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MINNESOTA AGRICULTURAL ECONOMIST

NO. 641 JANUARY 1983

The Minnesota Rural Real Estate Market in 1982

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Introduction

The value of Minnesota farmland dropped sharply in 1982, the first decline in rural land values since 1960 and the largest drop in percentage terms since the early 1920s. The weakness in the market was pervasive across virtually all of the state's important agricultural areas, with both estimated values and reported sales prices down consistently by 8 to 12 percent from 1981 levels.

Since 1910 data have been collected on regional and statewide developments in the Minnesota rural real estate market, making this one of the nation's longest-running efforts in monitoring land values at the state and sub-state levels. Each summer since the early 1950s, questionnaires have been sent to real estate brokers, appraisers, farm finance officials, and others familiar with rural land values in their local areas. Respondents are asked to provide two types of information. First, they are asked to estimate the current average value of various grades of farmland in their communities. Second, they are asked to provide information on actual sales of farmland which occurred during the first six months of the year, including acreage and price, quality of land and buildings, method of finance, and some characteristics of the buyer and seller. They are requested not to report sales which may not accurately reflect current market conditions, such as transfers between close relatives

This report is divided into three parts. The first describes current trends in the Minnesota farmland market, utilizing a six-district division of the state for which a series of land value data now extends back 72 years. The second

part discusses sales trends within economic development regions, and the third part focuses on the market for farmland in the greater Twin Cities metropolitan area.

PART I The 1982 Farmland Market

Estimated Land Values

The estimated statewide average value of Minnesota farmland in July, 1982 was \$1,179 per acre (Table 1). This represents a decline of 10 percent, or \$131 per acre, from the average value in 1981, the first such decline in estimated value recorded by this survey since 1960, when the statewide average value of farmland dropped one percent to \$155 per acre. Before that, estimated values had also declined slightly in 1953

The greatest previous decline in Minnesota farmland values, however, began in the early 1920s and did not bottom out until the mid-1930s. Land values had increased rapidly in the decade leading up to 1921, spurred by

the high grain prices that resulted from the strong export demand from wartorn Europe. As grain prices slid from their post-war high, land values fell with them during the 1920s and then slid further in the 1930s as the country endured the Great Depression. From a high of \$104 per acre in 1920-21, the value of Minnesota farmland fell to \$40 per acre by 1934-35, and did not exceed the 1921 level again until 1952. The Southeast and East Central districts recovered even more slowly, not regaining the earlier levels until 1955.

The 1982 decline in land values was spread consistently among the cashgrain districts of western Minnesota, where estimated values declined by 8 to 10 percent from 1981 (Table 2). In eastern Minnesota, where livestock agriculture is more important and where the influence of urban and recreational uses is more strongly felt, the estimates showed more variability. The East Central district reported the greatest decline in estimated value, a loss of 14 percent, and the Southeast had the next largest drop in 1982, 12 percent. This marks the third consecutive year that the Southeast and East Central districts

Table 1 Estimated Average Value per Acre of Farmland, by District, Minnesota, 1972-82

Years	Southeast	Southwest	West- Central	East- Central	Northwest	Northeast	Minnesota
			Dol	lars per A	Acre		
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	573	599	368	1040
1980	1526	1750	962	596	683	390	1120
1981	1709	2083	1135	679	813	460	1310
1982	1504	1875	1044	584	748	483	1179

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have lagged behind the rest of the state in terms of relative change in estimated farmland values. In 1979 and 1980 these two districts showed the smallest percentage increases in value of the six districts, and in 1982 they experienced the greatest relative decline. The Northeast district, on the other hand, reported an increase of 5 percent in estimated land values. In recent years, reports from this largely non-agricultural district have quite consistently coupled increases in estimated values with declines in reported sales prices.

In dollar terms, the Southwest district again led the state in average value of farmland, at \$1875 per acre (Table 1). In 1981 the Southwest had averaged \$2005 per acre, the first time in the history of this survey that any district's average value per acre had exceeded \$2000. The next-highest valued district was the Southeast, averaging \$1504 per acre in 1982. These two districts have maintained their relative positions for the past 50 years, but over time the ratio of their land values has varied considerably.

