



## Data and Outlook for Making 2018 Cash Rental Decisions

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Much of the cash rent data for making 2018 cash rental decisions is now available. Data include 1) 2017 county and state cash rents as reported by the National Agricultural Statistical Service (NASS) and 2) actual 2017 and projected 2018 cash rents on professionally managed farmland as reported by the Illinois Society of Professional Farm Managers and Rural Appraisers (ISPFMRA). These data are reported in this article. For 2018, cash rents likely will continue to decline as farmers are projected to have negative returns when cash rents are at average levels.

### 2017 County Cash Rents

County cash rents published by NASS are shown in Figure 1. As can be seen in Figure 1, there is variability in 2017 average cash rents across Illinois. The highest county cash rents tend to be located in central Illinois, with Logan County having the highest cash rent of \$289 per acre. Southern Illinois counties tend to have lower cash rents, with Johnson County having the lowest cash rent of \$72 per acre.

Much of the variability in county cash rents relates to soil productivity. To illustrate, a regression analysis was conducted in which the county cash rents shown in Figure 1 were explained by 2017 county trend yields. A trend yield represents the anticipated yield for 2017. If 2017 could be repeated many times, the average of the resulting yields would equal the trend yield. The process used to calculate a trend yield is described in a [May 2, 2017 farmdoc daily article](#).

The linear relationship fit between 2017 county cash rents and 2017 trend yields is shown by the red line in Figure 2. This equation explains 82 percent of the variability in cash rents. As the trend yield increases, the 2017 county cash rent increases as well. The linear relationship between trend yields and cash rents is:

$$\text{cash rent} = -216.76 + 2.42 \times \text{trend yield}$$

While explaining a majority of the variability, there still are differences between what the above equation will predict and actual 2017 country yield. Take, for example, Logan County. Logan County has a 2017 trend yield of 190 bushels per acre. The above equation predicts a cash rent of \$245 per acre. The actual cash rent is \$289 per acre, \$44 higher than the predicted rent of \$245 prediction. Logan counties trend yield and cash rent are indicated in Figure 2. Logan County has the largest positive difference in actual from projected cash rents.

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Figure 1. 2017 Average County Cash Rents

