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Nebraska Farm Real Estate Market Developments 2000-01

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NEBRASKA FARM REAL ESTATE MARKET DEVELOPMENTS 2000-01

by
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Peter Brummels
and
Lance Kuenning



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

This report is also available through the Internet. The website address is:

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Table of Contents

List of Tables	ii
List of Figures	iii
Summary	iv
Introduction	1
Land Value Trends Over the Past Ten Years	2
2001 Land Value Patterns and Trends	3
Agricultural Land Value Ranges for 2001	6
Factors Impacting Recent Agricultural Land Markets	8
Characteristics of Actual Sales During 2000	9
Cash Rental Market Conditions for 2001	12
2001 Gross Rent-To-Value Ratios	15
Market-Derived Net Rates of Return	17
UNL Survey Reporter Expectations for 2001	19
Inventorying Nebraska's Irrigation Acres	23
Appendix	25

List of Tables

Table No.	Page
1. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, Feb. 1, 2000 - Feb. 1, 2001	4
2. Average Reported Value Per Acre of Nebraska Farmland for Different Types and Grades of Land in Nebraska by Agricultural Statistics District, February 1, 2001.	7
3. Land Characteristics of Agricultural Real Estate Transactions in 2000, by Agricultural Statistics District in Nebraska.	10
4. Types of Financing Associated with Agricultural Real Estate Sales in 2000, by Agricultural Statistics District in Nebraska	10
5. Percent Distribution of Agricultural Real Estate Transactions in 2000 by Seller Type, by Agricultural Statistics District in Nebraska	11
6. Percent Distribution of Agricultural Real Estate Transactions in 2000 by Buyer Type, by Agricultural Statistics District in Nebraska	12
7. Reported Cash Rental Rates for Various Types of Nebraska Farmland: 2001 Averages and Ranges by Agricultural Statistics District	13
8. Reported Cash Rental Rates for Pasture on a Monthly Rate Basis for 2001: Averages and Ranges by Agricultural Statistics District	14
9. Reported Cash Rental Rates, Associated Estimates of Value, and Gross Rent as a Percent of Market Value by Type of Land and Agricultural Statistics District, 2001	16
10. Estimated Annual Net Rates of Return by Type of Land and Agricultural Statistics District, 1990 - 2001	18
11. Analysis of Typical Net Returns for Selected Land Types and Locations Using Typical Cash Rental Rates, 2001	20
12. Reporters' Beginning-Year Expectations of Market Activity for Agricultural Land During 2001 by Agricultural Statistics District in Nebraska	22
13. Reporters' Beginning-Year Expectations of Agricultural Land Value Changes During 2001, by Agricultural Statistics District in Nebraska	22

List of Figures

Figure No.	Page
1. Nebraska Farmland Values: Annual Percentage Change in the State, All-Land Average Years Ending Feb. 1, 1992-2001	2
2. Nebraska Agricultural Statistics Districts	3
3. Average Value of Nebraska Farmland, February 1, 2001 and Percent Change from a Year Earlier	3
4. Typical Percentage Value Adjustments in Price Per Acre for Quality Differences, by Type of Land, Nebraska, 2001	8
5. Reporters' Rating of Factors Influencing Agricultural Land Values in Their Areas of Nebraska, February 2001	8
6. Active Farmers in Nebraska's Agricultural Land Market, 2000	12

Appendix

App. Table No.	Page
1. Farm Real Estate Values in Nebraska, USDA Historical Series, 1860 - 2001	26-27
2. Deflated USDA Farmland Values and Percent Changes for Nebraska 1930 to 2001	28-29
3. Nominal and Deflated Agricultural Land Values by Selected Types of Land in Nebraska, 1978 to 2001	30
4. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1978-2001	31-38
5. Historical Per Acre Value Range for Different Types and Grades of Land in Nebraska by Agricultural Statistics District, 1996-2001	39-40
6. Historical Average Cash Rental Rates of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1981 - 2001	41-48
7. Land in Farms and Irrigated Acreage Data by County and Agricultural Statistics District, 2000	49-51

Nebraska Farm Real Estate Market Developments 2000 - 2001

Summary

Despite turbulent economic conditions in the state's agricultural sector, Nebraska's agricultural land values and cash rent levels remain on a generally stable course. In the February 2001 UNL Nebraska Farm Real Estate Developments Survey, the all-land average of \$709 per acre was up 1.5 percent from year-earlier levels. Together with all-land average changes of the previous two years, the 2001 level is essentially unchanged from early 1998 value levels.

While the overall value level has been steady, the "choppiness of economic waters" is reflected in modest value movements in both directions across various land types and regions of the state. As expected, the state's cropland classes experienced relatively small value changes – a clear reflection of persistently low crop prices and income shortfalls buffered in part by major dollar transfusions from federal farm commodity programs. Had it not been for the latter, cropland values, in all likelihood, would have moved downward significantly.

In contrast, a profitable cattle economy helped to fuel some value increases of 4 to 6 percent for the grazing and forage land classes. This strength was particularly evident in the major range areas of the state where livestock represents a significant component of the agricultural economy. In many areas of the state, the 2001 values for these land classes represent historical highs – quite different from the various cropland classes where historical value highs were recorded 20 years previously.

According to UNL reporters, major factors contributing upward strength to agricultural land values in early 2001 were: purchases for farm expansion; "1031" tax exchanges; non-farmer investor interest; and federal farm program policy. Major factors dampening the market and contributing to downward pressures on values, according to UNL survey reporters, were: property taxes and current crop prices.

Based on actual sales occurring during the year 2000, active farmers accounted for 75 percent of the purchases of agricultural parcels; the vast majority being for expanding the acreage base of existing operations. In contrast, active farmers only represented a small portion of the seller side of the market in 2000.

Similar to recent years, nearly half of the sales in the year 2000 were cash purchases with no debt financing involved – despite the fact that the dollar value of these acquisitions averaged more than \$200,000 per parcel in every region of the state.

The general steadiness of values over recent months is reflected in the cash rental market as well. For cropland classes, the 2001 per-acre cash rental rates are generally similar to those of the past few years. Some modest movements, both upward and downward, can be observed without a discernible directional trend. Demand for cropland to cash rent remains strong and, therefore 2001 rents were not negotiated downward, despite the fact that tenants are facing higher input costs and reduced federal farm program payments in 2001.

Demand for forage land remain strong in 2001, which has kept pasture rental rates at historical highs.

Nebraska Farm Real Estate Market Developments 2000-2001

Introduction

Nebraska's agricultural land base is considerable, being comprised of more than 45 million acres of land in farms and ranches according to the most recent 1997 Census of Agriculture. Currently, it's total estimated market value is more than \$32 billion (See Appendix Table1). There is much diversity to this base as one moves across the state, reflecting major differences in soils and climatic features which, in turn, affect agricultural productivity and the various non-agricultural uses. The result is a virtual collage of hundreds of local agricultural land markets, each having unique land value levels and market characteristics.

For the past 24 years, the UNL Department of Agricultural Economics has been monitoring and reporting on agricultural real estate market conditions and trends across the state. In addition to secondary data sources, it employs an annual February 1st survey of a panel of nearly 150 reporters from across the state. The reporters are real estate professionals, many of whom are agricultural appraisers and/or professional farm managers. On the basis of their first-hand, professional observations of land markets in their geographic areas, a realistic perspective of market conditions and trends can be obtained.

