

# North Dakota Farmland Values in 1989

Jerome E. Johnson

The estimated average value of North Dakota farmland rose a mere \$3 an acre or 1.1 percent across the state in 1989. Survey respondents provided detailed information on land values, actual farm sales, and conditions affecting buyers, sellers, and the market. The important factors affecting 1989 farmland buyers were offsetting: the drought offset government farm income support program and Conservation Reserve Program (CRP) incomes, and a farm economy generally felt to be poor offset the important demand factors of farm expansion and tract location to the home unit.

North Dakota farmland values peaked in 1981 and then declined in spite of government income support programs for major crops (Table 1 and Figure 1). The CRP, with the federal government 10-year contract on highly erodible lands with guaranteed payments, slowed the land price decline in 1987 and brought rising land prices in 1988. However, 1988 drought reduced income expectations and caused buyer caution. The federal government responded not only with crop insurance and continued deficiency payments but huge disaster payments, which should have buoyed the land market in 1989. But many areas experienced a second successive drought in 1989, yielding mixed results for 1989.

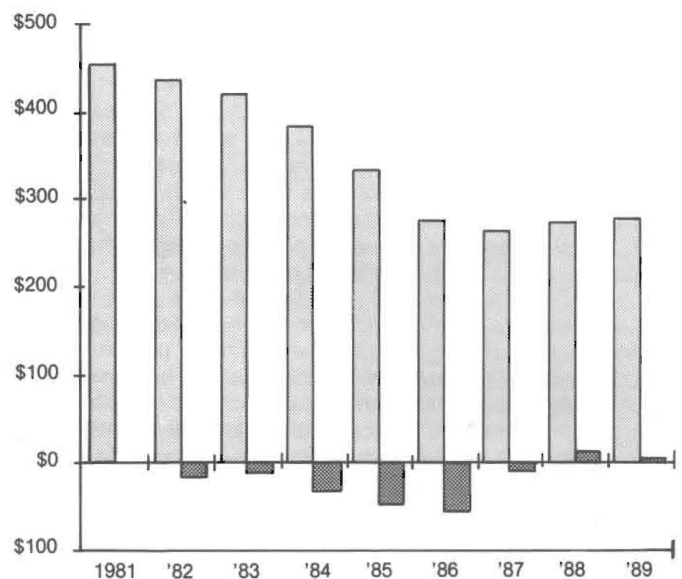
Two years of successive drought in many areas led potential farm buyers and landowners to act cautiously, resulting in reduced demand for land. But many areas with normal or better rainfall in 1989 did experience an array of price increasing forces: an added year of more CRP payments which led to buying land out of CRP plus bringing investors and some landowners to invest in tracts arranged to enter CRP. CRP payments allowed many farmers facing cashflow and credit or financial pressures another year of farming.

Some farmers who entered land into CRP still had their underutilized machinery complements available, so they moved into the land market to increase farmable acres. The CRP income also fueled the demand for more land to expand base units, especially when adjacent tracts became available.

Other positive factors in some areas included sugarbeet farmers seeking virgin acreages or expanding their ownership units, many tracts entered into CRP showing good returns causing more potential investors and buyers to enter the land market, good cattle prices, and a feeling in some areas that land prices had bottomed out so the time to buy is now.

**Table 1. Estimated North Dakota Farmland Values Per Acre and Changes since 1981.**

Year	Estimated Value \$ per acre	Annual Change in Value Measured in:		Total Change in Value from 1981 Peak as:	
		dollars	percent	dollars	percent
1981	\$454				
1982	435	(\$19)	- 4.2%	(\$ 19)	- 4.2%
1983	420	( 15)	- 3.4	( 34)	- 7.5
1984	385	( 35)	- 8.3	( 69)	-15.2
1985	334	( 51)	-13.2	( 120)	-26.4
1986	276	( 58)	-17.4	( 178)	-39.2
1987	262	( 14)	- 5.1	( 192)	-42.3
1988	273	\$11	4.2	( 181)	-39.9
1989	276	3	1.1	( 178)	-39.2



**Figure 1. Estimated Average Annual Values Per Acre of North Dakota Farm and Ranch Lands and Annual Changes in Value, 1981-1989.**

Johnson is professor, Department of Agricultural Economics.

