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The Minnesota Rural Real Estate Market in 1979



Including special studies of:

Minnesota Economic Development Regions
The Red River Valley

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SUMMARY

The Minnesota Rural Real Estate Market in 1979

The average value of Minnesota farm land was \$1,040 per acre in 1979, as estimated by brokers, lending agencies, and others familiar with the rural real estate market. This was an increase of 17% from July 1978 to July 1979. Above average increases in estimated values were reported in the Northwest, Northeast and Southeast districts of Minnesota. The average reported sales price of farm land in Minnesota was \$1,140 per acre in 1979. This was an increase of 16 percent over the average price received in reported sales in 1978. The estimated value is generally more indicative of market trends, while the sales prices reflect more localized fluctuations in the farm land market. The largest increase in the average reported sales prices was a tremendous 62% in economic development region 2, which lies just east of the Red River Valley. The Red River Valley led the state in land value increases during the period of rapid change in 1973-74 but now is experiencing a rate of increase almost even with the statewide average.

The 1979 farm land market was characterized by a low level of market transactions. The index of farm transfers by voluntary sale expressed as a percentage of all farms in Minnesota as reported by the U.S. Department of Agriculture continued its long-term decline, to the lowest level since the early 1930's. While the rate of total transfers increased slightly over the 1978 level, it is still one of the lowest ever reported since 1926. Associated with the thinness of the market in 1979 was its extremely local character. Over two-thirds of all farm land sold was purchased by buyers who lived less than 10 miles from the tracts purchased. The most frequent sales to distant buyers were in the Northeast portion of the state, where rural residences and hobby farms are prevalent.

The lagging portion of the farm land market in 1979 was in West Central Minnesota. The eight-county group which constitutes economic development region 4 experienced a three percent decline from 1978 sales prices. This portion of the state experienced a tremendous boom in land prices in 1977-78, and buyers were apparently reluctant to continue the upward movement. The thinness of the land market has also given rise to erratic trends in prices. In a group of counties whose locus lies about 90 miles northwest of the Twin Cities Metropolitan Area, land prices fell from 1978 to 1979 in both real and nominal terms. Even though land prices in most of the state increased in real terms over 1978 levels, in economic development regions 3, 4, 5 and 6W, rates of increase were below the 11.3 percent increase in the consumer price index in 1979. In other words, these areas suffered a decline in farm land values in real terms.

Farm expansion buyers dominated the demand side of the farm land market in both the Red River Valley and in the cash grain areas of southern and southwestern Minnesota. Statewide, farm expansion buyers accounted for 67% of all purchases reported. The range in the proportion of expansion purchases varied from a low of 25% in the Northeast district to a high of 86% in the Southwest. Among economic development regions, the highest concentration of farm expansion buyers was in region 9, containing the highest priced farm land in the state. The activity of agricultural investor buyers has fluctuated within a relatively narrow range for

the past three decades in the Minnesota farm land market. In 1979, investor buyers accounted for 12% of all purchases statewide. Operating farmer buyers who purchased complete farm units accounted for 21% of Minnesota farm land purchases during the first six months of 1979, with most of these purchases concentrated in the Northeast and East Central portions of the state. The high proportion of farm expansion purchases statewide is clear indication that participation in the farm land market has been highly dependent upon financing ability and debt repayment capacity achieved through the ownership of other land in addition to the tracts purchased.

The supply side of the farm land market in Minnesota has been dominated by death or retirement in recent years. These two reasons for selling accounted for 59% of all sales in 1979. The total population of sales due to people leaving farming for any reason was 74%. Only 10% of the sales were attributed to owners who had sold their farm land in order to move to another area and begin a new farming operation.

The financing of farm land purchases by the use of contracts for deed continues to predominate in the land market. When land prices rise to high levels this method of financing is advantageous to both the buyer and the seller. It usually involves a lower down-payment, for the buyer, and offers possibilities for reducing capital gains tax liabilities, for the seller. About one-fourth of all purchases were financed by mortgages, and 16% of the sales were cash purchases. Unlike previous years, the frequency of use of these various methods of financing was relatively constant among the districts in 1979.

The changes illustrated by this report took place from July 1978 to July 1979. They are based on reports of farm land transfers which occurred during the first six months of 1979, and on reporters' estimates of value. The data presented do not encompass any changes in the Minnesota rural real estate market which may have taken place the last six months of 1979 or the first six months of 1980. There have been frequent reports of some softening in the farm land market in the early months of 1980. These changes will be reflected in the report on the Minnesota rural real estate market for 1980.

PROCEDURE

Data for the Minnesota Rural Real Estate Market Report in 1979 were collected through the use of mail questionnaires sent to 1,435 individuals during the months of July and August of 1979. Real estate brokers, county officials, agricultural loan specialists, and other people well informed on farm land values in Minnesota have contributed as respondents to the questionnaires.

The data collected are of two types: actual sales prices, and reporters' estimates of values. In the first section of the questionnaire, respondents were asked to estimate an average value for farm land in their area, with separate estimates for land of high, medium and low quality. These estimates were used to calculate percentage changes in land values during the past year. This was done by (1) weighting the estimate by the average acres of farm land in their county; (2) adding these values county by county for each district; and (3) dividing this total for all counties in a district by the total acreage of farm land in that district. In making comparisons with 1978, only estimates of the respondents who had answered in both 1978 and 1979 were used. Under this rigorous restriction, a total of 487 estimates were useable.

Land value changes determined by the estimate method have definite advantages over value changes based on reported sales. Factors which have a marked effect on land value, such as the quality of land and buildings, may vary significantly from sale to sale and year to year. For this reason, only reports from respondents who report for at least two consecutive years are used in constructing the estimates of value.

The second section of the questionnaire requested data on actual farm sales. Reports were obtained on a total of 1,119 sales which had taken place during the first six months of 1979. Data were collected on type of buyer and seller, land and building quality, and the method of financing. When filling out this part of the questionnaire, reporters were asked not to include sales between close relatives (father to son, etc.).

This report distinguishes three types of agricultural land buyers:

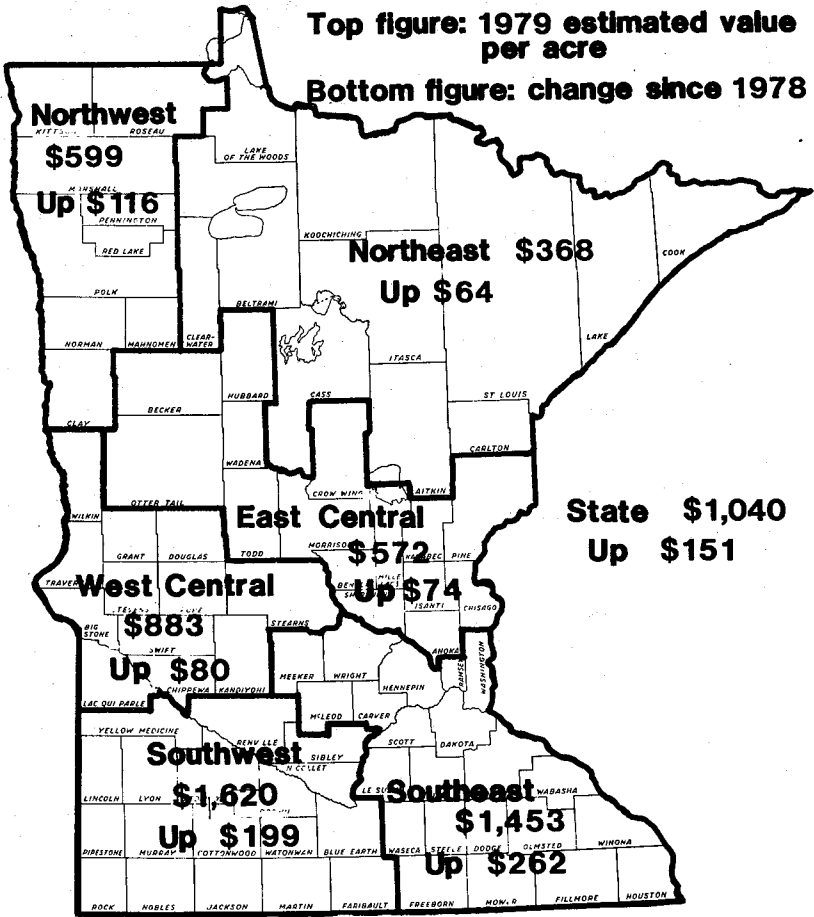
- 1.) Operating farmers: Those buying complete farm units for operation as individual farms which they plan to run themselves.
- 2.) Expansion buyers: Those who already own some farm land either as farmers or landlords and are adding to their existing holdings.
- 3.) Agricultural investor buyers: Those who buy farm land to be rented out or managed for farming purposes.

The presence of buildings is used to distinguish between improved and unimproved land. Land with no buildings is unimproved. The respondents judge the quality of farm land as good, average or poor, and rate building quality as good, average, poor or none.

Respondents also provide information on the reason for selling farm land and on the distance the buyer lived from the tract at the time of purchase.

The analysis presented in this publication is made possible by the conscientious and prompt replies supplied by the reporters, some of whom have been providing information annually for several decades.

Figure 1: Estimated Average Land Values per Acre
 (excluding Hennepin and Ramsey counties)*



*Based on reported estimates of average value per acre of farmland.

PART I: THE MINNESOTA FARM LAND MARKET IN 1979

A. Land Market Trends

Reporters' Estimates

The estimated statewide average value of farm land in (July) 1979 was \$1040 per acre (Table 1). This represents an increase of \$151 per acre or 17% over 1978. The annual increases in farm land values from 1973 to 1978 were 20, 42, 24, 27, 19 and 12 percent, respectively (Table 2). The 1979 increase of 17 percent is the second smallest percentage change since 1972 but it does represent a notable dollar increase. The 42 percent increase from 1973 to 1974 was applied to a base of \$298 and added \$125 to the value per acre, while the 17% increase of 1979 occurred from a base of \$889 and added \$151 to the estimated value per acre. The previous three years in the farmland market (1977, 1978, 1979) have not reflected the optimism and large percentage increase of 1974, 1975 and 1976. Farm land price increases which began late in 1972 after the Russian wheat purchases have now begun to slow down.

There are two distinct regional groupings in the Minnesota farm land market. One comprises the three eastern districts (Northeast, East Central and Southeast) which are influenced mainly by livestock, recreational and residential land uses. The other region contains the three western districts (Southwest, West Central, and Northwest) which are more heavily dependent upon cash grain farming. Since 1973, the estimated value of farm land has generally risen faster in the three western districts than in the three eastern districts, reversing a trend which had lasted throughout the 1960's. The regional percentage increases in estimated value in 1979 do not show a clear conformity with the new trend, which has been growing weaker in recent years. Increases in 1979 in the Southwest and West Central districts were well below the statewide average. A slow transition may be taking place again in Minnesota farm land market activity.

By districts, the Southeast, Northwest and Northeast showed the largest percentage increases in estimated value (22, 24 and 21 percent, respectively). The 14 percent increase in the Southwest district was only slightly above the rate of inflation, but was high relative to its 1978 increase of 8 percent. Only the East Central district experienced a decline in the estimated percentage increase, falling from 20% in 1978 to 15% in 1979. The estimated dollar value per acre of farm land for all six districts increased.

The smallest percentage increases in 1979 occurred in the West Central and Southwest districts (10 and 14 percent, respectively), while the other heavily cash crop district, the Northwest, led the state with its estimated percentage increase of 24%. It is not surprising to see a difference of this magnitude among these three districts. The major cash crops in the West Central and Southwest districts are corn and soybeans, while sugar beets, wheat, sunflowers and potatoes dominate land use in the Northwest. Weather conditions vary among these three districts from year to year, adding to the dissimilarity. The general weakness of corn and soybean crop prices over the last three years is probably responsible for the small percentage increases in estimated farm land value in the West Central and Southwest districts.

Table 1: Estimated Average Value Per Acre of Farm Land by District, Minnesota, 1969-1979*.

Years	South-east	South-west	West Central	East Central	North-west	North-east	Minnesota
dollars per acre							
1969	308	350	196	146	120	54	223
1970	317	347	198	161	120	62	227
1971	333	351	204	155	119	63	232
1972	370	379	208	163	117	76	248
1973	433	459	247	194	146	115	298
1974	576	675	378	279	199	144	423
1975	674	844	503	296	295	163	525
1976	856	1,106	624	349	378	210	667
1977	1,027	1,316	730	415	427	279	794
1978	1,191	1,421	803	498	483	304	889
1979	1,453	1,620	883	572	599	368	1,040

*Based on reporters' estimates of average value per acre of farm land in their area.