Beginning in 1930-31, when the two districts were tied at \$88 per acre, land values in the Southeast slipped relative to those in the Southwest until the mid-1950s. The low point came in 1957, when values in the Southeast equaled only 72 percent of those in the Southwest district. Then land values began to catch up again in the Southeast, due at least in part to the urbanizing influences then being felt in the northeastern part of the district. By 1972 land values in the Southeast had reached 98 percent of the level in the Southwest.

This trend was interrupted by the explosion in state farmland values that commenced in 1973 on the heels of the large Soviet grain purchases and the heating up of inflation. By 1976 the ratio of relative land values had fallen back to 77 percent, as the Southwest's greater suitability for large-scale cash grain farming caused land values there to increase more rapidly. Since then, the pattern has become less clear, with values in the Southeast increasing faster from 1976 to 1979, and the Southwest growing faster until 1981.

Over the years, the Southeast and Southwest districts provide a good illustration of the two competing factors that influence the state rural land market as a whole. One is the agricultural value of the land, resting on physical characteristics such as soil type and

Table 2 Annual Percentage Changes in Estimated Farmland Value per Acre, by Districts, Minnesota, 1972-82

Years July to July	Southeast	Southwest	West- Central	East- Central	Northwest	Northeast	Minnesota
1972-73	17	21	19	19	25	51	20
1973-74	33	47	53	44	36	25	42
1974-75	17	25	33	6	48	13	24
1975-76	27	31	24	18	28	29	27
1976-77	20	19	17	19	13	33	19
1977-78	16	8	10	20	13	9	12
1978-79	22	14	10	15	24	21	17
1979-80	5	8	9	4	14	6	8
1980-81	12	19	18	14	19	18	17
1981-82	-12	-10	- 8	-14	- 8	5	-10

Table 3 Average Reported Sales Price per Acre of Farmland, by District, Minnesota, 1972-82 (Unadjusted)

Years	Southeast	Southwest	West- Central	East- Central	Northwest	Northeast	Minnesota
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	1116	664	321	377	210	735
1977	1216	1340	709	446	432	198	859
1978	1352	1321	908	554	504	256	980
1979	1675	1680	949	618	612	411	1140
1980	1837	1868	1095	603	759	394	1318
1981	1965	2005	1171	680	919	483	1367
1982	1749	2022	1168	746	887	406	1360
% Change 1981-1982	- 11	1	0	10	- 3	- 16	_ 1

drainage, economic factors such as crop and livestock prices and interest rates, and technological developments such as the introduction of large machinery, which makes large, level fields relatively more valuable. The other element influencing the market is the value of land in alternative uses for residential or commercial sites or for recreation. These values are influenced more strongly by population, personal income, and tastes, and often result in a premium on characteristics that an agricultural user might discount, for example, rolling, wooded hillsides.

Reported Sales

Based on reports of 939 sales between January and July, the average price of Minnesota farmland sold in 1982 was \$1360 per acre (Table 3). This decline of only 1 percent from 1981 reported sale prices is due to a proportionate shift in land market activity back toward higher valued land

areas, which occurred in four of the state's six districts, and a shift state-wide to proportionately more activity in the higher-valued areas of southern and western Minnesota.

In order to compensate for the effects of this shift in land market activity, adjusted average sales prices for Minnesota and each of the six districts were computed by weighing the 1982 reported prices by the 1981 acreage distribution of sales. This eliminates the effects of shifts in market activity from one year to the next. resulting in a 1982 statewide average adjusted price of \$1263 per acre, a decrease of 8 percent from 1981 (Table 4)

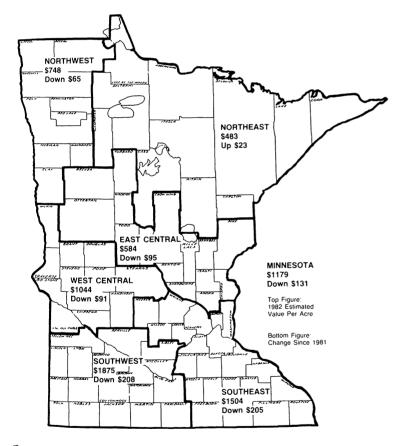
Adjusted sales prices followed the trend of estimated values quite closely in the three western districts, where agricultural use is the primary determinant of rural land values. Of the three, the Northwest suffered the greatest percentage loss in price, down 14 percent from 1981. This is a reversal from the

