



University of Idaho
Extension

2018 Farm Bill Decision Aid Training

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Presentation Outline

1. Review of Agriculture Risk Coverage – County (ARC-CO) and Price Loss Coverage (PLC) programs and key changes in 2018 Farm Bill (FB)
 - Brief note on Agriculture Risk Coverage – Individual (ARC-IC)
2. Discuss the 2018 FB Decision Aid created by The Agricultural and Food Policy Center at Texas A&M University
3. Implement an example use of the 2018 FB Decision Aid

Basics of ARC-CO and PLC



Photo: Patrick Hatzenbuehler

- Programs established in the 2014 Farm Bill
 - 2014 election applied for full 2014-2018 period
- ARC-CO
 - Payment when actual county crop revenue is less than the ARC-CO guarantee
- PLC
 - Payment when effective price less than reference price
 - Effective price is the higher of moving year average (MYA) or loan rate (LR)
- For both: payment on historical base acres, not current production

Brief note on ARC-IC



- ARC-IC payments initiated: actual revenue for all covered commodities on ARC-IC farm < guarantee
 - Payment amount: 65% of total base acres * (Guaranteed revenue – actual revenue)

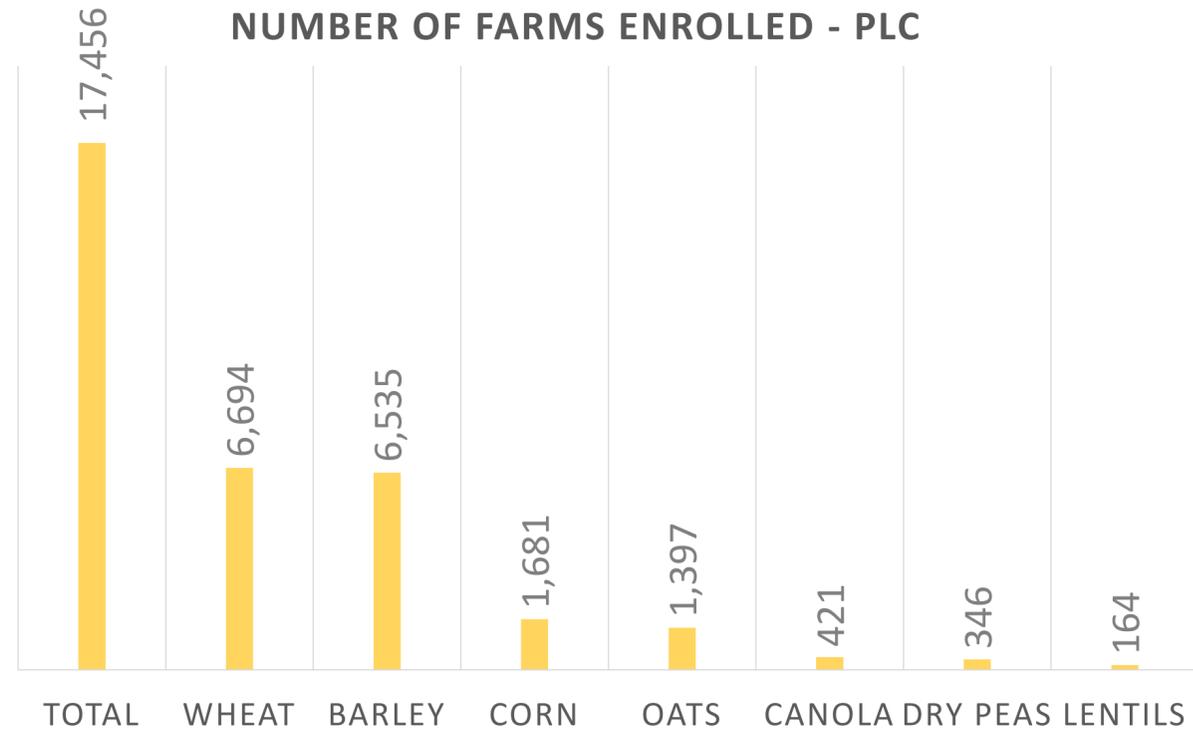
- Recommendations from other experts
 - Consider ARC-IC for 2019 and 2020 if:
 - University of Illinois: all acres in prevent plant or low yields
 - Purdue: 20% production losses

- Note:
 - Only 2% of farms and 3% of base acres in ID elected ARC-IC for 2014 FB
 - University of Illinois “2018 Farm Bill What-If Tool” has ARC-IC calculation capabilities (more complex)

