		Million Bushels		
Production	4,504.5	4,053.5	3,828.3	3,603.1
Beginning Stocks	219	219	219	219
Imports	25	25	25	25
Supply	4,749	4,297	4,072	3,847
Change in Supply		-9.5%	-14.2%	-19.0%
Market Price	$ 12.40	$ 15.76	$ 17.45	$ 19.13
Price Elasticity from Literature	-0.35			
Statutory Reference Price	$ 8.40	$ 8.40	$ 8.40	$ 8.40
Effective Ref Price	$ 8.40	$ 8.40	$ 8.40	$ 8.40
ERS National COP	$ 12.04	$ 12.04	$ 12.04	$ 12.04
IMSET Effective Ref Price (COP*1.1)	$ 13.24	$ 10.82	$ 12.03	$ 13.24
Marketing Loan	$ 6.20	$ 6.20	$ 6.20	$ 6.20
Estimated Payments		Million $		
Baseline	$ -			
IMSET		$ -	$ -	$ -
Estimated Producer Receipts		Million $		
Market	$ 55,856	$ 63,903	$ 66,785	$ 68,910
Government Payments	$ -	$ -	$ -	$ -
Total	$ 55,856	$ 63,903	$ 66,785	$ 68,910
Payment per Base (Baseline) or Planted (IMSET) Acre	$ -	$ -	$ -	$ -

Table 24. Historical Evaluation of High Price Scenario for Wheat in 2023.

Wheat	Jan CBO Baseline 2023	10 Percent	15 Percent	20 Percent
		Million Acres		
Base Acres	63.7	63.7	63.7	63.7
Planted Acres	48.000	43.2	40.8	38.4
Harvested Acres	38.000	36.74	34.70	32.66
Harvested %	79%	85%	85%	85%
		Bushels per Acre		
Harvested Yield	49.0	49.0	49.0	49.0
Payment Yield	41.9	41.9	41.9	41.9
		Million Bushels		
Production	1,862.0	1,800.4	1,700.4	1,600.4
Beginning Stocks	571	571	571	571
Imports	140	140	140	140
Supply	2,573	2,511	2,411	2,311
Change in Supply		-2.4%	-6.3%	-10.2%
Market Price	$ 6.96	$ 7.38	$ 8.05	$ 8.73
Price Elasticity from Literature	-0.4			
Statutory Reference Price	$ 5.50	$ 5.50	$ 5.50	$ 5.50
Effective Ref Price	$ 5.50	$ 5.50	$ 5.50	$ 5.50
ERS National COP	$ 9.68	$ 9.68	$ 9.68	$ 9.68
IMSET Effective Ref Price (COP*1.1)	$ 10.65	$ 8.07	$ 9.36	$ 10.65
Marketing Loan	$ 3.38	$ 3.38	$ 3.38	$ 3.38
Estimated Payments		Million $		
Baseline	$ -			
IMSET		$ 1,073	$ 1,901	$ 2,624
Estimated Producer Receipts		Million $		
Market	$ 12,960	$ 13,281	$ 13,693	$ 13,970
Government Payments	$ -	$ 1,073	$ 1,901	$ 2,624
Total	$ 12,960	$ 14,354	$ 15,594	$ 16,594
Payment per Base (Baseline) or Planted (IMSET) Acre	$ -	$ 24.85	$ 46.60	$ 68.34

Table 25. Historical Evaluation of High Price Scenario for Cotton in 2023.

Seed Cotton	Jan CBO Baseline 2023	10 Percent	15 Percent	20 Percent
		Million Acres		
Base Acres	12.805	12.805	12.805	12.805
Planted Acres	10.000	9	8.5	8
Harvested Acres	8.500	7.65	7.23	6.80
Harvested %	85%	85%	85%	85%
		Pounds per Acre		
Harvested Yield	850.0	850.0	850.0	850.0
Payment Yield	1,748.0	1,748.0	1,748.0	1,748.0
		Million 480 lb Bales		
Production	15.1	13.5	12.8	12.0
Beginning Stocks	2.947	2.947	2.947	2.947
Imports	0.005	0.005	0.005	0.005
Supply	18	16	16	15
Change in Supply		-8.4%	-12.5%	-16.7%
Market Price	$ 0.3949	$ 0.45	$ 0.48	$ 0.50
Price Elasticity from Literature	-0.6			
Statutory Reference Price	$ 0.3670	$ 0.3670	$ 0.3670	$ 0.3670
Effective Ref Price	$ 0.367	$ 0.367	$ 0.367	$ 0.367
ERS National COP	$ 0.5310	$ 0.5310	$ 0.5310	$ 0.5310
IMSET Effective Ref Price (COP*1.1)	$ 0.58	$ 0.48	$ 0.53	$ 0.58
Marketing Loan	$ 0.25	$ 0.25	$ 0.25	$ 0.25
Estimated Payments		Million $		
Baseline	$ -			
IMSET		$ 343	$ 662	$ 941
Estimated Producer Receipts		Million $		
Market	$ 2,853	$ 2,926	$ 2,932	$ 2,919
Government Payments	$ -	$ 343	$ 662	$ 941
Total	$ 2,853	$ 3,268	$ 3,594	$ 3,859
Payment per Base (Baseline) or Planted (IMSET) Acre	$ -	$ 38.07	$ 77.84	$ 117.60

Table 26. Historical Evaluation of High Price Scenario for Grain Sorghum in 2023.