Table 2: Annual Percentage Changes in Estimated Farm Land Value Per Acre, by District, Minnesota, 1972-1979.

District	Percentage change from July to July						
	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79
----- percent -----							
Southeast	17	33	17	27	20	16	22
Southwest	21	47	25	31	19	8	14
W. Central	19	53	33	24	17	10	10
E. Central	19	44	6	18	19	20	15
Northwest	25	36	48	28	13	13	24
Northeast	51	25	13	29	33	9	21
Minnesota	20	42	24	27	19	12	17

Despite its small percentage increase, the Southwest district still maintained its position as the leader in estimated value per acre in 1979, at \$1,620. Its lead, which had been narrow in 1972, now appears to be slowing again. The Southeast district has had larger percentage increases in estimated farm land value than the Southwest district since 1977. Historically, the Southwest district has contained the highest priced farm land in the state since the mid-1930's, and has held this lead for almost 50 years. Between 1945 and 1960 its lead generally widened, and then slowly narrowed to the \$9 difference from the Southeast in 1972. The narrowing which occurred between the two districts is primarily due to the increased demand for land for non-farm purposes in the Southeast district. When the prices of farm products are strong and weather is favorable this is reflected in land prices in the Southwest district, as occurred during the years following the Russian wheat purchase. The percentage increase in estimated farm land value in the Southwest district between 1973 and 1974 was 47%.

The compounded annual rate of increase needed to derive 1979 average estimated values from any given base year is presented in Table 3. For example, the 1970 estimated value per acre statewide of \$227 per acre, if compounded at an annual rate of 18.43% would equal the estimated value per acre statewide of \$1,040 in 1979. The information is presented for each of the districts and the state as a whole, for each year since 1970.

The large increase in land values which occurred as a result of the high grain prices of 1973 emerges clearly from the table. The compounded annual rate of increase for the period from 1973 to 1979 was 23.16%, while the annual rate of increase required to reach 1979 values from the 1974 base was only 19.71%. The sizeable reduction in the compounded rate of annual increase reflects the fact that the estimated average value per acre statewide in 1973 was \$298 compared to \$423 in 1974, an increase in one year of 42%. The information presented in Table 3 can be compared with the rate of inflation as a measure of the increase in real value of farm land. Statewide, the annual rate of increase in estimated values has been higher than the rate of increase in the consumer price index (CPI) for every year shown, but the difference in 1979 was the smallest in any year since 1970. Using CPI as a deflator, the real rate of increase in Minnesota estimated farm land values in 1979 was only 5.6 percent.

Actual Sales

The statewide average reported sales price for farm land was \$1,140 per acre in 1979 (Table 4), based on information received on 1,119 sales in the period January through June. This represents a 16% increase over the 1978 average sales price. In 1979 all six districts showed an increase in the average reported sales price, the first time in three years that no district showed a decline. The data on reported sales in 1979 supports the reporters' estimates of value on a statewide basis, but sheds new light on the pattern of increases among the six districts.

Prices received in actual sales increased 27% in the Southwest district, compared to only a 14 percent increase in estimated values (Table 5). Actual sales prices are a reflection of isolated sales in a very thin market, while reporters' estimates of value refer to the total farm land area, and have historically been a better guide to long term market trends.

Table 3: Compounded Rate of Annual Increase Using Reporters' Estimates of Minnesota Farm Land Values for Stated Time Periods.

District	1979/ 1970	1979/ 1971	1979/ 1972	1979/ 1973	1979/ 1974	1979/ 1975	1979/ 1976	1979/ 1977	1979/ 1978
Southeast	18.43	20.22	21.58	22.36	20.33	21.17	19.29	18.95	22.00
Southwest	18.67	21.07	23.06	23.40	19.14	17.70	13.57	10.95	14.00
W. Central	18.07	20.10	22.94	23.65	18.49	15.11	12.27	9.98	9.96
E. Central	15.13	17.73	19.64	19.75	15.44	17.90	17.90	17.40	14.86
Northwest	19.56	22.39	26.28	26.53	24.66	19.37	16.59	18.44	24.02
Northeast	21.88	24.68	25.27	21.39	20.64	22.58	20.56	14.48	21.05
Minnesota	18.43	20.63	22.73	23.16	19.71	18.64	15.96	14.45	16.99
CPI*	4.3	3.3	6.2	11.0	9.1	5.8	6.5	7.7	11.3

* CPI = Consumer Price Index.

Table 4: Average Reported Sales Price Per Acre of Farm Land, by District, Minnesota, 1969-1979*.

Years	South- east	South- west	West Central	East Central	North- west	North- east	Minnesota
dollars per acre							
1969	341	334	194	130	121	51	238
1970	346	340	206	141	113	45	243
1971	344	343	205	150	100	44	259
1972	389	366	222	145	107	76	293
1973	444	410	223	178	120	122	298
1974	598	630	340	243	204	144	450
1975	792	844	493	299	353	159	607
1976	937	1,116	664	321	377	210	735
1977	1,216	1,340	709	446	432	198	859
1978	1,352	1,321	908	554	504	256	980
1979	1,675	1,680	949	618	612	411	1,140
% Change 1978-79	24%	27%	5%	12%	21%	60%	16%

*Based on reported farm sales, January 1 to July 1 of each year.

Table 5: Average Estimated Value Per Acre of Farm Land Compared with Prices Received in Actual Sales, by District, Minnesota, 1978-1979.

District	1978		1979		Percent Changes Over 1978	
	Estimated Value	Sales Price	Estimated Value	Sales Price	Estimated	Actual
	- dollars per acre -				- percent -	
Southeast	1191	1352	1453	1675	22	24
Southwest	1421	1321	1620	1680	14	27
W. Central	803	908	883	949	10	5
E. Central	498	554	572	618	15	12
Northwest	483	504	599	612	24	21
Northeast	304	256	368	411	21	60
Minnesota	889	980	1040	1140	17	16

The differences between estimated values and actual sales prices in the Southeast, Southwest and Northeast districts can be explained in part by a disproportionately large number of sales of high priced land in these districts in 1979, when compared to 1978. To remove the effect of this shift in sales activity from lower priced to higher priced land, an adjusted sales price per acre was computed for each district, to reduce the effect of changes in the geographic distribution of acres sold between 1978 and 1979. Table 6 shows the reductions that this adjustment achieves in the percentage changes in the Southeast, Southwest and Northeast districts. The opposite was true in the Northwest district, where the percentage increase rose from 21% (unadjusted) to 44% (adjusted). In the Northeast district, where the frequency of reported sales is lower than in the other five districts, the adjustment to remove the effect of a geographic shift in the distribution of sales is also important. The adjusted sales price increase of 47% in the Northeast district in 1979 is still more than twice the 21% increase in the reporters' estimated values in that district. This suggests that the few properties that were sold in the Northeast district in 1979 were not representative of the majority of farm land in that district.

Activity in the Land Market

The USDA has estimated that voluntary sales of farm land for the year ending February 1, 1979 numbered 20.3 per 1000 farms in Minnesota (Table 7). This was the lowest rate of voluntary transfers in Minnesota since 1935 (Table 7). The reduced number of voluntary transactions is consistent with the reduced number of sales reported in this survey. The Southwest district in particular has reported a decline in the number of sales every year for the past three years, while the number of sales reported from the other five districts has fluctuated from year to year. The number of forced sales, those caused by foreclosure or tax delinquency, has fallen to 1.2 per 1000 farms after jumping to 2.5 in 1978. Transfers due to inheritance, gifts and all other reasons jumped significantly from 6.0 in 1978 to 10.6 in 1979. The move to 10.6 transfers per 1000

farms is a return to the long term average for this figure. The total of all classes of transfers in 1979 was 32.1 per 1000 farms, a slight increase over 1978 but still indicative of a very slow market when compared to the long term average of this figure. The 1978 value of 30.2 was the lowest since the series was begun in 1926. The low frequency of transfer indicates that 1979 was also a hard year for the acquisition of farms.

Statewide, the average size of farm tract sold in Minnesota increased in 1979 to 188 acres per sale, as compared to 179 in 1978 (Table 8). This increase represents a shift in the trend for this figure, which had noticeably declined since 1972. The beginning of the change was in 1978, when the average size of tract sold was one acre larger than in 1977. The downward trend since 1972 had been fairly uniform among the districts, with the exception of the East Central and Northeast districts, where operating farmer buyers dominate the land market. The relationship between the type of buyer and the average size of tract sold is not uniform among the districts, due to the wide diversity in types of agriculture, land quality, and farm size in Minnesota.

The estimated proportion of farm land sales involving real estate brokers has changed little in the 1970's, hovering just above 50 percent on a statewide level. In 1979 this proportion was 52% (Table 9). However, a distinct trend can be noted in the Southwest district, where the proportion of sales involving real estate brokers has declined throughout the 1970's. Two reasons have been noted by respondents to explain

Table 6: Comparison of Average Sales by District, 1978 and 1979, Adjusted to Remove the Effect of Shifts in the Geographic Distribution of Sales.

District	Avg. Price /Acre From Rptd. Sales		Adj. Price Per Acre* 1979	% Change July 1978-July 1979 in		
	1978	1979		Rptd. Sales Price	1979 Sls. Price Adj. to 1978 Volume*	Est. Values
	\$	\$	\$	%	%	%
Southeast	1352	1675	1529	24	13	22
Southwest	1321	1680	1606	27	22	14
W. Central	908	949	945	5	4	10
E. Central	554	618	641	12	16	15
Northwest	504	612	724	21	44	24
Northeast	256	411	724	60	47	21
Minnesota	980	1140	1149	16	17	17

* The adjusted price per acre was computed as follows: For each county, the average price per acre from reported sales in 1979 was applied to the acres sold in 1978. The results were summed for each district and divided by total acres sold in that district in 1978. The adjusted price thus reduces the effect of changes in the geographic distribution of acres sold between 1978 and 1979.

this phenomenon: a growing number of auction sales, and a growing number of farm expansion purchases, which typically involve neighbors and do not involve a real estate broker's services. Offsetting the lower level in the heavy cash crop districts, broker participation has been generally higher in the urban, residential and recreationally oriented eastern districts. In these districts, a higher proportion of the purchases are made by operating farmers and investor buyers, and the distance of the buyer from the tract purchased is on the average higher than in the rest of the state. Buyers of this type need the services of a real estate broker more than do the farm expansion buyers of the western districts.

Table 7: Estimated Number of Farm Title Transfers Per Thousand Farms, by Methods of Transfer, Year Ending February 1, Minnesota 1964-1979.

Years	Voluntary Sales	Forced Sales (Foreclosures, Tax Delinquencies)	Inheritance, Gifts and all Other Transfers	Total all Classes
1964	30.6	3.2		46.2
1965	29.7	2.8	12.4	43.1
1966	35.5	2.1	10.6	52.5
1967	37.5	1.4	14.9	53.1
1968	38.1	2.4	14.2	50.3
			9.8	
1969	33.5	2.0	11.8	47.3
1970	31.8	2.2	9.6	43.6
1971	36.1	2.2	10.4	48.7
1972	34.7	1.6	9.6	45.9
1973	42.3	2.4	11.9	56.6
1974	47.7	1.1	11.1	59.9
1975	37.4	0.3	10.0	47.6
1976	29.3	0.6	9.5	39.5
1977	31.6	0.3	9.7	41.6
1978	21.7	2.5	6.0	30.2
1979	20.3	1.2	10.6	32.1

Source: "Farm Real Estate Market Developments", CD-84, Economic Research Service, USDA, August 1979.

Table 8: Number of Reported Sales, Acreage of Land Sold and Average Acres Per Sales, by District, Minnesota, January - July 1, 1977-1979.

District	No. of Sales*			Acres Sold			Acres/Sale		
	1977	1978	1979	1977	1978	1979	1977	1978	1979
Southeast	324	322	310	44,426	50,162	49,326	137	156	159
Southwest	431	313	285	64,426	47,696	43,532	150	152	153
W. Central	231	197	200	44,691	40,168	42,393	193	204	212
E. Central	161	168	136	25,952	26,720	23,537	161	159	173
Northwest	120	127	140	35,351	34,586	41,339	295	272	295
Northeast	65	22	48	21,939	5,823	10,538	338	265	220
Minnesota	1,332	1,149	1,119	237,055	205,110	210,665	178	179	188

*These sales should not be interpreted as a record of total farm land transactions for the years indicated. The majority of farm land sales occur in the first half of the calendar year, which explains the choice of the Jan. 1-July 1 reporting period. Some sales do occur in the latter half of the year, but they are not included in the data reported above.

