

AEDE-RP-0035-03

Ohio Farm Real Estate Markets

D. Lynn Forster, Craig A. Pohlman, Marvin T. Batte, and Brent L. Sohngen

October 2, 2003

Forster and Batte are professors, Pohlman is an undergraduate student, and Sohngen is an associate professor in the Department of Agricultural, Environmental, and Development Economics, 2120 Fyffe Rd., Columbus, Ohio 43210. Primary contact is Lynn Forster (Forster.4@osu.edu).

The authors would like to thank the many Ohio farm operators who provided data for this report.

Abstract: This report examines markets for leased Ohio farm real estate using results from the 2003 Farm Real Estate and Farming Practices Survey. Cash rents and estimated market values are computed for each region of the state. Factors thought to be important in explaining differences in cash rents and market values are examined. Typical share rental arrangements are described. Other attributes of farm lease markets are examined, such as the extent of leasing by farm operators (i.e., number and size of leased tracts), relationships between landlord and tenant, and the size distribution of tenants' farming operations.

Ohio Farm Real Estate Markets

This study examines markets for leased Ohio farm real estate. Cash rents and estimated market values are computed for each region of the state. Key factors that affect differences in cash rental rates and market values are examined. Typical share rental arrangements are described. Also, we examine characteristics of leased tracts (e.g., soil productivity and parcel sizes), relationships between landlords and tenants (e.g., length of leases and use of written leases), and characteristics of tenants (e.g., size of farm operation).

Data for the study comes from the 2003 Farm Real Estate and Farming Practices Survey. A representative sample of 2,500 Ohio farm operators were questioned about their farm leases and farming practices in 2003. The sampling procedure resulted in five representative regional samples within the state (Figure 1). Thirty-one percent of the respondents were from the Northwest, 22 percent were from the Northeast, 25 percent were from the Southwest, 13 percent were from the South and 9 percent were from the East. Farmers were asked questions about a representative parcel that they leased. A total of 1001 farmers answered and returned the survey, and they provided information for 676 leased tracts.

Leasing is prevalent in Ohio agriculture. According to the 1997 Census of Agriculture, 47 percent of Ohio's land in farms is leased. Respondents to our survey leased 50.4 percent of their farmland.

Cash leases are the most common rental arrangements and are found on 71 percent of leased acreage in our survey. Typically, the tenant pays the landlord a fixed annual payment. Operating, machinery, and labor cost are paid by the tenant, while the landlord pays land related costs, such as real estate taxes, mortgage interest, improvements, and major repairs. Cash lease payments tend to be fixed, but renegotiated from year to year. A small number of cash leases in our survey (6 percent) have variable rent clauses. There, the annual rent payment is a function of crop prices and/or yields.

Historically, share rents have been the dominant rental arrangement, but their popularity has diminished. They are used on 29 percent of leased acreage. In the typical share rental arrangement, landlord and tenant share revenues and operating costs (i.e., seed, fertilizer, and chemicals) equally. The tenant pays machinery and labor costs, while the landlord bears land related costs. Some share leases differ from this typical "50-50" share lease, and these variations are discussed later.

Cash Leases

Annually, the U.S. Department of Agriculture (USDA) estimates the average cash rent per acre for Ohio cropland and the average value per acre for Ohio farm real estate (Table 1). USDA's January 1, 2003 estimate for average cash rent per acre in Ohio was \$78 per acre.

Our survey respondents reported cash rents for 448 tracts in 2002 and 2003 respondents. Those cash rents average about \$74 per tillable acre in both 2002 and 2003. Given the fact that different samples of farmers are used in making these estimates and substantial variation in rents occurs across farms, USDA's estimates and this survey's estimate are likely not statistically different.

Our analysis is designed to go beyond estimating a single state average for cash rent because we want to capture the wide variations in rental rates based on geographic region, land quality, and whether the land is in an area affected by development. As previously mentioned, we divide the state into five geographic regions.

Each tract in our sample also is placed into one of three "land classes" – top quality, average quality, and poor quality. In our analysis, "land class" is defined by normal corn yields for each tract. Top quality land is defined as those parcels having normal corn yields of 140 bu./acre or greater. Corn yields on average quality parcels are between 120 and 140 bu./acre, and poor quality parcels have corn yields of 120 bu./acre or less. Survey respondents' average yields for major crops in each land class and each region within the state are shown in Table 2. Comparisons of data in this table show that yields are similar in each land class, regardless of the region.

