2019 Kansas Corn Net Returns
at RMA Projected Corn Prices

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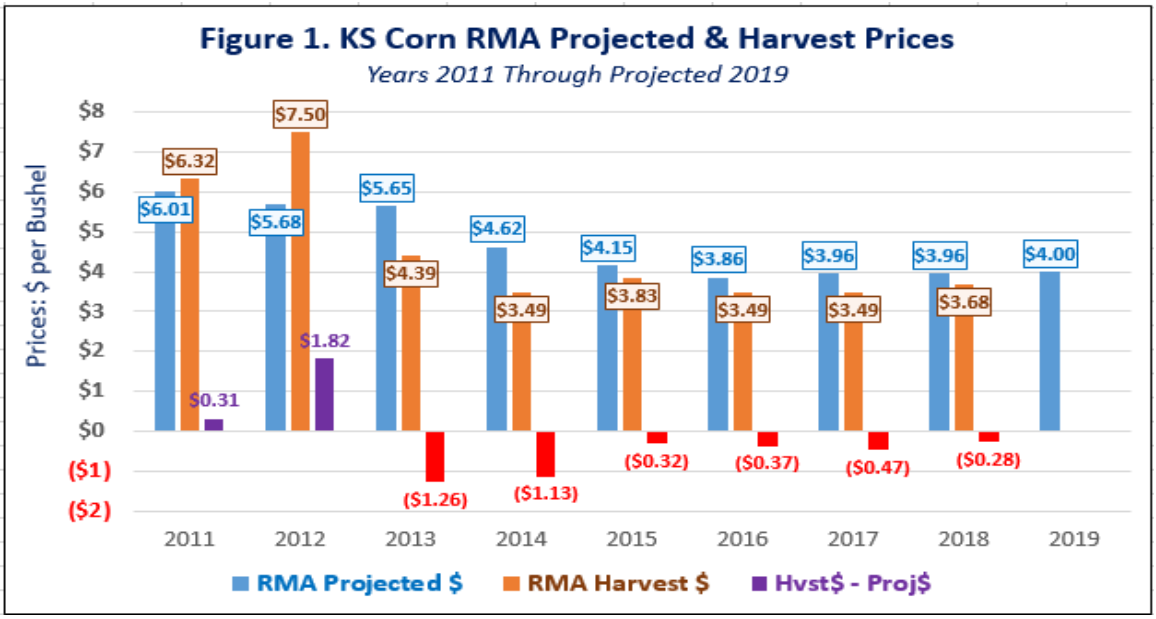
A. Release of the 2019 RMA Corn Projected Price of $4.00 /bu

With the month of February completed, in early March 2019 the USDA Risk Management Agency (RMA) recently released it's 2019 **projected prices** corn, grain sorghum, soybeans, and hard red spring wheat. For corn, the RMA **projected price** for 2019 crop revenue insurance coverage is calculated as the average of 2019 DEC Corn futures closes during February 2019.

The RMA **projected price** for 2019 corn revenue insurance coverage is $4.00 per bushel (/bu), up marginally from $3.96 /bu in both 2017 and 2018, and from $3.86 /bu in 2016 **(Figure 1)**. In October 2019 the RMA will calculate the October 2019 average of closing prices for DEC 2019 Corn futures, which is identified as the **harvest price** for RMA revenue calculations.

Following a series of average to large U.S. corn crops over the 2013-2018 period, RMA **projected prices** have been *higher* than RMA **harvest prices** by a range of $0.28-$1.26 /bu over this same period. During the 2015-2018 period, October RMA harvest prices for DEC Corn futures have been below the previous February average for DEC Corn by $0.28-$0.47 /bu **(Figure 1)**.



B. 2019 RMA Projected Price Returns of Kansas Irrigated Corn

KSU Extension Crop Budget Estimates: Cost of production estimates for year 2019 from Kansas Farm Management Guides are used in these RMA price versus cost of production comparisons. These irrigated crop production budgets provide "low", "average", and "high" yield scenarios with estimates of irrigation water applied. These multiple irrigation water availability and associated yield scenarios have become important for western Kansas irrigation enterprises as available subsurface groundwater supplies have dwindled and regulatory limitations on the amount of irrigation water applied in western Kansas have been or or beginning to be adopted.

