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Nebraska Farm Real Estate Market Developments 1988-89

Bruce B. Johnson
University of Nebraska-Lincoln, bjohnson2@unl.edu

Terry Akeson
University of Nebraska-Lincoln

Department of
Agricultural Economics

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by Bruce B. Johnson
and Terry Akeson

The Agricultural Research Division
University of Nebraska-Lincoln
Institute of Agriculture and Natural Resources

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Bruce B. Johnson
&
Terry Akeson*

*Professor and Research Assistant respectively, Department of Agricultural Economics, University of Nebraska-Lincoln.

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The authors express their appreciation to the survey reporters for their participation in the annual Nebraska Farm Real Estate Market Survey. Without their input, much of the information within this report would not exist.

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NEBRASKA FARM REAL ESTATE MARKET DEVELOPMENTS IN 1988-89

Summary

The year, 1988, was one of considerable real estate market activity and rising agricultural land values. These trends were evident across the state according to 1989 Nebraska Farm Real Estate Market Survey reports. The survey revealed an average rate of increase of 25 percent during the 12-month period ending February 1, 1989. This increase, however, represents a percentage change from a base value that reflects several years of declines. In fact, even with the 1988 advances, 1989 land values remain considerably below peak levels of the early 1980s.

A succession of high income years for production agriculture, in large part due to federal farm program payments, fueled market demand. Some of the activity appears to have been pent-up demand from earlier years of nearly dormant markets.

The vast majority of buyers have been active farmers who were generally buying parcels to add to existing farm units. In most cases, these parcels are within 5 miles of the buyer's residence. On the supply side of the market, some financial stress sales and liquidation sales by institutional lenders were still evident in 1988, but at a much lower level than preceding years.

Of actual transactions during 1988 that were observed by survey reporters, nearly 45 percent were straight cash sales involving no debt. About one in ten sales were seller-financed.

Negotiated cash rental rates for 1989 were also higher. Cropland rental rates were generally 10 to 20 percent higher than a year earlier. Rental rates on grazing land jumped significantly. In some areas of the state, current cash rental rates are approaching historic highs, a reflection of favorable income levels for production agriculture over the past few years.

As for rates of return to farmland investment, survey reporters usually estimated percentage rates to be highest for irrigated land followed by dryland cropland and then grazing land. However, adjusting typical cash rental rates for landowner expenses and estimating net rates of return will not yield very high returns on irrigated land. This may be explained in part by the fact that many landowners who are either farming the irrigated land themselves or renting on a crop-share basis have recently experienced higher levels of returns than those under current cash rental arrangements. For irrigated land particularly, some owners have, no doubt, recently achieved net rates of return of 10 percent or higher.

Nearly 5 percent of Nebraska's cropland base (1.1 million acres) is now enrolled in USDA's Conservation Reserve Program. While some counties have had considerable acreage enrollment, the impact of this program on local land values and cash rental rates appears to be marginal.

Introduction

In February, 1989, The Department of Agricultural Economics, University of Nebraska, Lincoln conducted its 12th annual Nebraska Farm Real Estate Market Survey. This survey draws on the expertise of over 200 reporters from across the state, the majority of whom participate each year. The reporters are knowledgeable about agricultural land market conditions in their areas. They include real estate brokers, appraisers, professional farm managers, and agricultural loan officers. As a consequence, the level of continuity and reliability to this ongoing monitoring effort is believed to be high.

Reporters provide estimates of average value per acre for various types of agricultural land in their locality. These estimates are aggregated into crop reporting districts and the state using an acreage weighting procedure. Percentage changes in value are computed by comparing current year estimates with those of a year earlier.

Reporters are also asked to provide estimates of cash rental rates as well as other perceptions of market characteristics in their area.

In addition, data on actual sales of agricultural land parcels are collected in the survey. This time, reporters provided specific information on 530 sales which had occurred during 1988. This provides key benchmark information on consummated sales including size, location, price, financing methods, and buyer/seller characteristics.

The analysis and findings presented in this report center on the results of the 1989 survey. Other data and information are also included, however, to provide the reader with a more comprehensive perspective. The statistical appendix is included for easy reference to several long-term data series.

At the outset, one must recognize that any agricultural land market is quite complex and everchanging. Moreover, there is no one market but rather hundreds of local markets scattered across the state. What are presented here are general patterns and trends which may not be reflective of unique parcel transactions or conditions in a particular locality.

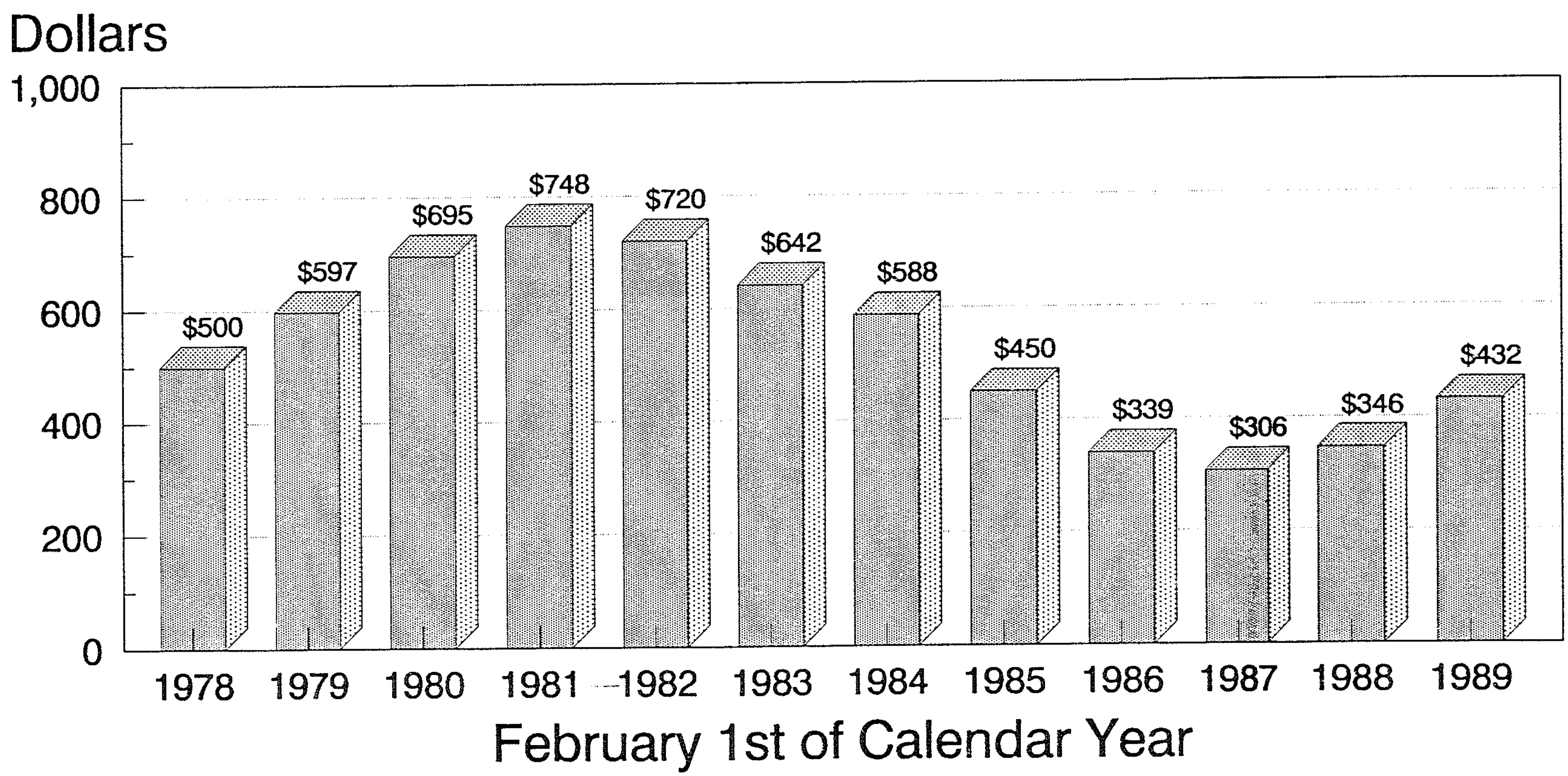
1989 Nebraska Farmland Values and Recent Trends

Across Nebraska, 1988 was a year of considerable real estate market activity and rising agricultural land values. It was the second consecutive year of increased values after values had fallen during each of the six previous years.

According to results from the 1989 UNL survey, the statewide average value was $432 per acre as of February 1, 1989, an increase of 25 percent from 12 months earlier **(Figure 1)**. The U.S. Department of Agriculture also maintains state land value series and found similar although less pronounced trends. As noted in **Figure 2** and **Appendix Table 1**, USDA's February 1, 1989 value for Nebraska was $421 per acre, 15 percent higher than a year earlier. Historically, the USDA series has recorded somewhat smaller annual changes than those of the UNL series during periods of value decline as well as value increases. Consequently, the 1989 dollar value estimates of the two series are close and the levels relative to previously recorded peaks are identical.

Figure 1. Nebraska Farmland Values UN-L Series, 1978 - 1989

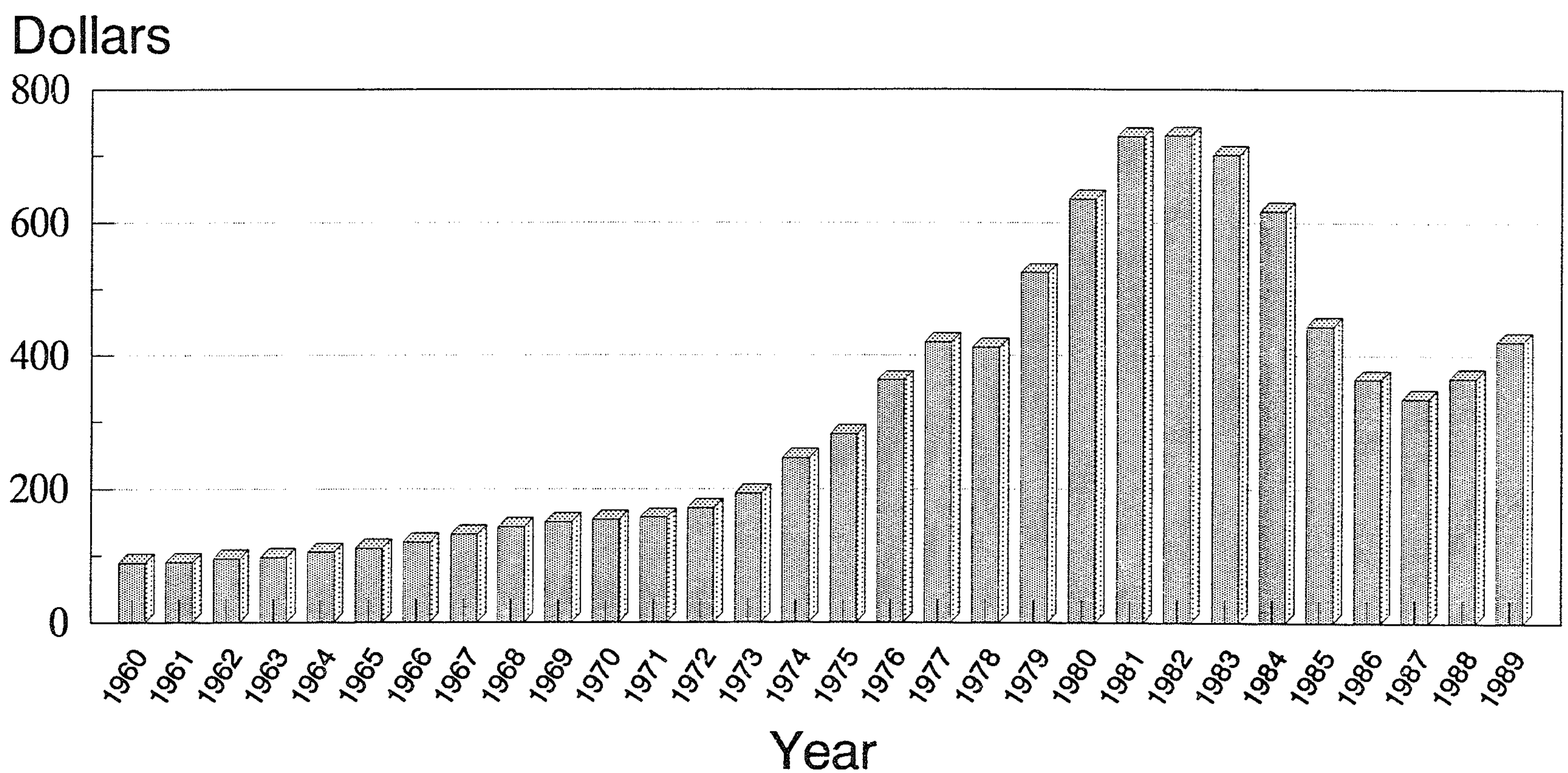
Average Value per Acre



Source: Nebraska Farm Real Estate Market Survey Series, IANR, UN-L

Figure 2. Nebraska Farmland Values
USDA Series, 1960 - 1989

Average Value per Acre



Source: Economic Research Service
United States Department of Agriculture

While the percentage change during 1988 was substantial, it is important to keep it in proper perspective. First, there is some degree of statistical illusion associated with it, since the percentage change is calculated on a much smaller beginning base value than in earlier years of this decade. To illustrate, consider $400 per acre farmland which appreciated 25 percent (or $100) to $500 per acre. That same land may well have been valued at $1,000 per acre earlier in the decade when a $100 per acre downward adjustment would have been only a 10 percent decrease.