Finally, each tract is placed into one of two "development" categories. Respondents were asked, "Is this tract is in an area where much of the land is moving into residential, commercial, or industrial uses and where these uses affect fair market value of the tract?" Based on their response, the tract is categorized as either "affected by development" or "not affected by development."

Statewide, cash rents for top quality tracts average \$86 per acre, while those for poor quality tracts are about \$50 per acre (Table 3). Cash rents are highest in the Corn Belt regions of the state (Northwest and Southwest) for all three land classes. Cash rents in these Corn Belt regions are over \$90/acre for top quality land and around \$80/acre for average quality land. These cash rents are about \$5/acre higher than state averages. Higher cash rents in the Corn Belt regions are especially pronounced on poor quality land: \$73/acre in the Northwest region, \$67/acre in the Southwest, and less than \$50/acre in other regions.

The East and Northeast regions have the lowest cash rent values. Of course, one explanation is low soil productivity in these regions. However, cash rents are relatively low for all three land classes in these regions. In the Northeast, cash rents for top quality tracts average only \$50 per acre, and only \$68 in the East. It is likely that cash rents in this region are heavily influenced by development pressure from urban areas. Comparisons of data in Table 3 suggest that areas affected by development pressure tend to have lower cash rents, especially for the top quality land. With development pressure, local cash rental markets face several forces causing downward pressure on rents: parcels are less accessible and smaller, drainage systems are often adversely affected, farming practices are constrained by non-farm neighbors, problems occur when moving equipment in densely populated areas, and competition for parcels may not be as keen.

Market Values

USDA's January 1, 2003 estimate of average value per acre of Ohio farm real estate was \$2,800 per acre (Table 1). Owners of farm real estate have enjoyed steady appreciation of value during the past five years. According to USDA estimates, average value per acre increased 3.7 percent during 2002, and its compounded growth rate was 6.5 percent per year during 1998-2003.

Operators responding to our survey estimate that their cash rented farmland had a statewide average market value of about \$2,800 per tillable acre on January 1, 2003. Unlike USDA's estimate of farm real estate values, this estimate does not take into

account non-tillable acres and does not include value added by buildings. It is also an estimate of only cash rented tracts which tend to be relatively productive land.

Market values of real estate reflect the present value of future cash flows generated for the owner. For farm real estate, future cash flows include annual rents or operating returns. In addition, market values of those parcels near residential, commercial, or industrial development are affected by the option to change land use and to develop the parcel at some time in the future.

Large differences in estimated market values exist across regions within the state (Table 4). Some of these differences can be explained by differences in "land class" or agricultural productivity. For example, in the Northwest region, the estimated market value for top quality land averages about \$2,600 per acre and about \$2,000 per acre for poor quality parcels.

For those parcels not affected by development, top quality parcels have the highest average market value in all regions except the Northeast. But for those parcels affected by development, there is little relationship between "land class" or agricultural productivity and average market price. In areas with development pressure, there could be high demand for poor quality agricultural land because of home buyers' preferences for rolling, wooded landscapes. In most of the five regions, the market value of parcels affected by development has little or no relationship with "land class."

Regression Analyses of Cash Rents and Market Values

In the preceding analyses of cash rents and market values, each of the factors (region, land productivity, and development pressure) appear to be important in explaining some of the differences in cash rents and market values observed in the sample. In order to examine the combined effects of these factors, linear regression models are estimated with cash rents and market values as dependent variables; regions, land productivity, and development pressure are explanatory variables. Other factors, drainage improvements and parcel size, are also hypothesized to explain differences in cash rents and market values and are included as explanatory variables. The existence of drainage improvements on the parcel is expected to affect cash rent and market value positively. Parcel size is expected to affect cash rents positively because tenants would pay higher cash rents for larger parcels due to improved operating efficiencies. Also, we hypothesize that smaller parcels have more potential buyers and are more liquid investments, thus parcel size is inversely related to market value. Regression results are shown in Table 5.