Members of the reporter panel provide their "point-in-time" estimates of market values for the various classes of agricultural land in their respective localities. These estimates are then aggregated into averages and ranges for each of the eight agricultural statistics areas of the state. For the land value estimates, these sub-state average values are then aggregated to the state level using an acreage weighting procedure to arrive at all-state estimates. These estimates provide valuable measures of dollar and percentage changes over time as well as cross-sectional analysis of differences across the various land types and/or sub-state regions. The end result is a definitive basis for understanding the general market patterns and trends in the state. The historical series for values going back to 1978 are included in the appendix of this report.

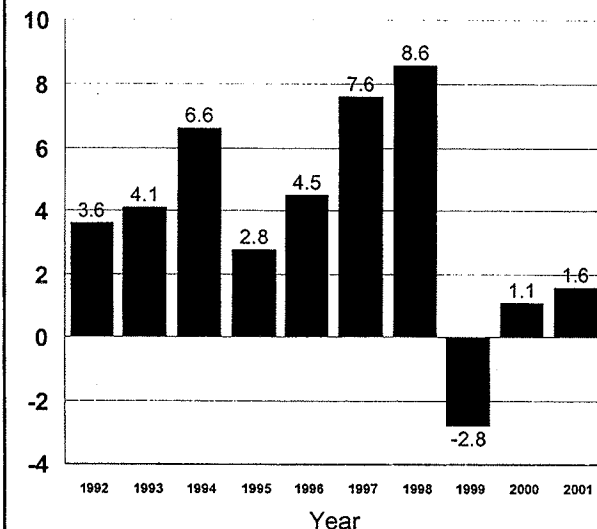
The reporter panel also provides detailed information on actual representative sales of agricultural land which have occurred over the previous 12 months. On the basis of this detail of actual transactions, reliable insight into the nature of market participation, financing, and sales parcels can be gained.

As part of the annual survey process, the reporter panel members also provide detailed information on area cash rental rates for the various classes of agricultural land. In any given year, more than 40 percent of this state's agricultural land base is leased from owners by tenant operators, with nearly half of the cropland and essentially all of the grazing land being leased on a cash rent arrangement (the alternative is a crop or livestock share arrangement). As a consequence, the level and trends of cash rental rates for agricultural land figure heavily into the economy of the agricultural sector. Data provided by the reporter panel give important perspective into current-year cash rent levels as well as the relationship of rental rate levels to the associated value of the land. The historical pattern of cash rents going back to 1981 are also included in the appendix.

Land Value Trends Over The Past Ten Years

Before focusing upon the more recent trends in the agricultural land values, it is valuable to set the context of a somewhat longer historical perspective. What has transpired over the past 10 years? As noted in Figure 1, the average value of Nebraska's agricultural land has risen in all but one of those years. The annual increases have ranged from a modest 1.1 percent for the year ending February 1st, 1999 to a high of 8.6 percent for the year ending February 1st, 1998 (see Appendix Table 4 for the complete value series). For the 10-year period the total percentage increase for the state all-land nominal average value was 39.0 percent, which represents an annual compound average rate of increase of 3.37 percent. However, after adjusting for general inflation, the real (purchasing power) increase over the 10-year period is about 17 percent, averaging 1.50 percent annually (see Appendix Table 3 for the nominal and deflated land value series).

Figure 1: Nebraska Farmland Values: Annual Percentage Change in the State, All-Land Average Years Ending Feb. 1, 1992-2001.



Source: UNL Nebraska Farm Real Estate Market Developments Surveys

It is also interesting to note from Appendix Table 3 that the February 1st, 2001 average all-land nominal value is 95 percent of the previous historical high set 20 years earlier in 1981; while in real value terms, the 2001 value is just 50 percent of the historical high set in 1981.

It is apparent from these longer-run trends that the market for agricultural real estate has exhibited relatively stable value conditions for some time— with annual value changes often being far less than recent daily changes in the major U.S. stock market indices. Particularly over the past three years, the value movements have been relatively muted; with the February 1st 2001 all-land average for the state being essentially identical to the level recorded in early 1998. While some differences in percentage change over this

time period can be observed across the basic land classes as well as areas of the state, the changes have tended to be rather marginal in both directions.

This relative stability of agricultural land values ironically may well be the most significant story about the market, primarily because this stability has occurred during a period of extremely stressful economic conditions within the agricultural sector. Chronically-low crop commodity prices, surging costs of key production inputs, weather-stressed yield short-falls, turbulent livestock cycles, politically-volatile farm program payments—these all have contributed to a level of economic uncertainty of potentially unparalleled proportions for agricultural producers. Net farm income levels the past few years have fallen far short of previous 10-year averages. Yet, at this juncture, the agricultural land market has not factored this economic uncertainty into any

discernible downward value movement. However, it remains to be seen how long current levels are sustainable without any significant improvement in economic conditions in the agricultural sector.

2001 Land Value Patterns and Trends

For the 12-month period ending February 1st, 2000, Nebraska's agricultural land values advanced an average of 1.6 percent, with the state all-land average value being \$709 per acre (Figure 3 and Table 1). This modest overall adjustment suggests a rather steady course for the agricultural land market. However, the choppiness of the "economic waters" is evident by some variations in the value changes across the various land types and sub-state areas.

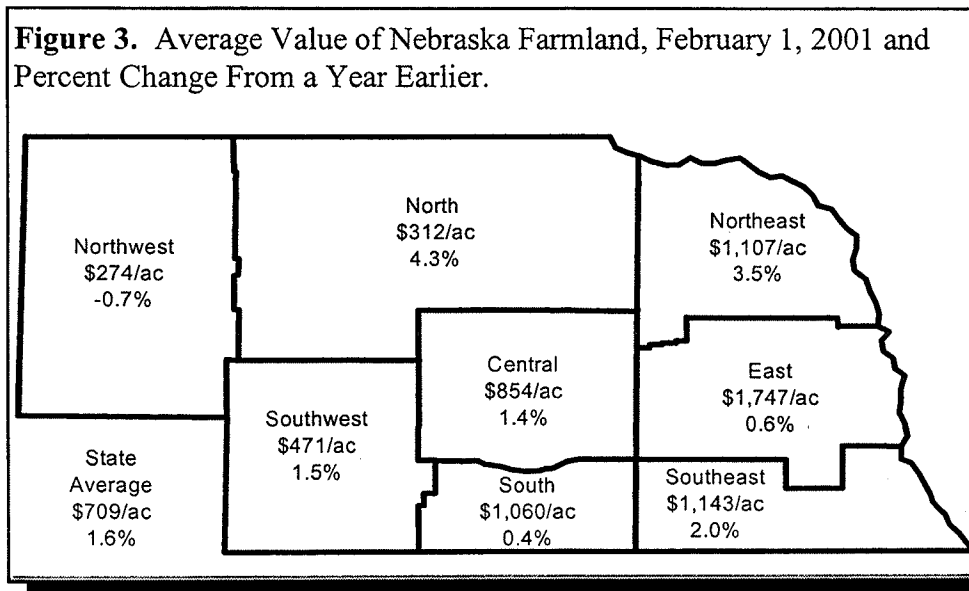
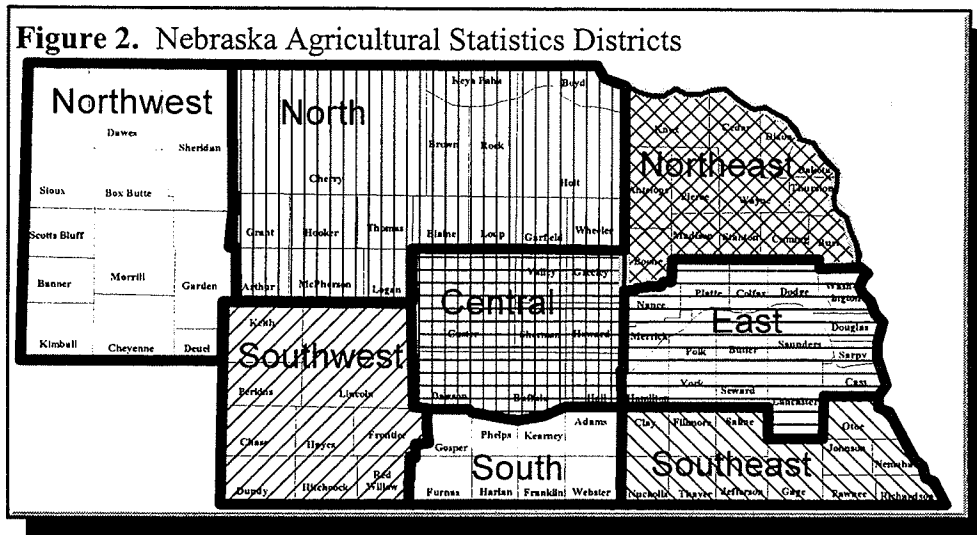


