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THE MINNESOTA RURAL REAL ESTATE MARKET IN 1978

Rodney Christianson and Philip M. Raup*

INTRODUCTION

In the twelve months from July 1977 to July 1978, Minnesota rural land prices continued the upward trend of recent years, though at a slower rate. This trend was uneven, with price declines reported in about a dozen counties, primarily in south central and southwestern Minnesota.

Regional and statewide data on the Minnesota rural real estate market have been collected since 1910. For the last 27 years, these data have come from mailed questionnaires sent in July and August to real estate brokers, bankers, agricultural loan specialists, and county officials. Two types of data are collected. First, those responding are asked to estimate the average value per acre of various grades of farmland in their communities. Second, details are requested on actual rural land sales from January 1 to July 1 of each year. These include acreage, price per acre, characteristics of buyers and sellers, quality of land and buildings, and financing methods. An average of two-thirds of those surveyed respond each year.

Part I of this three-part report discusses the overall Minnesota farmland market and 1978 trends. Part II deals with the farmland market in southwestern Minnesota, while part III focuses on deflated farmland prices and trends by development regions.

1978 Farmland Market

PART I

Overview of Current Trends

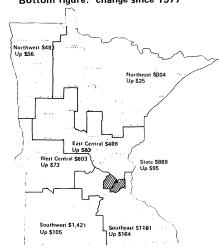
The estimated statewide average value of farmland in Minnesota in (July) 1978 was \$889 per acre (table 1), an increase of \$95 per acre or 12 percent over 1977 (figure 1). The annual increases in farmland values from 1972 to 1977 were 20, 42, 24, 27, and 19 percent, respectively (ta-

ble 2). While the 1978 increase is still notable in dollars, this is the smallest annual percentage rise in 6 years, reflecting a downturn in real terms (that is, adjusted for inflation) for the farmland market in several regions of the state and an actual decline in money terms for a few areas of southern Minnesota (see parts II and III). In 1978, several other counter-trends developed in contrast to the farmland market activity that dominated in 1972-1977. For example, the 1978 reported sales price per acre of good farmland changed very little over 1977, while the average price paid by expansion buyers for good land declined significantly from the 1977 level (see the next section—analysis of reported sales). Farmland values have climbed more than 3½ times since grain prices moved up considerably in late 1972 following the Russian wheat purchases (\$889 in 1978 vs. \$248 in 1972, table 1).

During the 1970's two distinct land market regional groupings emerged. The three eastern districts—the Northeast, East Central, and Southeast—are most strongly influenced by urban, residential, and recreational land uses, and de-

Figure 1. Estimated average rural land values per acre* (excluding Hennepin and Ramsey counties)

Top figure: 1978 estimated value per acre Bottom figure: change since 1977



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

pend more on livestock agriculture than the three western districts. Throughout the 1960's and to July 1972, the largest annual percentage increases in farmland values typically occurred in these three livestock and urban-oriented districts (table 2). Over the next 3 years this trend was completely reversed as estimated farmland values rose substantially in the Southwest, West Central, and Northwest districts (ranging from 19 to 53 percent each year from 1973-75).

In the three western districts cash crops dominate. Prices received by farmers for cash crops (corn, soybeans, wheat, barley, sugar beets) were remarkably stable until late 1972. After the Russian grain purchases, grain prices jumped up dramatically, followed by sugar beets in mid-1973. These higher crop prices were quickly capitalized into higher farmland prices. Many farmers used their record incomes to buy additional land to expand the size of their holdings, thus putting further upward pressure on farmland prices. By 1975, farmland values rose by more than the statewide average in the three western districts (25 to 48 percent) while farmland values increased less than the statewide average (6 to 17 percent) in the eastern districts where livestock farming and urban, residential, and recreational land uses are prominent (table 2).

By districts, the highest percentage increases in estimated values in 1977-78 took place in the Southeast and East Central districts (16 and 20 percent, respectively, table 2) while in the Southwest and West Central districts where cash crops dominate, farmland values rose half that much (8 and 10 percent, respectively, table 2). The slowdown in farmland value increases in these two western districts is apparently associated with the general downward movement of cash crop prices and farm incomes over the last 2-3 years, and the smaller role played by expansion buyers in these districts (table 5).