In this multivariate analysis of cash rents, six of the eight variables are statistically significant. Key results are:

-Nearby development negatively affects cash rents. If parcels have development pressure nearby, cash rents are reduced by about \$5 per acre.

-Cash rents are significantly affected by soil productivity. The coefficient for the corn yield variable is 0.37 implying that rents increase \$0.37 per acre for a one bushel increase in corn yield.

-Drainage improvements significantly affect cash rents. On average investments in drainage improvements increase cash rents by \$7 per acre.

-Parcel size has a small positive effect on cash rent, but the effect is statistically insignificant.

-There are substantial differences in cash rents among regions of the state, even after taking into account differences in soil productivity, development pressure, and parcel size. Cash rents in the Northwest and Southwest regions are \$24 - \$25 per acre higher than those in the Northeast and East regions, and cash rents in the South regions are about \$16 per acre higher than those in the Northeast and East regions.

-The explanatory variables used in this analysis explain about 47 percent of the observed variation in cash rents.

In the analysis of market values, population density of the township in which the parcel is located is added to the list of explanatory variable. We hypothesize that development pressure affects market values in two ways. First, development pressure in an adjacent township or county can cause market values to rise even before population growth occurs in the immediate vicinity. Second, as population grows in the immediate vicinity, a parcel's market value rises as the option to change land use becomes more feasible.

This multivariate analysis clarifies the role of factors such as development pressure, soil productivity, and regional location in determining market values. Key results from the analysis are the following:

-Parcels located in areas with development pressure (i.e., "where much of the land is moving into other uses and where these uses affect market values") have a "development premium" of about \$750 per acre, on average. In addition, population density has a strong effect of market values. The median population density for townships in Ohio is 55 people square mile. With each one unit increase in density, market values increase by \$12 acre. In some townships in metropolitan areas, agricultural parcels are in areas with population densities of 200-400 people per square mile. Our analysis indicates that a population density of 300 would increase the market value of a parcel by about \$3,000 per acre compared to a similar parcel located in a rural area with median population density.

-Soil productivity and drainage improvements significantly affect market values. On average, a one bushel per acre change in corn yield results in a \$15 per acre change in market value. The existence of drainage improvements increases market value by an average of \$376 per acre.

-Regional differences in market values, as illustrated in Table 4, are largely explained by development pressure, population density, soil productivity, and drainage improvements. Regression coefficients for regional location variables show market value premiums for parcels in Northeast and Southwest regions and market value reduction in the South region. However, all of the coefficients for regional variables are statistically insignificant.

-Parcel size has a negative, but statistically insignificant effect on market value.

-Variables used in this analysis (development pressure, population density, corn yield, drainage improvements, and region location variables) explain about 40 percent of the observed variation in market values, as estimated by survey participants.

Share Leases

Under a crop-share lease contract, landlord and tenant share production and costs. Our results indicate that in over 80 percent of the share leases, landlord and tenant share production on a 50-50 basis (Table 6). In 50-50 share leases, the tenant and landlord both pay 50 percent of seed, fertilizer, and chemical expenses. In some 50-50

arrangements, custom application of fertilizer and pesticides is substituted for application by the tenant, and these custom application costs are shared by the tenant and the landlord. Sharing custom application costs diverges from the traditional 50-50 share lease where the tenant is responsible for all machinery and labor costs for field operations (Table 7). Variable rate technology (VRT) costs are shared 50-50 by most tenants and landlords, but in some leases, tenants pay most or all VRT costs.

A small proportion (11 percent) of the share leases are 60-40 or 67-33 (Table 6). In the traditional 67-33 share lease, the tenant receives two-thirds of the crop. Seed, fertilizer, and chemical expenses are paid almost entirely by the tenant, as are application costs. As with the 50-50 share lease, the tenant supplies all labor and machinery related resources while the landlord furnishes land related resources.

Share lease provisions are far from being standard from farm to farm. The most variability in share lease provisions occurs in charges for harvesting the landlord's share of the crop. In 55 percent of the share leases, the tenant charges for harvesting the landlord's share. In 45 percent of the leases, there is no charge. For those leases with a charge to the landlord for harvesting, the average rate is about \$17 per acre for corn, soybean, and wheat combining (Table 8). However, there is wide variation in combining charges: 11 percent of the landlords pay less than \$12 per acre for combining corn, and 16 percent pay more than \$22 per acre.