Second, even with the 1988 advance added to the 1987 value increase, Nebraska's all-land average as of February 1, 1989 was still considerably below the peak year value **(Figure 3)**. In fact, it was just 58 percent of the survey average for the state eight years previously. (See Appendix Table 5 for similar comparisons by types of land and crop reporting districts.) Certainly, there has been only partial recovery from years of devaluation. As someone remarked, "we should never confuse getting off the basement floor with scaling to new heights".

What can explain the recent value turnaround? It is difficult to isolate one single factor since a variety of elements motivate land market participants. However, classic economic theory suggests that rents (or returns) determine land asset values. That would seem to be a major driving force in recent months. Nebraska's agricultural production sector has had a succession of high income years in the last half of the 1980s. That has continued through 1988, a year when much of the rest of the country was experiencing economic adversity from the widespread drought. Adjusted for inflation, annual net farm income in Nebraska since 1985 has averaged nearly twice the average levels of the first half of this decade.

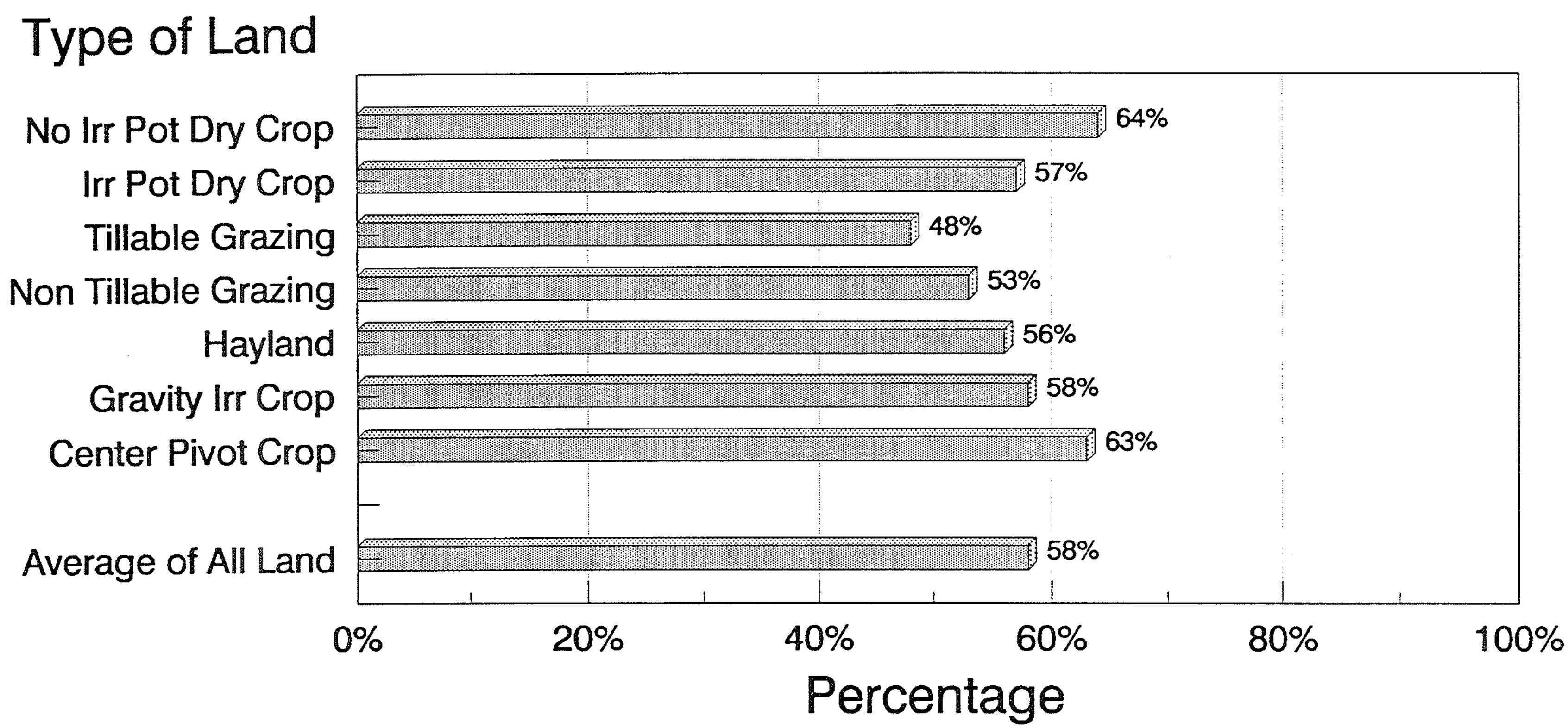
While favorable yield levels, renewed agricultural exports, and profitable livestock markets have been significant factors, a considerable amount of the economic recovery can be attributed to the federal farm program. The program led to direct payments to Nebraska's farm sector of more than $1 billion per year for 1987 and 1988. That magnitude represented essentially half of total net farm income generated in the state in those years. While the long-term future remains uncertain, the recent past has certainly been more economically robust because of these federal transfer payments. And to varying degrees, the market for agricultural land will capitalize into the value of land the enhanced earnings as well as the greater economic stability which such programs provide.

Some of the recent demand increase being experienced in local markets probably also reflects some pent-up demand from several years of near dormancy in agricultural land markets. During the farm financial crisis, many potential buyers withdrew to the sidelines to wait for more opportune and certain economic conditions. However, their motives for buying land remained -- for example, acquiring land for expansion reasons. A perceived stability to the land market in 1987 triggered their re-entry in 1988.

As we move into mid-year 1989 the recent activity of the land market appears to have been tempered somewhat by short run unknowns. In many areas, Nebraska's 1989 crop season has begun with serious moisture deficits that could signal more pervasive drought conditions later on. Also interest rates have continued to creep up over the past 12 months, rekindling some healthy

Figure 3. Nebraska Land Values in 1989 as a Percentage of the Peak Values

(by Type of Land)



Source: Land Value Series Maintained by the Department of Agricultural Economics, IANR, University of Nebraska-Lincoln respect for credit usage as well as enhancing the potential returns to government securities (an important asset alternative to hold by investors). Finally, the time for new farm policy legislation is fast approaching, which can certainly carry significant implications for agricultural land values and returns. To varying degrees, market participants are factoring these elements into their decisions, as well they should.

Value Changes By Type of Land And Region

As seen in **Figure 5** and **Table 1**, a strong upward movement of values occurred for all types of agricultural land during the 12-month period ending February 1, 1989. But the variation in percentage gains was substantial. Clearly, nontillable grazing land and hayland exhibited the largest percentage increases, 35 percent and 32 percent respectively. Tillable grazing land recorded the third highest percentage gain -- 29 percent. Since essentially half of the state's agricultural land base is in forage production -- grazing land or hay production -- these increases are important.

In assessing these changes, it is important to remember that these same classes of land had earlier experienced the largest declines during the years of devaluation. Before bottoming out in late 1986 or early 1987, grazing land (both tillable and nontillable had depreciated to about 35 percent of peak year value. Hayland had dropped to 38 percent of peak (see Appendix Table 3. for complete annual series by land type). Whether this was an over-adjustment remains a question to be researched. Nevertheless, it would seem logical to assume that volatility may be greater on the upside of the market as well as the downside.

In addition, it is noteworthy that the magnitude of value increases for these forage land classes during 1987, the first year of the market's recovery, was below that of the state's cropland classes. So the substantial percentage gains during 1988 may reflect, in part, a lagged effect to influences which showed up in cropland values earlier. With continued profitability being experienced by the cattle industry as well as some out-of-state demand for Nebraska forage during 1988 due to drought in other areas, conditions were right for substantial value increases.

Even though Nebraska escaped the full brunt of the drought during 1988, its land markets were affected nonetheless. In most of the regions, irrigated cropland recorded larger percentage gains than dryland cropland. Likewise, dryland cropland with irrigation potential tended to show somewhat larger percentage increases than cropland without irrigation potential. In short, the water premium (actual or potential) took on greater significance during the year.

By region, highest average values for all classes of land were reported in the East Crop Reporting District. Dryland cropland with irrigation potential averaged nearly $1,000 per acre across that district while gravity irrigated cropland was approaching a $1,500 per acre average in early 1989. In the Northeast and Southeast Crop Reporting Districts, where extensive dryland farming takes place, dryland cropland values generally fell in the $600 to $800 per acre range.

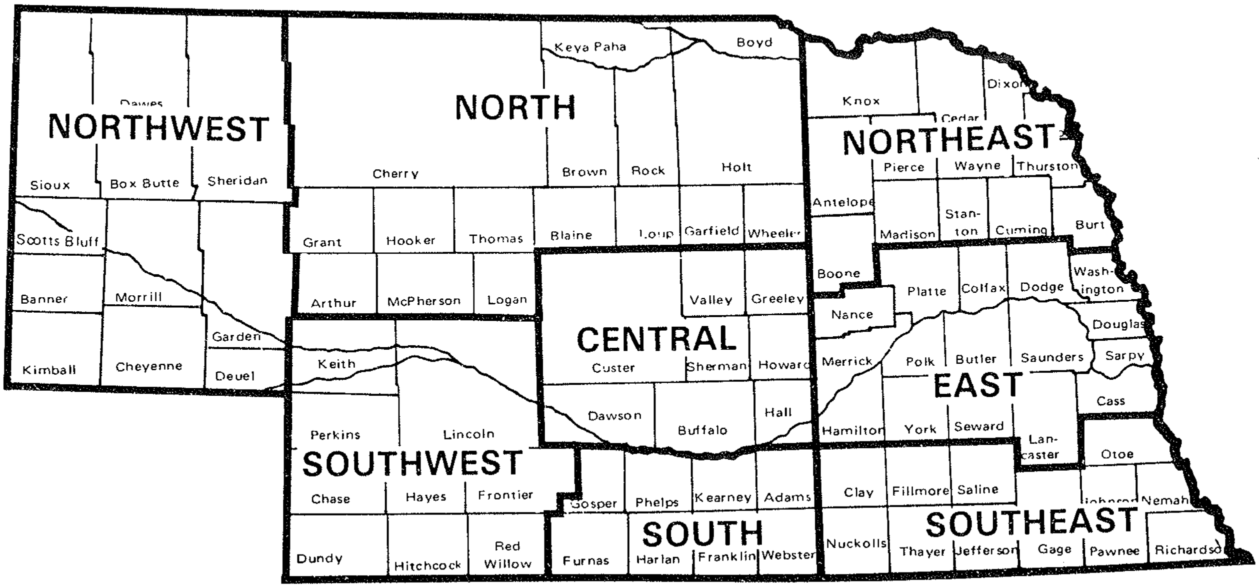


Figure 4. Nebraska Crop Reporting Districts.