Grain Sorghum	Jan CBO Baseline 2023	10 Percent	15 Percent	20 Percent
		Million Acres		
Base Acres	8.8	8.8	8.8	8.8
Planted Acres	6.700	6.03	5.695	5.36
Harvested Acres	6.000	5.26	4.97	4.68
Harvested %	90%	87%	87%	87%
		Bushels per Acre		
Harvested Yield	69.0	69.0	69.0	69.0
Payment Yield	62.9	62.9	62.9	62.9
		Million Bushels		
Production	414.0	363.3	343.1	322.9
Beginning Stocks	24	24	24	24
Imports	0	0	0	0
Supply	438	387	367	347
Change in Supply		-11.6%	-16.2%	-20.8%
Market Price	$ 4.93	$ 6.20	$ 6.70	$ 7.21
Price Elasticity from Literature	-0.45			
Statutory Reference Price	$ 3.95	$ 3.95	$ 3.95	$ 3.95
Effective Ref Price	$ 4.04	$ 4.04	$ 4.04	$ 4.04
ERS National COP	$ 8.64	$ 8.64	$ 8.64	$ 8.64
IMSET Effective Ref Price (COP*1.1)	$ 9.50	$ 6.77	$ 8.14	$ 9.50
Marketing Loan	$ 2.20	$ 2.20	$ 2.20	$ 2.20
Estimated Payments		Million $		
Baseline	$ -			
IMSET		$ 185	$ 437	$ 658
Estimated Producer Receipts		Million $		
Market	$ 2,041	$ 2,252	$ 2,300	$ 2,328
Government Payments	$ -	$ 185	$ 437	$ 658
Total	$ 2,041	$ 2,437	$ 2,737	$ 2,985
Payment per Base (Baseline) or Planted (IMSET) Acre	$ -	$ 30.63	$ 76.67	$ 122.72

Table 27. Historical Evaluation of High Price Scenario for Rice in 2023.

Rice	Jan CBO Baseline 2023	10 Percent	15 Percent	20 Percent
		Million Acres		
Base Acres	4.571	4.571	4.571	4.571
Planted Acres	2.500	2.25	2.125	2
Harvested Acres	2.455	2.23	2.11	1.98
Harvested %	98%	99%	99%	99%
		Pounds per Acre		
Harvested Yield	7,587.0	7,587.0	7,587.0	7,587.0
Payment Yield	6,377.0	6,377.0	6,377.0	6,377.0
		Million CWTS		
Production	186.3	169.4	160.0	150.6
Beginning Stocks	33.5	33.5	33.5	33.5
Imports	42.5	42.5	42.5	42.5
Supply	262	245	236	227
Change in Supply		-6.4%	-10.0%	-13.6%
Market Price	$ 17.20	$ 19.05	$ 20.07	$ 21.10
Price Elasticity from Literature	-0.6			
Statutory Reference Price	$ 14.00	$ 14.00	$ 14.00	$ 14.00
Effective Ref Price	$ 14.00	$ 14.00	$ 14.00	$ 14.00
ERS National COP	$ 16.41	$ 16.41	$ 16.41	$ 16.41
IMSET Effective Ref Price (COP*1.1)	$ 18.05	$ 16.03	$ 17.04	$ 18.05
Marketing Loan	$ 7.00	$ 7.00	$ 7.00	$ 7.00
Estimated Payments		Million $		
Baseline	$ -			
IMSET		$ -	$ -	$ -
Estimated Producer Receipts		Million $		
Market	$ 320,369	$ 322,587	$ 321,120	$ 317,717
Government Payments	$ -	$ -	$ -	$ -
Total	$ 320,369	$ 322,587	$ 321,120	$ 317,717
Payment per Base (Baseline) or Planted (IMSET) Acre	$ -	$ -	$ -	$ -

Table 28. Historical Evaluation of High Price Scenario for Peanuts in 2023.

Peanuts	Jan CBO Baseline 2023	10 Percent	15 Percent	20 Percent
		Thousand Acres		
Base Acres	2451	2451	2451	2451
Planted Acres	1,650.000	1485	1402.5	1320
Harvested Acres	1,609.000	1447.75	1367.32	1286.89
Harvested %	98%	97%	97%	97%
		Pounds per Acre		
Harvested Yield	4,119.0	4,119.0	4,119.0	4,119.0
Payment Yield	3,600.0	3,600.0	3,600.0	3,600.0
		Million Pounds		
Production	6,627.5	5,963.3	5,632.0	5,300.7
Beginning Stocks	2,142	2,142	2,142	2,142
Imports	115	115	115	115
Supply	8,884	8,220	7,889	7,558
Change in Supply		-7.5%	-11.2%	-14.9%
Market Price	$ 0.172	$ 0.18	$ 0.19	$ 0.20
Price Elasticity from Literature	-1.01			
Statutory Reference Price	$ 0.2675	$ 0.2675	$ 0.2675	$ 0.2675
Effective Ref Price	$ 0.2675	$ 0.2675	$ 0.2675	$ 0.2675
ERS National COP	$ 0.3273	$ 0.3273	$ 0.3273	$ 0.3273
IMSET Effective Ref Price (COP*1.1)	$ 0.36	$ 0.31	$ 0.34	$ 0.36
Marketing Loan	$ 0.1775	$ 0.1775	$ 0.1775	$ 0.1775
Estimated Payments		Million $		
Baseline	$ 675			
IMSET		$ 586	$ 626	$ 657
Estimated Producer Receipts		Million $		
Market	$ 1,140	$ 1,102	$ 1,076	$ 1,047
Government Payments	$ 675	$ 586	$ 626	$ 657
Total	$ 1,815	$ 1,688	$ 1,702	$ 1,703
Payment per Base (Baseline) or Planted (IMSET) Acre	$ 275.40	$ 394.84	$ 446.20	$ 497.55

Table 29. Summary of Results for the High Price Scenario.