Similar variability occurs with landlord expenses for grain drying and hauling (Table 9). The average charge to landlords for corn drying is 12 cents per bushel, but it ranges from 5 to 20 cents per bushel. The average grain hauling charge is about 10 cents per bushel, with a range of less than 5 cents to 20 cents per bushel.

General Characteristics of Leased Tracts

Over one-fourth of tracts are 50 acres or less; over one-half of tracts are 100 acres or less (Table 10). A small proportion of tracts are sizeable (e.g., about 12% are over 300 acres). Average size of share leased tracts (165 acres) is slightly larger than size of cash leased tracts (150 acres).

Development affects a high proportion of all leased tracts (Table 11). Forty percent are in areas affected by development (i.e., tract is in an area moving into residential, commercial, and industrial uses and where these uses affect the fair market value of land.) A higher proportion of cash leased tracts (45 percent) are in areas affected by development than are share leased tracts. Only 32 percent of share leased tracts are in an area affected by development.

Landlord-Tenant Relationships

The majority of landlords are either a relative of the tenant or a retired (or other) farmer (Table 12). While farm operators own only about one-half of farmland, a close landlord-tenant relationship is likely to exist on most leased tracts. Developers and realtors own relatively little farm real estate Retired (or other) farmers appear to favor cash leases, while relatives of tenants prefer share leases.

Leases tend to be long-term arrangements. Leased tracts in the sample have been farmed by the same tenant for about 16 years, on average (Table 13). About 60 percent of the tracts have been leased by the same tenant for more than 10 years. Only about 20 percent of the tracts are farmed by the same tenant for five years or less. Cash leases tend to be slightly shorter duration than share leases.

Farm leases tend to be informal. Despite the long-term tenure of most tenants, two-thirds of the leased tracts are operated with verbal agreements rather than written ones (Table 14). Only 12 percent of share leased tracts have written leases, while 44 percent of cash leased tracts have written leases. This difference seems counterintuitive because share leases are more complex than cash leases.

Farm Operators

Most commercial farm operators both own and lease farmland. For those farm operators who lease, the average number of tracts leased is about six (Table 15). Our survey found that a small but significant number (2.4 percent) of the operators lease more than 20 tracts.

Tenants tend not to be small farmers. Rather the largest farm operators lease a disproportionately large amount of farm real estate. In our sample, one-half of the leased farmland is operated by the largest 10 percent of farm operators in our sample (Table 16). The largest 20 percent of operators account for 70 percent of leased farmland.

Farm operator size distribution is depicted in Figure 2. Curves in the figure represent the *cumulative percentage of farm operators* (as arrayed from smallest to largest) and the *cumulative percentages of land owned and land leased* by farm operators in our sample. The smallest 40 percent of farms have about 10 percent of all land owned by farm operators but lease only two percent of all land leased. The smallest 60 percent of farms have 25 percent of all land owned by operators but lease only 10 percent of all land leased.

Concluding Comments

Our study examines markets for leased Ohio farm real estate using results from the 2003 Farm Real Estate and Farming Practices Survey. Cash rents and estimated market values are computed for each region of the state. Factors thought to be important in explaining differences in cash rents and market values are examined. Typical share rental arrangements are described. Other attributes of farm lease markets are examined, such as the extent of leasing by farm operators (i.e., number and size of leased tracts), relationships between landlord and tenant, and the size distribution of tenants' farming operations.

About one-half of the variation in cash rents across the state can be explained by development pressure, soil productivity, drainage improvements, and regional location. Cash rents for top class land (i.e., normal corn yields of 140 bushels per acre or greater) are about \$5 per acre higher than those for average class land (i.e., normal corn yields between 120 and 140 bushels per acre). On average, the rental market rewards a one bushel per acre increase in corn yield with a \$0.37 increase in annual cash rent. Location has an important effect on cash rents. Holding land quality and parcel size constant, cash rents in the Northwest and Southwest regions are about \$25 per acre higher than those in the Northeast and East regions, and cash rents in the South regions are about \$15 per acre higher than those in the Northeast and East regions. Local development pressure has a negative impact on cash rents, reducing them \$5 per acre, on average.