Table 9: Estimated Proportion of Farm Land Sales in which Brokers or Dealers Participate, Minnesota, by District, 1972-1979.

District	1972	1973	Sales With Brokers' Services					1979	Change 1972-1979
			1974	1975	1976	1977	1978		
-percent-									
Southeast	59	58	61	58	58	57	60	55	-4
Southwest	52	51	54	47	48	48	48	44	-8
W. Central	56	54	53	52	50	50	51	52	-4
E. Central	54	58	55	60	56	59	60	59	+5
Northwest	40	40	40	34	37	42	43	40	0
Northeast	50	46	58	54	57	57	61	55	+5
Minnesota	52	51	54	51	51	52	54	52	0

B. Analysis of Reported Sales

Reason for Sale

Retirement is still the largest reason for selling land in Minnesota, accounting for 41% of the reported sales in 1979 (Table 10). The number of sellers leaving agriculture for another job has continued its long term decline, to its present level of 15%. Departures from farming were highest in the Northeast district, where agriculture is heavily dependent on milk and livestock production. Some of the other reasons which are commonly reported in the survey include death, divorce, ill health, financial problems, and sales for profit, by both farmers and investors. Rural farm land sales in Minnesota are initiated by a variety of causes but death and retirement are by far the most significant, accounting for 59% of all farm land sales in Minnesota in 1979. Since these are both largely functions of age, it is clear that demographic transition is the major factor affecting the availability of farm land for purchase in rural Minnesota.

Improved and Unimproved Land

The distinction between improved and unimproved land depends on the presence of buildings. Unimproved land is land which has no buildings. Improved land accounted for 59% of farm land sales in 1979 (Table 11), continuing a long term decline in the percent of improved land sales in Minnesota. In the 1960's, sales of improved land consistently made up 80% or more of all sales. Among the six districts, there are two major groupings. In the three western agricultural districts (the Southwest, West Central and Northwest), the proportion of sales of unimproved land is well above the statewide average. In these districts purchases made by farm expansion buyers predominate. Farm expansion buyers are typically not as interested in farm buildings as are the operating farmer buyers, who are often new entrants into the business. In the three less agricultural districts (Southeast, East Central and Northeast), the proportion of sales of improved land is well above the statewide average of 59%. In these districts operating farmer buyers predominate.

Table 10: Reason for Selling Land by District, Minnesota, 1979

Reason For Sales	South-east	South-west	West Central	East Central	North-west	North-east	Minnesota
	-percent-						
Death	11	32	19	9	15	4	18
Retirement	44	40	39	50	34	28	41
Left Farming	15	7	17	19	16	30	15
Moved, Still Farming	16	6	11	8	4	15	10
Other	14	15	13	15	32	22	17

Prior to 1974 the price of unimproved land consistently averaged about 80% of the price paid for improved land (Table 12). In 1975 and 1976 this trend was reversed, with unimproved land selling for more than improved land. In 1977 and 1978 the relative value of unimproved land declined toward its old level. There was a slight change in 1979, with sales prices for unimproved land still lower than those for improved land, at 93 percent.

Table 11. Proportion of Improved and Unimproved Land Sales, by District, Minnesota, 1969, 1978 and 1979.

District	Improved Land			Unimproved Land		
	1969	1978	1979	1969	1978	1979
	-percent-			-percent-		
Southeast	83	68	67	17	32	33
Southwest	81	63	54	19	37	46
W. Central	73	51	53	27	49	46
E. Central	80	70	78	20	30	22
Northwest	67	39	36	33	61	64
Northeast	80	68	79	20	32	21
Minnesota	79	61	59	21	39	41

Table 12: Price Differential Between Improved and Unimproved Land Sold, Minnesota, 1969-1979.

Year	Improved Land	Unimproved Land	Difference	Price of Unimproved Land
				as a Percent of Price of Improved Land
	-dollars per acre-			-percent-
1969	245	206	39	84
1970	254	200	54	79
1971	271	207	64	76
1972	308	236	72	77
1973	317	234	83	74
1974	454	438	16	96
1975	605	613	-8	101
1976	729	753	-24	103
1977	899	782	117	87
1978	1026	888	138	87
1979	1169	1088	81	93

The highest reported average sales price of unimproved land was \$1,791 in the Southeast district. The lowest average price paid for unimproved land was \$290 per acre in the Northeast. The 1979 statewide average sales price of unimproved land was \$1,088 per acre and that of improved land was \$1,169 (Table 13).

Type of Buyer

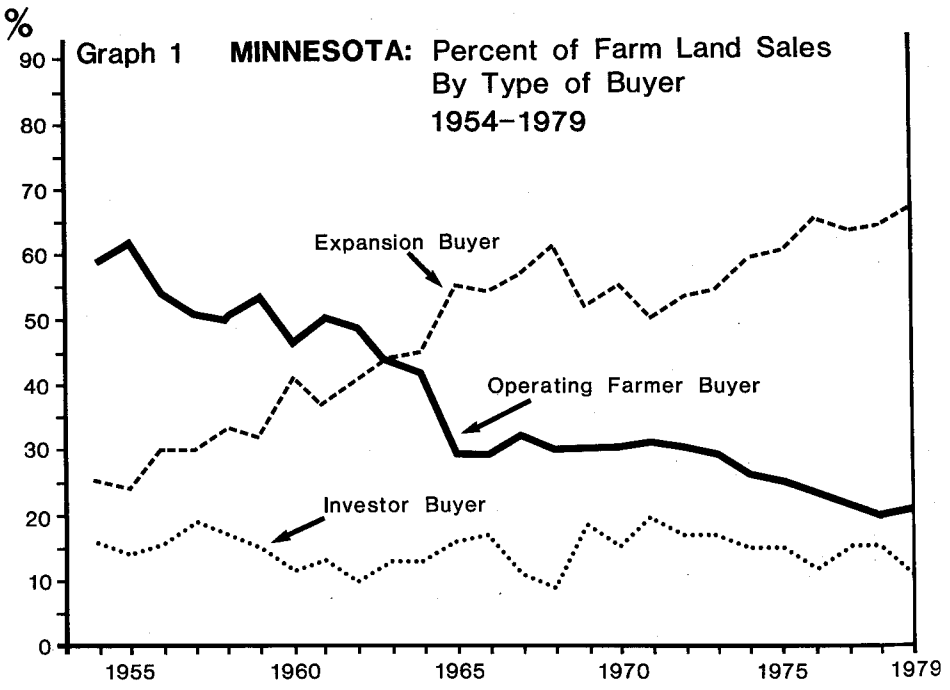
Agricultural buyers are grouped into three classes in this survey: operating farmers who buy complete farm units as owners-operators; farm expansion buyers, who may be operating farmers or investors increasing the size of their existing holdings; and agricultural investor buyers, who are nonfarmers who have bought land to be leased out or managed for farming purposes (and are not expanding the size of farms already owned). Over time, there has been a major shift in the proportion of sales made by the different types of buyers. In the early 1950's operating farmer buyers dominated the farm land market, accounting for nearly 60% of all purchases. Farm expansion buyers accounted for roughly 25%. From 1950 on through 1979 there has been a steady shift in the dominant role in the land market, from operating farmer buyers to farm expansion buyers. The distinct long term trend in the relative importance of the different types of buyers is illustrated in Graph 1. In the 25 years covered in Graph 1, the steadily declining role of operating farmer buyers is contrasted with the increasing dominance of farm expansion buyers in the Minnesota farm land market. Over the past quarter century the relative importance of these two types of buyers has been almost exactly reversed, with farm expansion buyers accounting for 67 percent of the purchases reported in 1979, and operating farmer buyers for 21 percent. The share of farm land purchases by investor buyers has ranged between 10 and 20 percent during the period illustrated, with no discernible trend. Purchases for farm expansion dominated the farm land market in the three western agricultural districts, accounting for 86, 71, and 77 percent of all sales in the Southwest, West Central and Northwest districts respectively in 1979 (Table 14).

Operating farmers, like agricultural investor buyers, also exhibit a distinct geographic grouping. Operating farmer buyers were most active in the farm land market in the East Central and Northeast districts. Although operating farmers accounted for only 21% of reported sales statewide in 1979, in these two districts they accounted for 45 and 54 percent of all purchases, respectively (Table 14). In both of these districts farm income is more dependent on livestock production than in the heavily cash grain areas of the south and west, and farmers can increase the size of their business by intensifying as well as by adding more acres. In addition, these districts are characterized by a large proportion of part time or "hobby" farms, whose purchasers are classified as operating farmers. Many purchasers of farm land in these districts are in reality residential customers from the Twin Cities metropolitan area or from the Iron Range communities. It will be interesting to observe the effects of the increasing cost of petroleum on this market in future years.

The price paid per acre by farm expansion buyers is generally higher than the price paid by operating farmer buyers or investors. In the Southeast district in 1979, farm expansion buyers paid an average of \$1,843 per acre for farm land, more than \$400 or almost 30 percent over the average price paid by either operating farmers or agricultural investor buyers. In the Southwest district, expansion buyers paid an average price of \$1,768 per acre, or 28 percent more than the average price of \$1,377 paid by operating farmers. Statewide, farm expansion buyers paid

Table 13: Average Sales Price Per Acre of Improved and Unimproved Farm Land, by District, Minnesota, 1978 and 1979.

District	Improved Land		Unimproved Land		Price of Unimproved Land as a Percent of Price of Improved Land	
	1978	1979	1978	1979	1978	1979
	-dollars per acre-				-percent-	
Southeast	1375	1638	1264	1791	92	109
Southwest	1350	1677	1259	1684	93	100
W. Central	910	947	904	953	99	101
E. Central	562	613	533	640	95	105
Northwest	455	686	548	555	120	81
Northeast	245	438	287	290	117	66
Minnesota	1026	1169	888	1088	87	93



an average of \$1,293 per acre for farm land, operating farmers \$905, and investor buyers \$815 (Table 15).

Agricultural investor buyers differ greatly from both farm expansion buyers and operating farmer buyers. In recent years they have consistently paid a lower average price per acre for farm land in all districts than have expansion buyers and operating farmer buyers. Historically, it is significant to note the constancy with which the agricultural investor buyers have maintained their market share. Since 1950 the proportion of purchases made by agricultural investors has ranged between 10 and 20 percent. In 1979 they accounted for 12% of all tracts purchased statewide, with relatively little fluctuation among the various districts (Table 14). The price paid for farm land by agricultural investor buyers is occasionally an indicator of market trends. In 1977, a slowdown in the market was presaged when investor buyers, statewide, paid less than they did in 1976 (\$582 in 1977 vs. \$592 in 1976). The next year, in 1978, the softening in the market was more evident, when expansion buyers paid a price only 3% above the price they had paid in 1977. In 1979, agricultural investor buyers paid less per acre statewide than they did in 1978 (\$815 vs \$843), even though farm expansion buyers and operating farmers both paid higher prices per acre than in 1978. It will be interesting to note whether or not the lower prices paid by agricultural investor buyers in 1979 will be followed by a slowdown in land market activity on the part of the operating farmers and farm expansion buyers in 1980.

Land and Building Quality

Land of good quality increased in price by 20% in 1979, after a relatively small increase of only 2% in 1978. In 1979 land of good quality sold for an average sales price of \$1,459 per acre (compared to \$1,213 in 1978). The price of good quality land is returning to its 1974-77 level and is again selling at more than twice the price per acre of poor quality land. In 1978, poor quality land took a tremendous leap, increasing in value by 40%. In 1979, the increase virtually ceased, with poor quality land increasing in price by only 2%, selling at an average of \$625 per acre (Table 16). These prices for land of good, average and poor quality are statewide averages. Readers should be aware that the concept and hence the price of good quality land in the highly productive cash grain areas of the state is greatly different from that of good quality land in the farm-forest fringe counties of the Northeast district. The same is true for the price of average and poor quality land. Quality differences are generally valid within regions, but not among regions, in a state as widely varied as Minnesota.