Table 4 Annual Percentage Changes in Adjusted Sales Price per Acre, by District, Minnesota, and CPI and GNP Implicit Price Deflator, 1974-1982

District	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
		Per	rcentage (Change in	Adjusted	Sales Pric	e	
Southeast	30	23	23	13	13	6	6	- 8
Southwest	34	33	20	2	22	12	15	- 8
West Central	43	32	8	18	4	9	13	- 9
East Central	24	6	32	37	16	0	19	4
Northwest	61	10	10	12	44	18	18	-14
Northeast	10	21	8	-24	47	-27	- 4	-18
Minnesota	35	26	18	10	17	9	11	- 8
CPI ¹	10.4	6.2	6.4	6.8	10.3	14.3	10.5	7.2
GNP Implicit ^{1,2} Price Deflator	10.9	5.6	5.5	6.7	8.8	9.1	8.6	6.4

¹The changes in price indexes were calculated by comparing the average prices for the first 6 months of the year with the average prices for the first 6 months of the previous year.

Figure 1. Estimated Land Values Per Acre
(Excluding Hennepin and Ramsey Counties)*



'Based on reported estimates of average value per acre of farmland for the first six months of 1982.

three previous years, in which the Northwest posted the greatest rate of increase in sales prices of the three cash-grain producing districts. Of the three eastern districts, the greatest decline in prices came in the Northeast, a drop of 18 percent. Prices in the Southeast were off 8 percent from the 1981

level, as the land market there closely followed the trend in the western districts. This marks a departure from the recent pattern, when the Southeast lagged behind while land values were increasing. The East Central district actually showed a 4 percent increase in adjusted sales prices, a phenomenon

that is discussed in more detail in Part III of this report.

When the 7.2 percent increase in the Consumer Price Index (CPI) between the first six months of 1981 and the same period in 1982 is considered, it is apparent that the combined effect of lower sales prices and inflation has been a decline in the real value of Minnesota farmland of approximately 15 percent. This follows on the heels of the two previous years, in which adjusted sales prices failed to keep pace with the increase in the CPI in 1980 and only approximately equaled it in 1981. It thus appears that, from the perspective of 1982, the boom in Minnesota farmland values that characterized the mid-1970s had essentially played itself out by 1980. Since 1979 the average adjusted price of state farmland sold has increased approximately 11 percent. Over the same period, the CPI increased by 35 percent, and a more conservative measure of inflation, the GNP Implicit Price Deflator, has increased 26 percent. By whichever vardstick one chooses, it is evident that, in real terms, Minnesota farmland has never been as valuable as it was in 1979.

The surge in state land values during the 1970s was based in large part on three factors. The first of these was the surge in export demand in 1973-74 and the resulting rapid increase in farm commodity prices. Expectations of future increases in demand for U.S. farm products and thus in the prices offered for them were raised further by widely publicized world food "crises," which served to buoy land values even as grain prices fell back from their middecade high. The second important factor was the availability of credit at very low or even negative real rates of interest. (The real interest rate is the nominal interest rate minus the inflation rate, and thus reflects the real cost of money to the borrower.) Cheap credit and the prospect of future increases in land values made investment in farmland an attractive option for both farmers and outside investors, adding to the market's momentum. The third factor propelling land values was inflation itself, both in the general price level, which served to draw investors looking for a safe haven into the land market, and an inflation in land values that, once established, seemed to validate earlier expectations and thus created still more.

That the bull market should have ended under the weight of develop-

²Economists often contend that the gross national product (GNP) implicit price deflator is a better indicator of price changes than the consumer price index (CPI). The CPI measures prices for a specified collection of goods and services which are typically purchased by urban consumers. The GNP implicit price deflator indicates the price changes of all goods and services measured by the GNP. The widening gap between the two measures in recent years is due largely to the influence of mortgage costs on the CPI.

ments in the 1980s is not surprising. Inflation slowed, interest rates rose, farm commodity prices declined, and the threat of imminent food disaster faded from the front pages. The slow-down did not appear concurrently in all parts of the state, however. The market remained strong through 1981 in the Northwest, largely on the strength of farm expansion buying in the lower-valued area east of the Red River Valley, and in the South Central district, where expansion buyers bid up the value of relatively small tracts of land.