Location makes a great difference in determining estimated market values. Our results indicate that development near the tract is a leading factor in determining the

estimated market value of farmland. As population density increases in areas affected by development, this "development premium" becomes even larger. It is common to observe agriculture parcels in areas with high population densities having "development premiums" of \$5,000 per acre or more

Demand for parcels of land represents aggregate demand, which includes the interests of farmers and non-farmers alike. For parcels located in regions economically dominated by agriculture, soil productivity and drainage improvements emerge as important determinants of market values. In areas with both agricultural and non-agricultural demands for land, development pressures overshadow soil productivity and drainage improvements in determining market values.

The total return on investment for land ownership can be found by adding together the increase in fair market value from 2002 to 2003 with the current return. In percentage terms, the total return on investment would be:

% return on investment = ([change in market value + cash rent] / market value). Using respondents' estimates of change in market value from 2002 to 2003 and their cash rents, the total return on investment averaged 4.5 percent during 2002 for parcels in the survey. It was slightly higher on those parcels unaffected by development (5 percent) than on those parcels affected by development (4 percent).

About one-half of farmland in Ohio is leased from off-farm landlords. However, leased parcels are relatively small and are like blocks across a quilted landscape. Over one-fourth of tracts are 50 acres or less; over one-half of tracts are 100 acres or less. Cash leases dominate share leases. Cash leases are used on over 70 percent of the leased farm real estate. Most of these have fixed annual rents with all the yield and price risks borne by the tenant. Share leases are used on only 30 percent of the farm real estate. Share leased parcels are slightly larger than cash leased parcels, and share leasing arrangements occur more frequently where owners and tenants are relatives and in areas with less development pressure.

Farm real estate leases tend to be informal. Two-thirds of all leased tracts are operated with verbal agreements rather than written ones, and almost 90 percent of share leases are verbal agreements. Despite their informal nature, they tend to be long-term. Leased tracts in the sample had been farmed by the same tenant for 16 years, on average. While landlords may be "off-farm," they are apt to be close to agriculture. The majority are retired farmers or relatives of tenants.

Economies of scale result in lower costs per unit and a competitive advantage for larger farm operators. These farmers aggressively expand the size of their operations by leasing. Because of capital constraints and financial risks associated with using debt, leasing is a preferred means of acquiring control of land resources than is ownership. A high proportion of leased farmland is operated by large-scale farm operations.



Figure 1. Regions Used in Study

Table 1. Ohio Cropland Rented for Cash: Average Cash Rent Per Acre and Ohio Farm Real Estate: Average Value per Acre, January 1, 1998-02.

Year	Average Cash Rent (\$/Acre)	Average Value (\$/Acre)
1998	73.20	2,040
1999	73.70	2,220
2000	74.00	2,300
2001	76.50	2,480
2002	77.00	2,700
2003	78.00	2,800

Source: U.S. Department of Agriculture, Economic Research Service.

Table 2. Crop Yields by Land Class and Region.

Region	Land Class	Corn bu/acre	Soybeans bu/acre	Wheat bu/acre
Ohio	Тор	151	48	69
	Average	127	41	63
	Poor	101	38	50
Northwest	Тор	151	46	70
	Average	129	40	66
	Poor	101	36	56
Northeast	Тор	150	45	70
	Average	127	39	60
	Poor	103	39	46
Southwest	Тор	153	48	69
	Average	126	43	61
	Poor	97	35	48
East	Тор	148	48	63
	Average	123	40	58
	Poor	98	40	51
South	Тор	151	51	67
	Average	126	43	61
	Poor	104	38	44

Table 3. Cash Rents per Acre, 2003, by Land Class, Region, and Development Effect

Region	Land Class	Land Affected by Development	Land not Affected by Development	All Tracts
Ohio	Тор	76	91	86
	Average	69	79	74
	Poor	49	52	50
Northwest	Top	85	93	91
	Average	82	80	80
	Poor	77	71	73
Northeast	Top	34	60	50
	Average	52	60	54
	Poor	43	43	42
Southwest	Top	85	95	90
	Average	75	89	83
	Poor	65	70	67
East	Top	66	72	69
	Average	73	68	66
	Poor	33	31	32
South	Top	75	88	84
	Average	78	72	76
	Poor	51	44	47