Analysis of Reported Sales

Information was received on 1,149 farm sales in the first 6 months of 1978. The statewide average reported sales price for farm-

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Table 1. Estimated average value per acre of farmland by district, Minnesota, 1973-1978*

| Years | South- east | South- west | West Central | East Central | North- west | North- east | Minnesota |
|-------|----------------|----------------|-----------------|-----------------|----------------|----------------|-----------|
| | | | (| dollars per | acre— | | |
| 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 |
| | | | | | | | |

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

Table 2. Annual percentage changes in estimated farmland value per acre, by district, Minnesota 1971-1978

| | Percentage change from July to July | | | | | | | | | | | |
|--------------|-------------------------------------|---------|---------|---------|---------|---------|---------|--|--|--|--|--|
| District | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 | 1976-77 | 1977-78 | | | | | |
| | | | | percent | | | | | | | | |
| Southeast | 11 | 17 | 33 | 17 | 27 | 20 | 16 | | | | | |
| Southwest | 8 | 21 | 47 | 25 | 31 | 19 | 8 | | | | | |
| West Central | 2 | 19 | 53 | 33 | 24 | 17 | 10 | | | | | |
| East Central | 5 | 19 | 44 | 6 | 18 | 19 | 20 | | | | | |
| Northwest | -2 | 25 | 36 | 48 | 28 | 13 | 13 | | | | | |
| Northeast | 20 | 51 | 25 | 13 | 29 | 33 | 9 | | | | | |
| Minnesota | 7 | 20 | 42 | 24 | 27 | 19 | 12 | | | | | |

Table 3. Average estimated value per acre of farmland compared with prices received in actual sales, by district, Minnesota, 1977-1978

| | 197 | 77 | 197 | 78 | Percent changes | | |
|--------------|-----------|-----------|-----------|-------|-----------------|--------|--|
| | Estimated | Sales | Estimated | Sales | over 1977 | | |
| District | value | price | value | price | Estimated | Actual | |
| | | —percent— | | | | | |
| Southeast | 1,027 | 1,216 | 1,191 | 1,352 | 16 | 11 | |
| Southwest | 1,316 | 1,340 | 1,421 | 1,321 | 8 | -1 | |
| West Central | 730 | 709 | 803 | 908 | 10 | 28 | |
| East Central | 415 | 446 | 498 | 554 | 20 | 24 | |
| Northwest | 427 | 432 | 483 | 504 | 13 | 17 | |
| Northeast | 279 | 198 | 304 | 256 | 9 | 29 | |
| Minnesota | 794 | 859 | 889 | 980 | 12 | 14 | |

Table 4. Proportion of sales and average sales price per acre of improved and unimproved farmland, by district, Minnesota, 1977 and 1978

| District | Improved land | | | | | Unim _l | Unimproved as a percent of improved | | | | |
|--------------|------------------|-------|------|-------|------|-------------------|-------------------------------------|-------|------|------|--|
| | 1977 | | 1978 | | 1977 | | 1978 | | 1977 | 1978 | |
| | % | \$ | % | \$ | % | \$ | % | \$ | % | \$ | |
| Southeast | 67 | 1,230 | 68 | 1,375 | 33 | 1,167 | 32 | 1,264 | 95 | 92 | |
| Southwest | 55 | 1,420 | 63 | 1,350 | 45 | 1,219 | 37 | 1,259 | 86 | 93 | |
| West Central | 58 | 736 | 51 | 910 | 42 | 664 | 49 | 904 | 90 | 99 | |
| East Central | 75 | 445 | 70 | 562 | 25 | 448 | 30 | 533 | 101 | 95 | |
| Northwest | 37 | 512 | 39 | 455 | 63 | 360 | 61 | 548 | 70 | 120 | |
| Northeast | 63 | 192 | 68 | 245 | 37 | 212 | 32 | 287 | 110 | 117 | |
| Minnesota | 60 | 899 | 61 | 1,026 | 40 | 782 | 39 | 888 | 87 | 87 | |