Type of Buyer

One of the most significant trends recorded by this survey over the past three decades has been the dramatic transformation in the type of buyer predominating in the Minnesota farmland market. In the mid-1950s, soletract operators, those purchasing intact farms to be their only farm acreage, accounted for approximately 60 percent of all purchases of farmland in the state (Graph 1). Expansion buyers, those farmers or investors who buy land to add to an existing farm, figured in only 25 percent of all transfers. Over the years the relative market shares of these two types of buyers have gradually been reversed, and in 1982 farm expansion buyers purchased 75 percent of the tracts transferred in Minnesota. This is the highest proportion of sales to expansion buyers ever recorded by this survey. Sole-tract operators, on the other hand, were involved in only 16 percent of purchases, a new all-time low. Investor buyers, those purchasing farmland to be rented out or otherwise managed for agricultural purposes but not to enlarge an existing farm, accounted for the remaining 9 percent of purchases. Investors' share of the market has remained relatively constant over the past 30 years, although the rate of investor buying has declined since 1980 as the boom in land values subsided.

The proportion of sales to expansion buyers increased in five of the state's six districts in 1982. In the three cash-grain districts, the Southwest, West Central, and Northwest, the percentage of sales to expansion buyers was over 80 percent, and in the most highly valued counties of South Central Minnesota it was 94 percent. In the East Central and Northeast districts, by contrast, the percentage of sales to expansion buyers is much less, and it is in these two districts that operator buyers have their greatest share of the market. In 1982 they made 62 percent of the purchases in the Northeast and 41 percent in the East Central.

Expansion buyers paid the highest prices in the Southwest, East Central, and Northeast districts, while operator buyers paid the most in the Southeast and West Central districts and investors bid the most in the Northwest. Investors have generally paid less than expansion buyers in the three western districts in recent years, and the fact that investors paid the highest prices in the Northwest in 1982 is another illustration of the sharp drop in prices there.

The Minnesota rural real estate market has traditionally been extremely

local in nature, and 1982 was no exception. Statewide, 75 percent of buyers lived within 10 miles of the tract purchased, and only 11 percent lived more than 50 miles away. In the cash-grain districts, where expansion buyers dominate, the proportion of buyers living within 10 miles was even higher—86 percent in the Southwest, 80 percent in the West Central, and 78 percent in the Northwest. In the Northeast and East Central districts, where recreational and residential uses are more important and where sole-tract farm buyers are more numerous, the proportion of nearby purchasers is much lower (23 and 45 percent, respectively, within 10 miles of the tract).

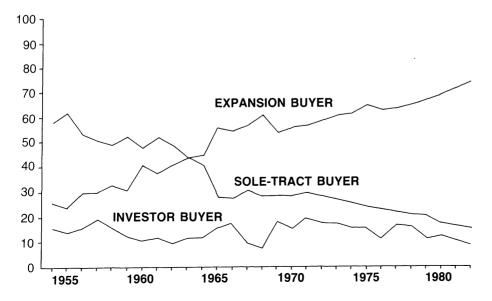
Reason for Sale

Retirement is the single most frequent reason for the sale of farmland, accounting for 32 percent of all sales in 1982. The second most frequent reason given was to "reduce the size of the operation," figuring in 23 percent of the sales statewide. Since this reason for sale was included as a possible response on the survey questionnaire for the first time in 1982, no comparison with the levels of earlier years is possible.

It is interesting to note, however, that the propotion of farm-reduction sales was highest in the Southeast and Southwest districts, areas that are characterized by the state's highest land values and by a very high proportion of sales to expansion buyers. The rate of farm-reduction sales was lowest in the East Central and Northeast districts, areas with the state's lowest land values and a much lower frequency of sales to expansion buyers. Those selling land in order to leave farming completely, on the other hand, made up 21 percent of the sellers in the Northeast and only 8 percent in the Southwest. Yet in both of these districts the sum of the two reasons for sale (reduce size of operations or leaving farming) are virtually equal (34 and 33 percent).