Farm expansion buyers paid the highest prices for land of all qualities in 1979 (Table 17). They were also more selective, with 43 percent of their purchases classified as good quality land in 1979 compared to 36% for operating farmers and 18% for investors. Investor buyers led the state in the percent of their purchases classified as average and poor quality land (55 and 27%, respectively). This is associated with the tendency of investor buyers to pay a lower price per acre than other types of buyers.

Building quality is reflected in the ranking of prices paid for land with buildings. Land with good quality buildings sold at an average price of \$1,303 per acre in 1979, while land with average and poor quality buildings sold at \$1,144 and \$1,032 per acre respectively (Table 18). Farm expansion buyers continued to pay more than operating farmers or investor buyers for land with buildings, but 52% of the tracts purchased

Table 14: Proportion of Tracts Purchased by Type of Buyer, by District, Minnesota, 1977, 1978 and 1979.

District	Oper. Farmer Buyer (Sole Tract)			Farm Expansion Buyer (Oper. or Investor)			Agricultural Investor Buyer (Sole Tract)		
	1977	1978	1979	1977	1978	1979	1977	1978	1979
-percent-									
Southeast	20	20	21	63	61	62	18	19	17
Southwest	11	13	9	77	74	86	11	13	5
W. Central	23	24	18	67	65	71	10	11	11
E. Central	54	45	45	30	39	35	16	16	20
Northwest	12	5	14	68	83	77	20	13	8
Northeast	40	41	54	32	23	25	29	36	21
Minnesota	22	21	21	63	64	67	15	15	12

Table 15: Average Sales Price Per Acre by Type of Buyer, by District, Minnesota, 1977, 1978 and 1979.

District	Operating Farmer			Expansion Buyer			Investor Buyer (Agricultural)		
	1977	1978	1979	1977	1978	1979	1977	1978	1979
-dollars per acre-									
Southeast	1269	1262	1420	1280	1433	1843	1023	1174	1428
Southwest	1117	1231	1377	1392	1373	1768	1160	1138	1521
W. Central	649	821	873	743	954	972	667	803	888
E. Central	460	511	619	463	654	728	364	411	435
Northwest	449	436	472	536	526	713	264	433	380
Northeast	233	293	442	216	236	383	135	212	328
Minnesota	694	858	905	1018	1048	1293	582	843	815

Table 16: Proportion of Sales and Price Paid Per Acre for Land of Various Quality, Minnesota, 1977, 1978 and 1979.

Land Quality	Proportions			Price Per Acre			Change in Price	
	1977	1978	1979	1977	1978	1979	1977-78	1978-79
	-percent-			-dollars/acre			-percent-	
Good	38	36	39	1187	1213	1459	2	20
Average	48	47	46	813	939	1081	15	15
Poor	14	17	15	438	613	625	40	2
All	100	100	100	859	980	1185	14	21

Table 17: Proportion of Purchases and Price Paid Per Acre by Type of Buyer for Land of Various Quality, Minnesota, 1978 and 1979.

Type of Buyer	Land Quality											
	Good				Average				Poor			
	1978		1979		1978		1979		1978		1979	
	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$
Operating Farmer	32	1055	36	1146	56	872	48	854	12	470	15	600
Expansion Buyer	41	1232	43	1548	44	1005	45	1180	15	665	12	805
Agric. Investor	22	1336	18	1390	50	782	55	981	29	611	27	403
All	36	1213	39	1458	47	939	47	1081	16	613	15	625

by farm expansion buyers had no buildings, and sold for a higher price per acre than the land they bought which had poor quality buildings. Operating farmers clearly preferred to purchase land with good or average quality buildings, which comprised 69% of their purchases in 1979. Only 14% of the purchases made by operating farmers involved no buildings, and only 17% of the purchases they made had poor quality buildings in 1979. Agricultural investor buyers exhibit a tendency to purchase land with poor quality or no buildings, and these two classes accounted for 62 percent of their purchases. Only 14% of the land they purchased had good quality buildings in 1979 (Table 18). Agricultural investor buyers are apparently the "bargain hunters" of the Minnesota rural real estate market.

Table 18: Proportion of Purchases and Price Paid Per Acre by Type of Buyer for Land with Various Quality of Buildings, Minnesota, 1979.

Type of Buyer	----- Building Quality -----							
	Good		Average		Poor		None	
	%	\$	%	\$	%	\$	%	\$
Operating Farmer	31	1007	38	900	17	713	14	797
Expansion Buyer	14	1527	19	1332	14	1146	52	1227
Agricultural Investor	14	1170	24	881	30	986	32	538
All	18	1303	24	1144	17	1032	41	1215

Method of Financing

Contracts for deed (or land contracts) were used to finance Minnesota farm land transfers in about 40 percent of all sales in the 1950's and up to 1966. This percentage jumped to 50 percent in 1967, and reached a level of 60% of all purchases in 1974 (Table 19). The proportion of transfers financed by contract for deed fluctuated between 56 and 58 percent from 1975 through 1978. In 1979, a new high was reached when 61% of all farm land transfers were financed by contract for deed. The use of contracts for deed was most frequent in the Southeast and East Central districts, where they accounted for 68 and 67 percent of all transfers, respectively. Statewide, the use of mortgage financing declined from 29% of all transactions in 1978 to 23% in 1979. The 23% figure for 1979 is the lowest proportion of mortgage financing ever reported in Minnesota. Cash sales accounted for 16% of all transfers, a slight increase over the 14% reported in 1978. The use of cash purchases was lowest in the Southeast district, where only 12% of all farm land transfers were financed by cash.

The price paid for farm land varies with the type of financing used, but it is difficult to infer causal relations between price levels and methods of financing. In some years sales financed by contract for deed brought a higher price than land sold with mortgage or cash financing. This has usually been a result of the predominant use of contract for deed financing in the areas of higher priced land in Minnesota (notably the Southeast and Southwest districts). The use of contract for deed financing in these areas has been stimulated by the tax advantage received by the seller in spreading any capital gains over a period of years. In 1975, cash sales brought the highest average price per acre, statewide. In 1977 mortgage financed property brought the highest average sales price, statewide. In 1979 mortgage financed land sold at an average of \$1,146 per acre (Table 20). The higher prices associated with mortgage financing are actually misleading. Only in the East Central district was mortgage financing associated with the highest sales

Table 19: Proportion of Farm Sales by Method of Financing, By District, Minnesota, 1964, 1974-1979.

Method of Financing	South-east	South-west	West Central	East Central	North-west	North-east	Minnesota
-percent-							
<u>Cash</u>							
1964	19	17	16	30	24	36	20
1974	12	15	13	24	22	28	16
1975	12	16	13	15	18	30	15
1976	12	16	15	23	18	16	16
1977	16	15	16	17	14	19	16
1978	13	15	9	15	19	18	14
1979	12	19	17	13	18	15	16
<u>Mortgage</u>							
1964	29	42	46	30	31	37	36
1974	19	26	26	27	24	26	24
1975	28	27	24	36	30	25	28
1976	21	31	23	28	33	34	26
1977	27	29	23	29	27	38	28
1978	17	31	36	38	32	18	29
1979	20	24	31	20	23	23	23
<u>Contract for Deed</u>							
1964	52	41	38	40	45	27	44
1974	68	59	61	49	54	47	60
1975	60	58	63	49	52	45	57
1976	68	54	62	49	50	50	58
1977	57	56	61	53	59	44	56
1978	70	53	55	47	49	64	57
1979	68	57	53	67	59	62	61

price for farm land (Table 20). In the Southeast, Northeast and West Central districts, the highest priced farm land was financed by contract for deed in 1979, while in the Southwest and Northwest districts the highest priced farm land sales were financed with cash. There is no consistent statewide tendency for cash or contract for deed sales to be associated with higher priced land than is the case in sales financed with mortgages, although there are wide variations in the frequency of use of these methods of financing in the various districts of the state.

In Table 21, the method of financing is related to quality of land, price paid per acre, and proportion of sales. Prior to 1974, the highest prices paid for good and average quality land were usually financed by contract for deed. In 1979, the highest prices paid for good quality land were in sales financed by mortgages, and this was also true of poor quality land as well. For land average in quality, cash purchases re-

Table 20: Average Sales Price Per Acre of Farm Land by Method of Financing, by District, Minnesota, 1977, 1978 and 1979.

Method of Financing	South-east	South-west	West Central	East Central	North-west	North-east	Minnesota
-dollars per acre-							
<u>Cash</u>							
1977	1066	1417	586	327	300	207	820
1978	1323	1279	797	396	547	314	956
1979	1614	1737	894	589	739	284	1165
<u>Mortgage</u>							
1977	1358	1345	643	436	394	218	939
1978	1330	1345	924	601	498	297	966
1979	1629	1623	896	740	671	381	1146
<u>Contract For Deed</u>							
1977	1217	1313	759	468	471	181	838
1978	1353	1299	930	554	490	236	995
1979	1675	1670	990	607	543	439	1125

sulted in the highest price per acre. Average quality land accounted for the highest proportion of all sales (48% statewide), while good and poor quality land accounted for 38 and 14 percent of all farm land transfers, respectively. In 1977, the highest sales prices for good land were paid for lands financed with mortgages. In 1978, the amount paid for good quality land financed with mortgages actually declined. Institutional lenders were apparently becoming cautious in 1978, after having financed some of the highest priced land sales with mortgages in 1977. The caution of 1978 moderated in 1979. Good quality land financed with mortgages brought an average sales price of \$1,510 per acre in 1979, or 2% above the price paid for good quality land financed by the sellers with contracts for deed (Table 21).

Distance of Buyer From Tract Purchased

The Minnesota farm land market has always been highly localized in character but this has been intensified since 1975, due to the increase in the proportion of tracts purchased by farm expansion buyers. The median distance of buyer from tract purchased declined, statewide, from 5 to 4 miles in 1975, and the trend has continued at that level. In 1976, 69% of all buyers lived less than ten miles from the land purchased. In 1979, 68% of all buyers lived less than ten miles from the tracts purchased, and the median distance was 4 miles (Table 22). A further illustration of the localized market for farm land in Minnesota is that only 12% of all buyers lived more than 50 miles from the tracts they purchased in 1979 and only 3% lived more than 300 miles away.

Table 21: Price Paid Per Acre and Proportion of Sales, by Method of Financing and Quality of Land, Minnesota, 1978 and 1979.

Land Quality Class	-----Method of Financing-----							
	Cash		Mortgage		Contract for Deed		All Sales	
	1978	1979	1978	1979	1978	1979	1978	1979
Good								
\$ per acre	1293	1376	1118	1510	1235	1480	1213	1446
% of Sales	29	41	38	35	37	38	36	38
Average								
\$ per acre	910	1190	907	1071	979	1069	939	1069
% of Sales	44	44	49	49	48	48	47	48
Poor								
\$ per acre	614	513	700	680	579	631	613	631
% of Sales	26	15	13	17	15	14	17	14
All Grades								
\$ per acre	956	1165	966	1146	995	1125	980	1140
% of Sales	100	100	100	100	100	100	100	100

In the two least agricultural districts, the Northeast and East Central, expansion buyers do not predominate and the market is less localized. In the Northeast district, 61% of all buyers lived more than 10 miles from the tracts they purchased in 1979. The 14% of buyers residing more than 300 miles away from the tracts purchased in 1979 is a sharp decline from the 27% reported in this category in the Northeast district in 1978. There was also a large drop in the median distance of buyer from tract in the Northeast, falling from 65 miles in 1978 to 13 miles in 1979 (Table 22). The land market in the East Central district, while not as localized as the rest of the state due to the importance of hobby farm and rural residential-recreational purchases, continues to become more localized year by year. In 1977, 56% of all purchases in the East Central district were located more than 10 miles from the buyers' residences. This fell to 52% in 1978, and to 49% in 1979. There was also a drop in the median distance of buyer from tract purchased in the East Central district, from 10 miles in 1978 to 8 miles in 1979 (Table 22).

Table 22: Classification of Farm Land Sales by Distance of Buyer's Residence from Tract, by District, Minnesota 1977, 1978 and 1979.