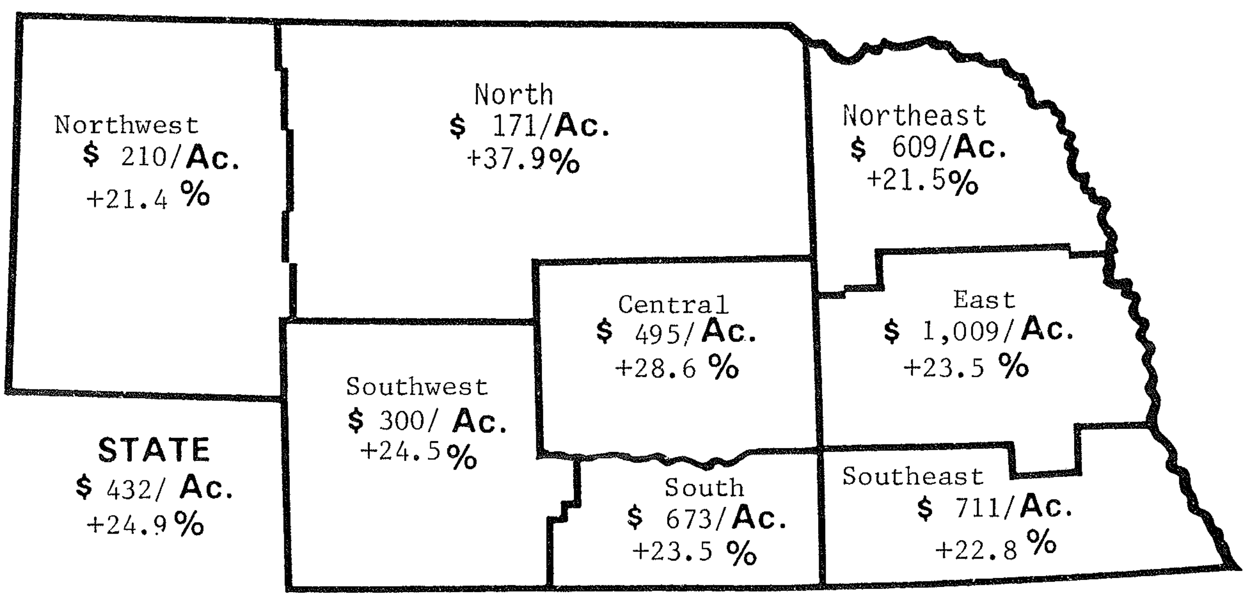


Figure 5. Average Value of Nebraska Farmland, February 1, 1989 and Percent Change From A Year Ago.

Table 1. Average Reported Value Of Nebraska Farmland For Different Types Of Land By Crop Reporting District, Feb. 1, 1988 And Feb. 1, 1989.[a]

Type of Land & Year	Crop Reporting District								
	North-west	North	North-east	Central	East	South-west	South	South-east	STATE[c]
	Dollars Per Acre								
Dryland Cropland (No Irrigation Potential)									
Rptd. in 1989...	305	250	688	370	824	371	491	621	500
Rptd. in 1988...	267	202	576	301	692	294	411	513	416
% Change........	14.2	23.8	19.5	22.9	19.1	26.2	19.5	21.1	20.2
Dryland Cropland (Irrigation Potential)									
Rptd. in 1989...	376	339	773	483	980	433	684	772	674
Rptd. in 1988...	310	266	646	380	801	339	576	623	552
% Change........	21.3	27.5	19.7	27.1	22.4	27.7	18.8	23.9	22.1
Grazing Land (Tillable)									
Rptd. in 1989...	104	150	362	217	418	130	253	341	173
Rptd. in 1988...	80	107	294	168	361	100	208	292	134
% Change........	30.0	40.2	23.1	29.2	15.8	30.0	21.6	16.8	29.1
Grazing Land (Nontillable)									
Rptd. in 1989...	71	109	242	183	310	101	209	266	123
Rptd. in 1988...	58	76	189	128	270	75	152	220	91
% Change........	22.4	43.3	28.1	43.0	14.8	34.7	37.5	20.9	35.2
Hayland									
Rptd. in 1989...	194	183	295	275	382	220	268	291	210
Rptd. in 1988...	144	130	238	230	317	178	202	245	159
% Change........	34.7	40.8	24.0	19.6	20.5	23.6	32.7	18.8	32.1
Gravity Irrigated Cropland									
Rptd. in 1989...	815	900	1,100	1,210	1,462	841	1,232	1,170	1,182
Rptd. in 1988...	668	691	862	948	1,151	740	994	956	947
% Change........	22.0	30.3	27.6	27.6	27.0	13.7	24.0	22.4	24.8
Center Pivot Irrigated Cropland[b]									
Rptd. in 1989...	532	604	993	779	1,320	683	1,021	1,056	841
Rptd. in 1988...	446	441	800	622	1,038	548	792	820	661
% Change........	19.3	37.0	24.1	25.3	27.2	24.6	28.9	28.8	27.2
All Land Average[c]									
Rptd. in 1989...	210	171	689	495	1,009	300	673	711	432
Rptd. in 1988...	173	124	567	385	817	241	545	579	346
% Change	21.4	37.9	21.5	28.6	23.5	24.5	23.5	22.8	24.9

[a] Source: 1988 and 1989 Nebraska Farm Real Estate Market Surveys.
[b] Value of pivot not included in per acre value.
[c] Weighted averages.

In the ranching areas of northern and southwest Nebraska, grazing land (nontillable) values were in the $100^{+} per acre range, while ranchland in the Panhandle was valued somewhat lower. On the basis of animal unit carrying capacity, 1989 values would average between $1,250 and $1,500 per animal unit, since 12 to 20 acres are required to maintain an animal unit during the forage season. Rangeland values are hard to estimate since transactions which take place often represent "balanced" operations comprised of both grazing land for the 5 to 6 month grazing season as well as forage-producing land to sustain the herd during the remainder of the year.

Among the regions, the North District recorded the largest percentage increase for the year. In large measure, this was due to Sandhills grazing land climbing more than 40 percent while its center pivot cropland rose 38 percent during the 12 months ending February 1, 1989. The all-land average in the Central District showed the second largest percentage gain, 28 percent.

Survey reporters also provide estimates of value for the range of land quality in their areas. These estimates for February 1, 1989 show a wide spectrum -- from $55 per acre for low-grade nontillable grazing land in the Northwest to $1,630 per acre for high-grade gravity irrigated cropland in the East **(Table 2)**.

Even though the value range for any particular land type in any crop reporting district may be substantial, the reader is cautioned to note that these values still represent averages for multi-county areas which the districts represent. Thus, for a particular locality the average value of a certain land type might still fall outside the range reported in **Table 2.** For example, dryland cropland in parts of Northeast Nebraska was reportedly valued in excess of $1,200 per acre in early 1989 even though the top end of the range for this district as a whole was less than $1,000.

Market Activity in 1988

Survey reporters were asked for the perceptions of their local market in recent months. Just over half saw greater sales activity in 1988 over 1987, with an estimated increase of 20 percent **(Table 3)**. Of the remainder, the majority saw similar levels of activity to that of 1987, which itself was a year of sales resurgence.

The earlier farm financial crisis led to a significant amount of forced sales activity in the mid-1980s. The incidence of this type of activity has been traced for a number of years by the farm real estate survey. As can be seen in **Table 4**, the incidence of forced sales was still present across the state in 1988, but at substantially lower levels than that of a few years earlier. As perceived by survey reporters, the incidence has dropped for the state as a whole from nearly two-thirds of the sales in 1986 to just over one-fourth in 1988. In every region, the proportion of financially forced sales was reportedly down considerably in 1988 from previous years, further evidence of the improved farm economy.

In turn, the nature of the selling side of the market returned in 1988 to more typical historical patterns. Estate settlement and sales for retirement or health reasons were perceived by survey reporters as important factors for selling in 1988 **(Table 5)**. Financially-forced sales and liquidation of

Table 2. Average Reported Value Per Acre Of Nebraska Farmland For Different Types And Grades Of Land By Crop Reporting District, Feb. 1, 1989.[a/]

Type of Land & Quality	Crop Reporting District							
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast
	Dollars Per Acre							
Dryland Cropland (No Irrigation Potential)								
Average...........	305	250	688	370	824	371	491	621
High Grade.........	365	335	795	450	945	415	565	730
Low Grade..........	220	205	475	290	565	265	355	440
Dryland Cropland (Irrigation Potential)								
Average...........	376	339	773	483	980	433	684	772
High Grade.........	430	415	905	580	1,085	490	765	875
Low Grade..........	310	285	575	395	715	295	495	580
Grazing Land (Tillable)								
Average...........	104	150	362	217	418	130	253	341
High Grade.........	140	180	420	285	480	140	290	395
Low Grade..........	85	125	250	180	330	90	200	270
Grazing Land (Nontillable)								
Average...........	71	109	242	183	310	101	209	266
High Grade.........	75	130	290	220	360	110	240	290
Low Grade..........	55	90	175	145	235	75	150	190
Hayland								
Average...........	194	183	295	275	382	220	268	291
High Grade.........	215	220	315	345	445	250	305	300
Low Grade..........	130	150	225	210	310	170	215	200
Gravity Irrigated Cropland								
Average...........	815	900	1,100	1,210	1,462	841	1,232	1,170
High Grade.........	975	1,050	1,385	1,395	1,630	1,000	1,420	1,290
Low Grade..........	520	630	940	895	1,095	625	880	860
Center Pivot Irrigated Cropland								
Average...........	532	604	993	779	1,320	683	1,021	1,056
High Grade.........	600	780	1,150	955	1,505	755	1,230	1,230
Low Grade..........	375	430	820	585	960	485	755	810

[a/] Source: 1989 Nebraska Farm Real Estate Market Survey.

Table 3. Reporter Estimates of The Changes in The Number of Nebraska Farmland and Ranchland Tracts Sold in 1988 Compared with The Previous Year.[a]

Item	The Number Of Tracts Sold In 1988:		
	Increased	Decreased	Remained the same
	- - - - - - - - - - - - Percent - - - - - - - - - - - -		
Proportion of Responses Reported........	52	13	35
Average Percentage Change Reported[b].........	+20	-24	

[a] Source: 1989 Nebraska Farm Real Estate Market Survey.

[b] Percentage change in sales activity in 1988 relative to previous 12-month period.

Table 4. Reporter Estimates of Sales Activity Due to Financial Pressure By Crop Reporting District, 1986-1988.[a]

Crop Reporting District	Percent of Sales Due To Financial Pressure:		
	In 1986	In 1987	In 1988
	- - - - - - - - - - - - - - - Percent - - - - - - - - - - - - - - -		
Northwest.........	62	45	31
North.............	74	70	30
Northeast.........	66	46	16
Central...........	73	56	21
East..............	60	50	23
Southwest.........	73	65	46
South.............	60	47	36
Southeast.........	62	43	29
STATE.............	65	51	27

[a] Source: Annual Nebraska Farm Real Estate Market Survey series.

Table 5. Reasons Given By Reporters Why Land Was Sold In 1988 By Crop Reporting District In Nebraska.[a]

Crop Reporting District	Reasons For Selling						
	Estate Settlement	Financial Pressures	Retirement or Health	Improved Market for Selling	Financial Institution Sales	Other	Total
	Percent						
Northwest.........	36	32	14	0	14	4	100
North.............	18	31	29	12	10	0	100
Northeast.........	33	15	21	21	6	4	100
Central...........	37	17	17	13	16	0	100
East..............	33	25	20	15	4	3	100
Southwest.........	20	25	24	14	12	5	100
South.............	44	36	7	5	8	0	100
Southeast.........	48	28	12	10	2	0	100
STATE.............	35	26	17	12	8	2	100

[a] Source: 1989 Nebraska Farm Real Estate Market Survey.