Commodity	Baseline			10%			15%			20%		
	Market	Government	Total	Market	Government	Total	Market	Government	Total	Market	Government	Total
Rice	$ 320,369	$ -	$ 320,369	$ 322,587	$ -	$ 322,587	$ 321,120	$ -	$ 321,120	$ 317,717	$ -	$ 317,717
Corn	$ 69,188	$ -	$ 69,188	$ 81,476	$ -	$ 81,476	$ 86,029	$ -	$ 86,029	$ 89,513	$ -	$ 89,513
Upland Cotton	$ 2,853	$ -	$ 2,853	$ 2,926	$ -	$ 2,926	$ 2,932	$ 662	$ 3,594	$ 2,919	$ 941	$ 3,859
Wheat	$ 12,960	$ -	$ 12,960	$ 13,281	$ 1,073	$ 14,354	$ 13,693	$ 1,901	$ 15,594	$ 13,970	$ 2,624	$ 16,594
Soybeans	$ 55,856	$ -	$ 55,856	$ 63,903	$ -	$ 63,903	$ 66,785	$ -	$ 66,785	$ 68,910	$ -	$ 68,910
Grain Sorghum	$ 2,041	$ -	$ 2,041	$ 2,252	$ 185	$ 2,437	$ 2,300	$ 437	$ 2,737	$ 2,328	$ 658	$ 2,985
Peanuts	$ 1,140	$ 675	$ 1,815	$ 1,102	$ 586	$ 1,688	$ 1,076	$ 626	$ 1,702	$ 1,047	$ 657	$ 1,703
Totals	$ 464,406	$ 675	$ 465,081	$ 487,526	$ 1,845	$ 489,371	$ 493,935	$ 3,625	$ 497,560	$ 496,403	$ 4,880	$ 501,283

Summary and Conclusions

This analysis compares the IMSET approach to an adjusted baseline that was calculated in the same manner as CBO. IMSET allows producers to take 10, 15 or 20% of their cropland for each commodity on their farm out of and place it in conserving uses. In return, IMSET would provide those producers with a higher reference price based on that commodity's cost of production (COP). Based on economic theory, when supply is reduced market prices will rise, which, in the right situations generate more income from the market, making government payments less necessary. This in a nutshell is the IMSET approach.

Through this analysis it was shown that the approach has the potential to work and work well for commodities that have inelastic demand (a small negative number close to zero) like corn, soybeans and wheat. It has less of an effect on prices for commodities with more elastic demand (a negative number around or greater than 1) like rice, cotton and peanuts. However, given the trade disruptions resulting from the administration's proposed tariffs, it is not at all clear that past supply/demand relationships will hold now or in the future.

We do have a few cautions that have been addressed throughout this report:

- In a perfect world, the individual farmer's COP would be used to develop their own reference prices. That is typically not how policy in the U.S. is made, and in general, published government generated data is used in payment calculations. This provides transparency and ensures no individual farmer can influence their own payments. There is no other way to say it: the USDA COP data for the lower acreage crops is not good, making their use in IMSET problematic. But, it is generally the only national data.

- As discussed earlier, what happens with imports will ultimately determine whether this approach is successful (as described above) or markets become inundated with imports reacting to the high prices that are created by taking land out of production, rewarding foreign producers.

- As with any farm bill provision, there would need to be rules established to determine the acres a farmer could idle. The analysis just reduced CBO baseline acres by the IMSET percentages. However, if the IMSET approach were to be adopted, a decision would need to be made regarding the acres that could be reduced. Would it be for example, the previous year's acres, an average of the past 5 years or something else?

- The voluntary nature of IMSET means that participation could vary as some producers seek to benefit from higher prices without having to set aside land, and producers likely would choose to set aside less productive acres (resulting in slippage). As a result, the potential impact from IMSET could vary widely compared to estimates.

- The IMSET approach is likely to draw the attention of the WTO based on paying on planted acreage. Historically, the U.S. has been able to provide significant support because that support was not based on current production. IMSET uses the program yield used in current programs; however, the move to paying on planted acreage will likely draw the ire of other nations (although the extent to which is less clear given the acreage set-aside involved). While paying on planted acreage makes a lot of sense in terms of directing government benefits to farmers who are actually planting, there is a strong chance that a WTO case would be brought against the United States.
    - We think IMSET is very likely to be considered Amber Box. More importantly, because it pays on plantings, it's likely product-specific Amber Box. But, as we stated above, it's not clear cut because it involves an acreage set aside. If you move to base acres, it's likely still Amber Box (in part because the US doesn't really report Blue Box), but it's probably non-product-specific at that point. As a refresher, Product-specific and non-product specific together must fit within the $19.1B AMS we agreed to in WTO.
        - Product-specific is a challenge because if payments exceed 5% of the value of the crop, everything you spend on that crop goes into the AMS calculation.
        - For non-product-specific, it simply has to be less than 5% of the value of all US crop production. In general, it's a lot easier for the non-product-specific to be exempt.