Average land values rose about 6.5 percent in the Northeast Central and Southeast Central farming areas in 1989 but declined in the two Valley areas (Table 2). Positive factors included credit availability for buying land, a feeling that land values may have bottomed, government and CRP payments, new farm operators, strong pressure to expand, and good cattle prices.

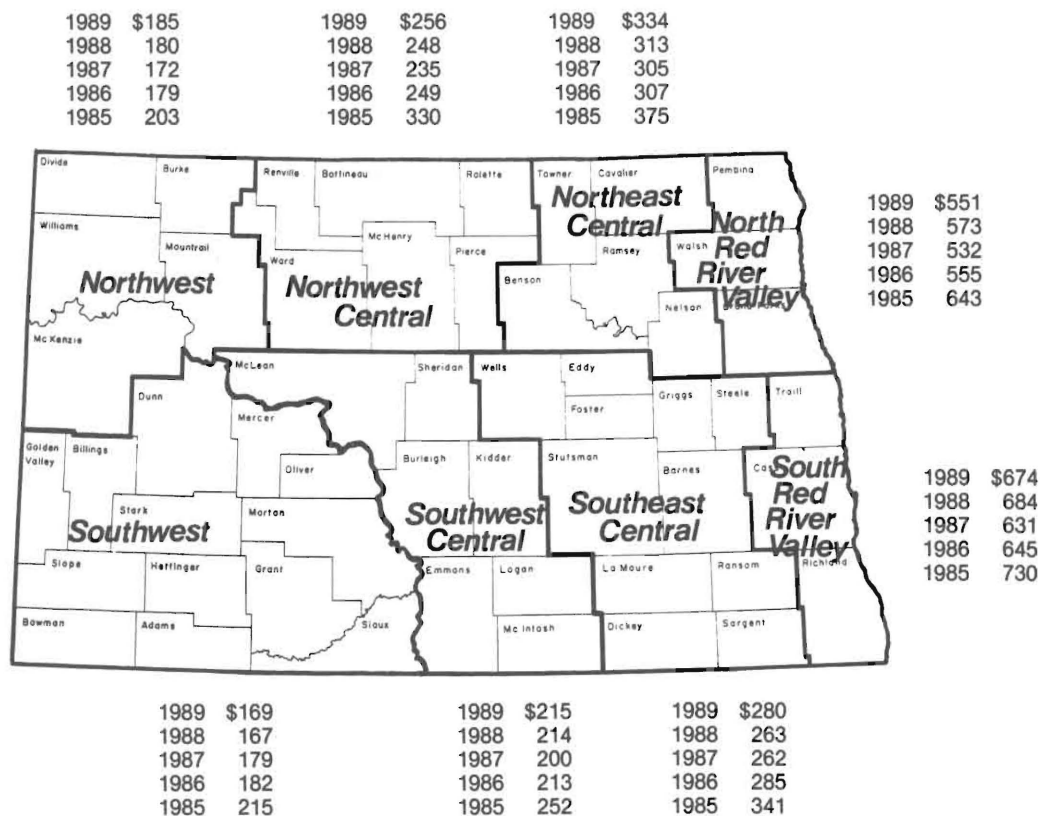
The reported decline in average land values in the two Valley areas contradicts the reported rise in cropland values. Reporters respond to an overall impression of the land market when estimating average land values, including such negative factors as the drought of 1989 (even with disaster payments), crop prices considered weak, credit and interest costs, cashflow problems, and poor return to investors. Their perception of cropland values reflects the many, mostly cropland, tracts sold in the Valley.

The five-year history of estimated farmland values for the eight farming areas is shown in Figure 2. The pervasive effect of the drought in the Southwest area is most evident regardless of good cattle prices and the CRP payments. The area is very short of moisture, with some locations experiencing several years of drought. The Southwest Central area also experienced drought but reported having more buyers and investors, the urban and job influences of Bismarck, growing government payments, reduced land in the market due to the CRP program, a good return on land investments in some locations, good cattle prices, and the generally strong farm expansion drive among farm operators.