land was \$980 per acre. This is 14 percent above the 1977 average sales price and consistent with both the statewide slowdown indicated earlier for estimated farmland values and an actual decline for some areas of southern Minnesota (table 3). The regional shift in land market activity toward the more livestock, urban, and recreationally oriented eastern districts continues to be evident in the reported sales data as well. The average sales price rose by 11 percent in the Southeast district, while the reported price declined 1 percent in the Southwest (table 3). The 11 percent increase in the Southeast returned this district to the top position in average sales price for the first time since 1973. This is another indication of the weakened agricultural forces in the 1978 rural land market in southern Minnesota. Among the five most agricultural districts (excluding the Northeast) the percentage rise was greatest in the West Central, a district where the land market is apparently recovering from the drought conditions of 1976.

The U.S. Department of Agriculture (USDA) has estimated that voluntary sales for the year ending February 1, 1978 numbered 21.7 per 1,000 farms in Minnesota, the lowest rate of transfers by voluntary sale since 1935. This is a 31 percent decline from 1977 and is consistent with the decreased number of sales reported in this survey, particularly in the Southwest district. The number of forced sales (foreclosures and tax delinquency) is up again to 2.5 per 1,000 farms. This figure is now close to its long-term average after dropping to record lows over the previous 3 years (0.3 to 0.6 thousand). Transfers to all types (voluntary sales, inheritance, estate settlements, foreclosures, tax sales, and other miscellaneous transfers) reached a record low (since the survey began in 1926) of 30.2 per 1,000 Minnesota farms in 1978.

Improved land (meaning, with buildings) accounted for only 61 percent of 1978 Minnesota farm sales (table 4). This proportion has been steadily declining since the 1960's when improved land consis-

tently made up at least 80 percent of all sales. Among the districts, there are the two familiar regional groupings. The three western cash grain districts had improved land transactions near or below the statewide average (63, 51, and 39 percent for the Southwest, West Central, and Northwest districts, respectively, table 4). The three less agricultural eastern districts had proportions of improved land sales well above the average. This points out the major motivation for land purchase in the cash grain areas: farm expansion through acquisition of unimproved land. Fewer farmers have increased the size of their holding in the Southeast, East Central, and Northeast districts. Livestock farming is more significant in these districts and the demand for land with buildings for residential and recreational purposes has been stronger.

Before 1974 unimproved land prices consistently averaged 80 percent of prices paid for improved land. In 1975 and 1976 this statewide trend was reversed and unimproved farmland sold for more than improved land. During 1975 and 1976 the absence of buildings was strongly associated with higher farmland prices in the three western cash grain districts, where farm expansion buyers placed a greater value on land without buildings. In 1977 the trend shifted and continued in 1978 in that unimproved land prices averaged substantially less than the prices paid for improved land (\$888 vs. \$1,026, or 87 percent, table 4). Among the western districts, the absence of buildings is now associated with significantly higher farmland prices only in the Northwest (table 4), where expansion buvers still overwhelmingly dominate the farmland market (table 5).

This survey groups agricultural buyers in three classes: operating farmers who buy complete farm units as owner-operators; farm expansion buyers who may be operating farmers or investors increasing the size of their holdings; and agricultural investor buyers who are nonfarmers who have bought land to be rented out or managed for farming purposes. (This land is not

Table 5. Proportion of tracts purchased and average sales price per acre by type of buyer, district, Minnesota, 1977 and 1978