These **KSU Farm Management Guide Crop Budget** estimates for irrigated corn enterprises in Northwest, Southwest and North Central Kansas can be found on the KSU AgManager.info website (www.AgManager.info) at the following web address: http://www.agmanager.info/farm-mgmt-guides/2019-farm-management-guides-irrigated-crops-0

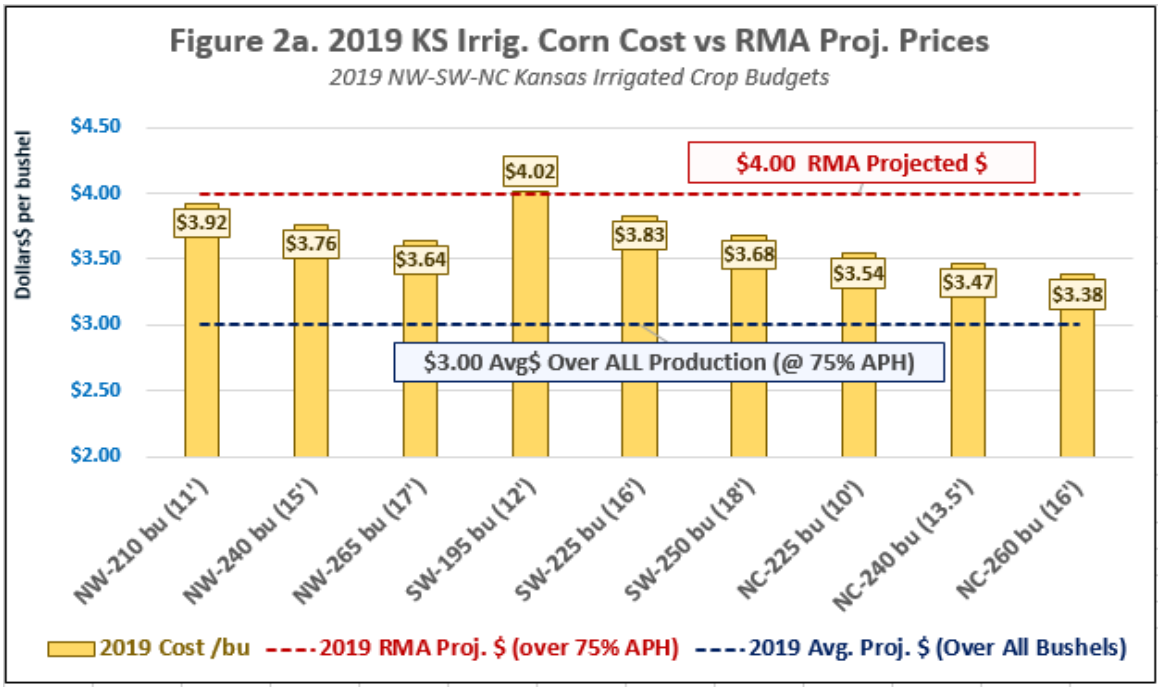
A Brief Explanation of Percent (%) APH Coverage: Note that in RMA terminology, **"APH"** stands for Actual Production History. Kansas farmers can select coverage levels on corn enterprises ranging from 50% of APH yields up to 85% of APH Yields. In this article, it is assumed that a **75% APH Coverage level** is selected for these Revenue Insurance coverage examples. When considering ALL bushels produced on irrigated corn enterprises in Kansas, the full $4.00 price of 2019 RMA **projected price** coverage extends **ONLY** to the elected APH bushels – in this example equal to 75%.