- Discussions during the current farm bill cycle around a mandatory or forced base update led us to develop an alternative IMSET scenario with the results presented in Appendix B. The results provide the comparison between the IMSET concept in Tables 5-13 above that pays on planted acres and an alternative that pays on base acres after a forced base update (FBU) was implemented. The simple average of 2021-2025 planted acres was used as the new base acres. Note: If implemented by Congress, the formula could potentially use different years and/or an Olympic average, however, the relative changes in base acres across commodities will be the same. The FBU results in about 10 million additional base acres although the only commodity with higher base acres would be soybeans with corn having the smallest relative loss. As expected, wheat would see the largest decrease with a 15.1 million acre decline in base acres. Interestingly, the results of for this alternative are only slightly different than the original analysis in terms of total payments across all commodities.
    - Government payments would not be impacted by the FBU unless the decision is made to pay on base acres. Therefore, to allow a comparison to the results in Tables 5-13, the results in Appendix B calculate government payments using the updated base acres rather than planted acres. Overall, there would be a very small

increase in government payments relative to Tables 5-13.

- We think the IMSET acres would be treated like CRP acreage in terms of Emergency Haying & Grazing. It would just be a matter of Congress authorizing it. But, emergency haying and grazing always has some detractors because of concern about loss of wildlife habitat or environmental degradation.

Appendix A. Published Data on Elasticities Used to Develop Estimates for Analysis

Commodity	Price Elasticity of Demand	Source
Corn	(-0.44 to -0.24)	FAPRI
Corn	(-0.1 to -0.39)	Fally and Sayre (2018)
Corn	-0.244	Roberts, Michael J., and Wolfram Schlenker. 2013
Corn	-0.287	Roberts, Michael J., and Wolfram Schlenker. 2013
Cotton	-0.684	Russo et al. (2008)
Cotton	-0.674	Bogmans, Christian, Pescatori, Andrea, Petrella, Ivan, Prifti, Ervin, and Martin Stuermer (2024).
Cotton	-0.572	Bogmans, Christian, Pescatori, Andrea, Petrella, Ivan, Prifti, Ervin, and Martin Stuermer (2024).
Cotton	-0.2	Johnson (1977) - The Elasticity of Foreign Demand for U.S. Ag Products
LG Rice	(-0.01 to -0.55)	Fally and Sayre (2018)
LG Rice	-0.14	Russo et al. (2008)
LG Rice	0.032	Bogmans, Christian, Pescatori, Andrea, Petrella, Ivan, Prifti, Ervin, and Martin Stuermer (2024).
LG Rice	0.062	Bogmans, Christian, Pescatori, Andrea, Petrella, Ivan, Prifti, Ervin, and Martin Stuermer (2024).
LG Rice	0.007	Roberts, Michael J., and Wolfram Schlenker. 2013
LG Rice	-0.017	Roberts, Michael J., and Wolfram Schlenker. 2013
LG Rice	(-0.487 to 0.007)	but the Fally and Sayre (2018) I found says (-0.01 to -0.55)
Wheat	(-0.33 to -0.26)	FAPRI
Wheat	(-0.09 to -1.6)	Fally and Sayre (2018)
Wheat	-0.192	Bogmans, Christian, Pescatori, Andrea, Petrella, Ivan, Prifti, Ervin, and Martin Stuermer (2024).
Wheat	-0.363	Bogmans, Christian, Pescatori, Andrea, Petrella, Ivan, Prifti, Ervin, and Martin Stuermer (2024).
Wheat	-0.109	Roberts, Michael J., and Wolfram Schlenker. 2013
Wheat	-0.095	Roberts, Michael J., and Wolfram Schlenker. 2013
Wheat	-0.2	Johnson (1977) - The Elasticity of Foreign Demand for U.S. Ag Products
Soybeans	(-0.05 to -0.329)	Fally and Sayre (2018)
Soybeans	-0.475	Bogmans, Christian, Pescatori, Andrea, Petrella, Ivan, Prifti, Ervin, and Martin Stuermer (2024).
Soybeans	-1.87	Bogmans, Christian, Pescatori, Andrea, Petrella, Ivan, Prifti, Ervin, and Martin Stuermer (2024).
Soybeans	-0.329	Roberts, Michael J., and Wolfram Schlenker. 2013
Soybeans	-0.236	Roberts, Michael J., and Wolfram Schlenker. 2013
Soybeans	-0.4	Johnson (1977) - The Elasticity of Foreign Demand for U.S. Ag Products
Sorghum	(-0.49 to -0.3)	FAPRI
Sorghum	(-0.06 to -0.49)	Fally and Sayre (2018)
Sorghum	0.51	Pocock, Asante, Olonga and Muzenda (2016)
Sorghum	-0.4	Johnson (1977) - The Elasticity of Foreign Demand for U.S. Ag Products
Peanuts	(-0 to -0.4)	Fally and Sayre (2018)
Peanuts	(-0.3 to -0.1)	FAPRI
Peanuts	-1.0149	Rafael Bakhtavoryan, Guo “Chris” Cheng, Oral Capps Jr. and Senarath Dharmasena (2022)
Peanuts	-0.8028	Rafael Bakhtavoryan, Guo “Chris” Cheng, Oral Capps Jr. and Senarath Dharmasena (2022)

Appendix B. Results Assuming Forced Base Update and IMSET Paying on Base Acres

Appendix Table B1. Comparison of Planted and Base Acres Before and After the Forced Base Update with IMSET Planted Acres by Commodity.