| District | 1 | Oper farmer 977 (so | buy | er | Expansion farmer buyer (operator or investor) | | | | | Agricultural investor buyer (sole tract) | | | | |
|--------------|------|---------------------------|------|-------|---|-------|------|-------|------|--|------|-------|--|--|
| | 1977 | | 1978 | | 1977 | | 1978 | | 1977 | | 1978 | | | |
| | % | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % | \$ | | |
| Southeast | 20 | 1,269 | 20 | 1,262 | 63 | 1,280 | 61 | 1,433 | 18 | 1,083 | 19 | 1,174 | | |
| Southwest | 11 | 1,117 | 13 | 1,231 | 77 | 1,392 | 74 | 1,373 | 11 | 1,160 | 13 | 1,138 | | |
| West Central | 23 | 649 | 24 | 821 | 67 | 743 | 65 | 954 | 10 | 667 | 11 | 803 | | |
| East Central | 54 | 460 | 45 | 511 | 30 | 463 | 39 | 654 | 16 | 364 | 16 | 411 | | |
| Northwest | 12 | 449 | 5 | 436 | 68 | 536 | 83 | 526 | 20 | 264 | 13 | 433 | | |
| Northeast | 40 | 233 | 41 | 293 | 32 | 216 | 23 | 236 | 29 | 135 | 36 | 212 | | |
| Minnesota | 22 | 694 | 21 | 858 | 63 | 1,018 | 64 | 1,048 | 15 | 582 | 15 | 843 | | |

Table 6. Proportion of purchases and price paid per acre by type of buyer for land of various quality, Minnesota, 1977 and 1978

| | | | | Lan | d qua | ality | | | | | | | |
|-----------------------|----|-------|------|-------|-------|-------|------|-------|------|-----|------|-----|--|
| Good Average Po | | | | | | | | | | | oor | or | |
| Type of buyer | 1 | 977 | 1978 | | 1977 | | 1978 | | 1977 | | 1978 | | |
| | % | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % | \$ | |
| Operating farmer | 40 | 856 | 32 | 1,055 | 47 | 643 | 56 | 872 | 13 | 411 | 12 | 470 | |
| Expansion buyer | 40 | 1,335 | 41 | 1,232 | 46 | 942 | 44 | 1,005 | 14 | 546 | 15 | 665 | |
| Agricultural investor | 24 | 1,075 | 22 | 1,336 | 58 | 642 | 50 | 782 | 18 | 252 | 29 | 611 | |
| All | 38 | 1,187 | 36 | 1,213 | 48 | 813 | 47 | 939 | 14 | 438 | 16 | 613 | |

being used to expand the size of farms already owned.) In 1974 expansion buyers led in the proportion of farmland purchased by these three classes. Over the next 2 years this trend intensified so that by 1976 expansion buyers dominated the farmland market making up 65 percent of all purchases in Minnesota, while sales to both operating farmers and agricultural investors declined in proportion. The shift was even more pronounced in the three western cash grain districts accounting for 79, 75, and 72 percent of 1976 sales in the Southwest, Northwest, and West Central, respectively. Among the districts in 1977 there was a slight shift away from expansion buying for the West Central, East Central, and Northwest districts (table 5). In 1978, expansion buyers still dominate statewide, with 64 percent of all purchases, but their role has declined in the Southwest and West Central.

Operating farmer buyers continue to dominate in the East Cen-

tral and Northeast, two districts associated with a larger proportion of part-time and hobby farms (table 5). Statewide, agricultural investors held their own in 1978 after rebounding from a 5-year decline in their market share of farmland purchases the previous year. By districts, investor buying remained steady or increased in all but the Northwest, which experienced unusually heavy investment purchases in 1977.

A slowdown in the Minnesota rural land market was evident when investor buyers, statewide, paid less in 1977 on the average than in 1976 (\$582 in 1977 vs. \$592 in 1976). The 1977 issue of this report indicated that these slightly lower prices, together with an increased market share for investor buyers, might lead to a future softening of prices paid by other buyers, too. It did. Statewide, expansion buyers paid prices which averaged only 3 percent above last year. By districts, the average price negotiated by expansion buyers declined in the



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Southwest and Northwest, while operating farmers paid less in the Southeast and Northwest (table 5). Expansion buyers continue to lead all other buyers in average price paid in 1978, both statewide and in all districts except the Northeast. However, the wide price differentials of previous years in the cash grain areas are narrowing, particularly for the Southwest and Northwest districts (table 5). Growing price differentials between expansion purchases and other farmland sales are now found in the livestockand urban-oriented Southeast and East Central districts.