These figures suggest that two very distinct phenomena may be occurring in the state's regional farmland markets. In the northeastern part of the state, where the agricultural value of land is more marginal and where sales to expansion buyers are uncommon, there is little opportunity for farm operators in financial difficulty to sell off a part of their holdings to a nearby neighbor, so they frequently choose to leave farming entirely. In the Southwest.

Graph 1: Minnesota: Percent of Farmland Sales by Type of Buyer, 1954-1982



where farmland is very productive and a ready market exists for small tracts of land, farmers are much more easily able to reduce their debt burden by selling a parcel of land (perhaps purchased at the high prices of the late '70s) to a neighboring farmer.

The data on exit from farming in the East Central (15 percent) and Northeast (21 percent) districts also suggest that one result of the farmland price inflation of the '70s has been to channel the bulk of sole-tract buyers into marginal areas where the long-term viability of a new farm operation is more open to question.

Land and Building Quality

Statewide, land judged by survey respondents as "good" quality sold for an average price of \$1656 per acre in 1982, while "poor" land sold for a statewide average price of \$976 per acre. As has been the case in previous years, investor buyers bought a greater proportion of "poor" tracts (20 percent of their total purchases) than did either sole-tract operators (10 percent) or expansion buyers (12 percent). Conversely, expansion buyers made the highest percentage of purchases of "good" land (46 percent).

It should be noted that estimates of land quality are made in relation to the average quality of farm land in the respondent's home area, and thus that land rated "good" in different parts of Minnesota may vary considerably in agricultural productivity. Nevertheless, the data do suggest that investors tend to purchase lower-quality land more frequently than do other classes of buyers, and that expansion purchasers more often seek higher-quality land.

The presence or absence of farm buildings affects the value of land differently for the different types of buyers in the market. Operator buyers frequently seek land with buildings, and consequently offer a premium for improved land (meaning with buildings). Expansion buyers typically have little need for additional farm buildings and hence seek to purchase unimproved land or land without expensive buildings. These tendencies are confirmed by 1982 market data. Operator buyers included buildings in 82 percent of their purchases, while expansion buyers did so in only 37 percent of theirs.

These differing attitudes toward the worth of farm buildings are reflected in data on prices of improved and unimproved land at the regional level. In the

East Central district, where operator buyers exert more influence, improved land sold for an average of \$147 per acre more than unimproved land. In contrast, improved land sold for an average of \$66 per acre less than bare land in the West Central district, where expansion buyers predominate.

One development suggested by both sales and estimates data in recent years is a narrowing of the range or "compression" of farmland values across Minnesota. One indication of this is the behavior of the estimated values of high-, medium-, and low-grade farms reported by survey respondents each year. From 1979 to 1982, the average estimated value of high-grade farms increased 11 percent, the value of medium-grade farms increased 13 percent, and the value of low-grade farms rose 15 percent.

On the sales side, the standard deviation of reported sales prices, which measures the degree of variability in sale prices, declined in five of the six state districts in 1982. Another indicator is the coefficient of variation, which measures the degree of variation in prices relative to the average. The statewide coefficient of variation in 1982 was the lowest recorded since 1978. Taken together, the data suggest that the range of variation in state land values is narrowing, as poor land becomes relatively more valuable compared to good land.

Method of Finance

Contracts-for-deed were the most popular means of financing Minnesota farmland transfers in 1982, occurring in 60 percent of the reported sales. Mortgages were used to finance only 19 percent of sales, the lowest share ever recorded by this survey. This reflects the effect of high interest rates, as buyers and sellers have turned to alternative methods of financing their transactions. One result of this has been to increase the share of cash sales, which rose to 21 percent in 1982.

The popularity of seller financing, as represented by the contract-for-deed, raises some special considerations in the analysis of land sales data. Since seller-financed land sales often feature lower rates of interest on the amount financed than is the case with a mortgage from an institutional lender, sellers are in effect subsidizing part of the cost of the land to the buyer. This means that the real value transferred in exchange for the land is often less than

the specified or contract price.