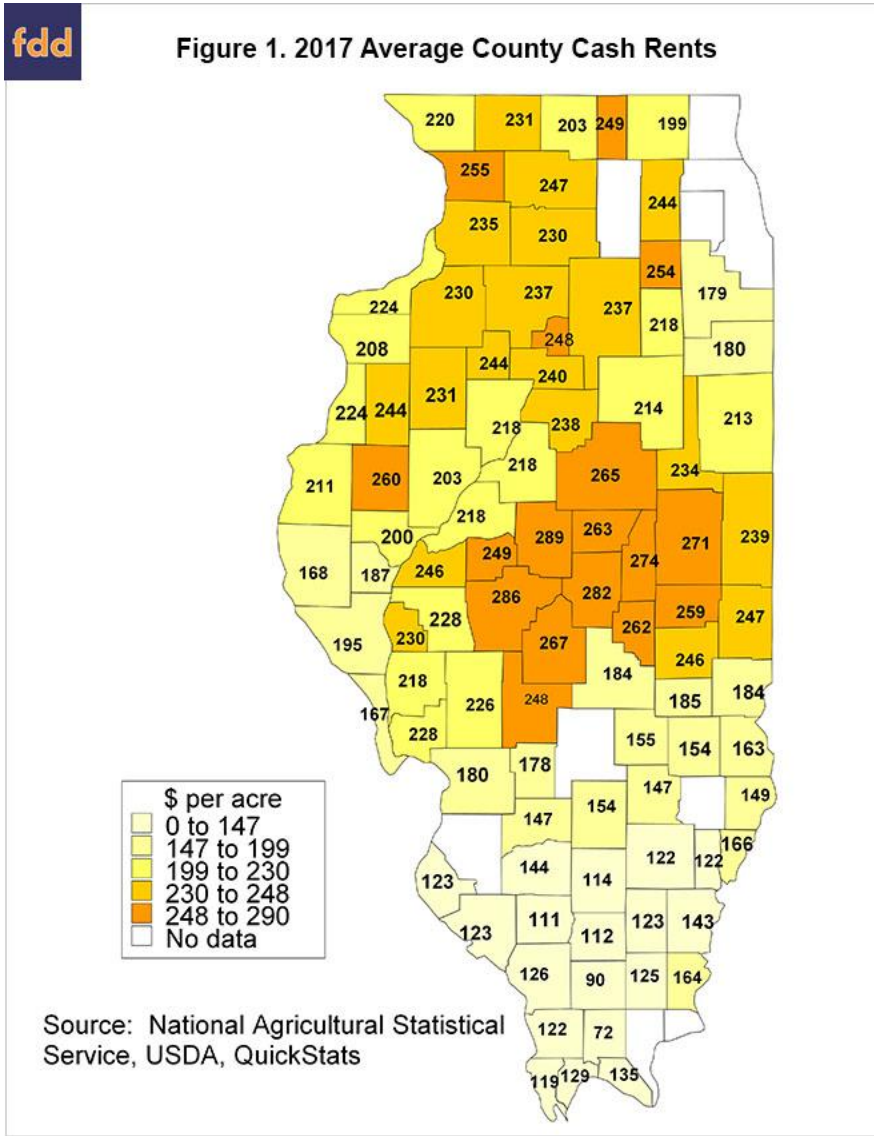
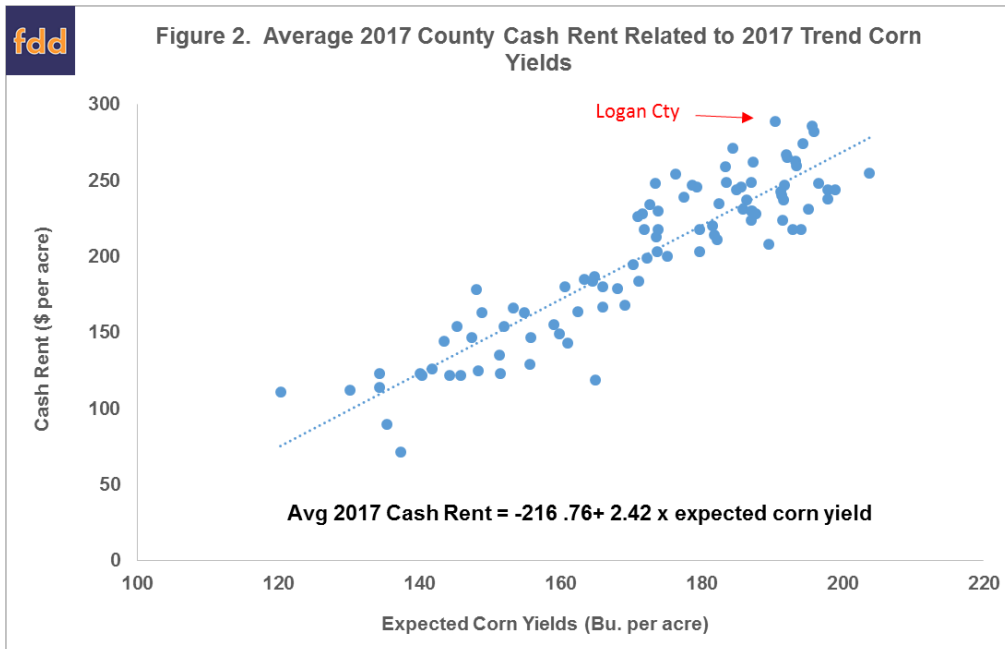


Figure 2. Average 2017 County Cash Rent Related to 2017 Trend Corn Yields



The above relationship can be used to arrive at an average cash rent for a particular farm. Take a farm with a trend yield in 2017 of 200 bushels per acre. For this yield, the predicted average cash rent for 2017 is \$267 per acre ( $\$267 = -216.76 + 2.42 \times 200$ )

### Average Cash Rents Compared to Professional Managed Farmland

In late August, the ISPFMRA released estimates of 2017 cash rent for professionally managed farmland in Illinois ([here](#)). Expectations for 2018 cash rents were released as well. Table 1 shows these 2017 and 2018 expected cash rent, as well as cash rents for 2015 and 2016. Cash rents are given for four farmland productivities:

- Excellent productivity farmland has soil productivity index values above 133([here](#)). Expected corn yields for excellent productivity farmland are above 190 bushels per acre. Cash rents have declined from \$350 in 2015 to \$305 per acre in 2017. Expected 2018 cash rents are projected to decrease by \$5 per acre to \$300 per acre.
- Good productivity farmland has soil productivity indexes between 117 and 132. In recent years, good productivity farmland has trend yields between 170 and 190 bushels per acre. Cash rents on professionally managed farmland have decreased from \$295 per acre in 2015 to \$260 per acre in 2017. Cash rents for good productivity farmland are expected to decrease another \$5 per acre to \$255 per acre.
- Average productivity farmland has soil productivity ratings between 100 and 116. In recent years, good productivity farmland has had yields between 150 and 170 bushels per acre. Cash rents on professionally managed farmland Hager decreased from \$250 per acre in 2015 to \$220 per acre in 2017. Expectations are for a \$10 per acre decrease to \$210 per acre in 2018.
- Fair productivity farmland has soil productivity ratings below 100. In recent years, yields on fair productivity farmland have been below 150 bushels per acre. Average cash rents have decreased from \$200 per acre in 2015 to \$166 per acre in 2017. Cash rents are expected to decrease by \$6 per acre to \$160 per acre in 2018.