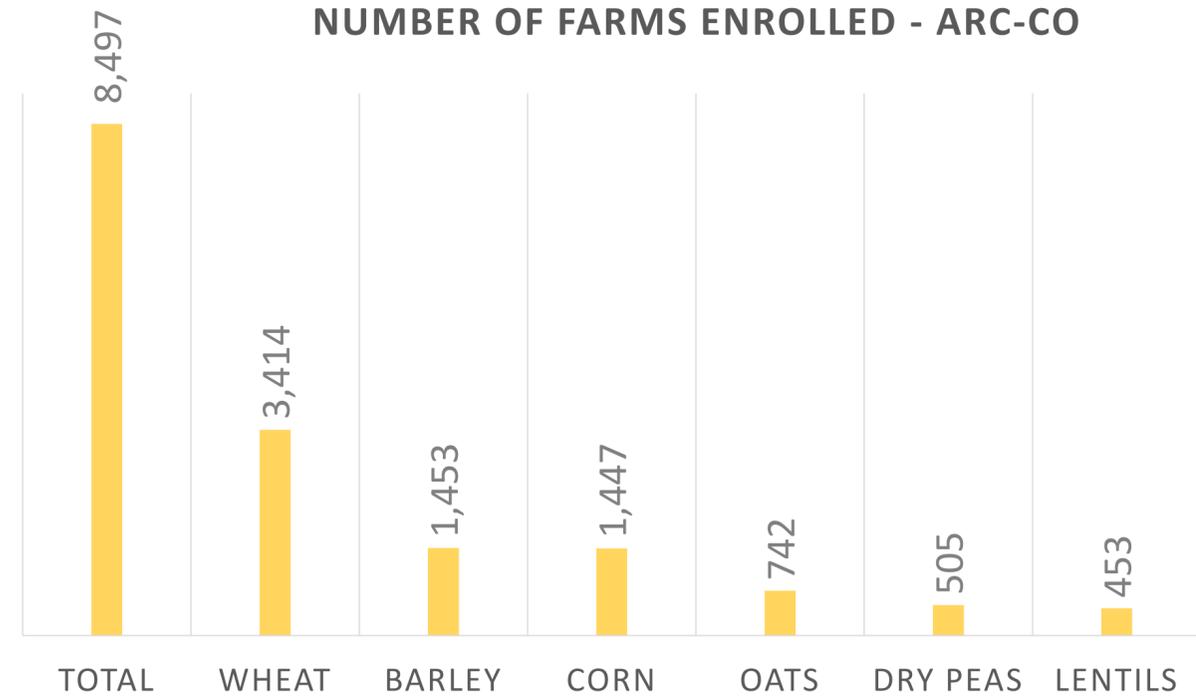
ARC-CO and PLC 2014 FB Elections in ID



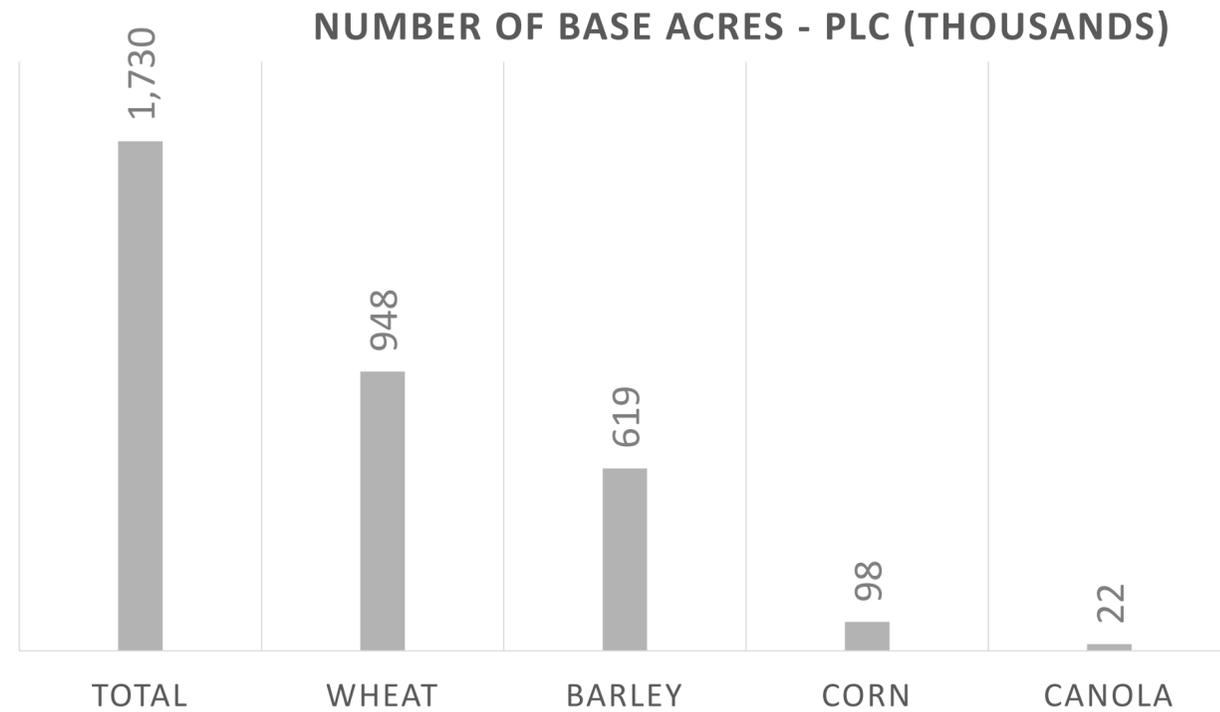
NUMBER OF FARMS ENROLLED - PLC



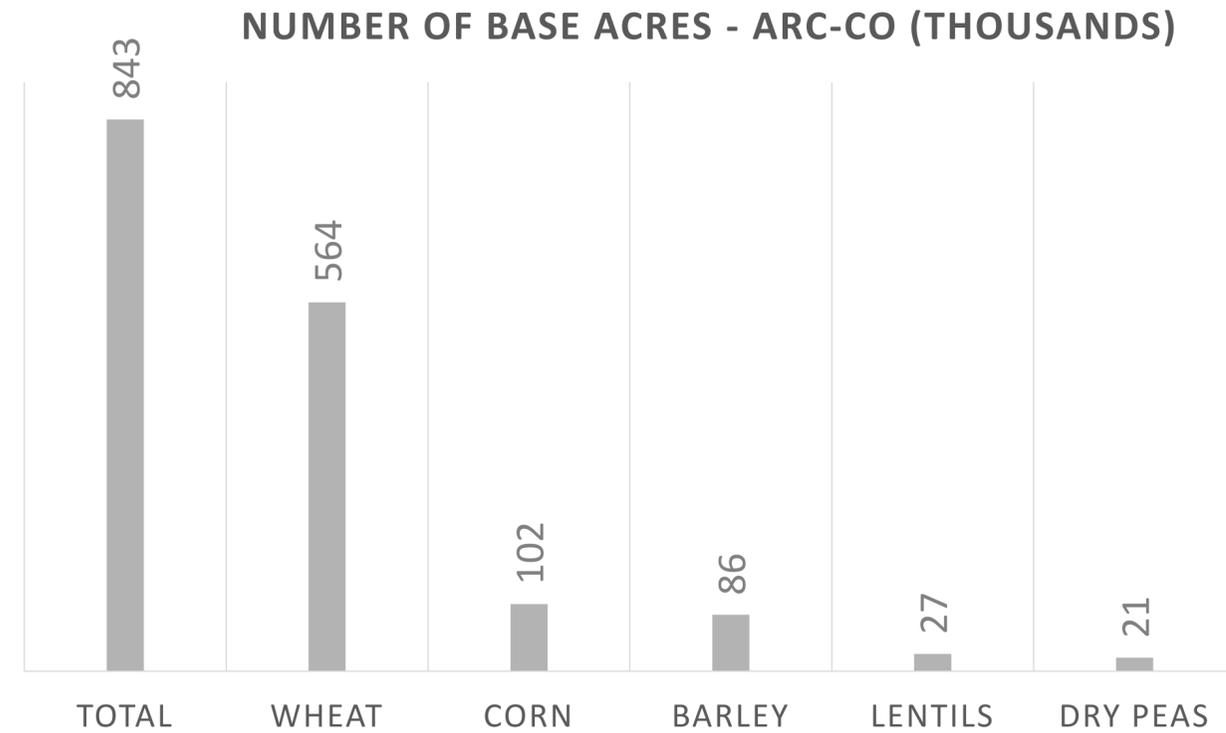