**Table 2. Estimated Average Farm and Ranchland Values and Changes in Value Per Acre from 1988 to 1989 by Eight Farming Areas, North Dakota.**

Eight Farming areas	Estimated Value in:		Change in Value 1988 to 1989	
	1988	1989	dollars	percent
	<b>\$ per acre</b>			
Northwest	180	185	5	2.8
Southwest	167	169	2	1.2
Northwest Central	248	256	8	3.2
Southwest Central	214	215	1	0.5
Northeast Central	313	334	21	6.7
Southeast Central	263	280	17	6.5
North Red River Valley	573	551	-22	-3.8
South Red River Valley	684	674	-10	-1.5
North Dakota	273	276	3	1.1

The rising land values in the three northern farming areas despite drought in some locations were caused by timely rainfall in isolated areas, good CRP and farm income support program incomes, adjacent tracts strongly desired by expanding landowners, good cattle prices, a feeling that land prices are low and have bottomed, credit being available and tracts often cashflowing, and investor interest, especially in CRP acres.



State Averages: 1989:\$276, 1988:\$273, 1987:\$262, 1986:\$276, and 1985:\$334.

**Figure 2. Estimated Average Values Per Acre of North Dakota Farmland for Eight Farming Areas, 1985-1989.**

Iowa land values also show the effects of federal farm income support program benefits and the drought (Duffy and Staiert, 1989)<sup>a</sup>. The annual fall surveys measured the third consecutive rise in values in 1989. Iowa had a decline of \$161 per acre to a statewide average of \$787 in 1986. The decline ended during 1987 and the year finished with an increase of \$88 an acre to average \$875 per acre. The 1988 survey reported a large increase of \$179 an acre or 20.4 percent to reach \$1,054. The 1989 drought impacted the market so the increase was only \$85 an acre to yield a state average of \$1,139 per acre in 1989.

Estimated average cropland values rose in all farming areas of North Dakota in 1989 (Table 3). Current cropland values are above their 1986 values in all but the Southwest and Southwest Central areas and reflect the recent scene of rising cropland values. The larger dollar increases per acre were calculated for the South and North Red River Valley, the Northeast Central, and Northwest Central farming areas.

Estimated average pastureland values were up 6.6 percent for the state, reaching \$113 per acre in 1989. Good cattle prices and some locations having adequate rainfall amounts strengthened the 1989 market. Large dollar increases were reported for the Southeast Central, Northwest Central, and the Northwest areas. The Southwest area strongly felt the impact of the 1989 drought, with better cattle prices offset by reduced herd sizes.

## DATA AND DATA SOURCES

The 1989 survey obtained 117 usable estimates of value, up from the 102 used in the 1988 study and nearer the 112 reports in 1987 and the 114 that formed the base of the 1986 report. The 1989 estimates came from over 70 percent of the Farmers Home Administration (FmHA) county supervisors plus one to five reports from farm real estate brokers and other knowledgeable people in over two-thirds of the counties. The geographical distribution of the reports was particularly good in the eastern half of the state and much less so in the western half in 1989 compared to previous studies.

<sup>a</sup>Duffy, Michael D. and Jim Staiert. "1989 Iowa Land Value Survey: Overview." Ames: Iowa State University Extension. December 1989.

Individual estimates of value by three types of land are summed and averaged by counties and weighted by acreage of land in farms in each county to create averages for the farming areas and for the state. Individual responses are kept confidential, and only the averages and frequency distributions are released. Responses received after the report was written were entered into the computerized database and are available to update the previously developed averages.

A note of caution is that the trends developed in this study should not be applied to valuing individual farm tracts. Trained appraisers should be utilized to make necessary comparisons and adjustments. This report provides trends in farmland values and characterizes the farmland markets by farming areas. Most farmland and leasing markets are small and quite local, so the procedures of combining individual reports and weighting county data to create area averages may average out or mask over significant local changes.

## CONTINUED ACTIVE MARKET IN 1989

Most farm tracts were sold by retired farmers or to settle estates and were purchased by active farmers. Farmland continued to be available for purchase, and some farm credit agencies had inventories which some reporters felt had a price depressing effect as those credit agencies sought to reduce those inventories.