Table 6. Reasons Given By Reporters Why Land Was Purchased In 1988 By Crop Reporting District In Nebraska.[a]

Crop Reporting District	Perceived Reasons For Buying					
	Expansion of Operation	Investment	Stronger Ag Economy	Lower Land Prices	Other	Total
	Percent					
Northwest.........	50	22	22	0	6	100
North.............	83	17	0	0	0	100
Northeast.........	63	4	13	8	12	100
Central...........	59	17	10	7	7	100
East..............	61	19	10	3	7	100
Southwest.........	36	9	36	5	14	100
South.............	52	17	21	7	3	100
Southeast.........	63	23	6	0	8	100
STATE.............	58	17	14	4	7	100

[a] Source: 1989 Nebraska Farm Real Estate Market Survey.

holdings by financial institutions were still evident across the state, but at considerably lower levels than in previous years. Reporters also noted that higher land values have contributed to some owners selling agricultural land in 1988, who undoubtably in many instances retained ownership for a number of years waiting for some market improvement.

When asked for the most important reasons among buyers for purchasing agricultural land in 1988 in their areas, reporters saw expansion of a farming operation as the primary motive among buyers **(Table 6)**. In most areas this was perceived as the predominant factor. Reporters frequently mentioned the improved agricultural economy which not only in itself can be a motive for land acquisition but which also can facilitate purchase for other reasons as well.

Overall, the characteristics of market activity in 1988 were generally seen as substantially different from those of a year earlier. Nearly 9 out of every 10 reporters believed the land market in their locality was decidedly different for a variety of reasons. Many noted that rising values were symptomatic of a much greater interest on the buyer side of the market. As one reporter commented, "during 1988, the market turned from a buyers' market to a sellers' market." Similarly another, noted "there were simply more (potential) buyers than land for sale, something that hasn't been the case for several years." Several noted a renewed attitude of optimism towards agriculture and owning agricultural land which led to more aggressive buying activity. At the same time, present land owners were more prone to hold onto their holdings, anticipating the same factors as those seen by potential buyers.

Characteristics of Actual Sales

Reporters in the 1989 UNL Survey supplied specific information on 530 agricultural real estate sales that had occurred over the past year. These sales were those which the respondents considered typical in their area and therefore should be representative of the entire universe. The transactions totaled over 200,000 acres. Given the long-term pattern that two to three percent of the agricultural land base changes ownership via arms-length transfers each year, the sales reported on this survey constituted about 15 to 20 percent of the acreage transfer which occurred during 1988 in Nebraska.

Physical characteristics and price per acre showed considerable variation across regions of the state **(Table 7)**. In the ranching areas, the average parcel size approached 1,000 acres while in the eastern third of the state, where the bulk of the acreage is cropland, the average transaction size was less than 200 acres. Price per acre also varied widely, reflecting the pronounced transition across the state. The average price per tract in each of the regions, however, clustered more closely around the statewide average of $135,300.

Despite the fact that the vast majority of farm real estate transactions exceeded $100,000 in value, a surprisingly high proportion, were reportedly purchased with cash with no debt financing involved **(Table 8)**. About 45 percent of the reported 1988 sales were cash purchases, ranging from just over 25 percent of the sales in the North Crop Reporting District to nearly 58 percent in the Southeast. For the state as a whole, just over four out of

Table 7. Characteristics Of Actual Farmland Sales By Crop Reporting District In Nebraska, 1988.[a/]

Crop Reporting District	Average Size of Tract	Percent Distribution			Average Price:	
		Dry Cropland	Irrigated Cropland	Pasture	Per Acre	Per Tract
	Acres	Percent			Dollars	
Northwest	945	17	6	77	$ 147	$138,900
North	870	5	3	92	145	126,200
Northeast	183	57	21	22	669	122,200
Central	296	10	34	56	505	149,500
East	127	49	38	13	1,190	151,300
Southwest	404	19	24	57	349	141,000
South	195	22	29	39	629	122,700
Southeast	160	60	14	26	719	115,000
STATE	390	25	18	57	438	135,300

a/ Source: Approximately 530 sales reported in the 1988 Nebraska Farm Real Estate Market Survey.

Table 8. Type Of Financing Characteristics of Actual Farmland Transactions By Crop Reporting District In Nebraska, 1988.

Crop Reporting District	Type of Financing				
	Cash Sale	Mortgage	Seller Contract For Deed	Other	Total
	Percent				
Northwest	50.0	29.6	20.4	---	100.0
North	25.8	58.1	16.1	---	100.0
Northeast	35.3	52.9	7.4	4.4	100.0
Central	38.5	41.0	15.4	5.1	100.0
East	44.5	47.1	5.9	2.5	100.0
Southwest	48.2	40.7	7.4	3.7	100.0
South	50.0	38.3	6.7	5.0	100.0
Southeast	57.6	30.5	8.5	3.4	100.0
STATE	44.7	42.6	9.5	3.2	100.0

a/ Source: Approximately 475 sales reported in the 1989 Nebraska Farm Real Estate Market Survey.

every ten transactions involved mortgage financing and one in ten a seller-financed contract for deed.

Compared with 1987 transactions reported in the previous year's survey, the incidence of cash sales in 1988 was down somewhat while seller-financed contract sales rose in importance. Still, the pattern of financing has remained considerably different from that of 10 years previous when less than 20 percent of the transactions were cash purchases and the incidence of seller-contract financing accounted for one third of the sales. Relative to these earlier periods it would appear that recent buyers are more financially sound and capable of weathering much economic adversity.

As has historically been the case, active farmers/ranchers continued to be the major buyer group in 1988. Of the 1988 transactions reported, 84 percent were purchases by active farmers **(Figure 6)**. In no area of the state did that percentage fall below 80 percent. While farmer/rancher buyers tend to dominate agricultural land markets, only a small percentage of farm operators purchase land in any given year. Given the typical turnover rate of land and size of parcel sold, an estimated 5,000 transfers occur annually in the state. Of these, some 4,000 are purchased by farm operators. So, less than 1 out of 10 farm/ranch operators made a real estate purchase in 1988.

The characteristics of purchases by active farmers/ranchers are presented in **Table 9**. Since they dominate the buyer side, the patterns are similar to what was previously discussed for the entire group **(Tables 7 and 8)**. Transaction size in terms of acreage, represented a fraction of average farm/ranch size in the various regions of the state. Moreover, the majority of the transactions did not include buildings. Obviously, agricultural land markets are basically parcel markets with the intent being to operate as add-on units to existing operations. The sale of a complete, viable-sized farm operation is the exception and not the rule.

Correlated with the above is the question of geographic proximity of buyer interest. Of the sales reported in the 1989 survey, more than two-thirds of the purchases by active farmer/rancher buyers were located within 5 miles of the buyer's residence. Frequently, the parcel was adjacent. Why does this pattern exist? It reflects greater buyer knowledge and familiarity with land nearby, as well as convenience and greater economic efficiency of farming units nearby.

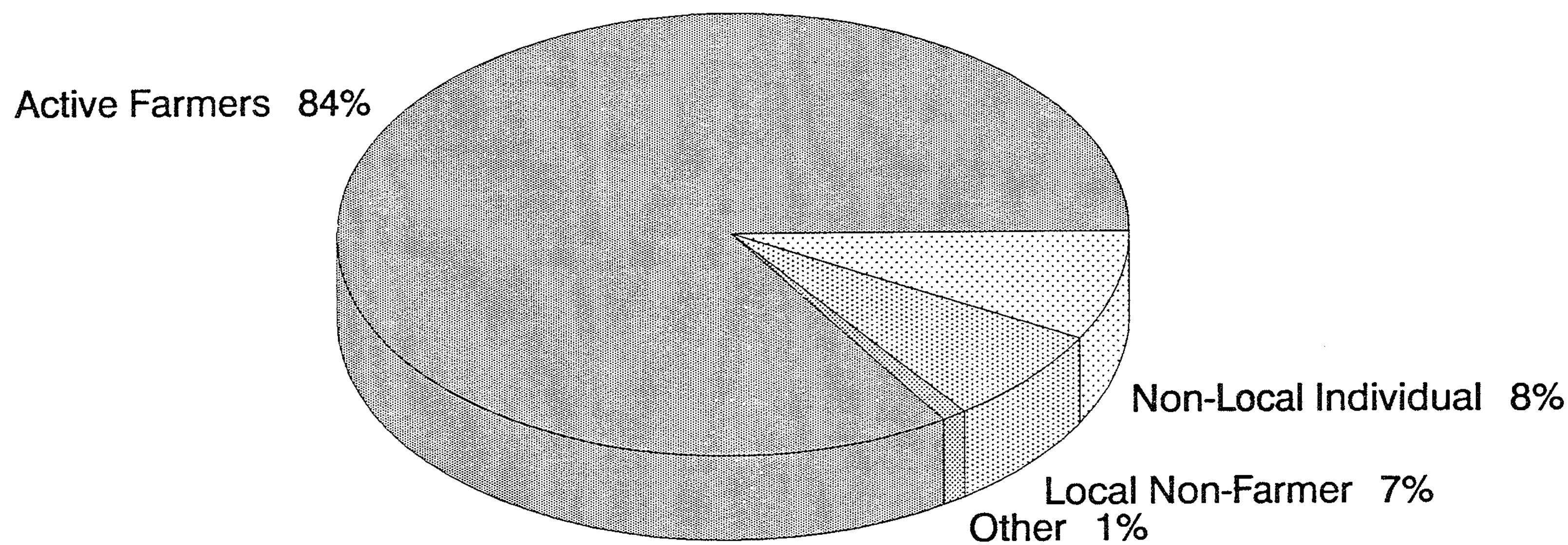
1989 Cash Rental Conditions For Nebraska Farmland

Negotiated cash rental rates for 1989 were considerably higher than year-earlier levels for all types of agricultural land and regions of the state **(Table 10)**. Cropland rental rates were generally 10 to 20 percent higher than a year ago, a reflection of improved income earnings in recent years. Highest rates were for irrigated cropland in the East Crop Reporting District, averaging $115 per acre for gravity irrigated, and $110 for center pivot irrigated cropland. Moreover, the upward end of the range in this area was $140 per acre. Dryland cropland rates across the eastern third of the state averaged between $50 and $70 per acre.

The most pronounced change, however, was associated with grazing land rates in the major forage areas. Throughout northern and central Nebraska,

Figure 6. Buyers of Nebraska Farm Real-Estate

1988



Source: 1989 Nebraska Farm Real Estate Market Survey, IANR, UN-L

Table 9. Characteristics of Actual Farmland Purchases By Active Farmer Buyers, By Crop Reporting District in Nebraska, 1988.[a/]

Crop Reporting District	Average Size of Tract	Average Price		Percent With Bldgs.	Financing of Purchase				Location of Tract to Buyer Residence			
		Per Acre	Per Tract		Cash Purchase	Mortgage	Contract for Deed	Other	Adjacent	Less Than 5 Miles	5-9 Miles	10 or More Miles
	- Acres -	- - Dollars - -		- - - -	- - - -	- - - -	- - Percent	- - - -	- - - -	- - - -	- - - -	- - - -
Northwest.........	748	$ 181	$135,400	43	46	30	24	0	31	23	34	12
North.............	712	164	116,800	44	28	56	16	0	43	29	9	9
Northeast.........	165	656	108,200	43	37	54	9	0	34	30	17	19
Central...........	280	511	143,100	30	30	56	7	7	29	31	20	20
East..............	124	1,226	152,000	19	39	52	7	2	16	56	19	9
Southwest.........	422	334	140,900	26	48	39	9	4	28	56	9	7
South.............	197	621	123,300	25	45	43	8	4	28	33	24	15
Southeast.........	161	746	120,100	40	55	31	10	4	32	39	14	15
STATE.............	280	474	132,700	31	42	46	10	2	27	41	19	13

a/ Source: Based on 440 transactions reported in the 1988 Nebraska Farm Real Estate Market Survey.