NUMBER OF FARMS ENROLLED - ARC-CO



NUMBER OF BASE ACRES - PLC (THOUSANDS)



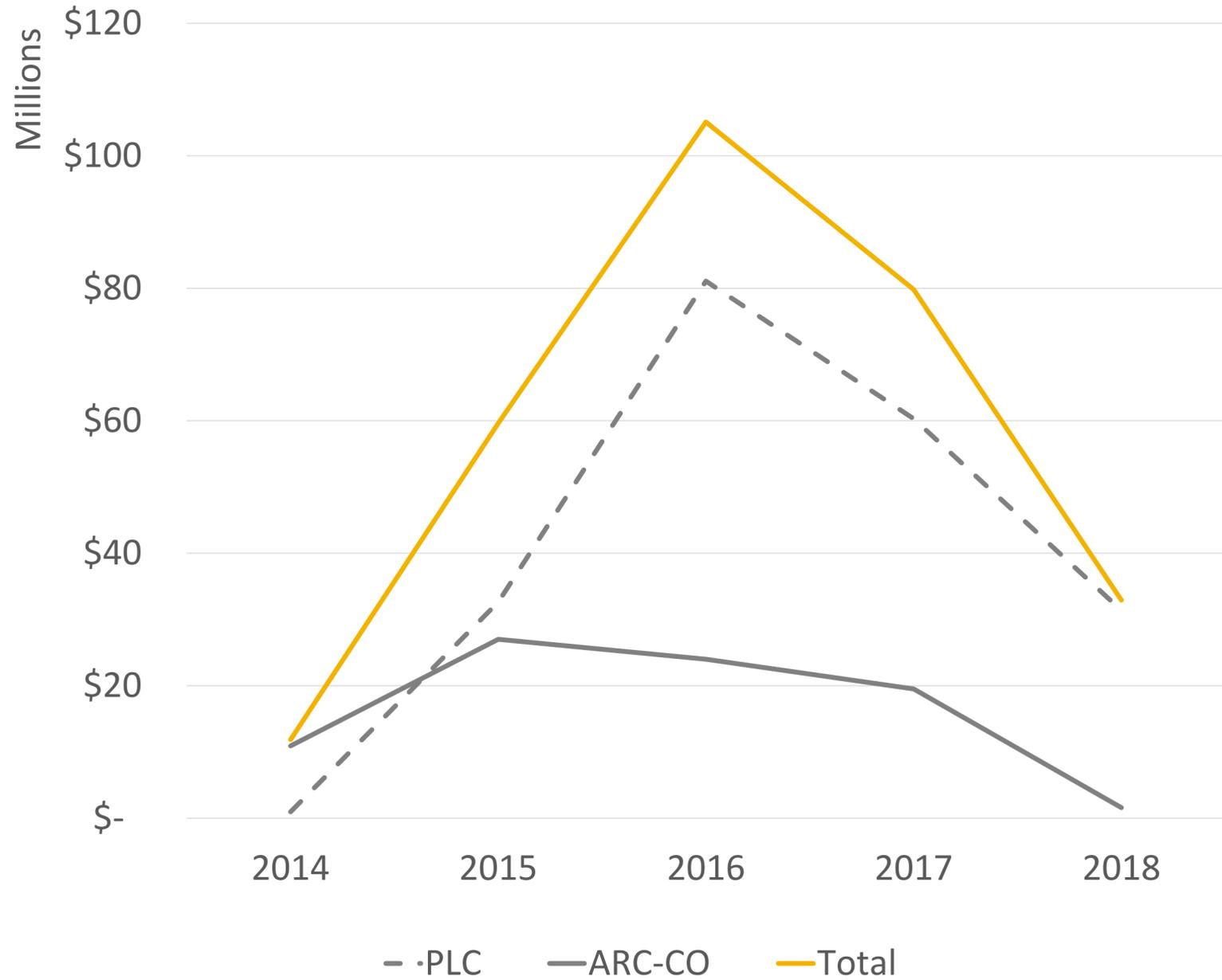
NUMBER OF BASE ACRES - ARC-CO (THOUSANDS)