Table 1. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, Feb. 1, 2000 - Feb. 1, 2001.^a

Type of Land and Year	Agricultural Statistics District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	State ^c
----- Dollars Per Acre -----									
Dryland Cropland (No Irrigation Potential)									
Rptd. in 2001	319	403	996	645	1,493	433	725	954	760
Rptd. in 2000	331	400	970	648	1,464	434	708	958	752
% Change	-3.6	0.8	2.7	-0.4	2.0	-0.2	2.4	-0.4	1.1
Dryland Cropland (Irrigation Potential)									
Rptd. in 2001	409	500	1,256	981	1,807	572	1,126	1,234	1,100
Rptd. in 2000	418	492	1,220	957	1,800	546	1,112	1,187	1,080
% Change	-2.2	1.6	3.0	2.5	0.4	4.8	1.3	4.0	1.9
Grazing Land (Tillable)									
Rptd. in 2001	171	288	670	505	750	291	524	578	335
Rptd. in 2000	173	275	581	471	731	256	464	588	315
% Change	-1.2	4.7	15.3	7.2	2.6	13.7	12.9	-1.7	6.3
Grazing Land (Nontillable)									
Rptd. in 2001	142	220	475	386	532	200	353	479	243
Rptd. in 2000	137	206	432	365	510	193	333	478	230
% Change	3.6	6.8	10.0	5.8	4.3	3.6	6.0	0.2	5.7
Hayland									
Rptd. in 2001	306	381	563	458	677	364	450	502	398
Rptd. in 2000	313	358	539	444	618	350	398	463	379
% Change	-2.2	6.4	4.5	3.2	9.5	4.0	13.1	8.4	4.7
Gravity Irrigated Cropland									
Rptd. in 2001	900	1,033	1,715	1,729	2,273	1,279	1,810	1,843	1,750
Rptd. in 2000	907	1,025	1,696	1,754	2,279	1,325	1,856	1,831	1,765
% Change	-0.8	0.8	1.1	-1.4	-0.3	-3.5	-2.5	0.7	-0.8
Center Pivot Irrigated Cropland ^b									
Rptd. in 2001	742	965	1,653	1,602	2,420	1,152	1,778	1,898	1,459
Rptd. in 2000	750	981	1,609	1,579	2,424	1,192	1,795	1,810	1,455
% Change	-1.1	-1.6	2.7	1.5	-0.2	-3.4	-0.9	4.9	0.3
All Land Average ^c									
Rptd. in 2001	274	312	1,107	854	1,747	471	1,060	1,143	709
Rptd. in 2000	276	299	1,070	842	1,737	464	1,056	1,121	698
% Change	-0.7	4.3	3.5	1.4	0.6	1.5	0.4	2.0	1.6

^a SOURCE: 2000 and 2001 UNL Nebraska Farm Real Estate Market Developments surveys

^b Value of pivot not included in per acre value.

^c Weighted averages.

Rather large differences in percentage changes for the 12-month period were observed between the cropland and the grazing/forage land classes. While the state's cropland classes showed relatively small percentage changes over the year, the grazing and hayland classes advanced from 4.7 to 6.3 percent. The largest class in terms of acres (nontillable grazing land) rose 5.7 percent to a state-wide historical high of \$230 per acre. A relatively profitable cattle economy over the time period undoubtedly contributed to these value advances, particularly in the major range areas of the state where livestock represents a significant component of the agricultural economy.

The 2001 average values for nontillable grazing land represent historical highs in the North, Northeast, Central, and Southeast Districts (see Appendix Table 4). In most cases, historical highs occurred in the early 1980s, and have been approached only in the past few years. Likewise, 2001 value averages for hayland represent historical highs in several of the districts, leading to the state hayland value of \$398 per acre also being an all-time high.

As for the various cropland classes of agricultural land, gravity irrigated cropland recorded a slight decline in value at the state level for the year ending February 1st, 2001. Value declines for this class of cropland were reported in five of the eight districts, although the decreases were relatively marginal. Center pivot irrigated cropland values were essentially unchanged at the state level for this time period; although here also slight declines occurred in five of the eight districts.

Dryland cropland (with no irrigation potential) rose just over one percent for the year at the state level, with district changes being evenly split between slight increases and slight decreases. Drought conditions over much of the state during the 2000 crop season curtailed dryland yields and probably contributed to a fairly anemic market for this type of land. Dryland cropland which has irrigation potential fared somewhat stronger for the year, particularly in areas where drought conditions may have revived some interest in irrigation development.

From a regional perspective, some geographic differences in value changes did show up for the year. The Northwest District recorded some value decreases for all but one of its land classes; which led to a slight decline in its all-land average value. In contrast, the North District, fueled primarily by advances in its grazing and hayland classes, showed an all-land average increase of 4.3 percent for the year. Of all the districts, the Northeast exhibited the most consistent percentage gains across its various land classes, averaging 3.5 percent over all. A relatively good crop year in that area of the state, coupled with its livestock-based economy, led to more broad-based upward value movements across all the land classes.

For the year ending February 1st, 2001, reporters to the UNL survey continued to be somewhat surprised at the relative strength and stability of the state's agricultural land values. Given the reasons discussed previously, most reporters were expecting to see definite softening of value levels during the year. As one reporter stated, "it's enigmatic; a lot of producers are just hanging on, yet land values have remained strong". But, as many other reporters pointed out as well, the major dollar infusions from federal farm programs have clearly helped to maintain land asset values in the face of many negative economic forces.

During 2000, an estimated \$1.4 billion of federal farm program payments were made to the state's agricultural producers and land owners. This amount represented three-fourths of the state's total net farm income for the year. The resulting effect on the land market was probably two-fold. First, the cash infusion strengthened the financial position of existing land owners, and significantly reduced

the amount of land that might otherwise have been forced onto the market under financial pressure. Secondly, the federal cash payments for some program participants were considerable; thereby providing some continual interest on the demand side of the market as well—particularly by producers of the larger operations who continue to seek add-on parcels.