Table 10. Reported Cash Rental Rates For Various Types Of Nebraska Farmland - 1989 Rates And Comparison With Year Earlier Levels [a/]

Type of Land	Northwest	North	Northeast	Central	East	Southwest	South	Southeast
	Crop Reporting District							
	Dollars Per Acre							
Dryland Cropland:								
Average 1989 Rate.....	b/	b/	65	42	70	26	43	52
Range of 1989 Rates...	b/	b/	60-85	35-55	50-90	20-40	30-50	40-70
Average 1988 Rate.....	b/	b/	58	35	62	25	38	48
Gravity Irrigated Cropland:								
Average 1989 Rate.....	b/	87	102	111	115	88	106	97
Range of 1989 Rates...	b/	45-100	80-120	95-125	85-140	75-100	85-125	85-110
Average 1988 Rate.....	b/	67	94	94	103	78	95	93
Center Pivot Irrigated Cropland:								
Average 1989 Rate.....	b/	88	99	98	110	81	101	100
Range of 1989 Rates...	b/	45-100	80-120	75-120	90-140	60-105	80-125	84-125
Average 1988 Rate.....	b/	67	91	82	100	73	89	93
Dryland Alfalfa:								
Average 1989 Rate.....	b/	b/	59	41	64	b/	56	48
Range of 1989 Rates...	b/	b/	45-75	35-60	40-90	b/	40-65	30-55
Average 1988 Rate.....	b/	b/	52	36	58	b/	42	39
Irrigated Alfalfa:								
Average 1989 Rate.....	b/	b/	85	88	92	b/	100	b/
Range of 1989 Rates...	b/	b/	60-100	60-100	60-125	b/	90-110	b/
Average 1988 Rate.....	b/	b/	72	66	78	b/	68	b/
Other Hayland:								
Average 1989 Rate.....	b/	25	b/	30	44	b/	b/	34
Range of 1989 Rates...	b/	18-30	b/	25-35	20-70	b/	b/	20-50
Average 1988 Rate.....	b/	b/	b/	26	31	b/	b/	31
Pastureland (Per-Acre):								
Average 1989 Rate.....	5	7	23	15	23	7	15	19
Range of 1989 Rates...	4-6	4-10	15-40	10-18	15-35	5-10	10-20	15-25
Average 1988 Rate.....	4	5	20	12	21	6	12	18
	Dollars Per Animal Unit/Mo.							
Average 1989 Rate.....	11.35	14.50	14.00	14.50	13.25	12.80	14.20	13.70
Range of 1988 Rates...	8-10	8-14	5-15	7-15	8-15	10-16	8-16	10-16
Average 1987 Rate.....	9.55	10.35	10.10	10.55	10.20	10.25	10.50	10.50

[a/] Reporters' estimated cash rental rates from the annual Nebraska Farm Real Estate Market Surveys.

[b/] Insufficient number of reports.

which includes the bulk of the Sandhills, average reported rates on a animal unit month (AUM) basis were in the $14 range compared with $10 to $11 a year earlier. Not surprisingly, it is the same land type and areas which exhibited the largest percentage gains in value during 1988.

Rental rate increases are a logical response to the recent favorable earnings for both crop and livestock producers. Both tenants and landlords tend to project their evaluation of acceptable rate levels largely on the most recent past. Just as rate concessions were requested by tenants, and frequently granted by landlords, during the financially-stressful years of the mid-1980s, the reversal now appears to be the case. Landowners are negotiating for rate increases and tenants have generally been willing to accept these rates.

A number of the 1989 survey reporters commented that bid levels for cropland seemed to be higher because less land was available to rent. In some localities, the federal government's Conservation Reserve Program (CRP) has resulted in considerable acreage coming off the rental roles for an extended time period. This can mean that prospective tenants must bid higher for that which remains. Despite some supply adjustments, however, the bulk of the rental rate advances appears to be due to more aggressive activity on the demand side of the rental market.

In a longer run context, 1989 cash rental rate levels are frequently approaching or even exceeding the historic highs of the early 1980s **(see Appendix Table 4)**. For example, dryland cropland in the Northeast and gravity irrigated cropland in the East are near previous highs, while current rates in the North district for center pivot irrigated cropland are reportedly setting at new highs. Likewise, for both dryland and irrigated alfalfa, 1989 rental rates are at or above previous highs, a reflection of 1989 alfalfa prices being over 40 percent above year-earlier levels.

Estimated Rates of Return To Farmland Ownership

To a considerable extent, the value of agricultural real estate reflects the earnings which owners and prospective owners receive or anticipate receiving from holding land.

In the 1989 survey, reporters were asked to estimate the rate of return (percentage) that landowners in their area could expect given current real estate values. Appraisers refer to this as the market-derived capitalization rate, in that estimated net income for the subject property will be divided by this percentage to arrive at its estimated value. This procedure is referred to as the income capitalization approach.

Reporters were asked for typical rates for irrigated land, dryland cropland, and grassland. The averages of their estimates are presented in **Table 11**. While variation among crop reporting districts was evident a consistent pattern could be observed across the land types with irrigated land reportedly having the highest annual percentage rate of return and grassland the lowest.

In no instance, do these averages match (or exceed) the typical interest rate now being charged on long term debt. This implies that at these levels

Table 11. Estimated Annual Rate Of Return By Type Of Land And Crop Reporting District, 1989.[a/][b/]

Crop Reporting District	Annual Rate Of Return On:		
	Irrigated Land	Dryland Cropland	Grassland
	- - - - - - - - Percent	- - - - - - - -	
Northwest.........	8.7	6.7	5.2
North.............	8.8	6.0	5.9
Northeast.........	8.2	6.9	5.4
Central...........	7.3	7.2	5.2
East..............	6.7	6.5	4.7
Southwest.........	6.9	5.8	4.1
South.............	7.1	6.7	5.4
Southeast.........	6.5	6.3	5.3
STATE AVERAGE[c/]...	7.2	6.5	5.1

a/ Source: 1989 Nebraska Farm Real Estate Market Survey.

b/ Reporter estimates of annual net rates of return given current values. Appraisers refer to this as the market-derived capitalized rate.

c/ Weighted averages based upon number of responses from each crop reporting district.

of return it would not be financially prudent to purchase such assets using debt capital. And it may explain in part why the current incidence of debt-financed acquisitions is considerably below the levels of a decade ago.

It is also interesting to note that these estimates of net percentage returns would often fall below the rates of return possible on many other investment opportunities which a potential buyer would have. Even highly-stable long-term government securities would yield higher rates than these reported for farm real estate. Apparently, present buyers are either anticipating higher rates of return than these in the future or factoring into their buying decisions considerations other than the expected annual rate of return.

Using an analysis framework that is likely similar to that used by many survey reporters, net return estimates have been constructed here for a variety of land types and areas of the state. The step-by-step procedure and the results are presented in **Table 12**. Starting with typical current values and 1989 cash rental rates, the latter are adjusted for annual expenses which an owner would typically incur. This yields an estimated net return on a per acre basis which can then be divided by current value to get a net annual rate of return (rows 8 and 9 of Table 12).

For dryland cropland the estimates of rates of return in Table 12 are generally similar to those of the survey reporters, the range being 5.5 to 7.0 percent.

However, for irrigated land the estimates derived from adjusted cash rental rates are consistently below those reported in the survey. In large part, this is due to the assignment of the appropriate fixed costs of depreciation and insurance associated with the irrigation equipment. Even though these may not be significant out-of-pocket costs in any given year for the owner, nevertheless the irrigation investment represents depreciating assets which must be periodically replaced. In turn, the net rate of return to irrigated property is pared down considerably from what gross rent-to-value ratios would indicate.

The apparent inconsistency between these estimates and those provided by survey reporters does not necessarily infer that either set is in error. More likely, the returns estimated in Table 12, using cash rental rates as a starting point, represent the low end of the range of returns occurring to owners of irrigated land in recent years. Given farm program provisions, excellent crop years in terms of yields, and recently favorable commodity prices the land owner farming the land himself/herself or operating on crop shares with a tenant should have been experiencing higher dollar returns than possible under cash leasing.

As a case in point consider a south central Nebraska gravity irrigated parcel operated under a 50-50 crop share arrangement **(Table 13)**. If corn yields average 145 bushels per acre (the approximate average for this crop reporting district for the years, 1985-1987) land owner net returns for the current year would be nearly $94 per acre or a 7.7 percent rate of return on the real estate investment at 1989 average land values. Moreover, should yields reach 180 bushels per acre, as has frequently been the case, the crop share landlord experiences a return of $130 per acre or over a 10 percent rate of return. Of course, this individual must also share on the downside of

Table 12. Estimation Of Typical Net Returns For Selected Land Types In Nebraska Using Cash Rental Rates, 1989.[a/]

Row	Item	Northeast NE Dryland Cropland	Northeast NE Sprinkler Irrigated Cropland[b/]	Eastern NE Dryland Cropland	Eastern NE Gravity Irrigated Cropland (from well)	Southeast NE Dryland Cropland
1.	Current purchase price per acre.................	$725.00	$1,150.00	$875.00	$1,475.00	$675.00
2.	Annual cash rent (gross)..................	$ 65.00	$100.00	$ 70.00	$115.00	$ 55.00
3.	Gross Rent-to-value ratio....................	9.0%	8.7%	8.0%	7.8%	8.2%
	Annual owner expenses (per acre)					
4.	Real Estate Taxes[c/]....	$ 10.90	$ 15.00	$ 13.10	$ 22.10	$ 10.10
5.	Irrigation costs[d/].....	--	$ 26.00	--	$ 21.00	--
6.	Incidental costs.......	$ 3.60	$ 46.75	$ 17.50	$ 50.50	$ 13.50
7.	Total owner costs......	$ 14.50	$ 46.75	$ 17.50	$ 50.50	$ 13.50
8.	Annual net returns per acre (before income taxes)..................	$ 50.50	$ 53.25	$ 52.50	$ 64.50	$ 41.50
9.	Percentage rate of return to land (before income taxes)..................	7.0%	4.6%	6.0%	4.4%	6.2%
10.	Mortgage amount per acre which could be serviced by net returns assuming:					
	15-year amortized loan at 10 percent interest......	$363.20	$382.90	$377.50	$463.80	$298.50
	% of purchase price....	50%	33%	43%	31%	44%
	30-year amortized loan at 10 percent interest......	$439.10	$463.00	$456.50	$560.80	$360.80
	% of purchase price....	61%	40%	52%	38%	53%

(See footnotes at end of table.)

Table 12 (continued)

Row	Item	Southwest NE Dryland Cropland	Southwest NE Sprinkler Irrigated Cropland[b/]	Northwest NE Gravity Irrigated Cropland (from well)	Northern NE Sprinkler Irrigated Cropland[b/]	Northern NE Sandhills Rangeland
1.	Purchase price per acre.....................	$400.00	$825.00	$1,225.00	$750.00	$110.00
2.	Annual cash rent (gross)..................	$ 30.00	$ 85.00	$105.00	$ 90.00	$ 7.00
3.	Gross Rent-to-value ratio....................	7.5%	10.3%	8.6%	12.0%	6.4%
	Annual owner expenses (per acre)					
4.	Real Estate Taxes[c/]....	$ 5.60	$ 10.10	$ 18.40	$ 9.00	$ 1.10
5.	Irrigation costs[d/].....	--	$ 26.00	$ 21.00	$ 26.00	--
6.	Incidental costs.......	$ 2.00	$ 4.10	$ 6.10	$ 3.80	$ .55
7.	Total owner costs......	$ 8.00	$ 40.20	$ 45.50	$ 38.80	$ 1.60
8.	Annual net returns per acre (before income taxes)..................	$ 22.00	$ 44.80	$ 59.50	$ 51.20	$ 5.35
9.	Percentage rate of return to land (before income taxes)..................	5.5%	5.4%	4.9%	6.8%	4.9%
10.	Mortgage amount per acre which could be serviced by net returns assuming:					
	15-year amortized loan at 10 percent interest......	$158.20	$322.20	$427.90	$368.20	$ 38.50
	% of purchase price....	40%	39%	35%	49%	35%
	30-year amortized loan at 10 percent interest......	$191.30	$389.50	$517.30	$445.20	$ 46.60
	% of purchase price....	48%	47%	42%	59%	42%

a/ Current purchase prices and cash rents based upon the 1989 Nebraska Farm Real Estate Market Survey.
b/ Value of pivot of approximately $150.00 per acre included in purchase price.
c/ Real estate taxes assumed to be 1.5 percent of purchase price for all cropland, and 1.0 percent of purchase price for all rangeland. For sprinkler irrigated land the value of the pivot is subtracted before taxes are calculated.
d/ Estimated fixed costs of depreciation and insurance on irrigation equipment, based upon Estimated Crop & Livestock Production Cost For Nebraska, 1989, Department of Agricultural Economics, UNL.