Commodity	CBO 2026 Planted Acres	Original Base Acres	FBU Base Acres	IMSET Planted Acres 10%	15%	20%
		----------	Million Acres	----------		
Rice	2.78	4.65	2.68	2.50	2.36	2.22
Corn	91.00	94.50	93.10	81.90	77.35	72.80
Upland Cotton	10.60	12.00	10.97	9.54	9.01	8.48
Wheat	45.00	61.80	46.70	40.50	38.25	36.00
Soybeans	86.00	53.50	85.32	77.40	73.10	68.80
Grain Sorghum	6.50	8.50	6.75	5.85	5.53	5.20
Peanuts	1.60	2.45	1.69	1.44	1.36	1.28
Totals	**243.48**	**237.40**	**247.21**	**219.13**	**206.95**	**194.78**

Appendix Table B2. Comparison of IMSET Market, Government and Total Receipts Relative to the Baseline, Given Base Update and Paying on Base Acres.

		IMSET										
Commodity	2026 CBO Baseline Assuming 100% PLC & FBU	10%			15%			20%				
	Market	Government	Total	Market	Government	Total	Market	Government	Total	Market	Government	Total
	---- $ Billion ----			---- $ Billion ----			---- $ Billion ----			---- $ Billion ----		
Rice	$ 3.04	$ 0.36	$ 3.40	$ 3.05	$ 0.22	$ 3.27	$ 3.03	$ 0.17	$ 3.20	$ 2.99	$ 0.13	$ 3.12
Corn	$ 61.88	$ 6.22	$ 68.10	$ 71.98	$ 2.64	$ 74.62	$ 75.67	$ 1.66	$ 77.34	$ 78.46	$ 1.06	$ 79.52
Upland Cotton	$ 2.51	$ 1.05	$ 3.56	$ 2.56	$ 1.38	$ 3.94	$ 2.55	$ 1.53	$ 4.09	$ 2.54	$ 1.68	$ 4.21
Wheat	$ 10.24	$ 1.46	$ 11.69	$ 10.78	$ 1.84	$ 12.62	$ 10.92	$ 2.03	$ 12.95	$ 10.97	$ 2.22	$ 13.19
Soybeans	$ 44.67	$ 3.54	$ 48.21	$ 50.64	$ 2.05	$ 52.69	$ 52.76	$ 1.60	$ 54.36	$ 54.29	$ 1.26	$ 55.55
Grain Sorghum	$ 1.64	$ 0.26	$ 1.91	$ 1.78	$ 0.50	$ 2.28	$ 1.82	$ 0.63	$ 2.45	$ 1.85	$ 0.76	$ 2.61
Peanuts	$ 1.39	$ 0.43	$ 1.82	$ 1.34	$ 0.47	$ 1.81	$ 1.31	$ 0.50	$ 1.80	$ 1.27	$ 0.52	$ 1.79
Totals	$ 125.38	$ 13.32	$ 138.70	$ 142.13	$ 9.11	$ 151.24	$ 148.06	$ 8.12	$ 156.18	$ 152.37	$ 7.62	$ 159.99

Appendix Table B3. Projected Market and Government Revenues for the Baseline and IMSET Alternatives for Corn in 2026, Given Base Update and Paying on Base Acres.

Corn	Jan CBO Baseline 2026 FBU	IMSET 10 Percent	IMSET 15 Percent	IMSET 20 Percent
		Million Acres		
Base Acres	93.1	93.1	93.1	93.1
Planted Acres	91.000	81.9	77.35	72.8
Harvested Acres	83.356	75.02	70.85	66.68
Harvested %	92%	92%	92%	92%
		Bushels per Acre		
Harvested Yield	183.3	183.3	183.3	183.3
Payment Yield	145.0	145.0	145.0	145.0
		Million Bushels		
Production	15,279.2	13,751.2	12,987.3	12,223.3
Beginning Stocks	2,109	2,109	2,109	2,109
Imports	25	25	25	25
Supply	17,413	15,885	15,121	14,357
Change in Supply		-8.8%	-13.2%	-17.5%
Market Price	$ 4.05	$ 5.23	$ 5.83	$ 6.42
Price Elasticity from Literature	-0.3			
Statutory Reference Price	$ 4.10	$ 4.10	$ 4.10	$ 4.10
OBBBA Effective Ref Price	$ 4.42	$ 4.42	$ 4.42	$ 4.42
ERS National COP	$ 4.81	$ 4.81	$ 4.81	$ 4.81
IMSET Effective Ref Price (COP*1.1)	$ 5.29	$ 4.86	$ 5.07	$ 5.29
Marketing Loan	$ 2.42	$ 2.42	$ 2.42	$ 2.42
Estimated Payments		Million $		
Baseline	$ 4,246			
IMSET		$ -	$ -	$ -
Estimated Producer Receipts Using Average Prices		Million $		
Market	$ 61,881	$ 71,982	$ 75,675	$ 78,463
Government Payments	$ 4,246	$ -	$ -	$ -
Total	$ 66,126	$ 71,982	$ 75,675	$ 78,463
Estimated Producer Receipts Simulating 500 Outcomes		Million $		
Market	$ 61,881	$ 71,982	$ 75,675	$ 78,463
Government Payments	$ 6,221	$ 2,639	$ 1,662	$ 1,062
Total	$ 68,102	$ 74,621	$ 77,337	$ 79,525
Prob of Pmt	71%	38%	27%	19%
		Million Acres		
Reduction in Planted Acres	0.0	-9.1	-13.7	-18.2
Planted Acres Minus Base Acres	-2.1	-11.2	-15.8	-20.3
Payment per Base Acre	$ 66.82	$ 28.35	$ 17.85	$ 11.40

Appendix Table B4. Projected Market and Government Revenues for the Baseline and IMSET Alternatives for Soybeans in 2026, Given Base Update and Paying on Base Acres.