The 1989 farmland market was in a flux of change: widespread drought versus strong federal farm income support and CRP payments. Also opposing were low crop prices versus good cattle prices. Cashflow and credit problems hindered buying and led some to sell tracts. Land prices were thought to have bottomed in some areas and about to rise in others. Proximity of the tract to the headquarters unit, need for virgin beet acreage, the strong desire to expand units, and the good incomes some experienced created a strong demand for land in some localities.

Respondents include those licensed to sell real estate and many other well informed people. The 1989 land market experienced an increase in listings for a third of the farm brokers and a large group with fewer listings (from 43 percent to 17 percent). About one-half had about the same number of listings in 1989 as they had in 1988.

**Table 3. Estimated Average Values of Crop and Pastureland Per Acre for Eight Farming Areas, North Dakota, 1986-1989.**

Eight Farming areas	Cropland				Pastureland			
	1986	1987	1988	1989	1986	1987	1988	1989
	----- dollars per acre -----				----- dollars per acre -----			
Northwest	234	243	251	259	95	94	87	95
Southwest	231	224	207	222	111	96	104	97
Northwest Central	312	290	305	330	119	116	109	120
Southwest Central	258	242	225	247	95	101	99	106
Northeast Central	311	340	341	377	125	105	120	122
Southeast Central	318	279	311	324	105	103	99	108
North Red River Valley	613	586	605	648				
South Red River Valley	721	661	724	776				
North Dakota	322	310	313	330	113	109	106	113

Note: The two Red River Valley areas contain few acres of pastureland.



The number of tracts sold per farm broker was similar to the 1988 market with about 60 percent having no sales in 1989. About one-third had sold one to three tracts, and about 4 percent had sold 20 or more tracts in 1989. Comparing the average number of tracts sold per farm broker suggests that total 1989 sales may have been down about 8 percent from the 1988 market.

### CHARACTERIZING THE 1989 FARM TRACT SALES

This section deals with the characteristics of the actual farm tracts sold and of the buyers and sellers in the 1989 market. Number of tracts sold and average size and sales price per acre for the eight farming areas are presented in Table 4.

The number of sales reported is down from previous studies in the Northwest, Northwest Central, and Southwest Central areas, and up in the Southwest, Northeast Central, Southeast Central and the two Valley areas. The average size of parcel transferred is up from the previous two studies but varies with local conditions. The larger average sizes occur in the Southwest area and the smaller tracts nearer cities and in the two Valley areas.

The average sales price per acre varies with many factors related to the tract itself, buyers and sellers, and the credit system, including soil and building qualities, location to cities and market facilities, and credit availability and terms, to name a few.

The sales average prices can be compared to the estimated values presented in Figure 2. Estimated values tend to move rather smoothly from year to year while average sales prices fluctuate. For example, the Northwest average sales price went up 60 percent from 1987 to 1988 and then declined 21 percent the following year. In contrast, the state average sales price rose 5.5 percent from 1987 to 1988 and only 0.75 percent in 1989. The numbers support basing of trends in farmland values on estimates and not using actual sales data; but sales data do present important information on the farmland market.

Characteristics of each sale tract were provided. Only 2.8 percent of the sales involved buyers and sellers who were related. Those tracts averaged only 158 acres in size and

sold for an average sales price of \$428 per acre. Most sales (97.2 percent) were among non-relatives and averaged 387 acres in size and \$253 an acre.

Respondents rated the soils qualities of the land in the sales tracts, with 30 percent rated as having "good" quality soils for their areas, averaging 246 acres in size and \$463 an acre. Tracts rated as having "average" quality soils made up 57 percent of all sales, averaging 394 acres in size and \$233 per acre in price. Only 13 percent of the tracts were felt to have "poor" quality soils for their areas, but averaged the large size of 619 acres and sold for a low of \$129 an acre.

Quality of buildings on each tract was also rated by respondents. About 77 percent of the tracts with 55 percent of the acreage transferred were without buildings. These tracts averaged 269 acres in size and sold for \$314 an acre. Tracts with buildings rated as "good" quality averaged 556 acres, those with "average" quality buildings had a mean size of 539 acres, and those with buildings rated as "poor" quality had the largest average size of 930 acres.