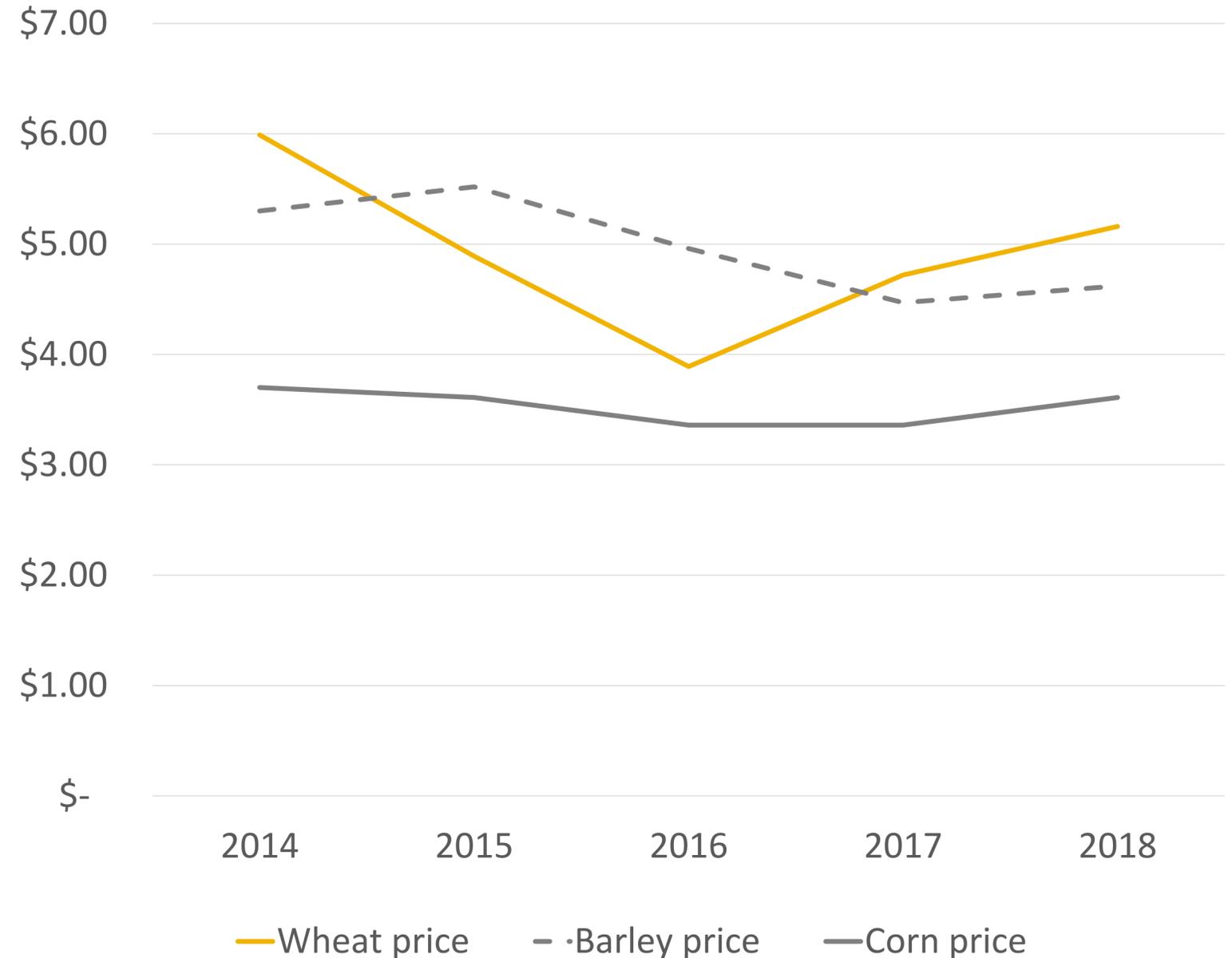
ARC-CO and PLC 2014 FB Payments in ID



ID ARC/PLC payments 2014-18



National prices 2014-18



Key changes to ARC and PLC in 2018 FB

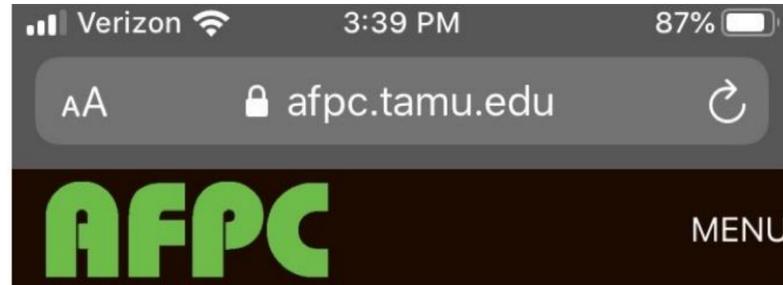


- Program election for ARC-CO, PLC, and ARC-IC in 2019 for 2019 and 2020; then, re-select for **annually** for 2021-2023
- Opportunity to update PLC program payment yields
 - Select update in 2019; do not take effect until 2020
 - Note: owner must update yields; operator can initiate;
- ARC-CO yields based on RMA rather than NASS data
 - Makes irrigated and non-irrigated demarcation more available
- ARC-CO yields are trend adjusted
- Effective reference prices calculated using 5-year Olympic average (OA) with one-year lag
 - For 2019, OA of prices from crop years 2013-2017 used



Photo: Patrick Hatzenbuehler

2018 Farm Bill Decision Aid



2018 Farm Bill Decision Aid

To retrieve your saved farms, you must first

[Login](#)

- Created by the Agricultural and Food Policy Center (AFPC) at Texas A&M University
 - Supported by U.S. House and Senate Agriculture Committees