Distance of Buyer's Residence from Tract Purchased	South-east	South-west	West Central	East Central	North-west	North-east	Minnesota
<u>Less than 2 miles</u>							
1977	23	23	19	16	23	17	21
1978	20	30	22	19	16	18	22
1979	22	29	16	18	14	14	21
<u>2-4 miles</u>							
1977	33	39	25	10	18	11	28
1978	26	33	28	15	29	14	27
1979	30	36	35	21	27	7	30
<u>5-9 miles</u>							
1977	13	17	27	19	16	11	18
1978	21	14	16	14	21	0	17
1979	18	21	14	12	20	19	17
<u>10-49 miles</u>							
1977	20	12	14	25	21	28	17
1978	21	17	23	26	24	18	21
1979	22	10	21	29	22	33	20
<u>50-299 miles</u>							
1977	7	8	13	21	13	17	11
1978	8	4	9	21	4	23	2
1979	6	3	12	16	14	14	9
<u>300 miles & over</u>							
1977	5	1	2	10	9	16	5
1978	4	1	3	5	6	27	4
1979	2	2	2	4	4	14	3
<u>Median Distance in miles</u>							
1977	4	3	5	10	6	15	5
1978	5	3	5	10	5	65	5
1979	4	3	4	8	5	13	4

PART II: FARM LAND PRICES AND TRENDS BY ECONOMIC DEVELOPMENT REGIONS

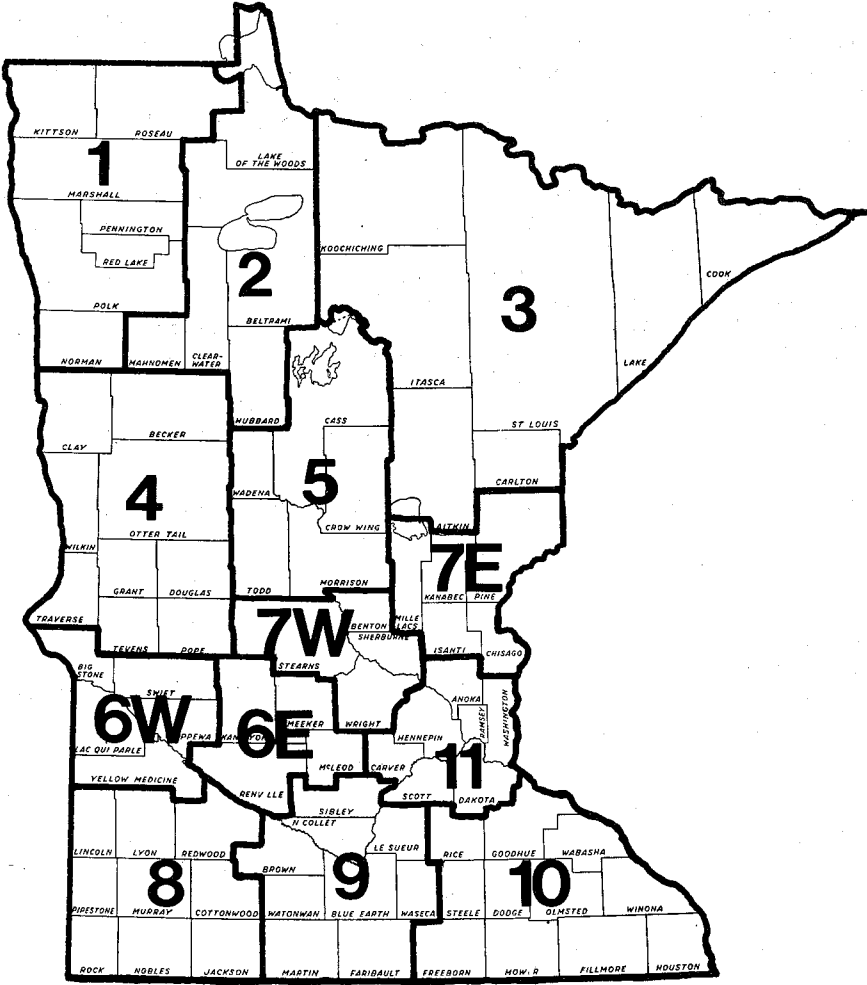
A. Land Market Trends

Since 1967 the state of Minnesota has designated 13 regional groupings of counties at the sub-state level. The coordination of state planning, federal program administration, local and state government interaction and cooperation is simplified by the adoption of these 13 development regions. Previously, over 160 different regional delineations existed. In keeping with the desire to use a common regional classification among various institutions, the results of the Minnesota Rural Real Estate Survey are presented by economic development regions in this section. The economic development regions allow an even more localized look at the land market than is possible with the six larger districts used in Part I of this publication. The present development regions are illustrated in Figure 2, and the average reported sales price and percentage changes in average sales price from 1972 to 1979 are presented in Tables 23 and 24, respectively.

Table 23: Average Reported Sales Price Per Acre of Farm Land, by Economic Development Regions, Minnesota, 1972-1979.

Economic Development Region	1972	1973	1974	1975	1976	1977	1978	1979
-dollars per acre-								
1	105	114	199	344	330	367	433	560
2	83	108	141	206	250	277	321	520
3	81	126	148	157	162	179	280	310
4	170	192	317	446	542	558	853	828
5	127	164	197	259	235	297	478	483
6W	238	233	341	537	696	746	906	960
6E	361	374	569	691	923	1027	1171	1528
7W	290	291	430	472	596	778	927	1112
7E	216	203	254	316	455	473	575	768
8	323	354	534	710	906	1058	1199	1574
9	461	534	829	1115	1464	1835	1682	2111
10	368	411	565	753	915	1197	1373	1645
11	586	698	882	1035	1150	1437	1396	1799
MN	293	298	450	607	735	859	980	1140

Figure 2: Minnesota Economic Development Regions



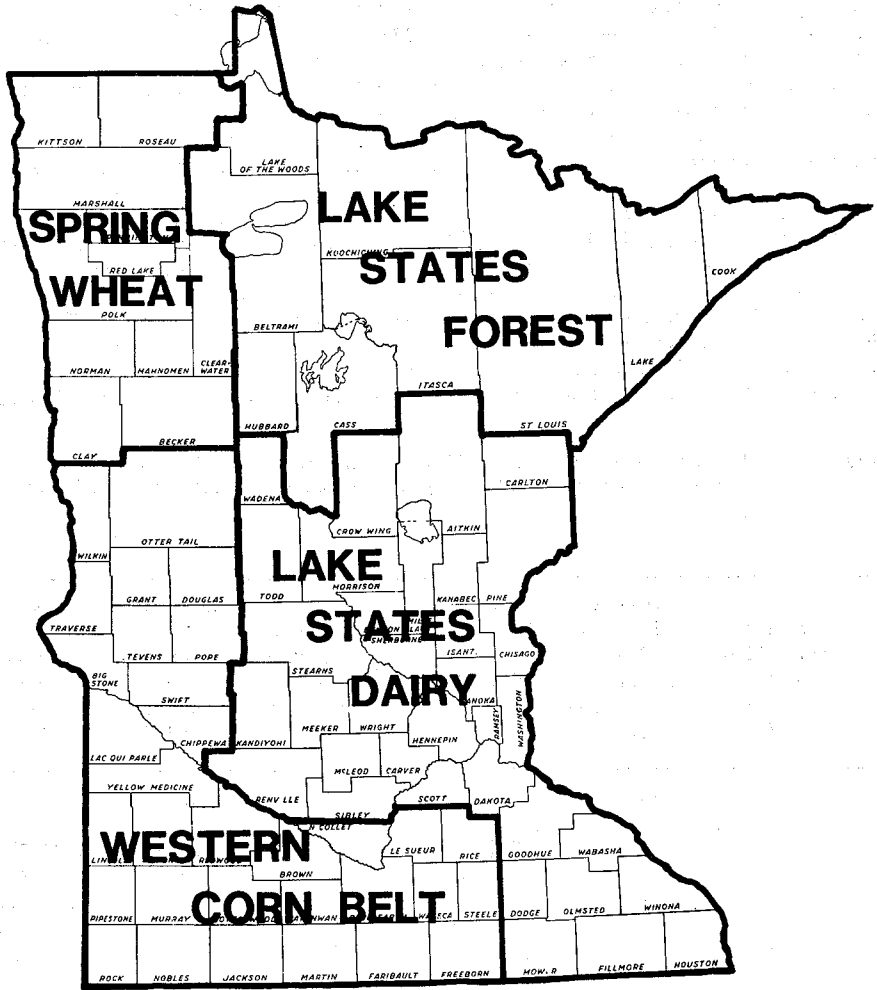
The largely agricultural areas of the state, where cash grain crops dominate land use, embrace Regions 1, 4, 6W, 8 and 9 in western and south-western Minnesota. These five regions correspond closely to the "spring wheat" and "western corn belt" farming areas as delineated by the U.S. Department of Agriculture and illustrated in Figure 3. Regions 1, 8 and 9 all showed a healthy rate of increase over the 1978 values, but Regions 4 and 6W lagged in 1979. Region 4 had experienced a 53% increase in average sales price from 1977 to 1978. The reluctance of buyers to continue this rapid rate of increase is apparent in the actual decline in average sales price in region 4 from 1978 to 1979. Region 6W had three successive relatively slow years in the land market, with annual rates of price increase of 7, 21 and 6 percent respectively, for 1977, 1978 and 1979. This region lies in a relatively high risk area for crop production and producers have apparently grown wary of paying continually higher prices for farm land.

The Lake States dairy area as defined by the U.S. Department of Agriculture includes not only the main dairy area of central Minnesota but also the urbanizing corridor of the state which runs from St. Cloud southeast through the Twin Cities to Rochester. This region corresponds roughly to development regions 6E, 7W, 7E, 11 and 10. Over the past four years the trend has generally been for the portion of the state experiencing the heaviest influence of urban and dairy forces in the land market to show the highest rates of land price increase. The record crop prices received by cash crop farmers in the western portion of the state during 1973-75 were reflected in higher land prices in those years. The general

Table 24: Annual Percentage Change in Sales Price Per Acre, by Economic Development Regions, Minnesota, and in the Consumer Price Index (CPI), 1972-1979.

Economic Development Region	Percent change in sales price						
	72/73	73/74	74/75	75/76	76/77	77/78	78/79
	-percent-						
1	9	75	73	-4	11	18	29
2	30	31	46	21	11	16	62
3	56	17	6	3	10	56	11
4	13	65	41	22	3	53	-3
5	29	20	31	-9	26	61	1
6W	-2	46	57	30	7	21	6
6E	4	52	21	34	11	14	30
7W	0	48	10	26	31	19	20
7E	-6	25	24	44	4	22	34
8	10	51	33	28	17	13	31
9	16	55	35	31	25	-8	30
10	12	37	33	22	31	15	20
11	19	26	17	11	25	-3	29
MN	2	51	35	21	17	14	16
CPI	6.2	11.0	9.1	5.8	6.5	7.7	11.3

Figure 3 : Types of Farming Areas in Minnesota—generalized by Crop Reporting Districts



downward trend in cash crop prices in 1976-78 curtailed the rate of increase in land values in the heavily cash crop areas and shifted the buoyancy in the market to the areas of the state where dairying and urbanizing influences were strongest. Economic development region 11 is the one most affected by spillover demand from the Twin Cities metropolitan area. The average rate of change in region 11 was -3% for 1977-78 but 29% in 1978-79 (Table 24).

Farm land sales prices occasionally decrease in current dollar value, as illustrated by the negative terms in Table 24. It is more common for farm land sales prices to decline in real terms. This happens whenever the rate of increase in farm land values is less than the rate of inflation. In order to facilitate this comparison, the consumer price index is shown at the bottom of Table 24. In 1979, economic development regions 3, 4, 5, and 6W all had a real decline in average farm land sales prices, although only region 4 experienced an actual dollar decline.

The gradually increasing average size of farm in Minnesota has been accompanied by a gradual increase in the size of tract purchased. Table 25 presents a comparison of the average size of tract purchased and of the total value of the transactions for 1975 and 1979. From 1975 to 1979, the statewide average size of tract purchased increased from 179 acres to 188 acres, and the average purchase price increased from \$108,653 to \$214,320. From 1975 to 1979, the average size of tract purchased in the Minnesota farm land market increased 5 percent, the average price paid

Table 25: Average Size of Tract Purchased and Total Purchase Price of Tract by Economic Development Region, Minnesota, 1975 and 1979.