Agricultural Land Value Ranges For 2001

As part of the UNL survey each year, members of the reporter panel are asked to provide their assessment of value ranges for the various land classes across quality gradients. In addition to the average reported values discussed previously, they provide per-acre value estimates for both low grade and high grade land in each of the respective land classes. These averages and ranges for 2001 are presented in Table 2. The historical series is presented in Appendix Table 5.

In the survey process, panel members are asked to give their opinion of value differences using their own interpretation of what constitutes high grade land and what constitutes low grade land. Given their professional expertise, their perspective of value adjustments due to quality variation should be fairly representative of the market. Moreover, their opinions should be taken to mean quality variation in the context of agricultural land being used for its most logical agricultural purposes. Those features of agricultural parcels which may enhance value considerably but may have little or no impact on its value in agricultural use are not considered in these ranges.

The value ranges in Table 2 tend to underscore the extreme variations that exist in the state's agricultural land base. From low grade grazing land at \$105 per acre in the Northwest District to high grade center pivot land at \$2,600 per acre (pivot not included) in the East District, the state has an eclectic land endowment far beyond what is observed in most other states.

The degree of adjustment for agricultural quality tend to vary somewhat by class of land (Figure 4). The reporter panel generally observed value premiums of high grade land being 15 to 20 percent for dryland cropland and 20 to 25 percent for grazing and hayland. For irrigated cropland, the value premium for higher quality was more in the 15 percent range.

On the low end of the quality scale, the observed percentage value discounts were somewhat greater than the premium side for the various cropland classes. For dryland cropland the observed discounts tended to be in the 20 to 25 percent range; while for irrigated land the value discount for poorer quality was more in the 25 to 30 percent range.

The above implies that agricultural productivity, and, hence, agricultural income potential, remain important determinants of market value. Market participants are cognizant of these gradations of quality and are bidding accordingly. In any given local market, the high grade end of a particular land class may have a per acre value as much as 50 percent higher than the low grade land in that class.

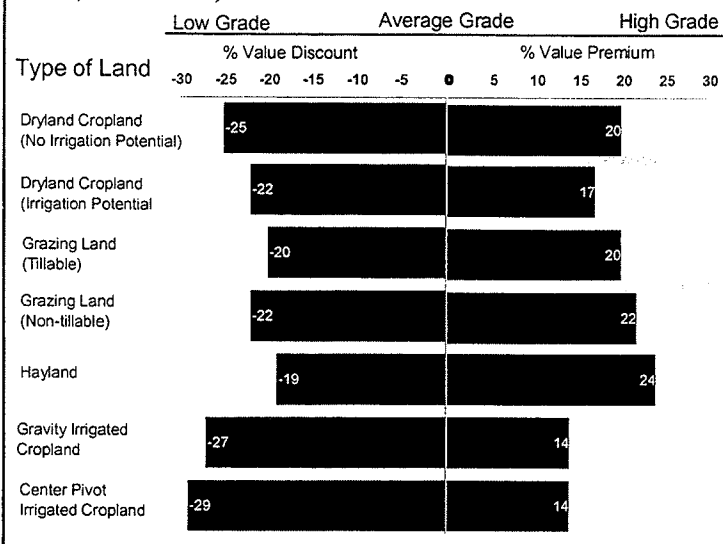
Table 2. Average Reported Value Per Acre of Nebraska Farmland for Different Types and Grades of Land in Nebraska by Agricultural Statistics District, February 1, 2001. ^a

Type of Land and Grade	Agricultural Statistics District							
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast
----- Dollars Per Acre -----								
Dryland Cropland (No Irrigation Potential)								
Average	319	403	996	645	1,493	433	725	954
High Grade	365	495	1,230	815	1,695	520	865	1,150
Low Grade	225	310	805	495	1,095	350	505	680
Dryland Cropland (Irrigation Potential)								
Average	409	500	1,256	981	1,807	572	1,126	1,234
High Grade	480	600	1,545	1,235	2,015	635	1,345	1,350
Low Grade	335	385	1,055	740	1,395	465	745	835
Grazing Land (Tillable)								
Average	171	288	670	505	750	291	524	578
High Grade	200	325	770	665	895	350	655	690
Low Grade	140	250	530	425	590	230	395	445
Grazing Land (Nontillable)								
Average	142	220	475	386	532	200	353	479
High Grade	160	290	590	460	700	235	450	535
Low Grade	105	170	365	315	420	165	270	340
Hayland								
Average	306	381	563	458	677	364	450	502
High Grade	370	470	695	550	875	515	515	585
Low Grade	255	310	465	360	565	330	310	425
Gravity Irrigated Cropland								
Average	900	1,033	1,715	1,729	2,273	1,279	1,810	1,843
High Grade	1,020	1,265	1,865	2,035	2,560	1,415	2,005	2,085
Low Grade	585	815	1,310	1,215	1,760	985	1,265	1,345
Center Pivot Irrigated Cropland ^b								
Average	742	965	1,653	1,602	2,420	1,152	1,778	1,898
High Grade	890	1,160	1,925	1,910	2,600	1,285	1,930	2,090
Low Grade	565	690	1,295	1,100	1,815	820	1,200	1,395

^a SOURCE: 2001 UNL Nebraska Farm Real Estate Market Developments Survey.

^b Value of pivot not included in per acre value.

Figure 4. Typical Percentage Value Adjustments in Price Per Acre for Quality Differences, By Type of Land, Nebraska, 2001.



Source: 2001 UNL Nebraska Farm Real Estate Market Developments Survey.

Factors Impacting Recent Agricultural Land Markets

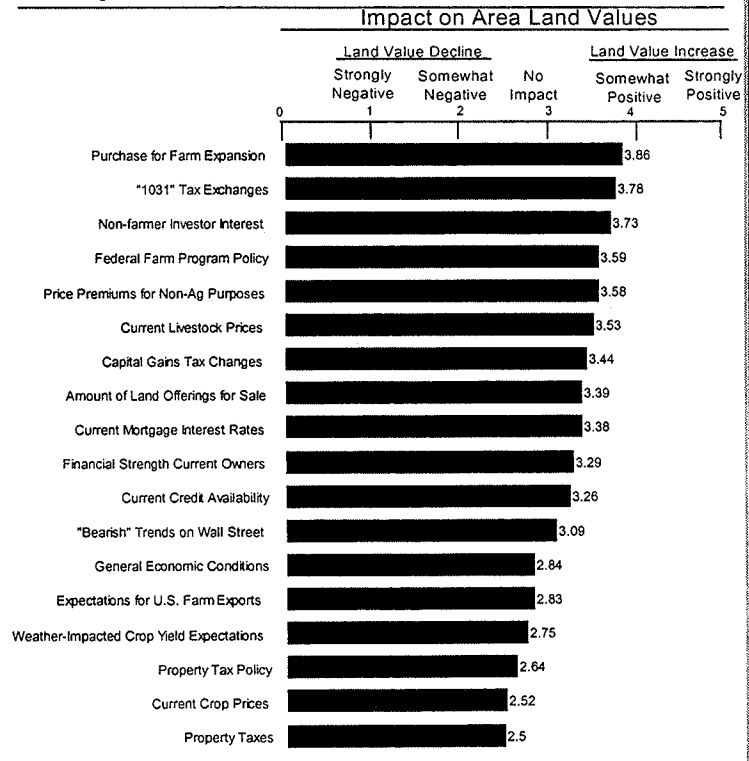
Each year, UNL reporter panel members are asked to rate the relative influence of a variety of market forces on the agricultural real estate market in their area. Using a rating scale from 1 (strongly negative) to 5 (strongly positive) with 3 being essentially no impact upon land values, reporters gave their opinions about 18 different factors. Their responses in the 2001 survey are presented in Figure 5.