Land of good quality increased only 2 percent in price over 1977, from \$1,187 to \$1,213 per acre; land of acreage and poor quality rose to \$939 and \$613 per acre, respectively

(table 6). From 1974 to 1977, good quality land, statewide, consistently sold for more than twice the price of poor quality land. This market trend shifted in 1978 as both average and poor quality land experienced much larger percentage increases in price per acre than did land rated good quality (15 and 40 percent increases, respectively, table 6). These relative changes in sales price among the various land quality categories reflect the overall slowdown and decline in the better quality land areas of the statenamely, in Minnesota's southwestern and south central counties.

During 1975-1977, farm expansion buyers paid substantially more than other buyers for all land, regardless of quality. In 1978 this market trend started to revert to its pre-1975 situation when agricultural investors consistently outbid other buyers for land of good and average quality. The highest prices for good quality land were offered by investor buyers in 1978 (\$1,336 per acre, table 6) while expansion buyers of good land paid lower prices in 1978 than they did the previous year (\$1,232 vs. \$1,335 per acre). Agricultural investors were also very active buyers of poor quality land in 1978 as they both paid considerably more for it and increased their proportion of purchases when compared to their 1977 market behavior (\$611 vs. \$252 per acre, and 29 vs. 18 percent, table 6). Operating farmers were the most active as buvers of land rated average in quality; average quality land constituted 56 percent of their purchases and the average price paid for it was 36 percent above the 1977 figure (\$872 vs. \$643 per acre, table 6).

PART II

The Farmland Market in Southwestern Minnesota

The southwestern quarter of Minnesota contains most of the best farmland, but some areas are vulnerable to climatic risk. In 1976 parts of western Minnesota experienced the driest summer ever recorded. To test the impact of this drought, the southwestern quarter was analyzed in three areas on the basis of variability in crop yields

(figure 2). The high-risk farming area comprises a group of nine counties in west central Minnesota with large yearly crop yield fluctuations due to occasional severe weather conditions (principally drought). In contrast, the low-risk farming area consists of a fairly well-defined block of nine counties in south central Minnesota containing the highest priced farmland in the state. Linking these two extremes is the transitional belt where

Figure 2. High-risk, transitional and lowrisk areas in southwest Minnesota



land is about the same quality found in the high-risk area, but there is less climatic risk.

The difference among the three areas is obvious when comparing land price levels over the last 4 years (table 7). Farmland in the low-risk counties averaged better than double the price paid for land in the high-risk group from 1974 to 1976. During 1977 the difference between the two areas was as much as three times, with land prices increasing 21 percent in the low-risk block while rising only 1 percent in the high-risk counties. Then in 1978 this regional trend reversed as farmland prices fell in the low-risk area by 6 percent while the average sales price climbed 26 percent in the high-risk counties. This substantial increment in the high-risk counties indicates that this area has rebounded from the severe drought conditions experienced 2-3 years

ago. Farmland price increases in the transitional belt have slowed at a regular rate over the last 3 years consistent with the decline in cash crop prices (30, 20, and 10 percent, respectively, table 7).

Expansion farmer buyers generally dominated in all three areas in 1975-1977, both in purchases and average price paid per acre. The price-setting dominance of the expansion buyer declined in 1978 with agricultural investors negotiating higher purchase prices in the highrisk area (\$848 per acre) while operating farmers offered more in the low-risk counties (\$814 per acre).

Expansion purchases continue to make up the great majority of farm sales in all three areas, although this proportion declined in the transitional belt, 1977-1978 (69 to 63 percent). Compared with last year, the average price paid by agricultural investors dropped in the transitional area (\$1,017 to \$919 per acre) and in low-risk counties (\$1,726 to \$1,436 per acre) while expansion buyers paid lower prices in the low-risk area (\$1,725 in 1978 vs. \$1,831 in 1977). Only operating farmers bid higher average prices in all three areas, ranging from 7 to 48 percent above last year's levels. Appa-