	Average Price Paid Per Acre Jan-June 1975	Average Size of Tract Purchased Jan-June 1975	Total Purchase Price of Average Tract 1975	Average Price Paid Per Acre Jan-June 1979	Average Size of Tract Purchased Jan-June 1979	Total Purchase Price of Average Tract 1979
	\$	acres	\$	\$	acres	\$
1	344	296	101,824	566	312	174,720
2	206	207	42,642	520	275	143,000
3	157	133	20,881	310	192	59,520
4	446	203	90,538	828	234	193,752
5	259	191	49,469	483	197	95,151
6W	537	197	105,789	960	209	200,640
6E	691	140	96,740	1528	140	213,920
7W	472	154	72,688	1112	149	165,688
7E	316	181	57,196	768	115	88,320
8	710	174	123,540	1574	160	251,840
9	1115	142	158,330	2111	128	270,208
10	753	169	127,257	1645	173	284,585
11	1035	122	126,270	1799	121	217,679
MN	607	179	108,653	1140	188	214,320

per acre increased 88 percent, and the total transaction price increased 97 percent. The largest total purchase price for an average tract in 1979 was in economic development region 10, at \$284,585. This reflected a combination of an average sales price per acre of \$1,645, the third highest in the state, and an average size of tract purchased of 173 acres, considerably below the statewide average. The rapid increase that has occurred in the total purchase price involved in an average transaction is of great significance for farm credit organizations. The increase in the total purchase price paid for an average tract is also indicative of a major change in the composition of prospective buyers. The average buyer of the average tract in economic development region 10 in 1979 would have found it difficult to compete in the farm land market with less than \$75,000 as a down payment. The statewide change in these magnitudes from 1975 to 1979 is shown in Table 26.

Table 26: Combined Effect of Increased Size of Tract and Increased Price Per Acre on Total Transaction Price, Minnesota, 1975 and 1979.

	<u>1975</u>	<u>1979</u>	<u>1979 as a % of 1975</u>
Average size of tract (acres)	179	188	105
Average price per acre (\$)	607	1140	188
Average transaction value (\$)	108,653	214,320	197

The number of farms in Minnesota, as estimated by the U.S. Department of Agriculture, has decreased from 204,000 in 1935 to 114,000 in 1978 (Table 27). The definition of a farm used to determine these figures considered a farm to be any operating unit of rural land of 10 or more acres in size with annual sales of farm products of over \$50, or any unit of less than 10 acres with annual sales of over \$250. This definition has recently been changed. Under the new definition, a farm is any acreage with annual sales of over \$1,000. Using this definition, the number of farms in Minnesota was estimated to be 104,000 in 1979, and the total number of acres of land in farms was estimated to be 30,300,000. This is a decline from 32,900,000 acres in 1935 (using the old definition of a farm). Over the same time period, the average size of farm rose from 161 acres (old definition) to 291 acres (new definition), as shown in Table 27. These data are presented here to permit a comparison with data from the 1978 U.S. Census of Agriculture, which should become available in 1980.

Table 27: Number of Farms, Land in Farms and Average Size of Farms, in Minnesota, 1935-1979*.

Year	Number of Farms	Land in Farms	Average Size of Farms
	-thousand-	-thousand acres-	-acres-
1935	204	32,900	161
1940	198	32,700	165
1945	189	32,200	176
1950	184	33,300	181
1955	168	33,300	198
1956	166	33,200	200
1957	167	33,100	202
1958	162	32,800	202
1959	160	32,500	203
1960	156	32,400	208
1961	154	32,400	210
1962	152	32,400	213
1963	149	32,400	217
1964	146	32,400	222
1965	141	32,100	228
1966	136	31,800	234
1967	131	31,500	240
1968	127	31,300	246
1969	123	31,100	253
1970	121	30,900	255
1971	120	30,700	256
1972	118	30,600	259
1973	118	30,600	259
1974	118	30,600	259
	new definition		new definition
1975	117 104	30,600	30,300 262 291
1976	117 104	30,600	30,300 262 291
1977	116 104	30,600	30,300 264 291
1978	114 104	30,600	30,300 268 291
1979	--- 104	-----	30,300 --- 291

*Data for 1935-74 from Minnesota Agricultural Statistics 1974 (page 49); data for 1975-79 from Minnesota Agricultural Statistics 1979 (page 3), Crop and Livestock Reporting Service, Minnesota Department of Agriculture, St. Paul, Minnesota.

B. Analysis of Sales by Economic Development Regions

In part one of this publication the activity of different types of buyers was analyzed across the six land market reporting districts. It is also instructive to analyze this activity by grouping counties into the thirteen economic development regions, as is done in Table 28. The proportion of tracts purchased is generally the highest for farm expansion buyers, although in regions 3, 5 and 7E operating farmer buyers purchased a greater proportion of tracts than did expansion buyers. Economic development regions 3, 5 and 7E are all contiguous in the northeastern part of the state and the greater activity of operating farmer buyers reflects a large number of part-time and hobby farms in the area. Table 28 also shows clearly that agricultural investor buyers concentrated their activity in the economic development regions in the northeast part of the state and near the Twin Cities Metropolitan Area (regions 3, 7W, 7E and 11). It is also interesting to note that in region 9, containing the highest priced farm land in the state, agricultural investors accounted for only 1% of the tracts purchased.

Table 29 shows the proportion of total acres purchased by type of buyer. In economic development regions 8 and 9, farm expansion buyers accounted for 80 and 89 percent of all acres purchased in 1979, respectively. The proportion of acres purchased by farm expansion buyers is greater than the proportion of tracts purchased in economic development regions 6W, 6E, 9 and 11 in 1979. This indicates the interest of expansion buyers in acquiring relatively large-sized tracts in these four regions, which are all contiguous in western and southern areas of the state containing the highest priced farm land.

Table 28: Proportion of Tracts Purchased, by Type of Buyer, by Economic Development Region, Minnesota, 1973-1979.

Region	Operating Farmer					Expansion Buyer					Ag. Investor				
	73	76	77	78	79	73	76	77	78	79	73	76	77	78	79
1	14	13	7	5	15	78	75	70	82	75	8	13	23	14	10
2	51	55	38	28	38	25	34	55	53	58	24	10	7	19	8
3	55	64	45	57	53	36	23	18	14	13	9	14	36	29	33
4	43	25	33	24	19	42	65	53	65	71	15	10	14	11	10
5	65	52	63	48	61	24	30	13	28	29	11	18	24	24	10
6W	23	10	10	9	14	70	77	86	82	72	7	13	5	9	14
6E	22	17	19	18	8	50	71	63	66	77	28	12	19	16	15
7W	39	39	34	36	38	34	40	60	36	41	27	21	6	28	21
7E	40	51	57	49	43	31	36	28	35	27	29	13	15	16	31
8	22	14	12	15	9	65	73	75	71	84	13	13	13	14	7
9	17	12	10	10	10	74	83	80	77	88	9	4	10	13	1
10	36	23	21	21	24	44	63	59	62	61	20	14	21	17	13
11	24	21	24	30	21	25	66	64	56	43	51	13	12	14	36

Table 29: Proportion of Acres Purchased, by Type of Buyer, by Economic Development Region, Minnesota, 1973-1979.

Region	Operating Farmer					Expansion Buyer					Ag. Investor				
	73	76	77	78	79	73	76	77	78	79	73	76	77	78	79
1	14	18	5	7	11	77	63	54	72	66	9	19	41	21	23
2	61	53	40	28	43	18	37	57	52	48	21	10	3	19	9
3	61	71	29	76	61	14	16	7	2	13	25	13	64	22	26
4	47	32	37	19	17	39	61	53	73	71	14	7	10	8	12
5	68	71	75	62	68	25	21	8	23	25	7	8	17	15	7
6W	26	12	9	10	12	68	78	87	79	77	6	10	4	11	11
6E	22	19	17	21	10	49	67	65	62	78	29	14	18	17	12
7W	43	38	46	37	46	35	38	48	40	34	22	23	6	23	20
7E	47	47	61	47	55	22	37	25	35	21	31	17	14	18	24
8	25	16	13	15	10	63	71	74	69	80	12	13	13	16	10
9	20	14	8	9	10	72	83	84	76	89	8	3	8	15	1
10	42	22	22	23	27	39	55	56	61	61	19	24	21	16	12
11	25	22	25	26	20	24	63	65	56	61	51	16	9	17	19

The average price per acre by type of buyer is shown in Table 30. In eight regions (1, 3, 4, 6W, 6E, 7E, 8 and 10) farm expansion buyers paid a higher average price per acre in 1979 than did either operating farmers or agricultural investor buyers. The higher price paid by agricultural investor buyers in region 9 must be interpreted in recognition of the fact that investor buyers accounted for only 1% of the total acres purchased in region 9 in 1979.

The reasons for selling land are presented by economic development regions in Table 31. Death and retirement together accounted for 59% of all farm land sales statewide in 1979, but for 70 percent or more of the sales in three regions, 6E, 7W and 8. In contrast, only 15 percent of the sales in 1979 were made by owners who quit farming for another job, but this was a relatively frequent reason for selling in regions 3, 5 and 7E. These three regions are all contiguous, in the northeastern quadrant of the state. The major role played by death or retirement in determining the volume of sales in the current land market is shown by the fact that these two reasons accounted for half or more of all decisions to sell in all regions, with the single exception of region 3.

The average sales price per acre of farm land by quality of buildings and quality of land are shown by economic development regions in Tables 32 and 33. These quality judgments regarding land and buildings are highly subjective measures. Both land and building quality vary tremendously over the state and these figures cannot be compared across the regions. Keeping this constraint in mind, it is still possible to make some useful comparisons. In regions 6E, 9 and 10, for example, the price of land with no buildings was equal to or higher than the price of land with good quality buildings in 1979 (Table 32). In both regions 6E and

8, the highest prices per acre were paid for land with only average quality buildings. These four regions (6E, 8, 9 and 10) are contiguous and include the highest quality of farm land in the state. In these regions it is valid to conclude that neither the presence or absence of buildings nor the quality of buildings had any appreciable effect on the sales price of farm land in 1979.

Table 30: Average Sales Price Per Acre, by Type of Buyer, by Economic Development Region, Minnesota, 1973-79.

Region	Operating Farmer				Expansion Buyer				Investor Buyer			
	73	75	77	79	73	75	77	79	73	75	77	79
1	95	187	460	462	120	417	453	670	91	223	257	336
2	111	197	313	410	102	220	257	547	103	193	182	935
3	124	163	232	276	186	150	269	466	87	86	124	310
4	179	290	474	780	201	540	675	907	208	320	337	484
5	146	321	310	512	205	155	280	402	197	182	248	560
6W	261	529	686	859	222	568	757	978	233	367	631	938
6E	355	577	1021	1027	403	722	1033	1627	338	590	1007	1599
7W	318	554	820	1267	214	398	741	1170	370	515	729	667
7E	206	323	518	802	224	332	392	819	178	238	486	608
8	344	568	881	1355	363	802	1106	1659	330	614	953	1466
9	513	997	1750	1549	540	1160	1862	2180	520	801	1662	2648
10	440	695	1215	1317	387	802	1298	1884	394	693	999	1270
11	641	1030	1623	2183	621	970	1343	1549	772	1097	1595	2213

Table 31: Reason for Selling Land, by Economic Development Region, Minnesota, 1979.

Reason for Sales	REGION													
	1	2	3	4	5	6W	6E	7W	7E	8	9	10	11	MN
	-percent-													
Death	13	13	7	19	6	23	17	17	6	31	29	10	11	18
Retirement	34	38	21	41	44	39	56	53	46	39	37	42	46	41
Left Farming	14	13	47	15	21	16	11	17	27	7	12	16	7	15
Moved, Still Farming	5	0	13	12	13	9	5	8	6	6	7	20	4	10
Other	34	38	13	13	17	13	11	6	16	17	15	12	32	17

Table 32: Average Sales Price Per Acre of Farm Land by Quality of Buildings, by Economic Development Region, Minnesota, 1973-79.

-----Quality of Buildings-----												
Region	Good			Average			Poor			None		
	1973	1978	1979	1973	1978	1979	1973	1978	1979	1973	1978	1979
-dollars per acre-												
1	149	406	663	107	421	785	92	521	568	117	412	517
2	164	381	584	89	367	424	65	223	316	55	337	502
3	221	467	286	96	230	425	87	-	254	90	325	211
4	226	1076	884	171	728	766	162	669	731	206	855	860
5	217	713	653	152	462	437	165	385	410	166	301	276
6W	288	1201	1119	268	750	906	184	897	881	200	909	1004
6E	457	1201	1359	369	1241	1683	359	1104	1498	324	1192	1577
7W	358	1218	1274	306	918	1044	239	836	840	220	710	1066
7E	327	739	1213	232	387	787	116	548	686	143	467	386
8	469	1287	1777	353	1230	1826	309	1200	1434	284	1122	1532
9	612	1771	2239	525	1757	1934	510	1582	1859	488	1648	2214
10	529	1634	1876	385	1227	1465	309	1241	1303	365	1264	1886
11	868	1615	2214	637	1449	1915	628	1408	1710	700	1165	1478

Table 33: Average Sales Price Per Acre of Farm Land by Quality of Land, by Economic Development Region, Minnesota, 1973, 1977, 1978, and 1979.