Soybeans	Jan CBO Baseline 2026 FBU	IMSET 10 Percent	IMSET 15 Percent	IMSET 20 Percent
		Million Acres		
Base Acres	85.32	85.32	85.32	85.32
Planted Acres	86.000	77.4	73.1	68.8
Harvested Acres	85.140	76.63	72.37	68.11
Harvested %	99%	99%	99%	99%
		Bushels per Acre		
Harvested Yield	53.0	53.0	53.0	53.0
Payment Yield	41.2	41.2	41.2	41.2
		Million Bushels		
Production	4,512	4,061	3,836	3,610
Beginning Stocks	435	435	435	435
Imports	20	20	20	20
Supply	4,967	4,516	4,291	4,065
Change in Supply		-9.1%	-13.6%	-18.2%
Market Price	$ 9.90	$ 12.47	$ 13.75	$ 15.04
Price Elasticity from Literature	-0.35			
Statutory Reference Price	$ 10.00	$ 10.00	$ 10.00	$ 10.00
OBBBA Effective Ref Price	$ 10.71	$ 10.71	$ 10.71	$ 10.71
ERS National COP	$ 12.04	$ 12.04	$ 12.04	$ 12.04
IMSET Effective Ref Price (COP*1.1)	$ 13.24	$ 11.98	$ 12.61	$ 13.24
Marketing Loan	$ 6.82	$ 6.82	$ 6.82	$ 6.82
Estimated Payments		Million $		
Baseline	$ 2,420			
IMSET		$ -	$ -	$ -
Estimated Producer Receipts Using Average Prices		Million $		
Market	$ 44,673	$ 50,641	$ 52,755	$ 54,290
Government Payments	$ 2,420	$ -	$ -	$ -
Total	$ 47,093	$ 50,641	$ 52,755	$ 54,290
Estimated Producer Receipts Simulating 500 Outcomes		Million $		
Market	$ 44,673	$ 50,641	$ 52,755	$ 54,290
Government Payments	$ 3,542	$ 2,053	$ 1,602	$ 1,258
Total	$ 48,215	$ 52,694	$ 54,357	$ 55,548
Prob of Pmt	67%	42%	33%	28%
		Million Acres		
Reduction in Planted Acres	0.0	-8.6	-12.9	-17.2
Planted Acres Minus Base Acres	0.7	-7.9	-12.2	-16.5
Payment per Base Acre	$ 41.51	$ 24.06	$ 18.78	$ 14.75

Appendix Table B5. Projected Market and Government Revenues for the Baseline and IMSET Alternatives for Wheat in 2026, Given Base Update and Paying on Base Acres.

Wheat	Jan CBO Baseline 2026 FBU	IMSET 10 Percent	IMSET 15 Percent	IMSET 20 Percent
		Million Acres		
Base Acres	46.7	46.7	46.7	46.7
Planted Acres	45.000	40.5	38.25	36
Harvested Acres	37.000	33.30	31.45	29.60
Harvested %	82%	82%	82%	82%
		Bushels per Acre		
Harvested Yield	49.4	49.4	49.4	49.4
Payment Yield	41.0	41.0	41.0	41.0
		Million Bushels		
Production	1,827.8	1,645.0	1,553.6	1,462.2
Beginning Stocks	738	738	738	738
Imports	120	120	120	120
Supply	2,686	2,503	2,412	2,320
Change in Supply		-6.8%	-10.2%	-13.6%
Market Price	$ 5.60	$ 6.55	$ 7.03	$ 7.51
Price Elasticity from Literature	-0.4			
Statutory Reference Price	$ 6.35	$ 6.35	$ 6.35	$ 6.35
OBBBA Effective Ref Price	$ 6.35	$ 6.35	$ 6.35	$ 6.35
ERS National COP	$ 7.92	$ 7.92	$ 7.92	$ 7.92
IMSET Effective Ref Price (COP*1.1)	$ 8.71	$ 7.53	$ 8.12	$ 8.71
Marketing Loan	$ 3.72	$ 3.72	$ 3.72	$ 3.72
Estimated Payments		Million $		
Baseline	$ 1,221			
IMSET		$ 1,381	$ 1,456	$ 1,514
Estimated Producer Receipts Using Average Prices		Million $		
Market	$ 10,236	$ 10,779	$ 10,921	$ 10,975
Government Payments	$ 1,221	$ 1,381	$ 1,456	$ 1,514
Total	$ 11,456	$ 12,160	$ 12,377	$ 12,489
Estimated Producer Receipts Simulating 500 Outcomes		Million $		
Market	$ 10,236	$ 10,779	$ 10,921	$ 10,975
Government Payments	$ 1,457	$ 1,838	$ 2,027	$ 2,218
Total	$ 11,693	$ 12,617	$ 12,948	$ 13,193
Prob of Pmt	78%	80%	81%	81%
		Million Acres		
Reduction in Planted Acres	0.0	-4.5	-6.8	-9.0
Planted Acres Minus Base Acres	-1.7	-6.2	-8.5	-10.7
Payment per Base Acre	$ 31.20	$ 39.35	$ 43.41	$ 47.49

Appendix Table B6. Projected Market and Government Revenues for the Baseline and IMSET Alternatives for Seed Cotton in 2026, Given Base Update and Paying on Base Acres.