For 12 of the 18 factors, the average rank was greater than 3.0, meaning these elements had a perceived upward influence on agricultural land values.

The remaining 6 were ranked below 3.0, which meant reporters saw these as dampening current land values.

On the upward side, purchase for farm expansion was ranked as the most significant element, followed closely by "1031 tax exchanges and non-farmer investor interest. All of these factors represent continuing interest on the demand side of market despite the rather anemic agricultural economy. The farm size expansion and consolidation process in production agriculture continues unabated, meaning that there continues to be potential buyers in the local market looking for add-on units. The tax-avoidance opportunities associated with the exchange provisions of the current tax code tend to heighten buyer interest among farmer and non-farmer groups as well.

Figure 5. Reporters' Rating of Factors Influencing Agricultural Land Values in Their Areas of Nebraska, February 2001.



Source: 2001 UNL Nebraska Farm Real Estate Market Developments Survey.

Also ranked high on the upward side of the market was federal farm program policy, which reporters from across the state saw as very significant in recent months. Many reporters commented that they saw the farm program payments essentially providing a floor under the current agricultural land market, without which cropland values would have surely declined significantly over the past year. In essence, these payments have been capitalized into the current value of cropland.

Given the scheduled expiration of the current farm bill in 2002, there is currently greater uncertainty over the role of farm programs in the future. Even in 2001, the political potential of payment levels being similar to those of the past few years appears remote. Never-the-less, reporters in early 2001 did not see this future uncertainty dampening the market.

Several other factors were observed as having some upward influence upon agricultural land values in early 2001, including a cluster of financial elements. Credit availability and favorable interest rates along with financial strength of current owners all help to maintain land values—a pattern quite different from that experienced in the 1980s.

As would be expected, current crop prices was seen as one of the most dampening factors on current land values. When per-bushel prices for the major crops do not cover the realistic costs of production over an extended time period, the land market will tend to respond with lower bid levels.

Characteristics of Actual Sales During 2000

In addition to providing benchmark assessment of market conditions as of the first of the year, the UNL reporter panel is also asked to provide some detailed information on actual agricultural land sales which have occurred in their area during the previous year. They are asked to provide this for sales they deem as being arms-length and typical of sales for their locality. In the February 2001 survey, reporters provided information on 420 transactions which occurred during 2000. In total, these sales constituted nearly 153,000 acres of agricultural land sold in Nebraska during the year. Given the fact that only three percent or less of the total land base is sold in any given year, this sample of 420 sales essentially represents more than 10 percent of all agricultural land sold during 2000—a sample of sufficient size to provide a realistic perspective of the specific nature of the market and the participants.

The physical and financial characteristics of the year 2000 transactions show considerable variation across the state (Table 3). Average size of tract sold varied from 130 acres in the East District to more than 1,600 acres in the North District. Correspondingly, the bulk of the land transferred in the eastern region is cropland, much of which is irrigated; while pasture (grazing land) constitutes most of the land transferred in the northern area. Regardless of area of the state, however, the vast majority of transfers represent parcels rather than whole farms or complete ranches.

Even though it is a market of parcels, the dollar magnitude of the transactions is typically considerable. During 2000, the average price of the tracts sold in the state was more than \$280,000. In every region, the average sale price exceeded \$200,000.

Table 3. Land Characteristics of Agricultural Real Estate Transactions in 2000, by Agricultural Statistics District in Nebraska.

Agricultural Statistics District	Average Size of Tract	Average Percent Distribution			Average Price	
		Dry Cropland	Irrigated Cropland	Pasture	Per Acre	Per Tract
	- Acres -	----- Percent -----			----- Dollars -----	
Northwest	891	12	10	78	303	270,000
North	1,609	5	17	78	365	587,300
Northeast	190	55	16	29	1,412	268,300
Central	190	10	31	59	1,081	205,400
East	130	44	48	8	2,218	288,340
Southwest	757	15	10	75	407	308,100
South	160	13	68	19	1,463	234,100
Southeast	212	48	28	24	1,224	259,500
State	364	20	21	59	779	283,556

SOURCE: Based on 420 transactions which occurred across Nebraska during 2000 and reported in the 2001 UNL Nebraska Farm Real Estate Market Developments Survey

In light of the dollar magnitude of the exchange, it is somewhat surprising to see that nearly half of the transactions (46 percent) represent cash purchases where no borrowed money is involved (Table 4). Despite the dollar size of these transactions as well as the currently favorable credit conditions, only 51 percent of the 2000-year transactions involved mortgage financing. This would tend to imply that buyers in the market typically have considerable financial resources to make these purchases. In some cases, these cash purchases occur via the "1031" tax exchanges where a parcel is previously sold and the cash proceeds reinvested in an agricultural land parcel to defer capital gain taxes. In other instances, the cash purchases are those of outside investors diversifying some of their existing investment portfolio by purchasing for cash an agricultural parcel. However, many of the cash purchases still are basically purchases by active farmer buyers for add-on purposes only and not driven by tax or investment diversification reasons.

Table 4. Types of Financing Associated with Agricultural Real Estate Sales in 2000, by Agricultural Statistics District in Nebraska.

Agricultural Statistics District	Financing of Purchase				
	Cash Purchase	Mortgage	Contract for Deed	Other	Total
	----- Percent -----				
Northwest	47	53	0	0	100
North	64	27	9	0	100
Northeast	53	47	0	0	100
Central	48	52	0	0	100
East	37	58	4	1	100
Southwest	58	36	0	6	100
South	47	47	6	0	100
Southeast	39	59	2	0	100
State	46	51	2	1	100

SOURCE: Based on 420 transactions which occurred across Nebraska during 2000 and reported in the 2001 UNL Nebraska Farm Real Estate Market Developments Survey.

The fact that a considerable portion of the current agricultural land market involves equity financing infers that general credit conditions in the U.S. economy are not as influential on the market as they once were. In the early 1980s, for example, nearly 80 percent of the acquisitions involved debt financing with typically no more than 20 to 25 percent of equity as a down payment. In other words, 60 to 65 percent of the dollar volume of transactions in that era represented buyer debt—a situation which then evolved into considerable financial vulnerability and the eventual land market collapse of the mid-1980s. In contrast, today’s purchases with hardly more than half involving any debt financing at all—and those which do having typical equity down payments of at least 40 to 45 percent—results in total debt incurred being no more than 20 to 25 percent of the total dollar volume of sales. In other words, debt leveraging associated with agricultural land purchases has essentially been reduced to less than half of what it was two decades earlier.

Of the transactions reported for the year 2000 by the UNL survey panel, the seller characteristics were basically similar to those of recent years (Table 5). Estate sales continue to represent about a third of the sales, reflecting the fact that much of agricultural real estate is basically owned for a life-time and even beyond. Sales by non-farmers also accounted for about a third of the transfers in 2000, many of which represent sales of inherited land by heirs whose ties to the land have been diminished by time, distance, and other interests; and therefore see fit to liquidate their holdings. Active farmers do represent a seller group; but their presence on the selling side of the market continues to be rather modest. More typically, active farmers, if they sell land at all, will liquidate land holdings at time of retirement.