As an example of this effect, consider two alternative ways of financing the sale of a tract of farmland with a market value of \$1000 per acre. Under the first method, the buyers pays the seller the entire price in full at the time of sale, with money either borrowed from a bank at the market rate of interest or withdrawn from his own cash funds. Clearly in this case the buyer has paid \$1000 per acre for the land.

Under the second method, the seller offers the buyer a contract for deed calling for 10 percent down, 20 years of semi-annual amortized payments and an interest rate of 10 percent. Assume that the current interest rate for farm mortgages is 14 percent. When the effect of the seller's concessional finance terms are considered, the buyer is actually paying less for the land on a contract than he would have paid had he financed his purchase by a conventional mortgage.

In fact, for the buyer to pay the same present value in this case as he would have paid with a mortgage under the same terms except for the higher interest rate, the price using the contract for deed would have to be increased to approximately \$1250 per acre. This arrangement would also be of more value to the seller, since capital gains (which are taxed at a preferential rate) are increased and interest income is reduced.

This trade-off between selling price and interest rate on contracts-for-deed has important implications for the interpretation of farm real estate market data, particularly in periods of declining land values and high mortgage interest rates. While data on contract terms are not collected by this survey, sales data suggest that precisely such a tradeoff between selling price and interest rate may be occurring. In four of the state's districts, land sold on contracts averaged the highest price per acre of the three finance methods. In a fifth, the contract price was within \$2 per acre of the top. The only district in which contract-for-deed prices averaged significantly less than mortgages was the Northwest, due in large part to the much higher incidence of mortgage financing in the higher-valued Red River Valley. It is also interesting to observe that the only district that posted an increase in adjusted sales prices in 1982 (the East Central) was also the district with the highest proportion of contract-for-deed sales (72 percent).

PART II. Market Trends by Economic Development Regions

In 1967 Minnesota designated 13 economic development regions. These regions, each consisting of from 4 to 11 counties, were designed in order to aid in the coordination of government planning and administration activities. This section discusses trends in reported farm sales in the economic development regions, affording a more detailed look at the Minnesota farmland market in 1982. Figure 2 shows the economic development regions.

Table 5 shows average reported sales prices by region from 1973 through 1982. Before 1975 Region 11, which is the seven counties of the Twin Cities metropolitan area, contained the highest-priced farmland in Minnesota. Since 1975, however, Region 9 in south-central Minnesota has consistently averaged the highest in sales prices, and in recent years has been the only region to average over \$2000 per acre. The 1982 average price was \$2484, a decline of 13 percent from 1981 (Table 6).

In percentage terms, the greatest drop in sale prices came in the three northeastern regions (2, 3 and 5), all of which were down by 16 percent or more from the 1981 levels. These three regions had enjoyed the largest percentage increases in prices in the state in 1981 (all up by 37 percent or more), and they are heavily influenced by residential and recreational demands for rural land.

Among the predominately cashgrain agricultural regions, the greatest percentage decline in prices came in region 9, the highest-priced region, which had also experienced a 24 percent increase in 1981. Land prices in region 1, which contains the Red River Valley and had experienced strong increases in 1981, fell by 9 percent in 1982. Region 6W in west-central Minnesota, which had increased by 24 percent in 1981 after two previous years of small increases, dropped by 3 percent in 1982. In the other three western regions (4, 6E and 8), which had posted more modest increases or even declines in 1981, prices in 1982 changed less dramatically. Region 8, in the southwest corner of the state, saw prices increase by 3 percent in 1982

after a 2 percent decline in 1981.

In southeastern Minnesota, where livestock agriculture is more important and where nonfarm influences on the land market are more significant, the pattern was mixed. Regions 10 and 11, two relatively high-priced areas that had seen their rate of increase in sales

prices lag behind that of the rest of Minnesota in 1980 and 1981, were down by 12 and 7 percent, respectively, in 1982. Region 7E, on the other hand, showed the largest increase in prices in the state, up 11 percent from the 1981 level. The farmland market in this area, which lies directly north of