**Table 1. Actual Cash Rents on All Farmland and on Professionally**

Land Productivity (Expected corn yield)	Averages <sup>1</sup>		Professionally Managed Farmland <sup>2</sup>			
	2016	2017	2015	2016	2017	2018P
	\$/acre	\$/acre				
State average	221	218				
Excellent (190+ bushels)	268	264	\$/acre	\$/acre	\$/acre	\$/acre
			350	325	305	300
Good (170 - 190 bushels)	219	216	295	283	260	255
Average (150 -170 bushels)	170	168	250	247	220	210
Fair (Less than 150 bushels)			200	190	166	160

<sup>1</sup> Compiled from National Agricultural Statistical Service data.

<sup>2</sup> From surveys conducted by the Illinois Society of Professional Farm Managers and Rural Appraisers.

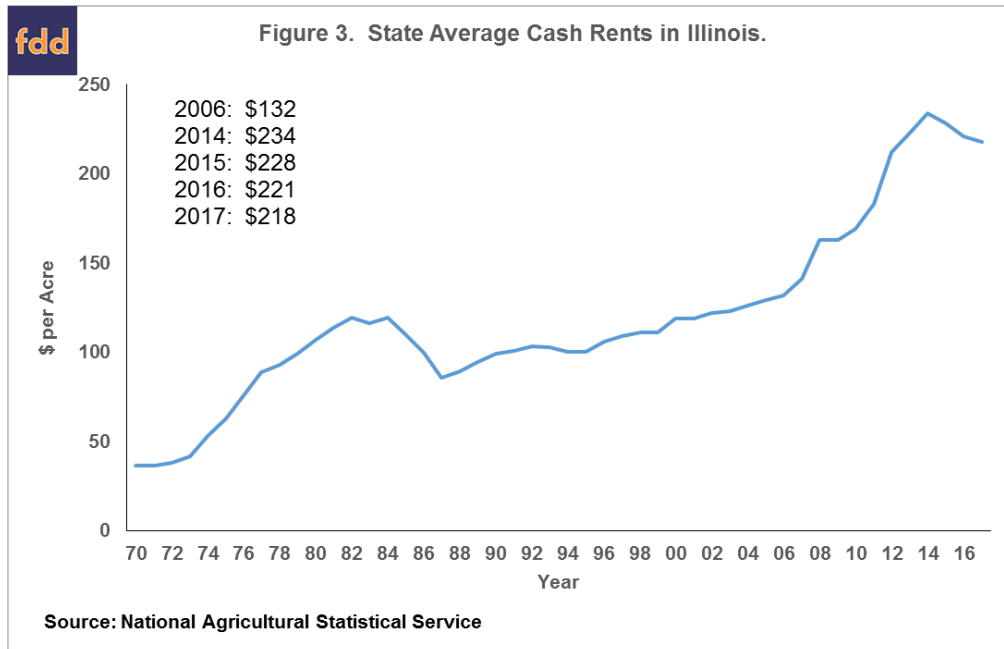
Also shown in Table 1 are average cash rents based on NASS county data discussed in the previous section. The equation in the previous section was used to calculate a rent based on NASS data. Note that the average cash rents are below the professionally managed cash rents. For excellent productivity

farmland, for example, the 2017 average cash rent is \$264 per acre, \$41 per acre below the professionally managed average of \$305 per acre. Similar differences exist for the other land productive classes (\$44 below for good productivity farmland and \$52 below for average productivity farmland).

The difference between professional and average productivity farmland demonstrate the differences in rents for similar productivity farmland. For the same productivity farmland, rents can range by more than \$50 per acre from the average.

### Trends in Cash Rents

As illustrated for professionally managed farmland, cash rents have been decreasing in recent years. Similar trends exist for the entire state. In Illinois, average cash rents reported by NASS have been decreasing since their \$234 per acre peak in 2014 (see Figure 3). Cash rents declined to \$228 in 2015, \$221 in 2016, and \$218 in 2017.



### 2018 Outlook for Cash Rents

Several factors suggest that 2018 cash rents will face downward pressures:

- Average net incomes across all grain farms in 2017 is projected to be lower than in 2016 ([farmdoc daily, August 15, 2017](#)).
- At this point, 2018 budgets suggest returns will have negative returns on cash rent farmland in 2018 when cash rents are at average levels ([farmdoc daily, July 25, 2017](#)).
- The 2018 expected cash rents for professionally managed farmland will result in large losses to farmers.
- Since 2014, many farmers have had negative returns to cash rented farmland at average cash rent levels ([farmdoc daily, August 22, 2017](#))

All the above factors suggest continuing downward pressures on cash rents. At this point, a continued reduction of \$5 to \$10 per acre should be expected on the state wide average for cash rents shown in Figure 3. Reductions of this size are not large enough to cause cash rented farmland to be profitable. However, declines in cash rents resulting in profitability are projected to be long and protracted. As long as corn prices remain below \$4.00 per bushel, there will be downward pressures on cash rents.

## References

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