Table 7. Analysis of reported farm sales in the high-risk, transition and low-risk areas, Minnesota, 1975-1978

| | High-risk area | | | Transition area | | | | Low-risk area | | | | |
|--|----------------|------|------|-----------------|------|------|-------|---------------|-------|-------|-------|-------|
| Item | 1975 | 1976 | 1977 | 1978 | 1975 | 1976 | 1977 | 1978 | 1975 | 1976 | 1977 | 1978 |
| Number of sales (JanJune) | 169 | 162 | 185 | 131 | 259 | 223 | 265 | 216 | 181 | 159 | 198 | 123 |
| Average size of tract (acres) | 205 | 236 | 195 | 188 | 175 | 161 | 157 | 150 | 139 | 135 | 133 | 130 |
| Average sales price per acre (dollars) | 480 | 638 | 644 | 810 | 653 | 852 | 1,025 | 1,130 | 1,145 | 1,495 | 1,812 | 1,699 |
| Change in sales price over preceding year | | | | | | | | | | | | |
| (percent) | 48 | 33 | 1 | 26 | 23 | 30 | 20 | 10 | 44 | 31 | 21 | -6 |

Table 8. Proportion of sales and price paid per acre, by quality of land in the high-risk, transitional and low-risk areas, Minnesota, 1975-1978

| Quality of land and year | H | gh-risk area | Tra | nsitional area | Low-risk area | | |
|---------------------------|----|-----------------|-----|-------------------|------------------|-------|--|
| Quality of failu and year | | | 0/ | | | | |
| | % | \$ | % | \$ | % | \$ | |
| Good | | | | | | | |
| 1975 | 36 | 692 | 37 | 748 | 42 | 1,313 | |
| 1976 | 37 | 710 | 39 | 1,013 | 48 | 1,775 | |
| 1977 | 28 | 841 | 42 | 1,237 | 51 | 2,058 | |
| 1978 | 37 | 1,007 | 36 | 1,337 | 39 | 1,936 | |
| Average | | | | | | | |
| 1975 | 46 | 447 | 47 | 654 | 46 | 1,117 | |
| 1976 | 47 | 619 | 44 | 829 | 42 | 1,332 | |
| 1977 | 50 | 660 | 40 | 1,004 | 41 | 1,604 | |
| 1978 | 41 | 781 | 47 | 1,117 | 41 | 1,754 | |
| Poor | | | | | | | |
| 1975 | 18 | 249 | 16 | 429 | 11 | 704 | |
| 1976 | 16 | 427 | 17 | 593 | 10 | 982 | |
| 1977 | 22 | 398 | 18 | 645 | 8 | 1,221 | |
| 1978 | 22 | 546 | 17 | 784 | 20 | 1,198 | |

rently, operating farmer buyers have access to more liberal credit arrangements than other buyers or are placing heavier weight on agriculture as a way of life.

The relative differences between average prices paid in the low-risk counties and in the other two areas for all qualities of land had been growing wider over the 1974-1977 period. During these 4 years, land rated poor in quality in the low-risk area consistently sold for more per acre than land judged good in the high-risk area and this spread widened in 1976 and 1977. For instance, the sales price per acre of poor land in the low-risk area exceeded the price of good land in the high-risk area by only 2 percent in 1975 (\$704 over \$692 per acre, table 8) but in 1976 this differential was 38 percent, and in 1977, 45 percent (\$1,221 over \$841 per acre, table 8). In addition, the price of poor quality land in the low-risk area surpassed the price of average quality transitional land in 1975 and was about to overtake the price paid for good quality land in the transitional belt in 1977 (\$1,221 vs. \$1,237 per acre).

This widening regional trend narrowed in 1978 as the average price paid for poor quality land in the lowrisk counties dropped (from \$1,221 to \$1,198 per acre, table 8) while the sales prices of all qualities of land increased in the other two areas. As a result the sales price of poor quality low-risk land exceeds the price of good high-risk land by only 19 percent and the price of average quality transitional land by just 7 percent (\$1,198 vs. \$1,007 and \$1,117 per acre, respectively, table 8). For the low-risk counties the average price paid for good quality land declined notably from its 1977 level (\$2,058 to \$1,936 per acre), and the proportion of sales shifted significantly away from good to poor quality land purchases (table 8).