Figure 2. Minnesota Economic Development Regions

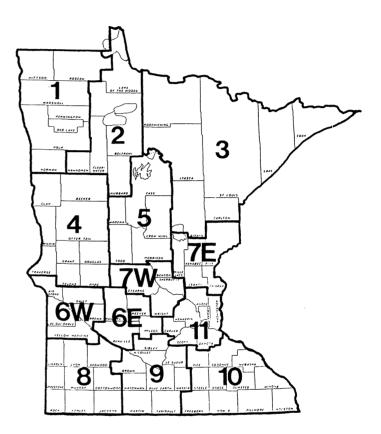


Table 5 Average Reported Sales Price per Acre of Farmland, by Economic Development Regions, Minnesota, 1973-1982

Economic Development										
Region	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
				De	ollars P	er Acre				
1	114	199	344	330	367	433	560	732	888	806
2	108	141	206	250	277	321	520	452	645	459
3	126	148	157	162	179	280	310	271	386	325
4	192	317	446	542	558	853	828	868	973	987
5	164	197	259	235	297	478	483	506	695	556
6W	233	341	537	696	746	906	960	1051	1303	1259
6E	374	569	691	923	1027	1171	1528	1735	1949	1876
7W	291	430	472	596	778	927	1112	1056	1300	1240
7E	203	254	316	455	473	575	768	741	790	873
8	354	534	710	906	1058	1199	1574	1674	1646	1701
9	534	829	1115	1464	1835	1682	2111	2320	2000	2484
10	411	565	753	915	1197	1373	1645	1864	1941	1713
11	698	882	1035	1150	1437	1396	1799	1778	1830 1	1711
Minnesota	298	450	607	735	859	980	1140	1318	1367	1360

the Twin Cities, is analyzed in more detail in Part III of this report.

PART III. The Farmland Market in the Greater Twin Cities Metropolitan Area

The greater Twin Cities metropolitan area is defined here as the seven metropolitan "core" counties (Hennepin, Ramsey, Anoka, Washington, Dakota, Scott, and Carver) plus the next ring of Minnesota counties that surround them: Chisago, Isanti, Sher-

burne, Wright, McLeod, Sibley, Le-Sueur, Rice, and Goodhue. These 16 counties are now within the "orbit" of the Twin Cities, and rural land markets there are influenced to some extent by demands for nonfarm uses of rural land for residential or commercial sites. At the same time, agricultural uses remain very significant in all of these counties with the exception of Ramsey.

The 16-county area has been further divided into three sub-areas, based on differences in population, recent rate of population growth, agricultural productivity, and historical land values. These subdivisions help to explain re-

Table 6 Annual Percentage Changes in Sales Price per Acre, by Economic Development Regions, Minnesota, and the CPI and GNP Implicit Price Deflator, 1973-82

				% Change in Sales Price						
Economic Development Region	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	
1	75	73	- 4	11	18	29	31	21	- 9	
2	31	46	21	11	16	62	-13	43	-29	
3	17	6	3	10	56	11	-13	42	-16	
4	65	41	22	3	53	- 3	5	12	1	
5	20	31	- 9	26	61	1	5	37	-20	
6W	46	57	30	7	21	6	9	24	- 3	
6E	52	21	34	11	14	30	14	12	- 4	
7W	48	10	26	31	19	20	- 5	23	- 5	
7E	25	24	44	4	22	34	- 4	7	11	
8	51	33	28	17	13	31	6	- 2	3	
9	55	35	31	25	- 8	26	10	24	-13	
10	37	33	22	31	15	20	13	4	-12	
11	26	17	11	25	- 3	29	- 1	3	- 7	
Minnesota	51	35	21	17	14	16	16	4	- 1	
CPI GNP Implicit	10.2	10.4	6.2	6.4	6.8	10.3	14.3	10.5	7.2	
Price Deflator	9.4	10.9	5.6	5.5	6.7	8.8	9.1	8.6	6.4	

Table 7. Average Reported Sales Price per Acre, Greater Twin Cities Metro Area and Subareas, 1973-1982

Year	Seven-County Metro ¹	South Metro Fringe ²	North Metro Fringe ³	Greater T.C. Metro ⁴ (16 counties)	Minnesota
1973	698	475	353	516	298
1974	896	647	556	689	450
1975	1023	808	599	839	607
1976	1164	1086	718	1045	735
1977	1442	1285	752	1198	859
1978	1423	1313	892	1185	980
1979	1799	1799	1309	1694	1140
1980	1778	2097	1170	1781	1318
1981	1830	1955	1334	1791	1367
1982	1711	1867	1446	1759	1360

Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington counties

³Chisago, Isanti, Sherburne, Wright ⁴All 16 counties named above cent trends in metropolitan area farmland prices.