Table 4. Average Market Values, January 1, 2003, by Region and by Development Effect

A	3 / 1 /	T 7 1
Average	Market	Value

		Average warket value		
Regions	Land Class	Land Affected by Development	Land Not Affected by Development	Average Market Value All Tracts
Ohio	Top	3,780	2,550	2,930
	Average	3,202	2,255	2,796
	Poor	3,786	2,384	3,158
Northwest	Top	3,611	2,392	2,614
	Average	2,814	2,112	2,333
	Poor	1,770	2,091	2,032
Northeast	Top	4,000	2,900	3,480
	Average	3,369	2,500	3,423
	Poor	5,599	3,552	4,862
Southwest	Top	4,239	2,842	3,329
	Average	2,957	2,663	2,851
	Poor	4,339	1,972	3,447
East	Top	4,750	2,500	3,625
	Average	6,027	2,000	4,416
	Poor	2,204	1,833	1,923
South	Top	2,100	2,348	2,312
	Average	1,725	1,995	1,907
	Poor	2,200	1,553	1,847

Table 5. Effects of Region, Land Class, Development Pressure, and Parcel Size on Cash Rents and Market Values.

	Dependent Variables		
Independent	Cash Rents	Market Values	
Variables	(\$/Acre)	(\$/Acre)	
Intercept	5.15	-499	
	(7.59)	(757)	
Development Pressure	-5.21	756	
(Yes=1, No=0)	(2.41)	(242)	
Population Density		11.86	
(Population / sq.mi.)		(1.33)	
Corn Yield	0.37	14.83	
(Bushels / acre)	(0.056)	(5.45)	
Drainage Improvements	7.01	376	
(Yes=1, No=0)	(2.55)	(249)	
Northeast Region	-1.67	496	
(Yes=1, No=0)	(4.52)	(452)	
South Region	15.88	-483	
(Yes=1, No=0)	(5.06)	(489)	
Southwest Region	25.50	229	
(Yes=1, No=0)	(4.40)	(445)	
Northwest Region	23.61	-78	
(Yes=1, No=0)	(4.37)	(435)	
Parcel Size	0.55	-51	
Acres (100s)	(0.62)	(58)	
R^2	0.467	0.395	
n	321	224	

Notes: Table reports ordinary least-squares (OLS) estimates of regression coefficients. Standard errors are reported in parentheses. Coefficients in bold are significant at p < 0.05; the coefficient in bold italics is significant at p < .13. The omitted dichotomous variable is East region.

Table 6. Share of Production Received by Tenant on Crop Share Leased Tracts

Tenant-Landlord	Percent of Tracts
25-75	1.9%
50-50	83.1%
60-40	4.2%
67-33	7.0%
Other	3.8%
Total	100.0%
n	213

Table 7. Share of Input Costs Paid by Tenant on 50-50 Crop Share Leased Tracts

	Share of	Input Category	Paid by Tenan	t (%)
Input Category	< 50	50	>50	Total
	Perce	ent of 50-50 Sho	are Tracts	
Seed	0.6%	97.6%	1.8%	100.0%
Fertilizer	2.4%	96.4%	1.2%	100.0%
Chemicals	0.6%	97.6%	1.2%	100.0%
Lime	9.1%	88.1%	2.8%	100.0%
Variable Rate Technology (e.g. Grid soil sampling)	0.0%	78.9%	21.1%	100.0%

Table 8. Landlord's Expenses in Share Leases with Landlord Paying Combining Expenses

\$/Acre	Combining Corn (Percent of Tracts)	Combining Soybeans (Percent of Tracts)	Combining Wheat (Percent of Tracts)
<\$12	11.4%	11.7%	13.4%
\$12-\$16	28.9%	30.8%	30.9%
\$17-\$21	43.9%	45.8%	46.4%
\$22-\$26	14.9%	10.8%	9.3%
>\$26	0.9%	0.8%	0.0%
Total	100.0%	100.0%	100.0%
Mean (\$/Acre)	17.20	16.90	16.70
n	114	120	97

Table 9. Landlord's Expenses in Share Leases with Landlord Paying Drying and Hauling Expenses