Location of buyer relative to the tract purchased was provided, and these data suggest that most real estate markets are relatively local and small in size. About 85 percent of all buyers lived in the county where the purchased tract was located, another 9 percent lived in a nearby county, and 3 percent lived in a more distant county. Only 2.9 percent of all tracts were purchased by buyers living in another state in 1989.

The method of financing the purchase of tracts has shifted in recent years. Cash purchases more than doubled from 1984 to the 1985-87 period and have shown some indication of returning to its previous level (Table 5). But the flow of federal farm income, drought assistance, crop insurance, and CRP payments have provided some farmers with the means to enter the real estate market. Cash purchases averaged 243 acres in size in 1989 and cost \$348 an acre.

Credit instruments, mostly mortgages and contracts for deed, again account for about three-fourths of all purchases. Sellers financed over a fourth of the tracts with 36 percent of the acreage, averaging 605 acres but a lower price of \$192 an acre. Mortgage financed purchases came in between cash and land contracts in price and size, averaging 353 acres and \$275 per acre in the 1989 market.

**Table 4. Number of Sales and Averages Calculated for Actual Farm Sales, Fall 1987-1989 Surveys.**

Eight Farming areas	Number of Sales			Average Size			Average Price		
	1987	1988	1989	1987	1988	1989	1987	1988	1989
	----- number -----			----- acres -----			--- dollars per acre ---		
Northwest	23	47	24	386	358	380	152	244	193
Southwest	95	39	51	300	669	657	185	129	154
Northwest Central	46	46	22	335	290	335	176	249	195
Southwest Central	60	74	58	369	375	475	168	165	192
Northeast Central	33	17	43	245	263	264	309	368	346
Southeast Central	55	54	57	273	252	285	237	255	283
North Red River Valley	32	68	72	162	142	216	624	734	552
South Red River Valley	45	20	20	211	230	189	631	715	688
North Dakota	389	365	347	290	318	359	252	266	269

**Table 5. Percent of Farm Sales by Method of Finance, 1984-1989.**

Method of Finance	State Averages for Sales in					
	1984	1985	1986	1987	1988	1989
	----- percent of sales -----					
Cash	15	36	35	39	23	25
Mortgage	59	38	35	34	53	47
Contract for Deed	26	26	30	27	24	28

While sellers and other individuals are important sources of buyer financing, the Farm Credit Services continues as the dominant source of credit. They also act in concert with the Bank of North Dakota and other financiers.

### CHARACTERISTICS OF SELLERS

The average age of all sellers was 60 years in 1989, up from the average of 58.2 in 1988 and 58.7 years in 1987. The age distribution in recent years is presented in Table 6. About 44 percent of the sellers in 1985 and 1986 were less than 55 years old; only 23 percent were in this age group in 1989.

Active and retired farmers each provided about one-fourth of the tracts sold in 1989. Their tracts averaged about 372 acres in size and \$268 in price. Just over one-fifth of the tracts were coded as coming from credit agencies, with an average size of 346 acres and selling for \$245 per acre. Estates offered 18 percent of the tracts, with an average size of 244 acres and sold for the higher average selling price of \$400 an acre. Eleven percent of the tracts came from absentee owners, which had the larger average size of 616 acres and lower average price of \$167 per acre.

Financial pressures, debts, and foreclosures appeared to be the leading reasons for selling tracts in 1989, accounting for 47 percent of the tracts sold with 51 percent of the acreage transferred. These tracts had an average size of 440 acres and sold for \$224 an acre. Health and need to retire provided nearly 22 percent of the parcels with 25 percent of the acreage, for an average size of 461 acres and \$220 an

**Table 6. Percent of Farm Tracts Sold by Age of Sellers, 1985-1989.**

Age of Sellers	State Averages for Sales in				
	1985	1986	1987	1988	1989
	----- percent of sales -----				
Under 35 years	3	6	4	7	4
35-44	15	19	12	11	8
45-54	26	19	15	17	11
55-64	29	34	29	23	31
65-74	24	17	28	31	36
75 and Over	3	5	12	11	10

acre. Settling estates was another major source of tracts. Nearly 5 percent of the tracts came from those selling for what was coded as a good price, averaging \$251 an acre and 444 acres in size.