-----Quality of Land-----												
Region	Good				Average				Poor			
	1973	1977	1978	1979	1973	1977	1978	1979	1973	1977	1978	1979
-dollars per acre-												
1	187	593	692	870	93	365	403	514	64	176	259	294
2	137	356	520	653	90	293	286	434	47	177	213	372
3	267	276	478	341	106	206	264	311	--	82	---	248
4	231	833	940	1020	181	473	871	895	123	418	487	425
5	212	535	601	757	135	278	530	437	145	227	293	314
6W	306	879	1131	1185	221	724	836	949	151	439	656	490
6E	434	1207	1408	1713	367	1095	1218	1666	269	657	842	923
7W	374	856	1109	1441	267	806	905	836	263	446	693	700
7E	279	612	622	1052	195	443	561	650	85	234	401	644
8	456	1341	1417	1735	334	981	1138	1632	226	640	814	1117
9	606	2107	1929	2421	503	1611	1758	1856	353	1305	1221	1481
10	494	1579	1645	2002	386	1101	1296	1556	283	774	834	1022
11	779	1612	1540	2670	627	1317	1431	1558	680	1242	1103	1678
MN	390	1187	1213	1459	280	813	939	1081	194	438	613	625

The proportion of farm sales by method of financing is presented for the economic development regions in Table 34. The proportion of sales involving contract for deed financing has been increasing steadily over time since the mid 1950's. The highest incidence of contract for deed financing occurred in regions 5, 7W, 10 and 11. These four regions include the urbanizing and industrializing counties in the Mississippi River corridor, reaching from Brainerd to Rochester. Mortgage financed farm sales ranged from a low of 6% in region 5 to a high of 41% of all farm land transfers in region 2. The use of mortgage financing has been gradually decreasing over time, in conjunction with the increasing usage of contract for deed financing. Cash financing is not widely used, and accounted for one-fourth or more of the sales only in region 3, where the average sales price per acre was the lowest in the state in 1979.

Table 35 presents the average sales price per acre by method of financing by economic development regions. Statewide, the highest price paid per acre was for cash financed sales in region 9, but there is no definitive pattern that can be observed across the various economic development regions.

Table 34: Proportion of Farm Sales by Method of Financing, by Economic Development Region, Minnesota, 1976, 1977, 1978 and 1979.

Region	Cash				Mortgage				Contract for Deed			
	1976	1977	1978	1979	1976	1977	1978	1979	1976	1977	1978	1979
1	23	16	19	19	26	27	27	20	51	56	54	61
2	7	10	19	9	39	33	34	41	54	57	47	50
3	17	21	29	27	39	39	29	27	44	39	43	47
4	15	20	17	21	28	24	32	24	56	56	51	55
5	25	26	9	10	27	26	26	6	48	47	64	84
6W	15	10	10	17	28	24	48	38	57	66	42	45
6E	12	9	3	10	25	25	37	27	63	65	60	63
7W	9	17	8	14	33	24	32	21	58	59	60	66
7E	31	15	13	14	22	33	55	29	46	53	32	57
8	16	14	14	19	30	31	32	18	54	55	54	63
9	15	29	21	15	28	27	22	36	57	55	58	49
10	12	20	15	12	19	29	15	18	69	51	70	69
11	15	6	9	11	17	20	14	15	67	73	77	74

Table 35: Average Sales Price Per Acre of Farm Land by Method of Financing, by Region, Minnesota, 1976, 1977, 1978 and 1979.

Region	Cash				Mortgage				Contract for Deed			
	1976	1977	1978	1979	1976	1977	1978	1979	1976	1977	1978	1979
1	364	287	440	716	386	381	429	622	303	388	421	476
2	137	208	243	293	262	202	384	425	257	332	306	600
3	124	138	309	264	185	263	230	341	199	146	303	305
4	541	393	746	856	483	518	878	901	584	609	887	800
5	241	327	643	343	258	255	481	476	230	304	447	492
6W	589	714	705	1051	747	699	942	804	709	777	911	1027
6E	743	910	1566	1847	1046	978	1200	1407	904	1059	1146	1576
7W	579	937	1216	763	696	727	886	1851	546	747	928	1011
7E	289	366	306	459	546	487	618	860	516	465	562	815
8	1049	1068	1201	1726	821	1054	1284	1416	922	1055	1135	1584
9	1437	1873	1515	2635	1548	2002	1628	2064	1452	1826	1738	1969
10	945	1033	1324	1383	875	1360	1422	1608	910	1206	1363	1669
11	997	1507	1233	2145	1138	1397	1111	1275	1167	1447	1446	1933

PART III: THE FARM LAND MARKET IN THE RED RIVER VALLEY

The northwest district of Minnesota is sharply divided into two parts, by differences in soil and topography. The Red River Valley, lying in the western part of the district, has fertile soil and is characterized by relatively large-scale farming units. The non-valley comparison area, lying in the eastern part of the district, is differentiated by soil fertility, type of farming, and prices paid for land (Figure 4).^{*} In this portion of the study, a comparison will also be made with economic development region 2, which consists of the following five counties: Mahnomen, Clearwater, Hubbard, Beltrami and Lake of the Woods. These five counties cover the area directly east of the non-valley comparison area, with the exception of Mahnomen County, which lies in both the non-valley comparison area and in economic development region 2. This overlap has been allowed to remain, in order to facilitate comparison by maintaining the geographic unity of the land market reporting districts and of the economic development regions, and to permit comparison with the valley and non-valley area data published in previous years.

The Red River Valley experienced the most rapid price increases of any sector of the Minnesota farm land market from 1973 to 1976, with increases in average sales prices of 79, 49 and 37 percent, respectively. Following these rapid increases, the land market in the Red River Valley slowed to a 6 percent increase in 1977 and 9 percent in 1978. During the first six months of 1979 the average sales price per acre of farm land in the Red River Valley was \$993, or 17% over its 1978 level. In the same period, the non-valley comparison area experienced an increase in the average sales price of 20%, moving up from \$385 per acre in 1978 to \$461 per acre in 1979. In sharp contrast, economic development region 2 experienced an increase in average sales price of 62%, from \$321 per acre in 1978 to \$520 in 1979 (Table 36). The average sales price in region 2 was higher than the average sales price in the non-valley comparison area in 1979, an unusual inversion in the farm land market of northwestern Minnesota.

The Red River Valley led the state in the proportion of sales of unimproved land (land without buildings) during the 1970's. In 1979, 75% of all farm land sales were of unimproved land in the Red River Valley, 65% of all sales involved unimproved land in the non-valley comparison area, while in economic development region 2, only 31% of all farm land sales involved land without buildings in 1979 (Table 37). The minor role played by the presence or absence of buildings in economic development region 2 is underlined by the fact that there was almost no difference between the price of improved and unimproved land in 1979 (\$522 and \$502 per acre, respectively, Table 37). It is not uncommon for unimproved land to sell for more than improved land in the Red River Valley, as it did in 1976 and 1978. In 1979, unimproved land sold for an average price per acre of \$977 in the Red River Valley, or 95 percent of the \$1,025 paid per acre for improved land. Unimproved land also sold for less than

* While most of the area designated as the "non-valley comparison area" lies within the drainage basin of the Red River and in this sense is within the Red River Valley broadly defined, the term Red River Valley is used here in a narrower sense to describe the much higher valued lands of the Red River Valley Lake Plain.

Table 36: Analysis of Reported Farm Sales in the Red River Valley, Non-Valley Areas, and Economic Development Region 2, Minnesota, 1977, 1978 and 1979.

Item	Red River Valley			Non-Valley Area			Economic Dev. Region 2		
	1977	1978	1979	1977	1978	1979	1977	1978	1979
Number of Sales (Jan.-June)	37	65	56	75	77	84	30	32	26
Average Size of Tract (Acres)	284	270	257	287	290	321	303	279	275
Average Sales Price Per Acre (dollars)	780	849	993	306	385	461	277	321	520
Change in Sales Price over Preceeding Year (percent)	6	9	17	10	26	20	11	16	62
Standard Deviation of Sales Price* (dollars)	313	291	323	165	159	228	136	143	209
Coefficient of Variation* (percent)	40	34	33	54	41	49	49	45	40

*See Statistical Appendix.

improved land in the non-valley comparison area, and in economic development region 2 in 1979 (Table 37). Since buildings generally add to the value of farm land, this is the expected price relationship. The inversion which occurred in the Red River Valley in 1976 and 1978 can be explained by the heavy activity of farm expansion buyers, who typically place little value on farm buildings.

The proportion of farm land sales and average sales price paid per acre by type of buyer are shown in Tables 38 and 39. Farm expansion buyers continued to dominate the farm land market of the Red River Valley and the non-valley comparison area in 1979, accounting for 85 and 77 percent of all purchases, respectively. In economic development region 2, farm expansion buyers were much less active, accounting for only 58 percent of the purchases. Farm size is smaller in economic development region 2, and there was a higher incidence of purchases by operating farmer buyers. Where cash crops are not the dominant form of land use, as is the case in region 2, there is a reduced incentive to increase the acre size of existing farms. Instead, livestock enterprises may be expanded by more intensive use of capital inputs.

Table 37: Proportion of Sales and Average Sales Price Per Acre of Improved and Unimproved Land in the Red River Valley, Non-Valley Comparison Area, and Economic Development Region 2, Minnesota, 1976-1979.

Area and Year	% of Sales		Price/Acre		Price of Unimpr. Land as a % of Price of Impr. Land
	Impr.	Unimpr.	Impr.	Unimpr.	
	%	%	\$	\$	%
<u>Red Rvr. Vly.</u>					
1976	33	67	677	769	114
1977	30	70	790	767	97
1978	31	69	729	901	124
1979	25	75	1025	977	95
<u>Non-Vly. Comp. Area</u>					
1976	53	47	281	275	98
1977	37	63	345	278	81
1978	45	55	402	364	91
1979	35	65	524	421	80
<u>Econ. Dev. Region 2</u>					
1976	73	27	248	259	104
1977	63	37	316	191	60
1978	47	53	308	337	109
1979	69	31	522	502	96

Farm expansion buyers in 1979 paid an average of \$1,036 per acre for farm land in the Red River Valley, or approximately twice as much as the \$557 and \$547 per acre paid by expansion buyers in the non-valley area and in economic development region 2, respectively (Table 39). The comparatively minor role played by investor buyers is reflected in the data showing that in 1979 they accounted for only 4% of the tracts purchased in both the Red River Valley and in economic development region 2, and for 9% of all purchases in the non-valley comparison area (Table 38).

The proportion of sales and price paid per acre by quality of land is presented in Table 40. Caution is necessary in the interpretation of these figures because the quality of land is comparable only within regions, and not among them. The sharp contrast in concepts of land quality as one moves eastward from the Red River Valley is obvious, with land classified as good in quality in the Valley selling for \$406 per acre more in 1979 than land classified as good in quality in the non-valley comparison area. The much higher incidence of good quality land in the Red River Valley is illustrated by the fact that 64 percent of all sales were of good quality land and only 2% were of poor quality land in 1979.

Table 38: Proportion of Sales by Type of Buyer, Red River Valley, Non-Valley Comparison Area and Economic Development Region 2, Minnesota 1976, 1977, 1978 and 1979.

Type of Buyer	Red River Valley				Non-Valley Area				Economic Dev. Region 2			
	1976	1977	1978	1979	1976	1977	1978	1979	1976	1977	1978	1979
Operating Farmer	9	6	3	11	16	15	6	14	55	38	28	38
Expansion Buyer	89	86	95	85	70	62	74	77	34	55	53	58
Investor (Agric.)	2	8	2	4	14	23	19	9	10	7	19	4

Table 39: Average Sales Price Per Acre by Type of Buyer in the Red River Valley, Non-Valley Comparison Area and Economic Development Region 2, Minnesota, 1976, 1977, 1978 and 1979.