Seed Cotton	Jan CBO Baseline 2026 FBU	IMSET 10 Percent	IMSET 15 Percent	IMSET 20 Percent
		Million Acres		
Base Acres	10.972	10.972	10.972	10.972
Planted Acres	10.600	9.54	9.01	8.48
Harvested Acres	8.268	7.44	7.03	6.61
Harvested %	78%	78%	78%	78%
		Pounds per Acre		
Harvested Yield	859	859	859	859
Payment Yield	1,768	1,768	1,768	1,768
		Million 480 lb Bales		
Production	14.8	13.3	12.6	11.8
Beginning Stocks	4.1	4.1	4.1	4.1
Imports	0.0	0.0	0.0	0.0
Supply	18.9	17.5	16.7	16.0
Change in Supply		-7.8%	-11.7%	-15.6%
Market Price	$ 0.35	$ 0.40	$ 0.42	$ 0.45
Price Elasticity from Literature	-0.6			
Statutory Reference Price	$ 0.42	$ 0.42	$ 0.42	$ 0.42
OBBBA Effective Ref Price	$ 0.42	$ 0.42	$ 0.42	$ 0.42
ERS National COP	$ 0.50	$ 0.50	$ 0.50	$ 0.50
IMSET Effective Ref Price (COP*1.1)	$ 0.55	$ 0.48	$ 0.52	$ 0.55
Marketing Loan	$ 0.30	$ 0.30	$ 0.30	$ 0.30
Estimated Payments		Million $		
Baseline	$ 1,088			
IMSET		$ 1,194	$ 1,244	$ 1,281
Estimated Producer Receipts Using Average Prices		Million $		
Market	$ 2,514	$ 2,557	$ 2,554	$ 2,535
Government Payments	$ 1,088	$ 1,194	$ 1,244	$ 1,281
Total	$ 3,602	$ 3,751	$ 3,799	$ 3,816
Estimated Producer Receipts Simulating 500 Outcomes		Million $		
Market	$ 2,514	$ 2,557	$ 2,554	$ 2,535
Government Payments	$ 1,051	$ 1,383	$ 1,532	$ 1,675
Total	$ 3,565	$ 3,941	$ 4,086	$ 4,210
Prob of Pmt	90%	93%	93%	94%
		Million Acres		
Reduction in Planted Acres	0.0	-1.1	-1.6	-2.1
Planted Acres Minus Base Acres	-0.4	-1.4	-2.0	-2.5
Payment per Base Acre	$ 95.75	$ 126.08	$ 139.61	$ 152.69

Appendix Table B7. Projected Market and Government Revenues for the Baseline and IMSET Alternatives for Grain Sorghum in 2026, Given Base Update and Paying on Base Acres.

Grain Sorghum	Jan CBO Baseline 2026 FBU	IMSET 10 Percent	IMSET 15 Percent	IMSET 20 Percent
		Million Acres		
Base Acres	6.754	6.754	6.754	6.754
Planted Acres	6.500	5.85	5.525	5.2
Harvested Acres	5.800	5.22	4.93	4.64
Harvested %	89%	89%	89%	89%
		Bushels per Acre		
Harvested Yield	70	70	70	70
Payment Yield	62	62	62	62
		Million Bushels		
Production	406.0	365.4	345.1	324.8
Beginning Stocks	40	40	40	40
Imports	0	0	0	0
Supply	446	405	385	365
Change in Supply		-9.1%	-13.7%	-18.2%
Market Price	$ 4.05	$ 4.87	$ 5.28	$ 5.69
Price Elasticity from Literature	-0.45			
Statutory Reference Price	$ 4.40	$ 4.40	$ 4.40	$ 4.40
OBBBA Effective Ref Price	$ 4.67	$ 4.67	$ 4.67	$ 4.67
ERS National COP	$ 7.08	$ 7.08	$ 7.08	$ 7.08
IMSET Effective Ref Price (COP*1.1)	$ 7.79	$ 6.23	$ 7.01	$ 7.79
Marketing Loan	$ 2.42	$ 2.42	$ 2.42	$ 2.42
Estimated Payments Using Average Prices		Million $		
Baseline	$ 221			
IMSET		$ 419	$ 504	$ 575
Estimated Producer Receipts Using Average Prices		Million $		
Market	$ 1,644	$ 1,779	$ 1,822	$ 1,848
Government Payments	$ 221	$ 419	$ 504	$ 575
Total	$ 1,865	$ 2,198	$ 2,325	$ 2,423
Estimated Producer Receipts Simulating 500 Outcomes		Million $		
Market	$ 1,644	$ 1,779	$ 1,822	$ 1,848
Government Payments	$ 261	$ 503	$ 631	$ 759
Total	$ 1,906	$ 2,282	$ 2,452	$ 2,607
Prob of Pmt	78%	92%	94%	95%
		Million Acres		
Reduction in Planted Acres	0.0	-0.6	-1.0	-1.3
Planted Acres Minus Base Acres	-0.3	-0.9	-1.2	-1.6
Payment per Base Acre	$ 38.69	$ 74.51	$ 93.37	$ 112.38

Appendix Table B8. Projected Market and Government Revenues for the Baseline and IMSET Alternatives for Rice in 2026, Given Base Update and Paying on Base Acres.