### BUYER CHARACTERISTICS

The average age of buyers was 42.7 years in 1989, down from the 45.4-year average in 1988 and between the 43.1 years in 1987 and 42.2-year average in 1986. Buyers under 35 years old have been declining as a portion of all purchasers since 1986 (Table 7). The decline in younger buyers reflects fewer first time farm buyers and buyers of rural residences.

The proportion of buyers 35 to 54 years made up 49 percent of all buyers in 1986 and rose to 64 percent in 1989. These buyers likely have increased their equity in owned land and now have the means to execute their farm expansion plans (presented in the next section). Buyers over 55 years of age typically purchased nearly one-fourth of all tracts in past years, often expanding their farms to include sons and utilize their machinery and labor resources. Respondent comments mentioned that many of these older operators were facing heavy interest costs and cashflow squeezes, leading some to become sellers in 1989.

The largest group of buyers in the land market continued to be expansion-oriented operators, who made up over three-fourths of the buyers and who purchased over three-fourths of the land sold in 1989. Their tracts averaged 378 acres in size and \$257 an acre. Renters accounted for just over 12 percent of the tracts transferring nearly 16 percent of the acreage for the larger average size of 488 acres at \$248 an acre. Businessmen, professionals, and non-professionals accounted for about 5 percent of the tracts.

**Table 7. Percent of Farm Tracts Sold by Age of Buyers, 1985-1989.**

Age of Buyers	State Averages for Sales in				
	1985	1986	1987	1988	1989
	----- percent of sales -----				
Under 25 years	3	5	3	1	1
25-34	20	23	22	21	16
35-44	27	25	26	22	37
45-54	26	24	29	28	27
55 and Over	24	23	20	28	19

### LAND USE BEFORE AND AFTER SALE

The 1989 farmland market marked a continuation of a long-term pattern of declining farming opportunities. About 80 of the 283 tracts coded by type of use before and after sale were used as separate, independent farms before entering the 1989 farmland market. They averaged about 592 acres in size and \$221 an acre. About 60 of those 80 tracts went to buyers expanding their existing farms, and five went to buyers for Other uses. One tract in Other uses joined the

15 parcels that passed through the market to continue as separate, independently operated farms. The decline in farming opportunities is measured by these 80 independently farmed tracts entering the marketplace, but only 16 parcels, or 6 percent of all tracts entering the market, will continue to be operated as single separate farms (Table 8).

About 190 tracts averaging 288 acres in size and \$290 per acre were reported as having been parts of another (expansion) farm before entering the 1989 marketplace. Four of them shifted to Other uses, but 186 tracts or 97.9 percent continued in this use. Sixty tracts previously operated as separate farms became a part of this expansion-oriented group, plus six from the Other uses group. The net change was a one-third increase in the number of tracts purchased going for expansion purposes.

### WHAT'S AHEAD

An important determinant for farmland values in 1990 will be the weather, for soil moisture is needed across much of the state. Additional moisture in a cool year or significantly heavier rainfall in a warm year is needed to support an active, rising market in 1990. Localities severely impacted by the droughts of 1989 and 1988 were often in the comments of the 1989 respondents. A possibility of drought in the coming year will cause some operators to hesitate to buy machinery or land.

The second leading comment dealt with CRP and other government farm income support programs, which had several different but collectively powerful influences on

**Table 8. Percent of Farm Sales by Purpose of Purchase, 1984-1989.**

Purpose: To be Operated as a:	State Averages for Sales in				
	1985	1986	1987	1988	1989
	----- percent of sales -----				
Single, separate farm	7	6	8	7	6
Part of an existing farm	89	89	87	86	89
Other uses	4	6	5	7	5

farmland values in 1989. The contractual CRP program will grow and have increased impacts in 1990, but the crop insurance, deficiency, and disaster transfer payments may face budgetary restraints.

Credit and cashflow problems may continue for many operators, opening the way for others with cash and good credit sources for more opportunities to expand their farms. The availability of credit will again be decisive in the land market.

Overall, a majority (53.5 percent) of respondents felt that land values in the fall of 1990 would be similar to those of 1989, yet 40 percent expect values to be up 5 percent or more, and only 6 percent expected them to be lower this fall.