Type of Buyer	Red River Valley				Non-Valley Area				Economic Dev. Region 2			
	1976	1977	1978	1979	1976	1977	1978	1979	1976	1977	1978	1979
Operating Farmer	538	558	770	738	245	424	440	347	238	313	328	410
Expansion Buyer	743	831	853	1036	304	364	363	557	278	257	347	547
Investor (Agric.)	2000	499	750	688	240	205	422	300	220	182	239	935

Table 40: Proportion of Sales and Price Paid Per Acre by Quality of Land, Red River Valley, Non-Valley Comparison Area and Economic Development Region 2, Minnesota, 1978-1979.

Land Quality	Red River Valley		Non-Valley Area				Economic Dev. Region 2					
	1978	1979	1978	1979	1978	1979	1978	1979	1978	1979		
	%	\$	%	\$	%	\$	%	\$	%	\$		
Good	68	989	64	1116	27	568	23	710	34	520	31	653
Average	22	737	34	820	52	376	51	450	38	286	50	434
Poor	10	368	2	560	21	244	27	325	28	213	19	372

In the non-valley comparison area, good quality land accounted for 23 percent of all sales in 1979, while 31 percent of all sales in region 2 in 1979 were of land considered good in quality in that region.

The use of contracts for deed in financing land sales has generally been expanding in northwestern Minnesota, stimulated by the rising prices of farm land in the 1970's. In 1979, contract for deed sales accounted for 70% of all transactions in the non-valley comparison area, at an average per acre sales price of \$445 (Table 41). In the Red River Valley and in economic development region 2, sales financed with contracts for deed accounted for 32 and 50 percent of all sales, respectively, and sales financed in this way brought the highest price per acre in both areas. Cash financing was abnormally frequent in the Red River Valley in 1979, where it was used in 40% of all sales, compared to 20% in 1978. This is in sharp contrast to the 11% and 9% of sales involving cash financing in 1979 in the non-valley comparison area and in economic development region 2. Mortgage financing was most frequently used in economic development region 2 in 1979 (41% of all transactions), but was used in only 19% of the sales in the non-valley comparison area, where contract for deed financing predominates. The pattern of financing used in farm land sales in northwestern Minnesota appears to be in a state of flux, but in general there has been an increase in the frequency of contract for deed financing in the Red River Valley since 1972.

Table 41: Proportion of Sales and Average Price Paid Per Acre by Method of Finance, Red River Valley, Non-Valley Comparison Area and Economic Development Region 2, Minnesota, 1978-1979.

Method of Financing	Red River Valley		Non-Valley Area				Economic Dev. Region 2					
	1978	1979	1978	1979	1978	1979	1978	1979	1978	1979		
	%	\$	%	\$	%	\$	%	\$	%	\$		
Cash	20	940	40	967	15	269	11	497	19	243	9	293
Mortgage Contract	51	894	28	913	27	350	19	540	34	384	41	425
For Deed	29	723	32	1057	58	410	70	445	47	306	50	600

STATISTICAL APPENDIX

One disadvantage in the use of average prices based upon actual sales is that the averages do not indicate the degree of variation in the data. Quality of land varies greatly in any one county or district, for example, but it is not possible to derive an accurate measure of land quality from this survey. Over time, the quality of land involved in the sales from year to year may also vary.

One measure of this variability in prices is indicated in Table 44. The standard deviation represents the dollar range from the average within which approximately two thirds of the reported sales fall. For example, in 1979 the Northwest district had an average of \$612 per acre with a standard deviation of \$355. This means that approximately two thirds of the sales in that district fell between \$257 and \$967 per acre. The coefficient of variation is the standard deviation divided by the average sales price, and multiplied by 100 to convert it to a percentage form. In the above example, the coefficient of variation is 57.9 percent. Wider variations in sales price above and below the average create larger coefficients of variation.

Table 42: Average Estimated Value Per Acre of Farm Real Estate in Minnesota by Districts, 1910-1911 through 1944-1945, by Two Year Periods, and Annually, 1946 through 1979.

Years	South-east	South-west	West Central	East Central	North-west	North-east	Minnesota
1910-11	58	54	39	24	24	11	41
1912-13	69	69	46	29	29	13	49
1914-15	82	84	56	34	32	14	58
1916-17	92	100	67	41	37	15	68
1918-19	117	118	78	50	40	18	82
1920-21	141	152	98	68	57	24	104
1922-23	114	119	82	56	44	23	85
1924-25	104	110	74	49	44	22	78
1926-27	106	109	72	49	36	22	76
1928-29	100	102	67	44	33	21	71
1930-31	88	88	51	36	22	18	60
1932-33	64	65	42	27	20	14	45
1934-35	52	58	38	26	22	15	40
1936-37	59	64	38	29	22	24	44
1938-39	60	68	37	28	22	25	45
1940-41	59	68	36	26	22	24	43
1942-43	65	76	40	29	24	25	48
1944-45	78	90	48	35	29	28	56
1946	88	104	56	39	33	32	65
1947	96	116	62	43	37	35	72
1948	104	129	69	47	41	38	79
1949	107	136	73	49	44	39	83
1950	109	141	76	50	46	40	85
1951	125	166	89	59	54	46	99
1952	131	175	96	65	68	42	107
1953	130	175	95	62	64	40	105
1954	139	187	99	66	72	40	113
1955	150	205	103	68	73	45	121

(continued)

Table 42: Average Estimated Value Per Acre of Farm Real Estate in Minnesota by Districts, 1910-1911 through 1944-1945, by Two Year Periods, and Annually, 1946 through 1979 (continued).

Years	South-east	South-west	West Central	East Central	North-west	North-east	Minnesota
1956	156	214	107	70	76	42	126
1957	165	230	122	77	86	49	138
1958	179	242	123	84	90	65	147
1959	191	255	134	89	103	58	157
1960	188	248	133	94	99	64	155
1961	189	247	133	95	100	64	156
1962	192	250	138	99	104	69	159
1963	194	246	142	103	114	68	161
1964	206	252	145	111	115	59	166
1965	219	261	146	112	113	51	171
1966	242	277	153	122	112	58	183
1967	262	303	163	128	108	62	194
1968	286	333	181	134	122	57	211
1969	308	350	196	146	120	54	223
1970	317	347	198	161	120	62	227
1971	333	351	204	155	119	63	232
1972	370	379	208	163	117	76	248
1973	433	459	247	194	146	115	298
1974	576	675	378	279	199	144	423
1975	674	844	503	296	295	163	525
1976	856	1106	624	349	378	210	667
1977	1027	1316	730	415	427	279	794
1978	1191	1421	803	498	483	304	889
1979	1453	1620	883	572	599	368	1040

Table 43: Annual Percentage Change in Estimated Farm Land Values Per Acre, Minnesota, 1946-1979.

<u>Year</u>	<u>Percent</u>	<u>Year</u>	<u>Percent</u>
1945-46	16.1	1962-63	1.3
1946-47	10.8	1963-64	3.1
1947-48	9.7	1964-65	3.0
1948-49	5.1	1965-66	7.0
1949-50	2.4	1966-67	6.0
1950-51	16.5	1967-68	8.8
1951-52	8.1	1968-69	5.7
1952-53	-1.9	1969-70	1.8
1953-54	7.6	1970-71	2.2
1954-55	7.1	1971-72	6.9
1955-56	4.1	1972-73	20.2
1956-57	9.5	1973-74	41.9
1957-58	6.5	1974-75	24.1
1958-59	6.8	1975-76	27.0
1959-60	-1.3	1976-77	19.0
1960-61	0.6	1977-78	12.0
1961-62	1.9	1978-79	17.0

Table 44: Average Price Per Acre of Reported Farm Sales, Deviation and Coefficient of Variation, by District, Minnesota, 1961-1979*.

Years	South-east	South-west	West Central	East Central	North-west	North-east	Minnesota
Average Price Per Acre (Dollars)							
1961	189.1	255.8	130.3	89.0	92.0	37.9	165.2
1962	195.7	228.5	140.5	76.3	73.9	30.3	161.1
1963	214.1	221.9	136.2	86.2	108.8	47.6	168.1
1964	213.3	234.3	150.3	86.3	103.6	51.6	178.1
1965	202.0	232.7	133.2	95.8	106.2	39.7	178.0
1966	253.4	260.4	164.3	113.0	103.4	30.6	203.4
1967	272.4	306.1	178.6	92.9	116.6	51.2	214.8
1968	316.0	329.0	186.0	104.0	90.0	47.0	232.0
1969	340.7	334.1	193.6	129.7	120.8	50.7	238.3
1970	346.0	340.0	206.0	141.0	113.0	45.0	243.0
1971	343.6	343.0	204.5	150.3	100.1	43.7	259.0
1972	389.4	365.7	221.7	145.1	107.2	76.4	293.3
1973	443.5	410.1	223.0	178.1	119.7	121.7	298.4
1974	598.4	630.1	339.8	242.7	204.7	144.4	450.1
1975	791.8	843.9	492.9	298.5	352.8	159.3	607.0
1976	937.2	1115.7	663.7	321.3	377.0	209.7	735.2
1977	1216.0	1340.0	708.6	445.7	431.7	197.9	858.8
1978	1351.7	1320.7	907.6	554.0	504.4	256.3	979.6
1979	1674.6	1674.5	949.3	618.1	612.2	410.9	1134.9
Standard Deviation (Dollars)							
1961	83.5	71.9	40.0	47.8	54.1	20.1	86.8
1962	80.7	68.6	45.1	39.1	57.2	29.7	88.5
1963	79.4	77.1	50.8	43.7	69.4	26.1	88.6
1964	91.6	77.3	70.1	52.4	89.9	39.0	97.2
1965	96.3	87.0	82.1	63.5	91.1	31.7	98.1
1966	142.7	95.3	56.7	66.5	65.7	32.2	199.4
1967	115.3	106.2	62.8	67.6	85.4	29.8	127.6
1968	179.0	124.2	77.5	108.5	70.5	41.6	160.7
1969	228.6	123.4	64.5	104.2	83.9	45.0	174.0
1970	189.7	129.6	75.4	105.6	89.5	29.3	162.5
1971	154.3	128.1	66.6	100.7	66.9	28.9	157.4
1972	154.9	136.4	79.0	96.7	70.0	38.8	164.4
1973	183.3	164.1	94.0	97.2	76.8	86.6	188.9
1974	265.2	290.0	147.2	153.0	127.5	60.6	287.7
1975	291.3	373.8	225.0	142.5	220.8	72.2	360.4
1976	359.0	501.4	243.0	176.2	273.2	100.6	457.8
1977	476.9	606.8	305.2	244.1	294.3	99.4	599.0
1978	454.2	496.9	329.2	304.0	260.8	100.5	539.7
1979	850.3	833.3	361.4	357.2	354.7	228.3	791.6

(continued)

Table 44: Average Price Per Acre of Reported Farm Sales, Deviation and Coefficient of Variation, by District, Minnesota, 1961-1979* (continued).

Years	South-east	South-west	West Central	East Central	North-west	North-east	Minnesota
Coefficient of Variation (Percent)							
1961	44.2	31.8	30.7	53.7	58.7	53.1	52.6
1962	41.2	30.0	32.2	51.2	77.3	98.0	54.9
1963	37.1	34.8	37.3	40.7	63.8	54.8	52.7
1964	42.9	33.0	46.6	60.8	86.7	75.5	54.6
1965	47.6	37.4	61.6	66.2	85.8	79.8	55.1
1966	56.4	36.7	32.6	58.9	63.8	105.4	58.7
1967	42.3	34.7	35.2	72.8	73.2	58.2	59.4
1968	56.6	37.3	41.6	103.8	78.3	88.5	69.2
1969	67.1	36.9	33.3	80.4	69.5	88.9	73.0
1970	54.8	38.1	36.6	74.9	79.2	65.1	66.9
1971	44.9	37.4	32.6	67.0	66.8	66.1	60.8
1972	39.8	37.3	35.6	66.6	65.3	50.8	56.1
1973	41.3	40.0	42.2	54.6	64.2	71.2	63.3
1974	44.3	46.0	43.3	63.0	62.5	42.0	63.9
1975	36.8	44.3	45.7	47.7	62.6	45.3	59.4
1976	38.3	44.9	36.6	54.8	72.5	48.0	62.3
1977	39.2	45.3	43.1	54.8	68.2	50.2	69.7
1978	33.6	37.6	36.3	54.9	51.7	39.2	55.1
1979	50.8	49.6	38.0	57.7	57.9	55.5	69.4

* Each acre is treated as a unit in calculating standard deviations and coefficients of variation.