



Payment Yield Update



The 2018 Farm Bill gives landowners a one-time opportunity to update their payment yield, which will take effect starting with the 2020/2021 crop year. Payment yield, or commonly called PLC yield, is the established yield of the farm and is used when determining Price Loss Coverage (PLC) payments. Landowners have until September 30th, 2020 to update their payment yield with their local FSA office.

A payment yield update was offered in the 2014 Farm Bill, but many farmers across the nation had experienced drought and low yields during the years that the payment yield update used (2008-2012). Recognizing that many farmers were in this situation, Congress is again offering this opportunity, but added a “detrending” factor to the calculation. This is a national ratio computed by dividing the national average 2008-2012 yield by the national average 2013-2017 yield, not to exceed 100% and limited to not less than 90%. These national detrending factors can be found in Table 1.

Payment yields can be updated by crop. For example, if corn would benefit from the yield update but soybeans would not, the farmer can retain the soybean yield and update the corn yield. The 2018 Farm Bill defines the payment update as a simple average of each crop yield from 2013-2017, multiplied by 90%. If the commodity was not planted in some of those years due to crop rotation, that year will drop out of the average (i.e. it may be a 4, 3, 2 or even a 1-year average). For years of large yield losses, there is also a “plug yield” or “substitute” yield that the farmer can use to replace their actual yield that year. This is calculated as 75% of the 2013-2017 average county yield. Farmers may also use this yield for years that historical yield information is not available, such as acquiring new land or leases. Values for these substitute yields for all Kansas counties can be found in Table 2. Producers should use the values from the county in which the land is actually located, not their administrative county. The updated payment yield will take effect starting with any 2020/2021 PLC payments.

The landowner will make the determination of whether they will update or not, unless the tenant has FSA Power of Attorney for them. All crop acres per FSA farm number will be used to determine the payment yield. If a landowner has multiple FSA farm numbers, they will update yields independently for each farm. If a farmer has irrigated and non-irrigated ground, yields will be combined to determine one payment yield per commodity. Farmers will sign a document to self-certify their yields with FSA, but need to have supporting documentation since they will be subject to spot-checks later. Crop insurance records are the best source of supporting documentation as they have already been verified, but other records are acceptable. Check with your local FSA office for a list of acceptable records.

Generally, if the updated payment yield is higher than the current payment yield, the landowner should update. This will increase PLC payments, if they are made. Even if the ARC program is chosen

for the life of the 2018 Farm Bill, the update may benefit the producer for future Farm Bill programs, where an update may or may not be offered again.

Producers can use the following outline to calculate their updated yield for each program crop:

	2013	2014	2015	2016	2017	
Your Yield	_____	_____	_____	_____	_____	← Step #1: Fill in your farm yield for all acres of a crop combined by FSA Farm Number (bushels or pounds per acre depending on crop)
<i>Corn Example</i>	<i>No plantings</i>	120	110	60	100	
Yield with County Plugs	_____	_____	_____	_____	_____	← Step #2: Look up your county's substitute yield in Table #2 for this commodity. Replace any years that are below that yield with that yield. Leave years not planted as blank.
<i>Corn Example</i>	<i>No planting</i>	120	110	95.87	100	
				<i>Washington County</i>		
Total Yield	_____	_____	_____	_____	_____	← Step #3: Add yields together for all years.
<i>Corn Example</i>	$(120+110+95.87+100) = 425.87$					
Average Yield	_____	_____	_____	_____	_____	← Step #4: Divide Total Yield by Number of Years Crop was Planted
<i>Corn Example</i>	$(425.87/ 4 \text{ years}) = 106.47$					
Detrending Factor Adj.	_____	_____	_____	_____	_____	← Step #5: Multiply your Average Yield by the detrending factor listed in Table #1 for that commodity
<i>Corn Example</i>	$(106.47 \times .9000) = 95.82$					
Updated Yield	_____	_____	_____	_____	_____	← Step #6: Multiply by 90% to get your Updated Yield. Note: If this is higher than your current payment yield, you should update.
<i>Corn Example</i>	$(95.82 \times .90) = 86.24$					

For seed cotton, there is also a special adjustment in the 2018 Farm Bill where the Updated Yield actually gets multiplied by 2.4, as well as the existing program yield. Then the farmers gets to decide which yield to use.

Producers would use the procedures in Step #1 through #6 above for each program commodity on their farm and then decide which yields to update and which to retain. An example is shown below.

In this Saline County example, the farmer used substitute yields for corn and soybeans in 2016 and 2017, when they experienced a severe loss on their own yields. This farmer also received a large yield advantage on grain sorghum, since they only grew it once in the 5-year period and it happened to be a bumper crop year. Soybeans had the opposite effect because more was grown in low-yielding years, so the updated number was less than the current payment yield.