 - Unlike other tools (e.g., University of Illinois), it includes crops beyond corn, soybeans, and wheat
- Includes updated data from RMA and other sources and all relevant yield and price formulas encompassed into estimates
- Required documents:
 - FSA-156 EZ (most recent)
 - Acreage Production History (APH) report (most recent)
- 2 main portions to implement:
 - 1) check if PLC yields are to be updated
 - 2) calculate expected payments



Step 1: Create login with password



AA afpc.tamu.edu

To create an account, just enter an email address and password.

Email Address

phatzenbuehler@uidaho.edu

Password

●●●●●●●●

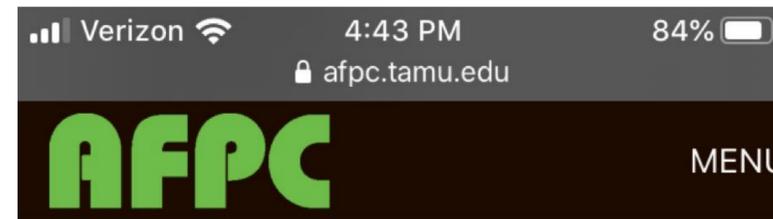
Login

- Use of real email address allows for receipt of updates (e.g., updated input data)
- Can create as many profiles as you want

Step 2: Enter farm unit information



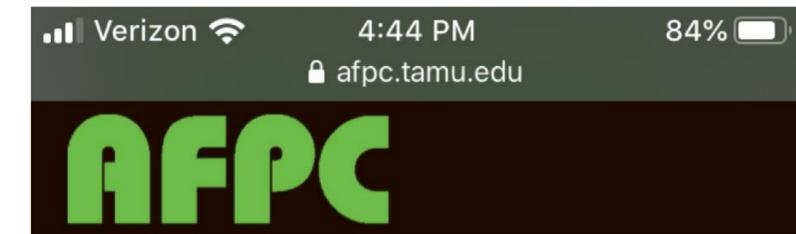
- A “farm unit” is any FSN and crop combination



My Farm Units

+ New Farm

FSN	State	County	Crop
1234	Idaho	Twin Falls	Wheat
1234	Idaho	Twin Falls	Barley
1234	Idaho	Twin Falls	Corn
5678	Idaho		