Part III

Deflated Farmland Prices and Trends by Development Regions

Minnesota in 1967 recognized the need for a common set of regional delineations (at the sub-state level) to facilitate developmental planning, state and federal program implementation, state agency ad-

ministration, and local inter-governmental cooperation. Before 1967 over 160 mostly different regional delineations existed. The state had 4 political regions, 10 economic regions, 24 federal agency regions, and 88 state agency regions. Through research efforts at the University of Minnesota and the State Planning Agency, and as a result of federal, state, and local government decisions, a common set of 13 development regions emerged. Figure 3 illustrates the present development regions and table 9, the average reported sales price for farmland in each of these regions, 1971-1978.

The largely agricultural areas of the state where cash crops dominate land use are in regions 1, 4, 6W, 8, and 9 in western and southwestern Minnesota. These five regions correspond closely to Minne-

Figure 3. Minnesota development regions (June 15, 1973)

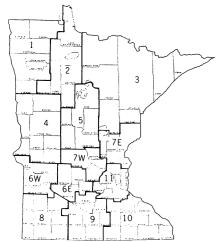


Figure 4. Types of farming areas in Minnesota—generalized by crop reporting districts



sota's spring wheat and western corn belt farming areas noted by USDA (figure 4). Regions 5, 6E, 7W, 7E, 10, and 11 fit fairly well into the lake states dairy area. Before 1973 the largest annual percentage increases in farmland prices typically occurred in these six dairy and urban-oriented regions and in the two recreation-oriented regions of northeast Minnesota (regions 2 and 3). To illustrate, for the 2-year period 1971-73 farmland prices rose by 17, to 223 percent in these regions while increasing at a slower rate in the five cash crop regions (8 to 34 percent, table 9).

Then from 1973 to 1975 the average sales price of farmland more than doubled in each of the five cash crop regions, while the other eight dairy, urban, and recreationoriented regions experienced much smaller increments (48 to 85 percent, table 9). the greater rates of land price increases in the cash crop regions for 1973-75 reflected the record cash crop prices and incomes received by farmers. Strong agricultural forces dominated the Minnesota rural land market from 1973-1975 in contrast to the strong urban forces which dominated earlier.

Table 9. Average reported sales price per acre of farmland, by economic development regions, 1971-1978

| • | • | | | | | | | |
|-----------------------------|------|------|------|---------|----------|-------|-------|-------|
| Economic development region | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 |
| | | | | dollars | s per ac | re | | |
| 1 | 93 | 105 | 114 | 199 | 344 | 330 | 367 | 433 |
| 2 | 53 | 83 | 108 | 141 | 206 | 250 | 277 | 321 |
| 3 | 39 | 81 | 126 | 148 | 157 | 162 | 179 | 280 |
| 4 | 176 | 170 | 192 | 317 | 446 | 542 | 558 | 853 |
| 5 | 93 | 127 | 164 | 197 | 259 | 235 | 297 | 478 |
| 6W | 216 | 238 | 233 | 341 | 537 | 696 | 746 | 906 |
| 6E | 319 | 361 | 374 | 569 | 691 | 923 | 1,027 | 1,171 |
| 7W | 230 | 290 | 291 | 430 | 472 | 596 | 778 | 927 |
| 7E | 228 | 216 | 203 | 254 | 316 | 455 | 473 | 575 |
| 8 | 298 | 323 | 354 | 534 | 710 | 906 | 1,058 | 1,199 |
| 9 | 400 | 461 | 534 | 829 | 1,115 | 1,464 | 1,835 | 1,682 |
| 10 | 314 | 368 | 411 | 565 | 753 | 915 | 1,197 | 1,373 |
| 11 | 465 | 586 | 698 | 882 | 1,035 | 1,150 | 1,437 | 1,396 |
| MN | 259 | 293 | 298 | 450 | 607 | 735 | 859 | 980 |
| | | | | | | | | |