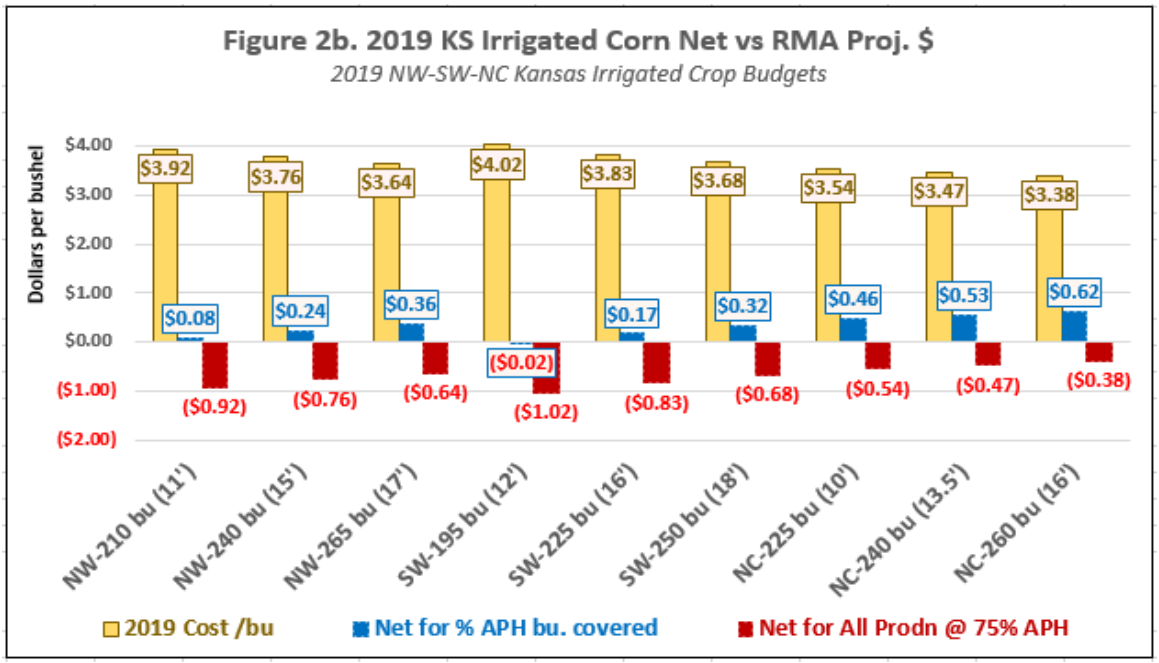
2019 RMA Price Coverage Results for only APH Covered Bushels: For the irrigated corn bushels that Kansas corn producers choose to provide crop insurance coverage for via their choice of % APH yield insurance level, the $4.00 RMA price almost uniformly covers full estimated production costs including machinery and land charges **(Figures 2a & 2b)**.

Defacto* 2019 RMA Price Coverage Results for All Bushels of $3.00 /bu (at 75% APH Coverage)**: When considering ALL bushels on a farm, if a producer chose to buy revenue insurance coverage for 75% of the APH yield, then the other 25% of their APH yield has **NO** direct Revenue Insurance coverage. However, by adjusting the RMA projected price by the selected percent APH coverage level, an *implicit* or ***"defacto" RMA projected corn price over ALL APH bushels can be calculated.

In this example, with 75% APH Revenue Insurance coverage, the 2019 $4.00 RMA **projected price** on corn for the "APH covered" bushels provides a **$3.00 /bu** "defacto" level of price coverage across ALL or 100% of the APH bushels (i.e., 75% x $4.00 /bu plus 25% x $0.00 /bu).

At this "defacto" ALL bushels coverage $3.00 /bu **projected price** level, the RMA the irrigated corn bushels, net returns fall short of full costs by $0.38-$1.02 /bu depending on the area of the state **(Figures 2a & 2b)**.