Table 13. Projected Landowner Net Returns Under Crop Share Leasing, Gravity Irrigated Land, South Central Nebraska, 1989[a]

ITEM	Landowner Share Per Acre Given Corn Yield Of:		
	145 bu./ac.	180 bu/ac.	110 bu./ac.
Projected Landowner Returns:			
Value of Production (90% acreage)[b] $2.35/bu. x yield	$153.34	$190.35	$116.33
Deficiency Payment $.49/bu x 120 bu./ac base yield	29.40	29.40	29.40
Total Projected Returns	$182.74	$219.75	$145.73
Projected Landowner Costs:			
Shared Cash Costs:[c]			
Seed	10.50	10.50	10.50
Fertilizer	15.80	15.80	15.80
Pesticides	6.70	6.70	6.70
Irrigation Energy Costs	14.50	14.50	14.50
Crop Drying	2.00	2.50	1.50
Total Cash Costs	49.50	50.00	49.00
Real Estate Taxes	18.40	18.40	18.40
Irrigation Costs (fixed)	21.00	21.00	21.00
Total Owner Costs	88.90	89.40	88.40
Net Annual Landowner Returns:			
Dollars Per Acre	93.84	130.35	57.33
Percent Rate of Return (given $1,225/Ac. value)	7.7%	10.6%	4.7%

[a] Assuming a 50-50 tenant-landlord share.

[b] Assuming a 10 percent set aside acreage requirement of the 1989 farm program.

[c] Based on representative budget in Estimated Crop & Livestock Production Costs for Nebraska, 1989, Department of Agricultural Economics, UNL.

yields and prices as well. And should yields average 110 bushels per acre, the projected rate of return would fall below that of typical cash rent returns.

In summary, annual returns to irrigated cropland in recent years have been quite attractive to owners who either chose to farm the land themselves or crop share. Not only have rates of return been quite competitive with alternative investment opportunities, but clearly in some cases have matched or exceeded the going interest rate on borrowed capital -- implying that debt financing of land purchases in some instances has been economically sound. Of course, the investor must always bear in mind the uncertainty of the future which can deviate dramatically from recent patterns. Even a succession of economically "good" years does not infer that similar income streams will hold for the future. Consequently, some discounting of these recently high rates of return will likely take place in minds of most investors.

Land In The Conservation Reserve Program

As part of the 1985 Food Security Act, the U.S. Department of Agriculture was authorized to develop the Conservation Reserve Program (CRP). The goal was to remove some 40 million acres of highly erodible land from cultivation by the end of 1990. Under the program, farmers and other landowners contract qualifying cropland for 10-year retirement, establish and maintain a cover vegetation, and receive guaranteed annual rental payments over the period.

Nationwide, by the end of 1988, just over 28 million acres had been contracted through the first seven sign-ups. At this rate, the 40-million acre goal appears to be unattainable unless higher rental rates are offered or acceptance criteria modified.

As noted in **Figure 7** just over 1.1 million acres of Nebraska cropland had been contracted under CRP by the end of 1988. Heaviest concentration of CRP acres show up in some of the state's western counties (Kimball, Banner, Box Butte, and Dawes counties).

As carried out, Nebraska is divided into four bidding pool areas **(Figure 8)**. Each pool area has an assigned bid maximum for acceptance into the program. This has not changed since early sign-ups. These levels for Nebraska's areas are as follows: Pool I, $45 per acre per year; Pool II, $52; Pool III, $60; and Pool IV, $70.

As originally envisioned, landowners were expected to offer bid levels near the rate of return expected if they were to farm the land or rent it out. Bids, of course, would be adjusted for any additional costs or benefits associated with the CRP enrollment. Under this process, the effects of the CRP on land values and cash rental rates would be minimal since payments would not vary from going market conditions.

However, following the first sign-up period, the bid process has not really functioned as such, since prospective participants have submitted the designated maximum bid level as their applied bid. Obviously, owners of less productive land than the average used for establishing the maximum bid level for the pool area were able to capture higher returns via CRP sign-up.

Figure 7. Acres of CRP Land Through 1988

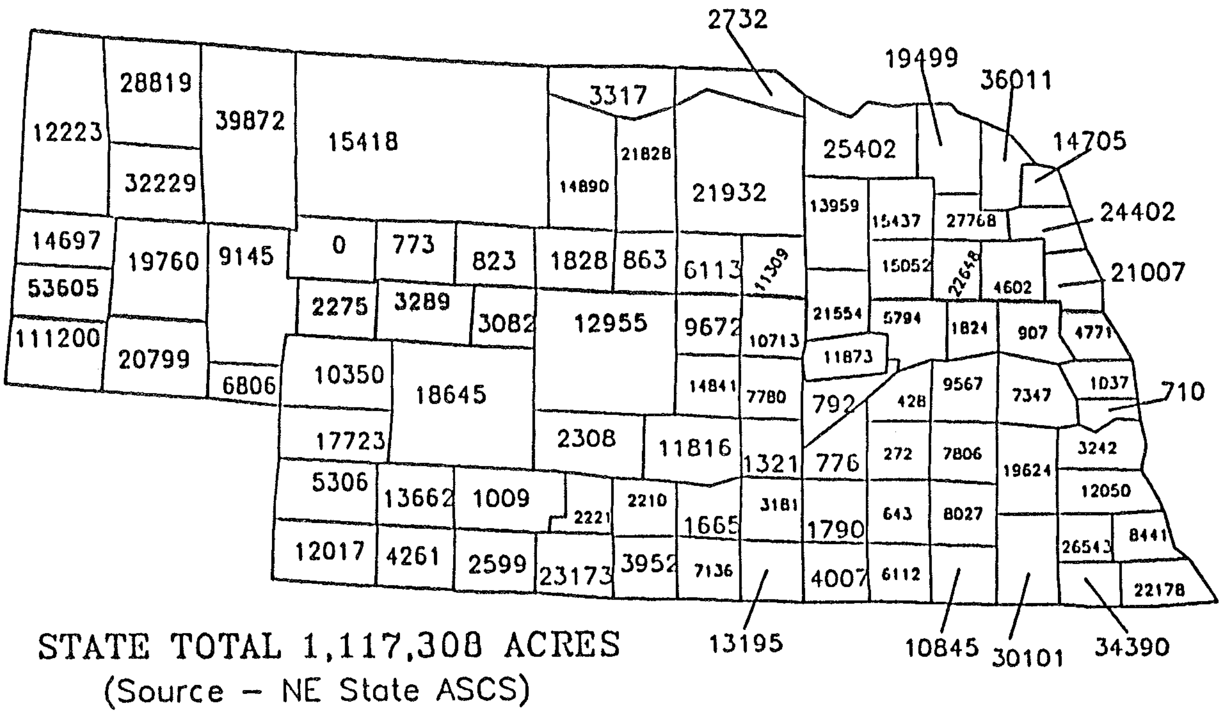
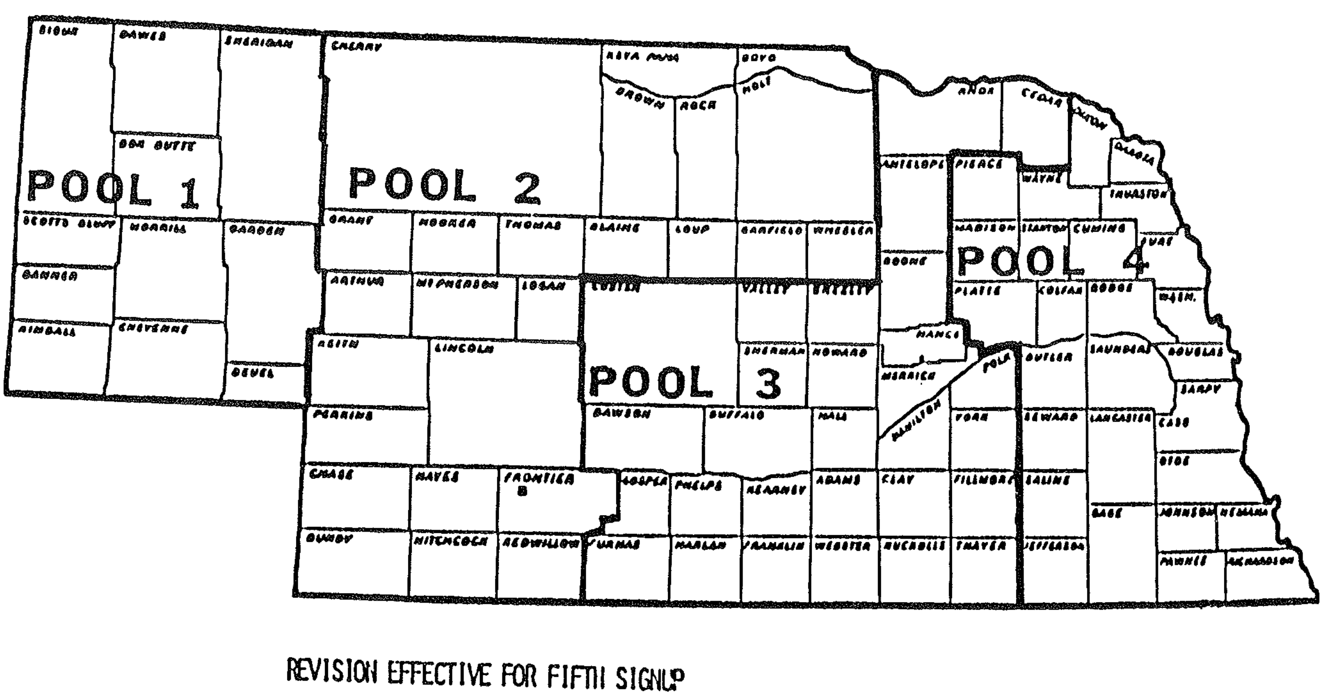


Figure 8. Conservation Reserve Program Bidding Pools



To the extent these CRP levels have exceeded the earnings of not enrolling, some impact on land values and cash rental rates may have occurred because of CRP. For example, if CRP enrollment would have resulted in a $10 per acre additional annual return, the value of that net increase for 10 years discounted at 8 percent would have been $67 per acre. This would have been added to the value of the land based on its traditional income stream. In contrast, had the marginal net gain with CRP sign-up been only $2 per acre the capitalized impact on total land value would have been much more moderate, only a $13 per acre enhancement.

The overall impact of CRP on a localized land market is complicated further by the nature of the market. Here in Nebraska, active farmer buyers tend to dominate the demand side of the market for agricultural land. And their interest in acquiring property, if not primary then certainly secondary, is to expand the working land base of their existing operations. Thus, land parcels committed to a 10-year CRP contract don't conform well to the farmer-buyers' motives. Rather than capitalizing any net additional earnings associated with a CRP contract, the demand side of the market may in fact discount such land in its bidding since it can not be actively farmed for several years.

The supply side of the market could also be impacted by CRP if existing landowners see this program as an alternative to selling the land in the immediate future. Some portion of normal flow of land into the market could be curtailed which may in turn raise the bid price for the remaining portion on the market. However, the extent of this supply effect appears to be marginal, even in those areas where CRP sign-up has been extensive.

In summary, while about 5 percent of Nebraska's cropland is now enrolled in CRP, its impact upon land values and rents appears relatively minor. Even in areas of relatively heavy enrollment for obvious economic reasons, market dynamics at this point in time do not signal strong currents either way regarding this program. However, should significant program modifications be made to reach acreage enrollment goals, more pronounced impacts could be triggered in the future.