Corn drying cents/bushel Percent of Tracts		Grain Hauling cents/bushel Per	g cent of Tracts
<5	0.0%	<5	4.0%
5-8	8.3%	5-8	32.0%
9-12	54.2%	9-12	48.0%
13-16	25.0%	13-16	12.0%
19-20	12.5%	17-20	4.0%
Total	100.0%	Total	100.0%
Mean (cents/bu	1) 12.0	Mean (cents/bu)	9.6
n	24	n	25

Table 10. Size of Leased Tract

Tract Size (Acres)	Cash Lease (Percent of Tracts)	Share Lease (Percent of Tracts)	All Leased Tracts (Percent of Tracts)
0-50	27.4%	24.1%	26.3%
50-100	29.5%	25.4%	28.1%
100-150	14.3%	17.4%	15.3%
150-200	9.8%	11.2%	10.2%
200-250	4.5%	4.5%	4.5%
250-300	3.4%	4.9%	3.9%
>300	11.1%	12.5%	11.6%
Total	100.0%	100.0%	100.0%
Mean (acres)	149.7	164.8	154.8
n	441	224	665

Table 11. Leased Tract Is in Area Moving into Residential, Commercial, and Industrial Uses and Where These Uses Affect Fair Market Value of Land

	Cash Lease (Percent of Tracts)	Share Lease (Percent of Tracts)	All Leased Tracts (Percent of Tracts)
Yes	45.1%	31.6%	40.5%
No	54.9%	68.4%	59.5%
Total	100.0%	100.0%	100.0%
n	446	225	671

Table 12. Owner of Leased Tract

	Cash Lease	Share Lease	All Leased
Tracts Tracts)	(Percent of Tracts)	(Percent of Tracts)	(Percent of
Relative of Tenant	27.2%	32.5%	29.0%
Retired or Other Farme	er 37.1%	22.4%	32.1%
Developer or Realtor	4.0%	0.9%	3.0%
Other	31.7%	44.3%	35.9%
Total	100.0%	100.0%	100.0%
n	448	228	676

Table 13. Number of Years Leased Tract Farmed by Tenant

Years Farmed	Cash Lease (Percent of Tracts)	Share Lease (Percent of Tracts)	All Leased Tracts (Percent of Tracts)
1	1.6%	1.7%	1.6%
2 to 5	20.2%	13.1%	17.8%
6 to 10	24.4%	17.5%	22.1%
11 to 15	17.3%	16.6%	17.0%
15 to 20	13.0%	14.4%	13.5%
over 20	23.5%	36.7%	28.0%
Total	100.0%	100.0%	100.0%
Mean (years)	14.6	18.3	15.9
n	446	229	675

Table 14. Lease is in Writing

	Cash Lease (Percent of Tracts)	Share Lease (Percent of Tracts)	All Leased Tracts (Percent of Tracts)
Yes	44.0%	11.9%	33.2%
No	56.0%	88.1%	67.8%
Total	100.0%	100.0%	100.0%
n	448	227	675

Table 15. Number of Tracts Leased by Farm Operators

Number of Tracts Leased	Percent of Farm Operators with This Number of Cash Leased Tracts Share Leased Tracts Any Leased Tracts		
0	53.9%	76.9%	45.3%
1	11.8%	8.9%	12.2%
2 to 3	14.0%	6.8%	15.1%
4 to 5	7.5%	4.0%	9.9%
6 to 10	7.8%	2.0%	10.2%
11 to 20	3.2%	1.2%	5.0%
>20	1.8%	0.2%	2.4%
Total	100.0%	100.0%	100%
Mean Number of Tra	acts		
All Operators	2.4	0.8	3.2
Operators Who Lea	ase 5.2	3.5	5.9

Table 16. Farm Size Distribution: Share of Leased and Owned Farmland Operated by Farm Operator Size

Operator Size (Acres Farmed)	Share of Leased Land (percent)	Share of Owned Land (percent)
Largest 10 percent	49.7%	36.1%
Largest 20 percent	69.8%	53.5%
Largest 30 percent	82.0%	65.9%
Largest 40 percent	90.0%	75.5%
Largest 50 percent	95.4%	82.9%

Figure 2.