Table 5. Percent Distribution of Agricultural Real Estate Transactions in 2000 by Seller Type, by Agricultural Statistics District in Nebraska.

Agricultural Statistics District	Type of Seller				
	Active Farmer/Rancher	Quitting Farmer/Rancher	Estate	Nonfarmer	Other
	----- Percent -----				
Northwest	14	40	16	28	2
North	4	32	23	27	14
Northeast	6	10	32	50	2
Central	20	15	30	28	7
East	8	10	44	34	4
Southwest	15	31	21	18	15
South	21	15	38	26	0
Southeast	5	23	39	29	4
State	11	19	34	32	4

SOURCE: Based on 420 transactions which occurred across Nebraska during 2000 and reported in the 2001 UNL Nebraska Farm Real Estate Market Developments Survey.

On the buying side of the market, the large majority of purchases in 2000 were by active farmers (Table 6). More than three out every four purchases were reportedly made by active farmers, in most cases for the purpose of expanding the acreage base of an existing operation.

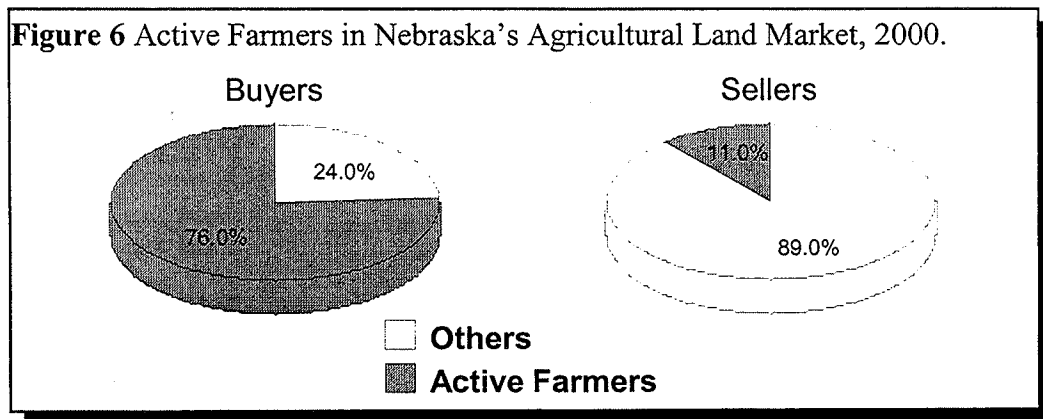
In recent years, the proportion of purchases by active farmers had been gradually decreasing from levels of 80 percent or more of the purchases in the early 1990s to less than 70 percent in 1999. Thus, the results for the year 2000 tend to reinstate the fact that active farmers still are pacing the demand

side of the market. To be sure, other buyer interest exists to some degree in virtually every local market across the state, particularly if there are additional non-agricultural uses associated with the land offerings. But, that aside, we are still in a general market that is agriculturally-based and essentially driven by agricultural producers who are accumulating far more land than they are liquidating (Figure 6).

Table 6. Percent Distribution of Agricultural Real Estate Transactions in 2000 by Buyer Type, by Agricultural Statistics District in Nebraska.

Agricultural Statistics District	Type of Buyer				
	Active Farmer/Rancher	Local Nonfarmer	Nonlocal Nebraska Resident	Out-of-State Buyer	Other
----- Percent -----					
Northwest	74	7	19	0	0
North	63	14	9	14	0
Northeast	73	10	11	6	0
Central	75	22	2	1	0
East	75	16	4	3	2
Southwest	94	3	0	3	0
South	83	13	2	2	0
Southeast	76	14	4	4	2
State	76	13	6	4	1

SOURCE: Based on 420 transactions which occurred across Nebraska during 2000 and reported in the 2001 UNL Nebraska Farm Real Estate Market Developments Survey.



Cash Rental Market Conditions For 2001

Each year UNL survey reporters provide estimates of current-year cash rental rates for the land classes and the associated ranges of these rates for their respective areas. These averages and ranges are presented in Table 7 with the long-term historical series in Appendix Table 6.

The 2001 per-acre cash rental rates are generally similar to those of the past few years. Some modest movements—both upward and downward—can be observed without a discernible directional trend. Irrigated cropland rents were up 3 to 5 percent from year-earlier levels in the Northeast, Central, and Southeast Districts; while little or no change was observed elsewhere.

Table 7. Reported Cash Rental Rates for Various Types of Nebraska Farmland: 2001 Averages and Ranges by Agricultural Statistics District. ^a

Type of Land	Agricultural Statistics District							
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast
----- Dollars Per Acre -----								
Dryland Cropland:								
Average	20	37	78	53	87	29	51	64
Range:								
High	25	48	95	71	106	36	66	78
Low	16	28	63	42	69	23	38	50
Gravity Irrigated Cropland:								
Average	84	98	122	128	133	106	127	126
Range:								
High	110	110	141	150	154	119	150	148
Low	65	78	105	108	113	86	103	102
Center Pivot Irrigated Cropland:								
Average	94	106	130	129	144	113	132	134
Range:								
High	115	120	152	148	166	131	153	159
Low	76	80	111	110	123	93	113	112
Dryland Alfalfa:								
Average	b	b	79	53	79	b	b	b
Range:								
High	b	b	94	72	94	b	b	b
Low	b	b	63	39	61	b	b	b
Irrigated Alfalfa:								
Average	b	b	118	107	118	b	b	b
Range:								
High	b	b	138	129	134	b	b	b
Low	b	b	97	86	94	b	b	b
Other Hayland:								
Average	b	b	50	37	47	b	b	b
Range:								
High	b	b	62	48	63	b	b	b
Low	b	b	34	26	36	b	b	b
Pasture:								
Average	7	12	32	23	30	11	20	22
Range:								
High	10	15	41	28	42	14	26	28
Low	6	9	23	18	21	9	15	15

^a SOURCE: Reporters' estimated cash rental rates (both averages and ranges) from the 2001 UNL Nebraska Farm Real Estate Market Developments Survey.

^b Insufficient number of reports.

Reporters pointed out that demand for cropland to rent for cash remains strong in their localities—a clear reflection of the ever-present farm size expansion and consolidation process going on across the state. Because of this keen demand, there was little evidence of negotiating 2001 rents downward, despite the fact that cash rent tenants are facing higher input costs (energy and chemicals) as well as the potential for significantly-reduced federal farm program payments in 2001.

The reported ranges in the cropland rents as evident in Table 7 reflect the quality ranges for values in Table 2 and Figure 4. Rents at the high-grade end are typically 15 to 20 percent higher than the area averages; while the lower range of rents is usually from 20 to 30 percent below the averages.

Pasture rents on a per-acre basis were unchanged in five of the eight regions for 2001 while showing a three to four percent increase in the other three regions. However, on dollar per animal unit month (AUM) basis, rates were up five percent or more in half of the regions, while maintaining the levels of 2000 in the other areas (Table 8 and Appendix Table 6). Demand for forage across the range areas of the state has remained keen as cattle numbers have been maintained and the market for feeder cattle has been profitable. Moreover, coming out of a drought period across a substantial area of Nebraska in 2000 implies the need for cattlemen in some areas to run lower stocking rates this year to allow grazing land to fully recover; thus adding to the demand side of the pasture rental market.