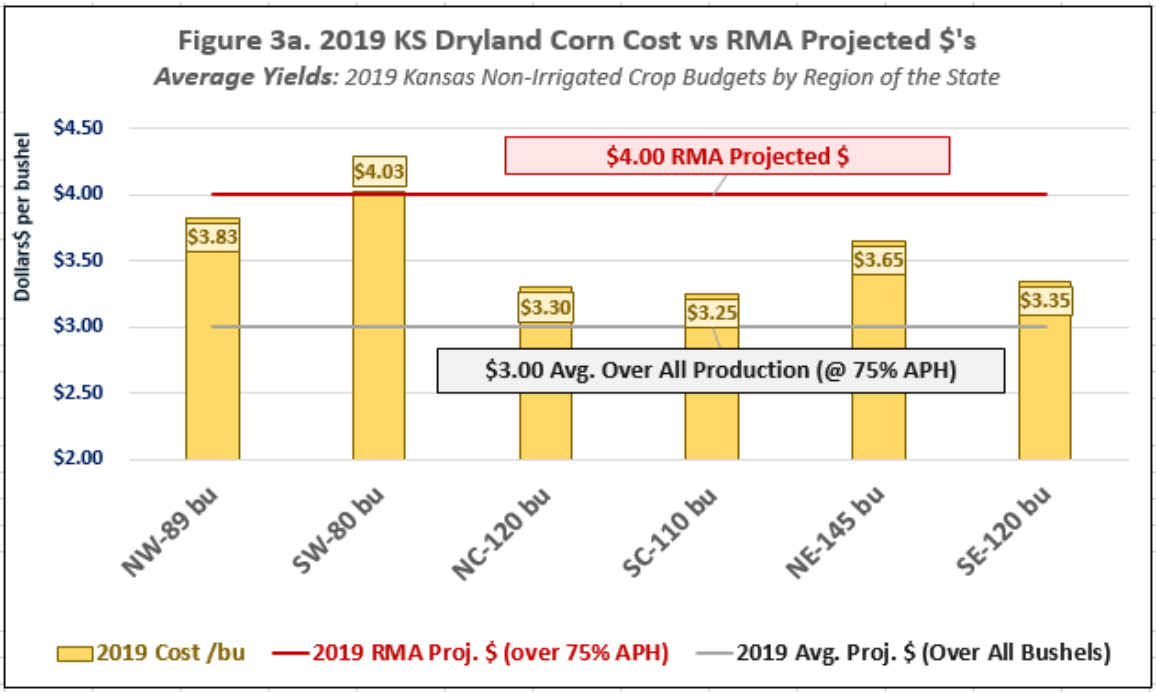


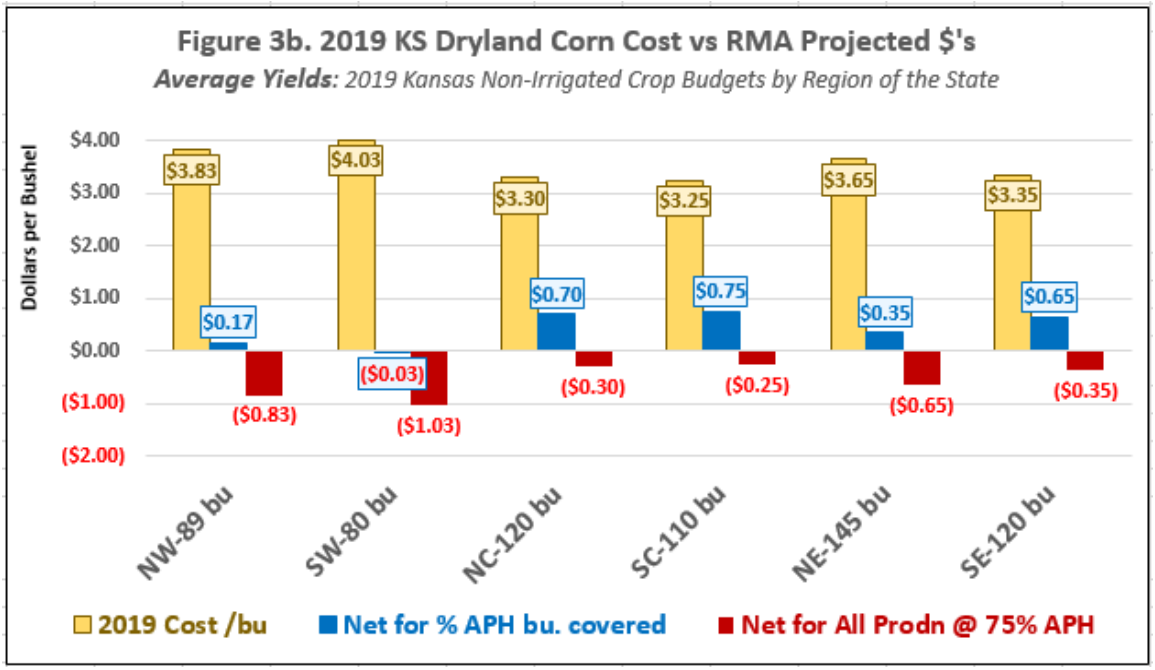
C. 2019 AVERAGE YIELD Non-Irrigated Corn Returns @ RMA Projected $'s

Concerning non-irrigated corn enterprises in Kansas, the net returns from RMA revenue insurance on **AVERAGE yield projections** will be examined. These **KSU Farm Management Guide Crop Budget** estimates for non-irrigated corn enterprises across the state of Kansas can be found on the KSU AgManager.info website (www.AgManager.info) at the following web address:
http://www.agmanager.info/farm-mgmt-guides/2019-farm-management-guides-non-irrigated-crops

2019 RMA Price Coverage Results for only APH Covered Bushels: For the non-irrigated corn bushels directly covered by crop insurance via their choice of % APH yield level, under **AVERAGE yield scenarios** the $4.00 RMA price again almost uniformly covers full estimated production costs including machinery and land charges **(Figures 3a & 3b)**.