Example Update Scenario for a Saline County, KS Producer						
	Corn		Grain Sorghum		Soybeans	
	Producer Yield	With Substitutes	Producer Yield	With Substitutes	Producer Yield	With Substitutes
2013	106	106	--	--	39	39
2014	115	115	106	106	--	--
2015	95	95	--	--	28	28
2016	45	75.23	--	--	15	26.79
2017	30	75.23	--	--	20	26.79
Sum		466.46		106		120.58
Average for planted years		93.29		106		30.15
Detrending Factor Applied		83.96		96.22		27.13
Updated Yield (90% of avg.)		75.57		86.59		24.42
Current Payment Yield		75		70		35
Optimal Choice		Update		Update		Retain

Note: Producer yields and current payment yields are examples. Substitute yields are taken from Table #2.

The decision to update payment yields is a straightforward comparison of current and updated yield. If the updated yield is higher than the current, the producer should update. Producers should start collecting their farms yields from 2013-2017 and work with their local FSA office to perform the update. More information can be found at www.AgManager.info by clicking on the “2018 Farm Bill” under the Ag. Policy section. An Excel spreadsheet calculator is also available that will perform the Updated Yield calculation and can be found here: <http://www.agmanager.info/ag-policy/2018-farm-bill/payment-yield-update>

Table #1: Detrending Factors by Commodity

Commodity	Detrending Factor
Barley	0.9437
Canola	0.9643
Chickpeas_Large	1
Chickpeas_Small	0.976
Corn	0.9
Dry Peas	0.9988
Flaxseed	1
Grain Sorghum	0.9077
Lentils	1
Mustard Seed	0.946
Oats	0.9524
Safflower	1
Seed Cotton	0.9
Soybeans	0.9
Sunflower Seed	0.9396
Wheat	0.9545
Safflower	1

Table #2: Plug Yields (75% of the county average from 2013-2017) for the common Kansas Commodities

A complete list, including other states, can be found here:

https://www.fsa.usda.gov/programs-and-services/arcplc_program/arcplc-program-data/index

County	Corn (bu)	Grain Sorghum (bu)	Soybeans (bu.)	Wheat (bu.)	Seed Cotton (pounds)	Sunflower Seed (pounds)
Allen	94.64	49.85	28.35	35.46	2185.56	1002
Anderson	91.46	48.41	31.29	36.96	2185.56	1002
Atchison	115.66	66.81	38.73	34.14		
Barber	90.25	46.44	23.98	24.29	2578.32	989.4
Barton	113.84	61.79	26.32	31.27	2389.68	943.95
Bourbon	94.08	53.93	27.14	32.93		
Brown	130.59	73.05	42.2	36.65		1002
Butler	87.23	48.08	29.18	34.34	2185.56	1002
Chase	90.9	51.89	29.21	36.78		1002
Chautauqua	68.27	56.1	23.06	27.3	2286	
Cherokee	94.27	61.4	28.15	42.63		1002
Cheyenne	100.28	48.42	44.49	33.17		1118.76
Clark	113.63	57.22	41.1	23		
Clay	116.75	78.93	33.62	38.15		955.95
Cloud	115.98	72.77	31.7	33.84		955.95
Coffey	86.93	48.78	27.31	35.04		1002
Comanche	102.86	48.93		23.45		
Cowley	83.67	51.93	27.14	30.99	1791.54	878.75
Crawford	94.97	51.06	26.55	38.22		1002
Decatur	64.97	40.82	21.08	29.5		1167.57
Dickinson	92.93	70.68	29.63	40.16		943.95
Doniphan	147.31	73.05	46.58	35.07		
Douglas	105.51	54.42	33.94	35.93		
Edwards	133.73	64.59	40.36	30.28	2389.68	930.51
Elk	83.12	44.85	25.19	32.76	2185.56	
Ellis	51.5	58.13	16.85	26.22		810.51
Ellsworth	72.56	63.21	25.7	32.82		843.57
Finney	135.06	62.65	43.82	30.86		1055.28
Ford	145.46	72.73	46.01	31.82		1009.5
Franklin	98.87	62.79	30.71	36.75		1002
Geary	108.8	77.04	34.4	38.04		1002
Gove	73.3	54.98	39.89	27.67		1109.72
Graham	73.37	53.31	28.05	28.26		1298.55
Grant	137.19	46.88	44.46	21.67	2012.94	1301.46
Gray	140.63	72.55	45.41	31.87		1009.5
Greeley	85.73	52.12	33.45	20.08		941.78
Greenwood	75.89	42.27	24.99	34.02	2185.56	