Edit Farm Unit

FSA Farm Number

1357

State

Idaho

County

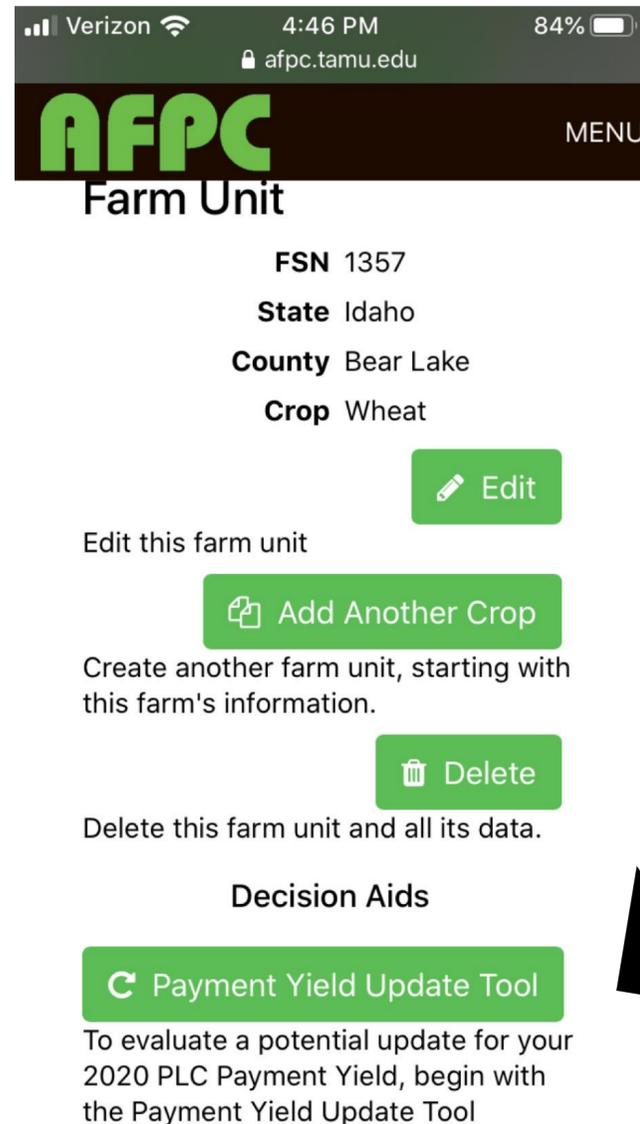
Bear Lake

Crop

Wheat

Save

Payment Yield Update Tool



- Used in PLC payments for 2020-2023
- Update if potential payment yield > 2014 payment yield
- The higher value automatically populates in the next step to calculate expected payments

Step 3: Enter yield update information



Verizon 4:44 PM 88%
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AFPC MENU

2015

100	acres
40	bu/ac

2016

100	acres
33	bu/ac

2017

100	acres
29	bu/ac

Recalculate



Verizon 4:44 PM 88%
afpc.tamu.edu

AFPC MENU

29	bu/ac
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Recalculate

Potential Payment Yield for 2020

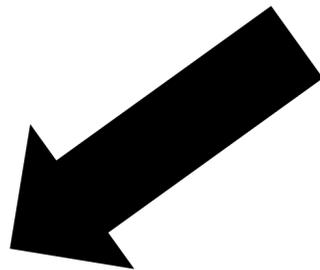
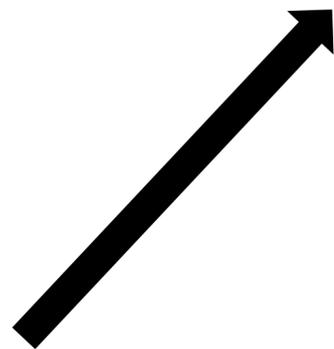
28.35	bu/ac
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Historical Irrigated Percentage ⓘ
for 2020

0.00	%
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Expected Payments Tool

© 2019 AFPC TAMU

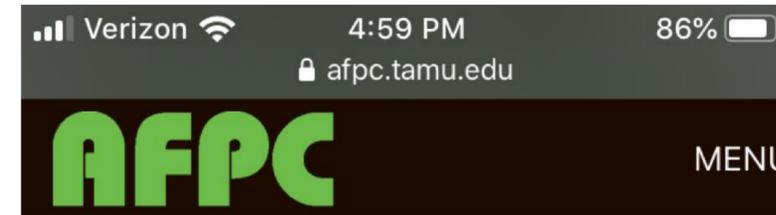


- Potential payment yield of 28.35 bu/ac is less than 2014 FB payment yield of 30 bu/ac
 - So, no update
 - And 30 bu/ac automatically fills in as PLC payment yield in Expected Payments Tool

Expected Payments Tool



- Information inputs:
 1. Base acres
 2. PLC payment yields (automatic if yield update done)
 3. Historical irrigated percentage (if applicable)
 4. Price expectations (can use prompts for USDA and FAPRI projections)
- Outputs:
 1. Estimated payments for PLC & ARC for 2019, 2020 and total
 - Also includes distributions of payments



Expected Payments

This decision aid characterizes probabilities of different levels of expected FSA payments. These characterizations are based on 500 possible future realizations of market prices and county yields. The expected payments are an average across these many possibilities. Values displayed in the results will not match the payments you might calculate using single specific price and yield realizations. To see the likelihoods of different levels of payments, click on an individual expected payment in the results table.

FSN 1357

State Idaho

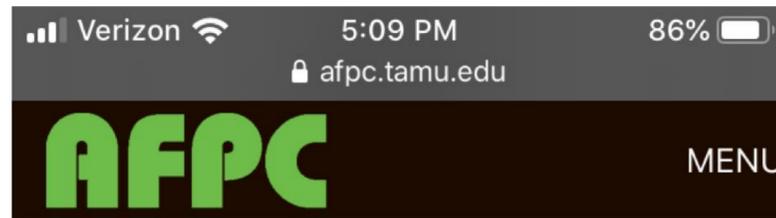
County Bear Lake

Crop Wheat

Base Acres



Step 4: Enter expected payments information



Base Acres

100	ac
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PLC Payment Yield
Historical Irrigated Percentage ⓘ

2019

30	bu/ac
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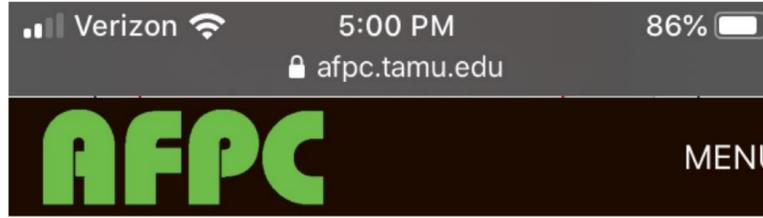
0	%
---	---

2020

30	bu/ac
----	-------

0	%
---	---

Your Wheat Expectations



Your Wheat Expectations

Your Expected Price
Projected Prices ⓘ

Use These

2019

4.70	\$/bu
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4.70	\$/bu
------	-------