***Defacto* 2019 RMA Price Coverage Results for All Bushels of $3.00 /bu (at 75% APH Coverage)**: In this 75% APH yield coverage example with average yields, this "defacto" ALL bushels coverage level of $3.00 /bu RMA **projected price** level, at **AVERAGE** non-irrigated yield levels, net returns fall short of full costs by $0.25-$1.03 /bu depending on the area of the state **(Figures 3a & 3b)**.



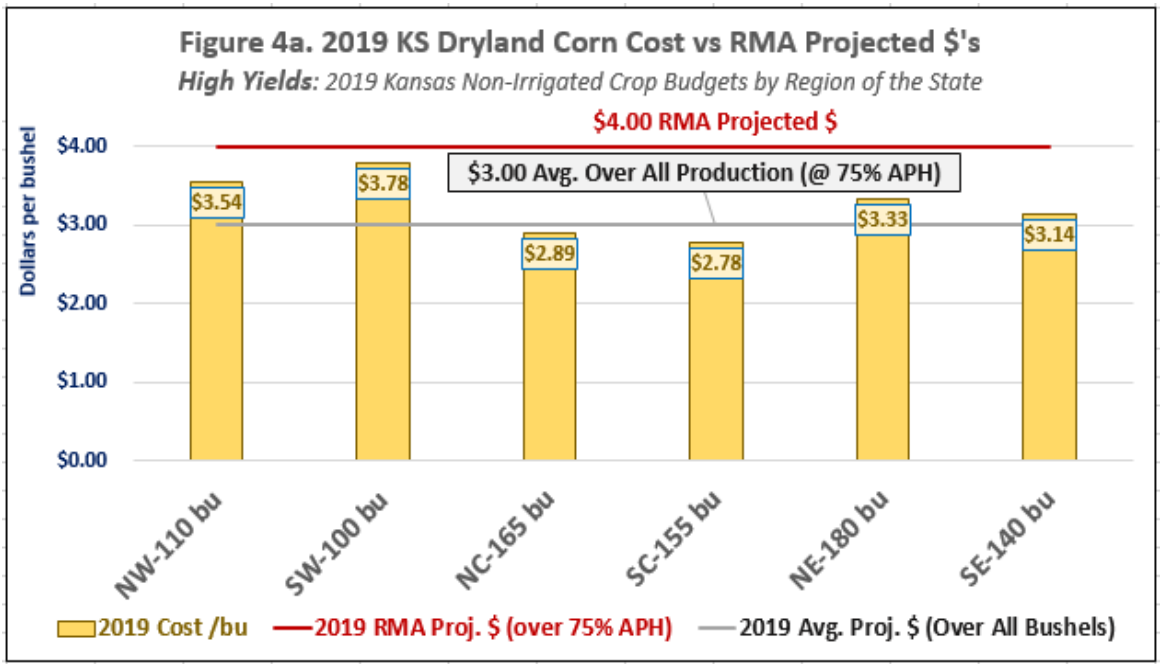


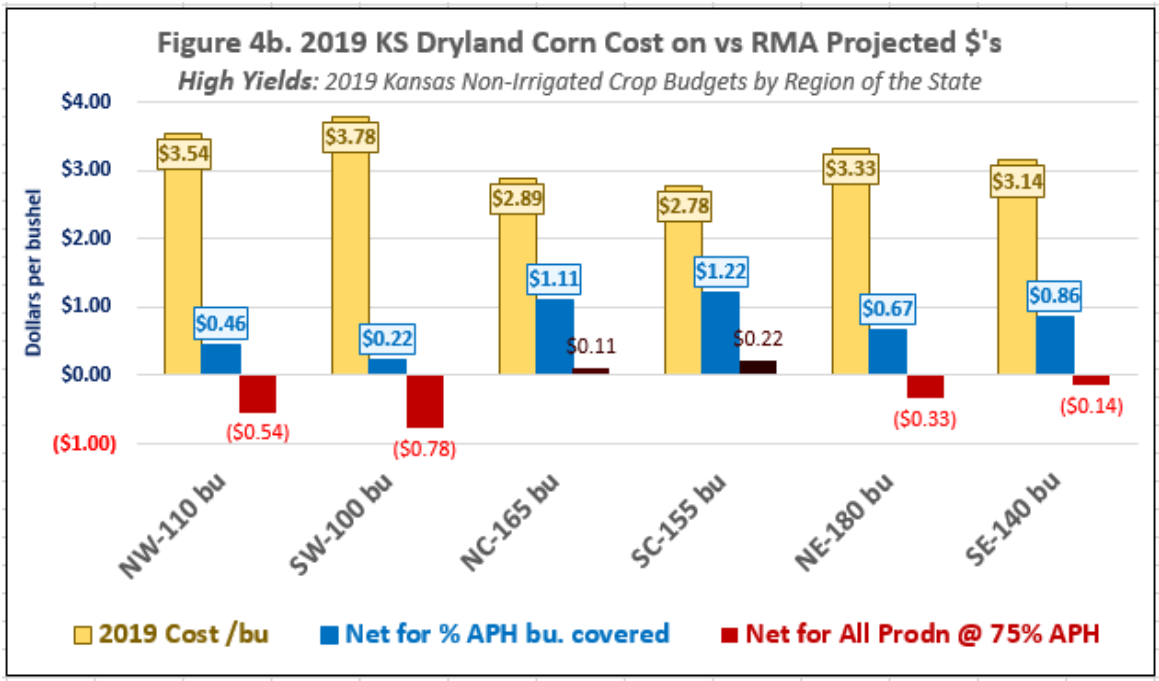
D. 2019 HIGH YIELD Non-Irrigated Corn Returns @ RMA Projected $'s

Again concerning non-irrigated corn enterprises in Kansas, the net returns from RMA revenue insurance on **HIGH yield projections** will be examined. These **KSU Farm Management Guide Crop Budget** estimates for non-irrigated corn enterprises across the state of Kansas can also be found on the KSU AgManager.info website (www.AgManager.info) at the following web address:
http://www.agmanager.info/farm-mgmt-guides/2019-farm-management-guides-non-irrigated-crops

2019 RMA Price Coverage Results for only APH Covered Bushels: For the non-irrigated corn bushels directly covered by crop insurance via their choice of % APH yield level, under **HIGH yield scenarios** the $4.00 RMA price uniformly covers full estimated production costs including machinery and land charges across the state **(Figures 4a & 4b)**.

***Defacto* 2019 RMA Price Coverage Results for All Bushels of $3.00 /bu (at 75% APH Coverage)**: In this 75% APH yield coverage example with average yields, this "defacto" ALL bushels coverage level of $3.00 /bu RMA **projected price** level, at **HIGH** non-irrigated yield levels, net returns are positive in North Central and South Central Kansas, but fall short of full costs by $0.54-$0.78 /bu in Northwest-Southwest Kansas, and by $0.14-$.33 /bu in the Northeast-Southeast part of the state **(Figures 4a & 4b)**.





E. Final Thoughts