County	Corn (bu)	Grain Sorghum (bu)	Soybeans (bu.)	Wheat (bu.)	Seed Cotton (pounds)	Sunflower Seed (pounds)
Hamilton	101.69	36.96	44.55	14.96		1009.5
Harper	50.33	36.93	18.99	24.63	1953.68	989.4
Harvey	93.64	53.37	28.77	36.52	2082.64	989.4
Haskell	149.03	67.67	45.8	28.67	2228.72	1020.15
Hodgeman	117.02	62.22	36.23	28.72		
Jackson	101.24	61.04	33.45	36.65		
Jefferson	108.63	64.98	37.72	36.66		
Jewell	105.94	78.62	33.63	34.32		955.95
Johnson	100.91	58.38	30.84	47.04		
Kearny	128.62	52.07	36.72	20.96		1009.5
Kingman	108.88	39.62	25.1	29.48	2432.88	863.22
Kiowa	146.43	64.76	44.03	29.22	2518.92	989.4
Labette	83.51	61.34	25.46	33.77	2286	1002
Lane	103.79	61.89	39.42	26.57		1110.45
Leavenworth	102.2	51.63	33.62	37.62		1002
Lincoln	68.78	64.49	25.16	31.01		967.11
Linn	92.16	52.05	28.16	31.17		1002
Logan	73.14		35.3	25.23		1009.5
Lyon	82.89	55.98	27.39	34.77		1002
Marion	79.49	57.59	27.11	36.23	2248.92	921.9
Marshall	99.28	78.02	29.63	34.29		1002
Mcpherson	96.39	62.1	29.21	37.45	2389.68	802.16
Meade	159.7	69.44	53.16	28.7		
Miami	98.64	55.94	30.42	46.07		
Mitchell	82.07	69	26.77	33.58		955.95
Montgomery	83.27	55.64	25.72	35.07	2286	1002
Morris	83.54	62.09	27.23	37.83		1002
Morton	122.78	33.28	44.55	16.85		1009.5
Nemaha	104.51	71.63	33.75	37.98		1002
Neosho	90.32	56.88	27.21	33.3		1002
Ness	78.65	60.53	26.25	26.4		
Norton	69.64	47.37	23.55	27.06		1298.55
Osage	93.32	53.63	30.18	34.4		1002
Osborne	72.83	63.55	23.72	29.1		997.22
Ottawa	88.01	63.81	25.76	32.97		955.95
Pawnee	121.58	62.75	36.18	32.56		989.4
Phillips	70.79	57.26	22.75	26.76		955.95
Pottawatomie	115.33	62.19	34.27	39.74		
Pratt	124.28	53.38	37.85	31.43	2088.33	989.4
Rawlins	71.99	48.4	33.76	29.81		840.57
Reno	110.46	55.19	28.91	33.83	2549.52	967.91
Republic	120.41	77.07	36.77	34.94		824.78

County	Corn (bu)	Grain Sorghum (bu)	Soybeans (bu.)	Wheat (bu.)	Seed Cotton (pounds)	Sunflower Seed (pounds)
Rice	87.63	66.5	26.81	36.03	2389.68	943.95
Riley	97.7	76.67	31.1	35.07		1002
Rooks	61.17	52.37	17.14	29.23		997.68
Rush	89.86	58.58	22.88	27.82		943.95
Russell	48.87	58.02	19.82	28.34		984.69
Saline	75.23	60.23	26.79	35.6		950.25
Scott	107.45	71.22	47.37	31.58		
Sedgwick	96.62	50.09	28.56	31.65	2389.68	989.4
Seward	148.62	55.2	51.29	29.51	2114	1164.44
Shawnee	105.03	66.68	34.01	39.06		1002
Sheridan	91.94	51.83	43.19	28.01		1422.8
Sherman	106.47	46.02	38.04	27.61		1088.96
Smith	91.4	75.96	29.12	31.16		993.3
Stafford	114.73	57.77	31.95	31.28	2257.2	989.4
Stanton	130.78	45.29	44.55	25.04		1009.5
Stevens	132.13	43.79	45.11	25.91	1337.68	1028.6
Sumner	71.72	47.7	22.59	27.92	1816.85	1007
Thomas	89.77	51.3	41.4	27.16		1159.27
Trego	53.23	53.6	27.98	27.02		1110.45
Wabaunsee	102.2	65.88	32.2	35.48		
Wallace	98.37	46.1	32.79	26.1		858.97
Washington	95.87	72.77	30.69	35.46		955.95
Wichita	110.41	57.43	40.53	25.93		1029.23
Wilson	85.81	52.77	26.33	40.88		1002
Woodson	86.87	54.02	27.72	40.7		1002
Wyandotte	120.09	73.05	33.93	34.04		

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