APPENDIX

Appendix Table 1. Farm Real Estate Values In Nebraska, USDA Historical Series, 1860-1989.[a/][b/]

Year	Number of Farms	Land in Farms	Value of Land & Buildings		
			Per Acre	Per Farm	Total Value
	Thousand	Million Acres	Dollars	Thousand Dollars	Million Dollars
1860	2.8	1.0	6	1.4	6
1870	12.3	2.1	12	2.0	24
1880	63.4	9.9	11	1.7	106
1890	113.6	21.6	19	3.5	402
1900	121.5	29.9	19	4.8	578
1910	129.7	38.6	47	14.0	1,813
1911	129.2	39.0	48	14.4	1,864
1912	128.8	39.2	49	14.9	1,919
1913	128.2	39.5	50	15.4	1,974
1914	127.5	39.8	51	15.9	2,027
1915	126.9	40.3	50	15.9	2,017
1916	126.3	40.9	51	16.5	2,084
1917	125.8	41.5	54	17.8	2,240
1918	125.2	41.8	62	20.7	2,591
1919	123.1	41.9	71	23.8	2,978
1920	124.6	42.2	88	29.8	3,712
1921	125.1	41.9	82	27.5	3,439
1922	137.1	41.9	71	21.7	2,974
1923	126.6	42.1	68	22.6	2,860
1924	127.3	41.8	63	20.7	2,635
1925	127.5	42.1	60	19.8	2,524
1926	128.2	42.5	60	19.9	2,552
1927	128.5	43.2	58	19.5	2,505
1928	128.6	44.0	57	19.5	2,508
1929	128.9	44.3	57	19.6	2,526
1930	129.3	44.6	56	19.3	2,495
1931	129.9	45.0	52	18.0	2,338
1932	130.8	45.8	44	15.4	2,015
1933	132.0	46.0	35	12.2	1,609
1934	133.2	46.4	35	12.2	1,625
1935	134.0	46.9	34	11.9	1,594
1936	131.2	46.7	34	12.1	1,587
1937	128.5	47.4	32	11.8	1,516
1938	125.8	47.4	30	11.3	1,421
1939	123.6	46.8	28	10.6	1,310
1940	121.1	47.4	24	9.4	1,138
1941	119.2	48.2	22	8.9	1,061
1942	116.9	48.2	24	9.9	1,157
1943	115.6	47.5	27	11.1	1,283
1944	113.7	47.9	33	13.9	1,580
1945	111.4	47.6	37	15.8	1,760
1946	111.3	47.4	42	17.9	1,992
1947	110.1	48.0	47	20.5	2,257
1948	109.0	47.3	56	24.3	2,649
1949	108.0	47.2	62	27.1	2,927
1950	107.3	47.2	58	25.5	2,735

Appendix Table 1. (continued)

Year	Number of Farms	Land in Farms	Value of Land & Buildings		
			Per Acre	Per Farm	Total Value
	Thousand	Million Acres	Dollars	Thousand Dollars	Million Dollars
1951	105.4	47.4	66	29.7	3,131
1952	103.9	47.5	72	32.9	3,417
1953	102.5	47.3	75	34.6	3,548
1954	100.8	47.6	70	33.0	3,329
1955	95.8	47.5	73	35.1	3,469
1956	96.7	47.6	73	35.9	3,472
1957	94.6	48.0	72	36.5	3,454
1958	92.5	48.0	79	41.0	3,791
1959	90.6	47.5	86	45.1	4,084
1960	88.4	48.0	89	48.3	4,269
1961	86.4	47.8	90	49.8	4,302
1962	84.3	48.0	95	54.1	4,558
1963	82.2	47.6	97	56.2	4,617
1964	80.1	47.7	105	62.5	5,009
1965	78.9	47.8	111	67.2	5,301
1966	77.5	47.5	120	73.6	5,704
1967	76.2	47.0	132	81.2	6,188
1968	74.9	46.5	143	88.8	6,653
1969	73.6	46.3	150	94.3	6,940
1970	72.3	46.0	154	97.9	7,076
1971	70.3	45.9	157	102.6	7,210
1972	69.4	45.8	171	113.0	7,838
1973	68.3	46.3	193	130.7	8,935
1974	67.4	45.8	246	167.0	11,258
1975	67.0	47.9	282	201.6	13,508
1976	67.0	47.9	363	259.2	17,366
1977	66.0	47.8	420	304.1	20,070
1978	66.0	47.8	412	298.5	19,702
1979	65.0	47.7	525	385.3	25,043
1980	65.0	47.7	635	466.0	30,290
1981	65.0	47.7	729	534.9	34,773
1982	63.0	47.5	730	550.4	34,675
1983	62.0	47.4	701	535.9	33,227
1984	60.0	47.2	617	385.3	29,117
1985	59.0	47.2	444	355.2	20,957
1986	59.0	47.2	364	301.5	17,185
1987	57.0	47.2	335	277.4	15,810
1988	56.0	47.2	366	308.6	17,280
1989 c/	55.0	47.2	421	361.3	19,871

a/ Source: Farm Real Estate Historical Series Data: 1960-1970 and Agricultural Resources: Agricultural Land Values and Markets, Situation and Outlook report series, issued by the U.S. Department of Agriculture.

b/ This USDA series is based in part upon Census of Agriculture benchmark data collected approximately every five years. As a result, year-to-year changes reflected here will not conform exactly with the USDA Index of average value series as presented in Appendix Table 2.

c/ Preliminary estimates.

Appendix Table 2. Deflated USDA Indexes Of Nebraska Farmland Values And Percent Changes, 1930-1989.[a/][b/]

Year	USDA Index of Average Value/Ac. (1977=100)	GNP Price Deflator (1977=100)	Deflated Index of Average Value/Ac. (1977=100)[c/]	Year-to-Year Change in Index of Deflated Farmland Values[e/]
				Percent
1930	13	23.2	55.9	-
1931	12	21.1	56.8	1.6
1932	10	18.8	53.2	- 6.3
1933	8	18.3	43.6	- 8.0
1934	8	20.0	40.1	- 8.0
1935	8	20.3	39.4	- 1.7
1936	8	20.4	39.2	- 0.5
1937	8	21.4	37.4	- 4.6
1938	8	20.9	38.3	2.4
1939	8	20.8	38.5	0.5
1940	7	21.3	32.9	-14.5
1941	6	23.0	26.1	-20.7
1942	7	25.4	27.5	5.4
1943	7	26.6	26.3	- 4.4
1944	9	27.1	33.2	26.2
1945	10	27.8	36.0	8.4
1946	11	32.1	34.3	- 4.8
1947	13	36.3	35.8	4.4
1948	15	38.8	38.6	7.8
1949	16	38.5	41.6	7.8
1950	15	38.2	39.3	- 5.5
1951	17	41.5	40.9	4.1
1952	19	42.1	45.1	10.3
1953	20	43.0	46.5	3.1
1954	19	43.4	43.8	- 5.8
1955	20	44.1	45.4	3.7
1956	20	45.2	44.2	- 2.6
1957	19	47.1	40.0	- 9.5
1958	21	48.0	43.8	9.5
1959	22	49.0	44.9	2.5
1960	23	50.0	46.0	4.2
1961	23	50.4	45.7	- 0.9
1962	24	51.3	46.8	2.4
1963	24	52.2	46.0	- 1.7
1964	26	52.9	49.1	6.7

Appendix Table 2. (continued)

Year	USDA Index of Average Value/Ac. (1977=100)	GNP Price Deflator (1977=100)	Deflated Index of Average Value/Ac. (1977=100)[c]	Year-to-Year Change in Index of Deflated Farmland Values[e]
				Percent
1965	28	53.9	51.9	5.7
1966	30	55.3	54.2	4.4
1967	33	57.2	57.7	6.5
1968	35	59.4	58.9	2.2
1969	37	62.1	59.5	0.9
1970	37	65.7	56.3	- 5.4
1971	38	69.0	55.1	- 2.1
1972	41	72.1	56.8	3.1
1973	47	75.3	62.4	9.9
1974	60	80.9	74.1	18.8
1975	70	89.8	77.9	5.1
1976	88	95.1	92.5	18.7
1977	100	100.0	100.0	8.1
1978	96	106.1	90.5	- 9.5
1979	120	115.9	103.5	14.4
1980	137	125.7	109.0	5.3
1981	151	138.9	108.7	- 0.3
1982	143	149.1	95.9	-11.8
1983	129	153.1	84.3	-11.1
1984	114	158.6	71.9	-14.7
1985	82	164.0	50.0	-30.4
1986	67	167.6	40.0	-20.0
1987	61	173.4	35.2	-12.0
1988	67	178.0	37.7	7.1
1989[d]	77	186.1	41.4	9.8

a/ Revised from series reported in earlier reports.

b/ Refers to year ending March 1 for years prior to 1976; year ending February 1 for years 1976-1981; and year ending April 1 for years 1982-1985, and year ending February 1 for 1986 and thereafter.

c/ Computed by dividing the index of average value per acre by the 1st Quarter GNP Price Deflator.

d/ Preliminary estimates.

e/ A positive value entry in this column represents a real increase in asset value for the year (e.e., the rate of land value appreciation exceeded the rate of inflation). Conversely, a negative value entry represents a real decrease in asset value.

Appendix Table 3. Average Reported Value Of Nebraska Farmland For Different Types Of Land By Crop Reporting District, 1978-1989.[a]

Type of Land & Year	Crop Reporting District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	STATE[c]
	Dollars Per Acre								
Dryland Cropland (No Irrigation Potential)									
1978...	289	253	648	319	817	360	468	660	492
1979...	317	319	813	397	1061	387	541	808	602
1980...	347	340	920	471	1296	454	626	971	702
1981...	419	346	1009	519	1409	546	754	1060	778
1982...	411	336	966	502	1325	522	752	988	742
1983...	387	321	864	450	1204	469	664	939	681
1984...	379	300	779	416	1129	444	653	840	632
1985...	325	237	643	340	905	365	474	612	501
1986...	259	198	499	263	669	308	412	423	384
1987...	242	190	520	246	626	288	377	416	371
1988...	267	202	576	301	692	294	411	513	416
1989...	305	250	688	370	824	371	491	621	500
Dryland Cropland (Irrigation Potential)									
1978...	409	387	741	590	1128	471	873	953	757
1979...	449	514	930	708	1411	520	1102	1152	926
1980...	533	565	1132	767	1733	628	1282	1352	1107
1981...	680	533	1225	880	1785	733	1432	1402	1192
1982...	658	535	1097	833	1665	685	1411	1268	1108
1983...	563	462	975	680	1462	654	1175	1160	979
1984...	507	441	911	638	1349	631	1050	1069	905
1985...	425	340	746	486	1013	504	705	723	684
1986...	312	300	598	367	746	377	573	545	524
1987...	285	250	567	325	707	328	503	508	484
1988...	310	266	646	380	801	339	576	623	552
1989...	376	339	773	483	980	433	684	772	674
Grazing Land (Tillable)									
1978...	177	191	433	299	549	215	465	433	248
1979...	186	229	521	347	701	259	479	574	288
1980...	200	261	583	395	760	307	621	643	328
1981...	251	257	622	435	881	332	697	636	357
1982...	248	248	605	422	824	317	710	654	348
1983...	198	234	571	405	739	315	555	589	315
1984...	187	233	500	325	661	285	519	521	289
1985...	146	180	392	259	510	205	339	357	218
1986...	101	135	275	166	366	146	250	241	154
1987...	77	99	267	135	336	115	187	236	124
1988...	80	107	294	168	361	100	208	292	134
1989...	104	150	362	217	418	130	253	341	173
Grazing Land (Nontillable)									
1978...	115	126	308	216	384	119	268	315	153
1979...	134	156	340	267	486	148	309	417	186
1980...	143	169	394	304	549	190	346	473	209
1981...	164	182	418	339	620	217	398	474	230
1982...	168	183	412	329	584	195	418	472	227
1983...	151	169	375	283	511	181	339	460	205
1984...	134	152	350	248	455	168	328	384	184
1985...	94	115	258	192	341	118	236	243	135
1986...	71	85	179	131	262	84	158	178	98
1987...	60	71	166	106	238	68	120	173	83
1988...	58	76	189	128	270	75	152	220	91
1989...	71	109	242	183	310	101	209	266	123