Table 10. Annual percentage changes in sales price per acre, by economic development regions, Minnesota and in the consumer price index (CPI), 1971-1978

| Economic development | | Percent change in sales price | | | | | | | | | | |
|----------------------|---------|-------------------------------|---------|---------|---------|---------|---------|--|--|--|--|--|
| region | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 | 1976-77 | 1977-78 | | | | | |
| | percent | | | | | | | | | | | |
| 1 | 13 | 9 | 75 | 73 | -4 | 11 | 18 | | | | | |
| 2 | 57 | 30 | 31 | 46 | 21 | 11 | 16 | | | | | |
| 3 | 108 | 56 | 17 | 6 | 3 | 10 | 56 | | | | | |
| 4 | -3 | 13 | 65 | 41 | 22 | 3 | 53 | | | | | |
| 5 | 37 | 29 | 20 | 31 | -9 | 26 | 61 | | | | | |
| 6W | 10 | -2 | 46 | 57 | 30 | 7 | 21 | | | | | |
| 6E | 13 | 4 | 52 | 21 | 34 | 11 | 14 | | | | | |
| 7W | 26 | 0 | 48 | 10 | 26 | 31 | 19 | | | | | |
| 7E | -5 | -6 | 25 | 24 | 44 | 4 | 22 | | | | | |
| 8 | 8 | 10 | 51 | 33 | 28 | 17 | 13 | | | | | |
| 9 | 15 | 16 | 55 | 35 | 31 | 25 | -8 | | | | | |
| 10 | 17 | 12 | 37 | 33 | 22 | 31 | 15 | | | | | |
| 11 | 26 | 19 | 26 | 17 | 11 | 25 | -3 | | | | | |
| MN | 13 | 2 | 51 | 35 | 21 | 17 | 14 | | | | | |
| CPI | 3.3 | 6.2 | 11.0 | 9.1 | 5.8 | 6.5 | 7.6 | | | | | |

From 1976 to 1978 a readjustment process has been occurring with urban and agricultural forces in the rural land market. A general downward movement in cash crop prices and farm income was accompanied by severe drought conditions in parts of western Minnesota. Consequently the rates of farmland price increases slowed significantly in all five cash crop regions in 1976-78 compared with the 1973-75 increments (table 10). This slowdown was particularly evident in regions 1, 8, and 9 with actual declines in region 1 in 1976 (-4 percent) and region 9 in 1978 (-8 percent, table 10). In the other two western cash crop regions, 4 and 6W, the rural land market rebounded substantially from the previous droughtstricken year.

During the 1976-78 period, the larger annual percentage increases are repeated in the dairy, residential, and recreational-oriented regions (table 10). For 1976-77 the rates of increase were greatest in regions 7W and 10, which embrace the urban corridor of the state, St. Cloud southeast through the Twin

Cities to Rochester. For 1977-78 the rate of increase was greatest for region 5 located north of region 7W in the heart of the recreational area of northern Minnesota (table 10). Among the three southern regions, the largest increase in farmland prices, 1977-78, occurred again in region 10, particularly along the Mississippi River in southeastern Minnesota. The average per acre price of farmland dropped in region 11 which comprises the Twin Cities Metropolitan Area (table 10). The two regions with the highest farmland prices, 9 and 11, then both experienced declines in the average prices paid during 1977-78.

Table 10 indicates that several regions of the state during the 1970's have reported farmland price declines in dollar terms (as indicated

by the negative terms). An even larger number of regions had farmland price declines with price changes expressed in real terms. meaning: adjusted for inflation. To illustrate, for 1972-73 regions 6W and 7E experienced farmland price declines in money terms (-2 and -6)percent, respectively, table 10). Regions 6E and 7W also experienced land price decreases in real terms since the Consumer Price Index (CPI) rose 6.2 percent in 1972-73, while farmland prices changed only 4 and 0 percent, respectively (table 10). The annual percentage change in the CPI is displayed at the bottom of table 10. This information can be used to determine whether farmland prices for a given region increased or decreased in real terms in any year from 1971-78.

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