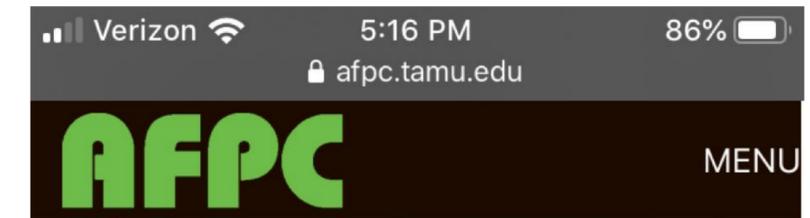
2020

4.81	\$/bu
------	-------

4.81	\$/bu
------	-------

Advanced Settings (Not recommended for most users)

If you have experienced exceptional



2019

4.70	\$/bu
------	-------

4.70	\$/bu
------	-------

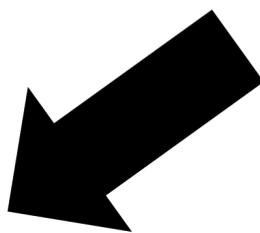
2020

4.81	\$/bu
------	-------

4.81	\$/bu
------	-------

Advanced Settings (Not recommended for most users)

If you have experienced exceptional circumstances in your county or would like to customize your analysis, check here to enable additional settings.



Step 5: analyze expected payments and distributions



Verizon 5:10 PM 86%

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AFPC MENU

Advanced Settings (Not recommended for most users)

If you have experienced exceptional circumstances in your county or would like to customize your analysis, check here to enable additional settings.

Recalculate

Crop	Program	2019	2020	Total
Wheat	PLC	\$2,236	\$2,118	\$4,354
Irrigated Wheat		\$0	\$0	\$0
Non-Irrigated Wheat	ARC	\$1,123	\$789	\$1,912

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Verizon 5:11 PM 86%

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AFPC MENU

Advanced Settings (Not recommended for most users)

If you circled like here

Details X

Wheat PLC 2019

Mean Payment	\$2,236
10th percentile	\$0
25th percentile	\$832
50th percentile	\$2,206
75th percentile	\$3,485
90th percentile	\$4,594

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Verizon 5:12 PM 86%

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AFPC MENU

Advanced Settings (Not recommended for most users)

If you circled like here

Details X

Wheat ARC 2019

Expected Yield 32 bu/ac

Mean Payment	\$1,123
10th percentile	\$0
25th percentile	\$196
50th percentile	\$1,692
75th percentile	\$1,692
90th percentile	\$1,692

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Verizon 5:12 PM 86%

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AFPC MENU

Advanced Settings (Not recommended for most users)

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Details X

Wheat PLC 2020

Mean Payment	\$2,118
10th percentile	\$0
25th percentile	\$84
50th percentile	\$1,851
75th percentile	\$3,783
90th percentile	\$5,168

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Verizon 5:12 PM 86%

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Advanced Settings (Not recommended for most users)

If you circled like here

Details X

Wheat ARC 2020

Expected Yield 33 bu/ac

Mean Payment	\$789
10th percentile	\$0
25th percentile	\$0
50th percentile	\$698
75th percentile	\$1,610
90th percentile	\$1,634

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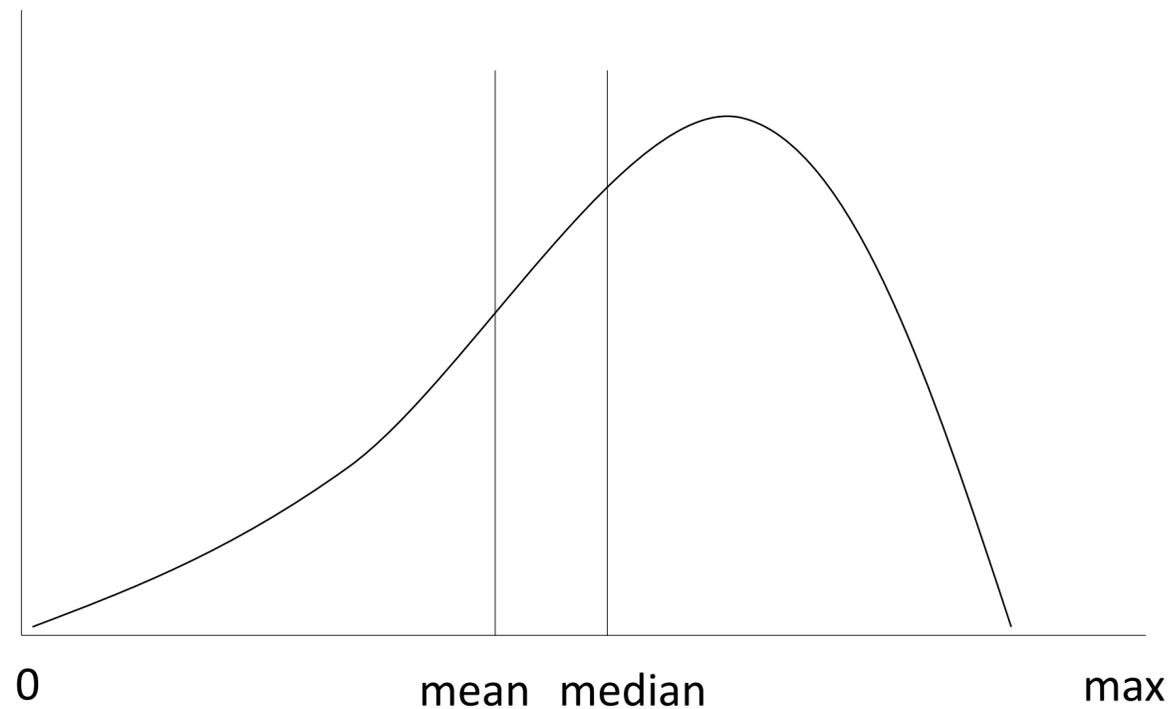
Review of distributions