Appendix Table 3. (continued)

Type of Land & Year	Crop Reporting District								
	North-west	North	North-east	Central	East	South-west	South	South-east	STATE[c/]
	Dollars Per Acre								
Hayland									
1978...	232	266	370	372	477	231	298	371	281
1979...	287	308	436	397	593	281	345	509	332
1980...	301	338	506	441	699	349	402	554	369
1981...	323	331	558	482	738	368	417	532	375
1982...	328	334	544	472	714	344	445	557	375
1983...	290	286	509	408	658	344	375	496	331
1984...	283	247	497	295	568	329	369	463	296
1985...	261	206	332	273	470	250	258	311	241
1986...	190	154	233	230	335	182	190	219	179
1987...	160	119	188	195	271	148	175	201	144
1988...	144	130	238	230	317	178	202	245	159
1989...	194	183	295	275	382	220	268	291	210
Gravity Irrigated Cropland									
1978...	1246	796	1030	1545	1624	1134	1412	1404	1410
1979...	1300	964	1289	1705	1910	1197	1746	1772	1638
1980...	1369	1020	1547	1976	2317	1329	2046	2026	1906
1981...	1555	1054	1781	2088	2403	1493	2230	2026	2030
1982...	1580	1033	1771	2053	2269	1598	2254	1924	1994
1983...	1361	1000	1430	1798	1969	1412	1872	1854	1737
1984...	1269	1020	1429	1613	1838	1250	1762	1639	1601
1985...	1042	817	1102	1304	1329	1010	1283	1171	1214
1986...	754	612	900	940	975	867	963	957	920
1987...	650	567	775	802	959	718	863	843	826
1988...	668	691	862	948	1151	740	994	956	947
1989...	815	900	1100	1210	1462	841	1232	1170	1182
Center Pivot Irrigated Cropland[b/]									
1978...	771	678	956	877	1484	813	1023	1286	947
1979...	915	770	1164	1076	1690	895	1291	1590	1114
1980...	894	886	1372	1223	2043	971	1535	1795	1272
1981...	973	816	1456	1312	2110	1105	1732	1900	1341
1982...	989	810	1332	1270	2010	1123	1681	1748	1293
1983...	847	769	1217	1016	1727	926	1391	1643	1130
1984...	809	698	1130	969	1655	827	1350	1465	1049
1985...	691	581	875	850	1243	691	1055	1020	833
1986...	496	400	700	628	970	558	788	788	634
1987...	417	396	703	541	888	487	665	723	580
1988...	446	441	800	622	1038	548	792	820	661
1989...	532	604	993	779	1320	683	1021	1056	841
All Land Average[c/]									
1978...	279	201	674	608	1125	363	796	844	500[d/]
1979...	307	244	836	699	1376	405	970	1044	597[d/]
1980...	333	269	989	800	1670	472	1139	1215	695[d/]
1981...	397	271	1077	865	1748	538	1268	1260	749[d/]
1982...	396	269	1004	843	1643	527	1272	1173	720[d/]
1983...	343	248	890	734	1475	480	1057	1099	642[d/]
1984...	318	229	829	654	1341	442	990	989	588[d/]
1985...	258	180	664	528	1007	347	706	689	450[d/]
1986...	190	136	522	379	745	273	543	518	339[d/]
1987...	165	115	502	324	707	232	474	482	306[d/]
1988...	173	124	567	385	817	241	545	579	346[d/]
1989...	210	171	689	495	1009	300	673	711	432[d/]

a/ February 1st estimates reported in the annual Nebraska Farm Real Estate Market Surveys.
b/ Pivot not included in per acre value.
c/ Weighted average.
d/ All land average for State may not conform to USDA series due to different acreage weighting.

Appendix Table 4. Historical Cash Rental Rates Of Nebraska Farmland For Different Types Of Land By Crop Reporting District, 1981-1989.a/

Type of Land & Year	Crop Reporting District							
	North-west	North	North-east	Central	East	South-west	South	South-east
	Dollars Per Acre							
Dryland Cropland								
1981....................	b/	b/	60	43	68	35	38	55
1982....................	b/	b/	67	38	71	34	38	60
1983....................	b/	b/	63	43	66	25	41	57
1984....................	b/	b/	63	41	72	29	44	57
1985....................	b/	b/	55	38	65	26	40	50
1986....................	b/	b/	52	29	58	25	35	45
1987....................	b/	b/	55	29	58	23	35	45
1988....................	b/	b/	58	35	62	25	38	48
1989....................	b/	b/	65	42	70	26	43	52
Gravity Irrigated Cropland								
1981....................	b/	b/	107	114	114	97	117	115
1982....................	100	96	b/	119	116	97	115	115
1983....................	93	95	b/	110	111	92	110	112
1984....................	110	95	100	115	113	89	115	113
1985....................	91	90	89	105	99	80	103	98
1986....................	78	73	80	90	97	77	93	88
1987....................	b/	67	83	88	96	76	91	85
1988....................	b/	70	94	94	103	76	95	93
1989....................	b/	87	102	111	115	88	106	97
Center Pivot Irrigated Cropland								
1981....................	b/	71	117	102	118	91	126	119
1982....................	98	82	116	108	120	93	127	119
1983....................	90	86	101	100	114	83	117	116
1984....................	98	81	99	101	118	80	120	114
1985....................	b/	69	93	90	104	81	111	96
1986....................	b/	60	86	75	99	69	91	86
1987....................	b/	62	83	77	97	66	82	86
1988....................	b/	67	91	82	100	73	89	93
1989....................	b/	88	99	98	110	81	101	100
Dryland Alfalfa								
1981....................	b/	b/	53	47	56	31	45	45
1982....................	b/	b/	57	47	64	31	43	47
1983....................	b/	b/	56	43	64	32	43	50
1984....................	b/	b/	50	46	63	36	44	45
1985....................	b/	b/	50	44	59	28	42	40
1986....................	b/	b/	47	32	52	25	44	40
1987....................	b/	b/	41	32	53	b/	41	37
1988....................	b/	b/	52	36	58	b/	42	39
1989....................	b/	b/	59	41	64	b/	56	48

Appendix Table 4. (continued)

Type of Land & Year	Crop Reporting District							
	North-west	North	North-east	Central	East	South-west	South	South-east
	Dollars Per Acre							
Irrigated Alfalfa								
1981	b/	b/	88	92	96	b/	90	b/
1982	b/	b/	75	87	100	56	90	b/
1983	b/	b/	78	89	105	70	84	b/
1984	b/	b/	80	83	96	68	84	b/
1985	b/	b/	74	80	87	b/	69	b/
1986	b/	b/	68	58	69	b/	68	b/
1987	b/	b/	61	62	70	b/	68	b/
1988	b/	b/	72	66	78	b/	68	b/
1989	b/	b/	89	88	92	b/	100	b/
Other Hayland								
1981	b/	21	b/	37	39	34	b/	35
1982	b/	18	b/	30	b/	b/	b/	34
1983	b/	b/	b/	41	b/	b/	b/	31
1984	b/	b/	b/	32	44	29	b/	36
1985	b/	b/	b/	38	38	b/	b/	28
1986	b/	b/	b/	26	29	b/	b/	26
1987	b/	b/	b/	28	32	b/	b/	24
1988	b/	b/	b/	26	31	b/	b/	31
1989	b/	25	b/	30	44	b/	b/	34
Pastureland (Per Acre)								
1981	6	8	33	16	28	10	14	26
1982	5	9	31	15	22	9	16	24
1983	6	9	26	16	21	9	14	24
1984	6	8	25	16	23	9	16	23
1985	5	6	20	13	23	7	14	20
1986	5	b/	16	10	22	6	10	16
1987	4	4	18	10	20	5	11	15
1988	4	5	20	12	21	6	12	18
1989	5	7	23	15	23	7	15	19
Pasture (Per Animal Unit/Mo.)c/								
1981	13.00	13.30	12.85	15.80	12.65	14.40	13.75	12.90
1982	13.00	12.50	15.25	15.95	13.85	16.00	15.00	14.95
1983	13.40	16.60	16.50	16.65	14.50	15.45	15.21	15.81
1984	13.20	15.90	15.30	16.55	14.10	15.25	14.75	15.60
1985	12.20	12.70	12.90	13.00	12.80	13.60	12.80	13.60
1986	10.70	10.50	11.00	10.60	10.10	10.40	10.70	11.30
1987	9.55	10.35	10.10	10.55	10.20	10.25	10.50	10.50
1988	9.50	11.00	10.90	11.30	13.00	12.70	12.65	13.50
1989	11.35	14.50	14.00	14.50	13.25	12.80	14.20	13.70

a/ Reporters annual estimates of cash rental rates in the annual Nebraska Farm Real Estate Market Survey series.

b/ Insufficient number of reports.

c/ Animal unit month (AUM) refers to sufficient forage capacity to sustain an animal unit (1,000 lb. cow or equivalent) for one month during the normal range season.

Appendix Table 5. Average Reported Value Of Nebraska Farmland As Of February 1989 And Comparison With Peak Values For Different Types Of Land By Crop Reporting District.[a/][b/]

Type of Land & Date	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	STATE[c/]
	Crop Reporting District								
	-Dollars Per Acre-								
Dryland Cropland (No Irrigation Potential)									
Feb. 1989.......	305	250	688	370	824	371	491	621	500
Peak Yr. Value..	419	346	1009	519	1409	546	754	1060	778
% of Peak.......	73%	72%	68%	71%	58%	68%	65%	59%	64%
Dryland Cropland (Irrigation Potential)									
Feb. 1989......	376	339	773	483	980	433	684	772	674
Peak Yr. Value..	680	565	1132	880	1785	733	1432	1402	1192
% of Peak.......	55%	60%	68%	55%	55%	59%	48%	55%	57%
Grazing Land (Tillable)									
Feb. 1989.......	104	150	362	217	418	130	253	341	173
Peak Yr. Value..	251	261	622	435	881	332	710	654	357
% of Peak.......	41%	57%	58%	50%	47%	39%	36%	52%	48%
Grazing Land (Nontillable)									
Feb. 1989.......	71	109	242	183	310	101	209	266	123
Peak Yr. Value..	168	183	418	339	620	217	418	474	230
% of Peak.......	42%	60%	58%	54%	50%	47%	50%	56%	53%
Hayland									
Feb. 1989.......	194	183	295	275	382	220	268	291	210
Peak Yr. Value..	328	338	558	482	738	368	445	557	375
% of Peak.......	59%	54%	53%	57%	52%	60%	60%	52%	56%
Gravity Irrigated Cropland									
Feb. 1989.......	815	900	1100	1210	1462	841	1232	1170	1182
Peak Yr. Value..	1580	1054	1781	2088	2403	1598	2254	2026	2030
% of Peak.......	52%	85%	62%	58%	61%	53%	55%	58%	58%
Center Pivot Irrigated Cropland[c/]									
Feb. 1989.......	532	604	993	779	1320	683	1021	1056	841
Peak Yr. Value..	989	886	1456	1312	2110	1123	1732	1900	1341
% of Peak.......	54%	68%	68%	59%	63%	61%	59%	56%	63%
All Land Average[d/]									
Feb. 1989.......	210	171	689	495	1009	300	673	711	432
Peak Yr. Value..	397	271	1077	865	1748	538	1272	1260	749
% of Peak.......	53%	63%	64%	57%	58%	56%	53%	56%	58%

a/ Estimated values as reported in Farm Real Estate Market surveys conducted by Department of Agricultural Economics - UNL.
b/ In most instances, peak values occurred in the 1980-81 period.
c/ Pivot not included in per acre value.
d/ Weighted average.