The seven-county Metro area in 1980 contained nearly half of the state's total population (49 percent), but its population grew quite slowly from 1970 to 1980, increasing only 5.7 percent in the 10 years. As noted in the previous section, until the mid-1970s farmland prices were higher in this part of the state than in any other.

The South Metro Fringe Area contains the five counties to the south of the "core" counties: Goodhue, Rice, Le-Sueur, Sibley, and McLeod. This area is more valuable agriculturally than the rest of the metropolitan area, and it experienced a somewhat greater rate of population growth in the 1970s (8.6 percent) than did the seven inner counties

The North Metro Fringe is made up of the four northern counties: Wright, Sherburne, Isanti, and Chisago. Farmland in this area is less productive than that in the counties to the south, and land values there have historically been below those of the other two subareas. The North Metro area experienced a great increase in population during the 1970s, rising by over 50 percent in 10 years.

Table 7 gives average reported sale prices of farmland from 1973 to 1982 for each of the three subareas, the greater Twin Cities metropolitan area as a whole and the state as a whole (including the Twin Cities). These data indicate that farmland prices in the greater Twin Cities area increased at a slower rate than those in the state as a whole from 1973 to 1982 (241 percent vs. 356 percent). They also indicate that within the greater Twin Cities area, farmland prices rose even more slowly in the sub-area that was most highly valued at the beginning of the period, the seven-county core (145 percent). Prices increased most rapidly in the lowest-valued area, the North Metro Fringe (310 percent), and in 1982 this was the only one of the three subareas to show an increase in prices (8 percent).

These data suggest that the phenomenon of "compression" noted earlier in this report at the statewide level, or a narrowing of the range of values of Minnesota farmland, is also occurring within the greater Twin Cities metro area. At the start of the recent inflation of land values in 1973, average sale prices in the South Metro Fringe Counties equaled 68 percent of the average in

² Goodhue, McLeod, LeSueur, Rice, and Sibley counties

the seven-county metro core. By 1982 average sale prices in the South Metro Fringe actually exceeded those in the core counties by 9 percent. Similarly, in 1973 average sale prices in the four North Metro Fringe counties equaled 51 percent of the average price in the core counties. The North Metro average increased to 85 percent of the core average by 1982.

These data help to explain the 11 percent increase in sales prices in Region 7E that was noted earlier. Recent large population growth in the area has increased the demand for farmland for residential and other nonfarm uses, and as nonagricultural demand for rural land has grown there has been a corresponding decline in price differentials based on agricultural value.

Two other characteristics of the greater Twin Cities metropolitan area

farmland market are worth noting. The first is that, contrary to the case in predominantly cash grain agricultural districts, land with buildings commands a consistently higher price than land without. This is likely due to the demand for rural residences within commuting distance of the Twin Cities.

The other notable feature of the Twin Cities area market is the increasing dominance of farm expansion buyers. In the total 16-county area, they made up only 34 percent of the purchasers in 1973. Since then they have gradually increased their share of the market to 72 percent by 1982. Expansion buyers have thus increased their share of purchases more rapidly in the Twin Cities area than in the more purely agricultural regions.

Two reasons for this suggest themselves: First, while in nonmetro rural areas farmers make the decision to expand or not based mainly on considerations of the future of the farm operation itself, farmers in the metropolitan area can base their expansion decision on the additional prospect of a capital gain resulting from conversion to a nonfarm use, thus adding to the incentive to expand. Second, due to the increase in the value of their existing property since the early 1970s, farmers in the Twin Cities area have found themselves in a stronger position from which to compete with nonfarm users for additional tracts of land. Farmers in the greater Twin Cities metropolitan area have thus had both short-term and long-term incentives to increase their farm size and an improved capital base from which to achieve it.

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