While the projected RMA price of $4.00 /bu for corn in the U.S. in 2019 is a vitally important component of the overall set of tools used by Kansas farmers to manage revenue risks on corn enterprises, it is NOT the only tool.

If the U.S. average loan rate for U.S. corn of $2.20 /bu in the latest farm bill was considered as a "price floor" for the remaining bushels NOT covered by RMA Revenue Insurance coverage, then instead of $3.00 per bushel being the implied or "defacto" floor price across ALL bushels (i.e., both 75% APH bushels and the remaining 25% uncovered amount of production, then the implicit floor would be higher at **$3.55 /bu**.

New Defacto Floor^{2019} = (75% APH Covered Bu. x $4.00) + (25% Non-covered Bu. x $2.20 /bu)

= **$3.55 /bu**

This one calculation alone presents a moderately more positive perspective on corn enterprise profitability in Kansas. Other elements of this corn enterprise income risk management picture can be presented by including USDA payments for **ARC (Agricultural Risk Coverage)** and/or **PLC (Price Loss Coverage)**.

The final point is that these revenue coverage levels for irrigated and non-irrigated corn in Kansas are at best "covering costs" but not providing strong profitability as is needed by many farmers in the state who have been "grinding" through a period of breakeven at best revenues arguably since 2014. As a "safety net" these programs are protecting the "down side" as many argue they are designed to do. But these programs that were designed to be a "safety net" are not providing any large amounts of net returns over costs. Cost competition, efficiency, and "surviving to farm another year" are the norm now among the larger part of Kansas corn producers.