

# FIRST REPORT

## 1999 Ohio Cash-Leased Farmland Rents and Market Values

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This is our first report of findings about cash-leased farmland rents and market values in Ohio in 1999. Looking at rents in the various regions of the state gives renters and landowners a better view of the variables currently influencing their agreements. On a larger scope, the 1999 study shows signs that alternative uses for land are beginning to factor more heavily into the farmland market. This bears watching as Ohio becomes increasingly more urban. About half of the renters in the state say that development affects land markets in their area. But there's some indication that urbanization does not necessarily increase the cost of renting that land. Smaller fields and traffic in more populated areas may actually drive the desirability of renting cropland there and depress rents. And less productive land may actually have higher market value because of proximity to urban centers and development demand.



### Key Points

According to the 1997 Census of Agriculture, 47% of Ohio's land in farms was leased. Cash leasing, share leasing, and custom farming are three methods that farm operators use to farm land owned by others. Farm operators in our study reported that cash leasing was used on over 75% of the land that was leased. Later reports will provide information about share leasing and custom farming arrangements.

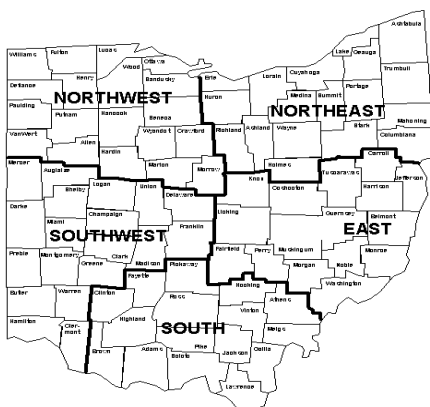
The importance of leasing tends to increase as farm size increases. On Ohio's "commercial" farm operations (annual gross sales of \$100,000 or more), 63% of farmland was leased from other owners. On Ohio's largest farm operations (annual gross sales of \$500,000 or more), 67% of the land was leased.

While cash rent data reported here are assured to be reliable, estimates of "normal" yields presumably represent expected or average yields and not yields realized in drought-plagued 1999. We assume tenants' estimates of fair market value are unbiased, but it's debatable whether they reflect actual fair market value.

### Cash Rents

1999 cash rent averages about \$70 per tillable acre statewide

(Table 1). There is considerable variation in rental rates between geographic regions and by quality of land in each region (Table 1). Land class is defined by normal corn yields for each tract: top quality ( $\geq 140$  bu./acre), average quality ( $< 140$  and  $\geq 120$  bu./acre), and poor quality ( $< 120$  bu./acre). On the average, top quality land rents are \$88 per tillable acre while poor quality land rents are \$50 per tillable acre.



**Table 1. Cash Rents, by Land Class (w/ Normal Yields) and Region**

Area	Land Class	Corn bu/acre	Soybean bu/acre	Wheat bu/acre	Cash Rent \$/acre	
					1998	1999
Ohio	Top	155	48	65	87.6	88.0
	Average	130	43	57	69.4	69.6
	Poor	102	39	48	51.0	49.9
Northwest	Top	157	50	68	96.2	95.4
	Average	130	42	58	78.0	78.9
	Poor	103	40	55	71.9	71.7
Northeast	Top	151	45	59	77.7	77.7
	Average	130	45	54	51.5	51.6
	Poor	101	39	49	41.4	41.2
Southwest	Top	155	47	66	92.7	95.1
	Average	130	43	60	80.0	79.8
	Poor	107	40	48	67.8	65.1
East	Top	154	53	60	68.9	68.8
	Average	128	44	53	51.4	51.7
	Poor	101	40	46	43.7	39.7
South	Top	151	46	66	86.1	86.3
	Average	130	45	57	82.6	82.6
	Poor	99	40	42	47.3	48.0

Ohio State University Extension districts are used to define five regions within the state. As might be expected, cash rents are highest in the Corn Belt regions of the state (Northwest and Southwest) where cash rents approach \$80/tillable acre for average-quality land and \$95/tillable acre for top-quality land.

Farm operators in the East and Northeast regions report the lowest cash rents. That is not surprising because soil productivity tends to be less in these regions than in Corn Belt



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regions. What may be surprising is that similar quality farmland rents for less in the East and Northeast regions than in the Northwest and Southwest regions. Possible reasons for this conflict and relatively low rents in the eastern portion of the state are smaller field sizes, more problems moving equipment in densely populated areas, and fewer farmers competing for land and bidding up cash rents.