Rice	Jan CBO Baseline 2026 FBU	IMSET 10 Percent	IMSET 15 Percent	IMSET 20 Percent
		Million Acres		
Base Acres	2.675	2.675	2.675	2.675
Planted Acres	2.775	2.498	2.359	2.220
Harvested Acres	2.725	2.45	2.32	2.18
Harvested %	98%	98%	98%	98%
		Pounds per Acre		
Harvested Yield	7,674	7,674	7,674	7,674
Payment Yield	6,385	6,385	6,385	6,385
		Million CWTS		
Production	209.1	188.2	177.7	167.3
Beginning Stocks	46.7	46.7	46.7	46.7
Imports	49.3	49.3	49.3	49.3
Supply	305.1	284.2	273.7	263.3
Change in Supply		-6.9%	-10.3%	-13.7%
Market Price	$ 14.54	$ 16.20	$ 17.03	$ 17.86
Price Elasticity from Literature	-0.6			
Statutory Reference Price	$ 16.90	$ 16.90	$ 16.90	$ 16.90
OBBBA Effective Ref Price	$ 16.90	$ 16.90	$ 16.90	$ 16.90
ERS National COP	$ 15.90	$ 15.90	$ 15.90	$ 15.90
IMSET Effective Ref Price (COP*1.1)	$ 17.49	$ 17.20	$ 17.34	$ 17.49
Marketing Loan	$ 7.70	$ 7.70	$ 7.70	$ 7.70
Estimated Payments		Million $		
Baseline	$ 343			
IMSET		$ 135	$ 40	$ -
Estimated Producer Receipts Using Average Prices		Million $		
Market	$ 3,041	$ 3,049	$ 3,027	$ 2,988
Government Payments	$ 343	$ 135	$ 40	$ -
Total	$ 3,383	$ 3,184	$ 3,067	$ 2,988
Estimated Producer Receipts Simulating 500 Outcomes		Million $		
Market	$ 3,041	$ 3,049	$ 3,027	$ 2,988
Government Payments	$ 361	$ 223	$ 173	$ 134
Total	$ 3,402	$ 3,273	$ 3,200	$ 3,122
Prob of Pmt	84%	64%	51%	41%
		Million Acres		
Reduction in Planted Acres	0.00	-0.28	-0.42	-0.56
Planted Acres Minus Base Acres	0.10	-0.18	-0.32	-0.46
Payment per Base Acre	$ 135.06	$ 83.55	$ 64.63	$ 50.15

Appendix Table B9. Projected Market and Government Revenues for the Baseline and IMSET Alternatives for Peanuts in 2026, Given Base Update and Paying on Base Acres.

Peanuts	Jan CBO Baseline 2026 FBU	IMSET 10 Percent	IMSET 15 Percent	IMSET 20 Percent
		Thousand Acres		
Base Acres	1,685	1,685	1,685	1,685
Planted Acres	1,600	1,440	1,360	1,280
Harvested Acres	1,560	1,404	1,326	1,248
Harvested %	98%	98%	98%	98%
		Pounds per Acre		
Harvested Yield	3,892	3,892	3,892	3,892
Payment Yield	3,600	3,600	3,600	3,600
		Million Pounds		
Production	6,071.5	5,464.4	5,160.8	4,857.2
Beginning Stocks	2,299.0	2,299.0	2,299.0	2,299.0
Imports	115.0	115.0	115.0	115.0
Supply	8,485.5	7,878.4	7,574.8	7,271.2
Change in Supply		-7.2%	-10.7%	-14.3%
Market Price	$ 0.2289	$ 0.245	$ 0.253	$ 0.261
Price Elasticity from Literature	-1.01			
Statutory Reference Price	$ 0.315	$ 0.315	$ 0.315	$ 0.315
OBBBA Effective Ref Price	$ 0.315	$ 0.315	$ 0.315	$ 0.315
ERS National COP	$ 0.3291	$ 0.3291	$ 0.3291	$ 0.3291
IMSET Effective Ref Price (COP*1.1)	$ 0.362	$ 0.339	$ 0.350	$ 0.362
Marketing Loan	$ 0.195	$ 0.195	$ 0.195	$ 0.195
Estimated Payments Using Average Prices		Million $		
Baseline	$ 444			
IMSET		$ 412	$ 404	$ 394
Estimated Producer Receipts Using Average Prices		Million $		
Market	$ 1,390	$ 1,339	$ 1,307	$ 1,269
Government Payments	$ 444	$ 412	$ 404	$ 394
Total	$ 1,834	$ 1,751	$ 1,711	$ 1,664
Estimated Producer Receipts Simulating 500 Outcomes		Million $		
Market	$ 1,390	$ 1,339	$ 1,307	$ 1,269
Government Payments	$ 426	$ 474	$ 496	$ 518
Total	$ 1,816	$ 1,813	$ 1,803	$ 1,787
Prob of Pmt	100%	100%	100%	100%
		Thousand Acres		
Reduction in Planted Acres	0	-160	-240	-320
Planted Acres Minus Base Acres	-85	-245	-325	-405
Payment per Base Acre	$ 252.69	$ 281.27	$ 294.66	$ 307.44