Negatively (left) skewed

- Mean < median
 - Lower probability of below average payment amount
 - But average may be low

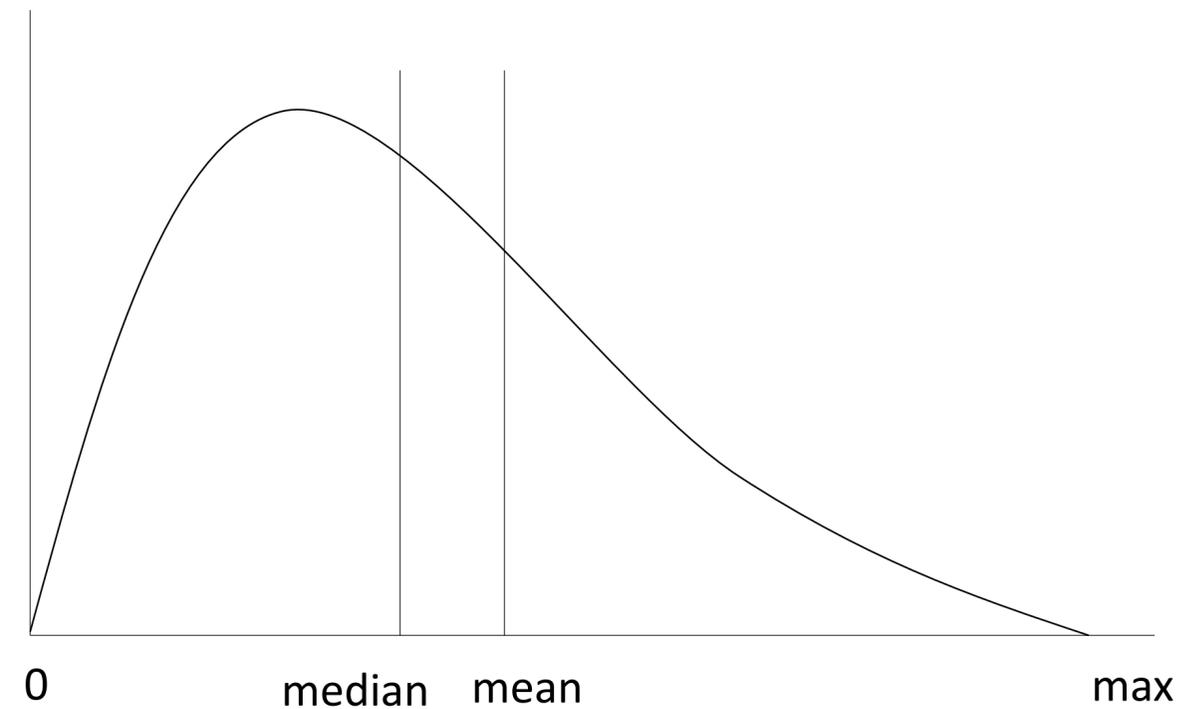
Probability density



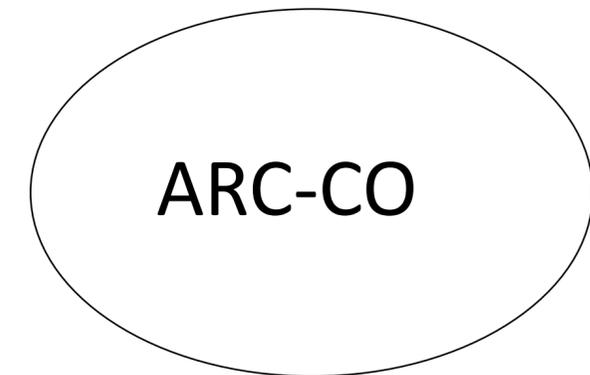
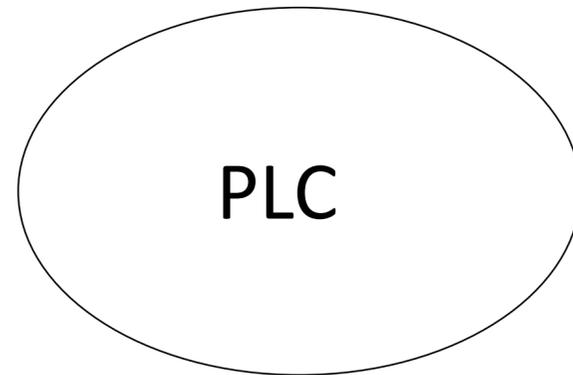
Positively (right) skewed

- Mean > median
 - Higher probability of below average payment amount
 - But average may be high

Probability density



Step 6: make choice and (and re-use tool as needed)



Logistical reminders

- Record choice with local USDA-FSA agent
 - Can do so by phone
- 2019 program choice must be made by March 15, 2020
 - Set up appointment now!
- Election applies for both 2019 and 2020
- Annual elections begin in 2021 for 2021-2023



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Thank you for your attention!

Comments and/or questions?

Email: phatzenbuehler@uidaho.edu