### Market Value

Farm operators estimated cash rented farmland to have a fair market value of approximately \$2,500 per tillable acre on Jan. 1, 1999 (Table 2). This estimate is not to be confused with an estimate of the fair market value of all farm real estate. Cash rented farmland tends to be productive cropland, and does not include non-tillable land. Also, this estimate does not include the value of buildings on the property.

Substantial variability occurs in market-value estimates across the state. However, land quality appears to play a small role in explaining this variability. For example, state averages indicate that poor quality land has higher value than top quality land (Table 2). And farmland in regions with less productive soils (e.g., Northeast) have higher values than land with more productive soils (e.g., Northwest). One explanation might be development pressure.

Half of the respondents indicated that their rented tract is in an area where land is moving into residential, commercial, or industrial uses, and that such uses are affecting market values. It is possible that development tends to occur first on lower quality land, which would explain the inverse relationship between market value and land quality.

Respondents estimated that market values for average-quality, cash-rented farmland increased by 2.6% from Jan. 1, 1998 to Jan. 1, 1999. In most regions of the state, this estimated change in land value is negligible (Table 1). However, respondents in the South region reported slightly greater market value appreciation than elsewhere - 3% to 9% depending on land quality.

### Returns to Investment

Farm real estate landlords own farms for a variety of reasons, not the least of which is as an investment. From 1926 to 1995, annual returns to U.S. farm real estate averaged 10.5%. About half of this annual return was rent. The other half was appreciation. This total return compares favorably with other investment opportunities, especially when considering the risk or variation in annual returns.

Annual returns to common stock owners averaged 12.5% during the same period. The standard deviation of returns on common stock was 20.4%, compared to only 8.5% for farm real estate returns.

Combining the percent change in land market value with the current return (cash rent / market value) gives an approximation of total return to owners (Table 2). On average, returns to owners of cash-rented farmland average about 5% of their investment. That is not stellar compared to historic returns for farm real estate or to recent returns for common stocks. Furthermore, the somewhat meager 5% return received by owners is reduced by property taxes, insurance and maintenance expenses.

### About the research

The 1999 data on cash-leased farmland rents and market values comes from a regionally representative sample of 2,500 Ohio farmers questioned about their farm leasing arrangements and their use of precision agriculture technologies. Responses from 1351 producers yielded nearly 440 who are leasing farmland on a cash basis. The characteristics of respondents closely matched the age and farm size distributions from the 1997 Census of Agriculture. Farm operators were asked about a "particular tract that is representative of all tracts" that they cash lease. Besides the amount of cash rent, respondents identified the county where the tract is located, "normal" corn, soybean, and wheat yields on the tract, and their estimate of the fair market value of the tract. Readers should be cautioned that results reported here are preliminary. Data analysis will continue with more detailed results reported in the next few months.

**Table 2. Market Value and Returns to Cash Leased Farm Land**

Area	Land Class	Market Value (\$/acre)		% Change	Current Return	Total Return
		1998	1999		1999	1999
Ohio	Top	2,445	2,476	1.3%	3.6%	4.8%
	Average	2,465	2,529	2.6%	2.8%	5.3%
	Poor	2,618	2,661	1.6%	1.9%	3.5%
Northwest	Top	2,395	2,374	-0.9%	4.0%	3.2%
	Average	2,021	2,033	0.6%	3.9%	4.5%
	Poor	1,822	1,889	3.7%	3.8%	7.5%
Northeast	Top	2,944	2,944	0.0%	2.6%	2.6%
	Average	2,594	2,598	0.2%	2.0%	2.1%
	Poor	3,725	3,734	0.2%	1.1%	1.3%
Southwest	Top	2,520	2,457	-2.5%	3.9%	1.4%
	Average	3,221	3,399	5.5%	2.3%	7.9%
	Poor	2,736	2,725	-0.4%	2.4%	2.0%
East	Top	2,158	2,311	7.1%	3.0%	10.1%
	Average	1,914	1,882	-1.7%	2.7%	1.1%
	Poor	1,704	1,811	6.3%	2.2%	8.5%
South	Top	2,350	2,565	9.2%	3.4%	12.5%
	Average	1,968	2,027	3.0%	4.1%	7.1%
	Poor	1,445	1,550	7.2%	3.1%	10.3%

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