Table 8. Reported Cash Rental Rates for Pasture on a Monthly Rate Basis for 2001: Averages and Ranges by Agricultural Statistics District in Nebraska ^a

Type of Land	Agricultural Statistics District							
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast
----- Dollars Per Month -----								
Cow-Calf Pair Rates ^c								
Average	19.65	25.10	23.40	24.45	24.00	25.00	22.20	22.75
Range:								
High	23.55	28.80	26.60	29.65	28.40	29.50	28.20	26.90
Low	16.20	21.10	18.00	20.45	19.90	20.60	15.60	17.15
Stocker (500-600 lb) Rates:								
Average	12.20	16.00	15.75	15.70	b	15.20	b	b
Range:								
High	15.50	19.35	19.35	18.45	b	17.80	b	b
Low	10.45	13.50	12.45	12.70	b	12.50	b	b

^a SOURCE: Reporters' estimated cash rental rates (both averages and ranges) from the 2001 UNL Nebraska Farm Real Estate Market Developments Survey.

^b Insufficient number of reports.

^c A 1,000 lb. cow with small calf at side grazed for one month during the normal usage season.

The 2001 reporter panel provided estimates of current monthly rates for cow-calf pairs (a 1,000 pound cow with small calf at side) which is considered to be an animal unit. Thus, the monthly rate for cow-calf pairs represents the AUM rate. The average rates for cow-calf pairs ranged from

\$19.65 in the Northwest District to \$25.10 in the North District. With the exception of the northwest, the average rates in the major range areas of the state were in the \$24 to \$25 level for 2001.

Within each district, the reported ranges between low and high rates were rather substantial—generally \$7 to \$9 per AUM. These variations may reflect two factors. First, rates do not always get renegotiated annually; and therefore those reported at the lower end of the range may often be arrangements made several years previously and obviously in need of some adjustment. Second, rates at the higher end of pasture rental range may often reflect a negotiated rate for additional services provided by the land owner, such as daily oversight of the herd, livestock minerals, checking and maintaining perimeter fences, etc. These services are beyond the more normal pattern of owner obligations which essentially calls for covering the cost of maintaining water supplies and adequate perimeter fencing. Consequently, the AUM rates of \$29 to \$30 may often have a \$5 component of additional non-land services provided by the landowner.

For stocker cattle of 500 to 600 pounds, the average monthly rate for the 2001 grazing season was usually in the \$15 to \$16 range. For reasons, that are not entirely clear, the reported rate in the Northwest District is (like cow-calf pairs) about 20 percent lower.

2001 Gross Rent-To-Value Ratios

As part of the survey process on rental conditions, UNL panel reporters also provide associated current land value estimates with the rental averages they supply. This allows the calculation of gross rent-to-value ratios for the various land classes across the state. This measure provides one indication of the relationship of economic returns to the asset value. The 2001 rent-to-value ratios exhibit a wide range across the land classes and geographic areas of the state (Table 9). Irrigated land, particularly center pivot irrigated land, tends to have a fairly high ratio of rent to value, reflecting the fact that owners must absorb the costs of depreciation on the irrigation system as well as other ownership costs associated with irrigation. For dryland cropland and grazing land, the owner costs, aside from property taxes, are minimal; and therefore the rental market will tend to generate a somewhat lower gross rent relative to the land asset's value.

The usefulness of the gross rent-to-value ratio is in the ability to use it for estimating either the unknown rental level or the unknown market value of a particular agricultural parcel. For example, a particular center pivot irrigated property in the Central District has a current market value of \$1,750 per acre and the expected gross cash rent is unknown. On the basis of the gross rent-to-value ratio of 7.8 percent (from Table 9), the implied cash rent one could expect from this property would be \$137 per acre ($\text{Rent} = .078 \times \$1,750$). Conversely, to illustrate the estimation of value, assume a dryland cropland parcel in the South District is commanding a competitive cash rent of \$54 per acre, but the market value of this property is unknown. Again, using the gross rent-to-value ratio, the implied estimated value of this parcel would be \$844 per acre ($\text{Value} = \$54 / .064$).

Table 9. Reported Cash Rental Rates, Associated Estimates of Value, and Gross Rent as a Percent of Market Value by Type of Land and Agricultural Statistics District, 2001.^a

Agricultural Statistics District and Type of Land	Gross Cash Rent Per Acre	Associated Value Per Acre ^b	Gross Rent to Value
	----- Dollars -----		--- Percent ---
Northwest:			
Dryland Cropland	20	300	6.7
Gravity Irrigated Cropland	84	910	9.2
Center Pivot Irrigated Cropland ^c	94	925	10.2
Pastureland	7	140	5.0
North:			
Dryland Cropland	37	425	8.7
Gravity Irrigated Cropland	98	1,000	9.8
Center Pivot Irrigated Cropland ^c	106	1,100	9.6
Pastureland	12	220	5.5
Northeast:			
Dryland Cropland	78	1,170	6.7
Gravity Irrigated Cropland	122	1,675	7.3
Center Pivot Irrigated Cropland ^c	130	1,770	7.3
Dryland Alfalfa	79	1,130	7.0
Irrigated Alfalfa	118	1,660	7.1
Other Hayland	50	665	7.5
Pastureland	32	600	5.3
Central:			
Dryland Cropland	53	720	7.4
Gravity Irrigated Cropland	128	1,750	7.3
Center Pivot Irrigated Cropland ^c	129	1,645	7.8
Dryland Alfalfa	53	680	7.8
Irrigated Alfalfa	107	1,445	7.4
Other Hayland	37	525	7.1
Pastureland	23	395	5.8
East:			
Dryland Cropland	87	1,570	5.5
Gravity Irrigated Cropland	133	2,280	5.8
Center Pivot Irrigated Cropland ^c	144	2,455	5.9
Dryland Alfalfa	79	1,225	6.4
Irrigated Alfalfa	118	1,815	6.5
Other Hayland	47	805	5.8
Pastureland	30	620	4.8
Southwest:			
Dryland Cropland	29	460	6.3
Gravity Irrigated Cropland	106	1,320	8.0
Center Pivot Irrigated Cropland ^c	113	1,225	9.2
Pastureland	11	205	5.4
South:			
Dryland Cropland	51	795	6.4
Gravity Irrigated Cropland	127	1,865	6.8
Center Pivot Irrigated Cropland ^c	132	1,825	7.2
Pastureland	20	400	5.0
Southeast:			
Dryland Cropland	64	1,045	6.1
Gravity Irrigated Cropland	126	1,750	7.2
Center Pivot Irrigated Cropland ^c	134	1,925	7.0
Pastureland	22	485	4.5

^a Source: 2001 UNL Nebraska Farm Real Estate Market Developments Survey.

^b Average values given by reporters for the land on which their cash rent estimates were made.

^c Value of the pivot included in the value per acre.

In somewhat similar fashion, the gross rent-to-value measure can serve to assess agricultural land in a more macro (aggregate) sense as well. Given these relationships observed across the state, it is possible to frame the general relationship of current cash rental rates to value levels in some systematic way; and, in turn, move toward a basis of value estimation.

Market-Derived Net Rates of Return

Each year, the UNL reporter panel provide their estimates of the average percentage **net** rates of return for the basic agricultural land classes given current values. This rate is the annual expected per acre income return to the land owner (after property taxes and all other owner-related expenses are subtracted) divided by current average value per acre. Using the vernacular of the financial world, this is ROA (return on assets). In the terminology of agricultural real estate appraisal, this is referred to as the market-derived capitalization rate; since it is based upon the estimated annual net income flows associated with recent market sales. Any capital gains (or losses) accruing to the real estate parcel are not included in this estimate.

The 2001 estimated net rates of return and the historical series back to 1990 are presented in Table 10. The levels for the current year are similar to those of the past two years—a reflection of a relatively stable agricultural real estate market. And the pattern across the three land classes also continues to show the typical historical relationship where the average net returns on irrigated land are about one percentage point above dryland cropland returns which, in turn, are about one percentage point above grazing land returns.

The gradual downward trend of net rates of return since the early 1990s is prevalent across all classes of land and geographic areas. Over the past 10 to 12 years, agricultural land values have appreciated at rates faster than land earnings, leading to this gradual decline in observed net rates of return.

The obvious question to raise is this: why have buyers been willing to accept somewhat lower rates of return on their investment, at least in the short run? Particularly if other investment opportunities of similar or even less associated risk are yielding higher rates of return than returns to agricultural land, why would the rational person accept less on a farmland purchase? There are likely a number of factors contributing to this, including:

—The preponderance of agricultural tracts being bought as add-on units by active farmers who are expecting to get somewhat higher economic returns from the parcel by spreading their fixed costs over more acres, using more efficient farming technologies, etc.

—The tax-exchange options which may lead to price premiums on some parcels in the market which, in turn, may lower the overall expected per acre net rate of return.

—Non-agricultural uses and benefits associated with agricultural land that carry the negotiated prices for parcels higher than that justified by expected annual economic returns.

Table 10. Estimated Annual Net Rates of Return by Type of Land and Agricultural Statistics District, 1990-2001.^{ab}

Type of Land and Year	Agricultural Statistics District								State Ave.
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	
----- Percent -----									
Irrigated Land:									
1990	8.3	9.3	6.9	6.8	6.7	6.3	6.3	6.0	7.1
1991	8.7	8.0	6.8	6.5	6.4	6.4	6.2	5.9	6.9
1992	6.8	6.5	6.6	6.6	6.0	6.5	6.0	6.1	6.4
1993	6.6	6.0	6.5	6.1	5.7	6.5	6.5	6.0	6.2
1994	6.9	6.5	6.3	6.3	5.6	6.2	5.7	5.7	6.2
1995	6.6	6.8	6.5	5.9	5.3	5.9	6.0	5.0	6.0
1996	6.7	6.3	6.9	5.8	5.2	6.5	6.2	5.4	6.1
1997	7.2	7.0	7.0	6.0	5.3	6.7	6.3	5.7	6.4
1998	6.7	6.7	6.0	5.8	5.0	6.6	5.7	5.4	6.0
1999	6.0	5.9	5.9	5.3	4.6	6.1	4.9	5.0	5.5
2000	6.0	6.2	6.0	5.6	5.0	6.3	5.5	5.0	5.7
2001	5.6	6.2	5.9	5.4	4.9	6.5	5.2	5.0	5.6
Dryland Cropland:									
1990	6.2	6.3	5.9	6.4	5.9	4.7	6.1	6.3	6.0
1991	5.9	5.0	6.0	5.9	5.8	4.7	6.1	5.8	5.7
1992	4.8	5.0	5.6	5.9	5.7	5.6	5.2	6.1	5.5
1993	5.0	4.3	5.8	5.7	5.3	5.3	6.1	5.2	5.4
1994	4.5	5.2	6.0	5.4	5.2	5.2	5.3	5.4	5.3
1995	4.2	6.0	6.2	5.3	5.2	5.1	5.4	5.0	5.3
1996	4.1	5.0	6.3	5.6	5.0	5.3	5.5	5.2	5.3
1997	5.1	5.8	6.4	5.6	5.3	5.3	5.4	5.4	5.5
1998	4.5	5.5	5.8	5.3	4.8	4.8	5.4	5.0	5.1
1999	4.3	4.9	5.4	5.1	4.5	3.9	4.5	4.9	4.7
2000	4.0	5.2	5.4	5.1	4.7	4.5	4.7	5.0	4.8
2001	4.1	5.3	5.5	5.0	4.6	4.3	4.6	4.7	4.8
Grazing Land:									
1990	4.0	5.8	4.6	4.9	5.0	4.5	5.4	5.0	4.9
1991	5.5	5.9	5.4	5.0	5.3	5.8	5.5	5.5	5.4
1992	4.0	5.3	4.9	4.6	4.4	5.1	5.0	5.0	4.8
1993	4.3	4.6	5.0	4.6	4.3	4.6	4.5	4.6	4.6
1994	4.7	4.5	5.1	4.4	4.3	4.7	4.1	4.5	4.5
1995	3.7	4.7	4.9	4.0	4.2	4.5	4.2	4.0	4.3
1996	3.8	4.3	4.9	4.3	4.0	4.3	3.8	4.1	4.2
1997	3.6	4.3	4.9	4.5	4.0	4.0	3.6	4.2	4.1
1998	3.4	4.2	4.6	4.1	3.9	4.2	4.0	3.8	4.0
1999	3.1	3.5	4.4	4.2	3.6	3.2	3.6	3.9	3.7
2000	3.3	4.4	4.6	3.7	3.8	3.6	4.0	4.1	3.9
2001	2.9	4.0	4.3	3.9	4.0	3.4	3.5	4.1	3.8

^a SOURCE: UNL Nebraska Farm Real Estate Market Developments Surveys.

^b Reporters' estimates of current annual net percentage rates of return given current values. Real estate appraisers refer to this percentage as the market-derived capitalization rate.

—A turbulent stock market in recent years. Agricultural land, with its relatively stable values and annual returns, can be competitive with those higher-yielding but far riskier investment alternatives.

—The cautious optimism among agricultural land buyers that longer-run returns will eventually justify the prices paid in the short run.

When these and other forces come into the local land market on both the demand and the supply sides, it is inevitable that the net rate of economic return to agricultural land will tend to be pushed downward.

Specific calculations of typical net rates of return have also been constructed for selective land types across the state (Table 11). Typical land owner expenses are subtracted from gross cash rents to calculate net returns and the inferred level of mortgage debt which those returns could service. As illustrated on line 9 of the table, the percentage rates of return calculated here are somewhat lower than reporter estimates in the previous table; however, the pattern across land types and geographic area of the state does show some similarity. The reason for lower levels may reflect the inclusion of larger expenses, particularly in the case of irrigated land where annual depreciation and insurance on irrigation equipment is factored in. Such costs tend to be overlooked at times by market participants—the result being that the true residual returns to agricultural land may actually be even lower than what market-derived capitalization rates suggest.

It is important to note that given typical cash rents and owner expenses, today's net returns will service rather modest levels of debt. For virtually all types of land, the debt-servicing capacity is, at best, less than 50 percent of purchase price and even as low as 33 percent of purchase price. In short, the level of expected returns to agricultural land will preclude the extensive use of debt financing and dictate a market of potential buyers with sufficient cash resources to participate.

UNL Survey Reporter Expectations For 2001

In February 2001, the survey reporters were asked to look ahead for the calendar year and give their professional opinions regarding 2001 market activity and value trends. The vast majority, 79 percent, saw little or no change in the number of tracts offered for sale during the year (Table 12). However, there was one notable difference, the Southwest District, where half of the survey respondents looked for some increase in market activity over 2000 levels. Their comments suggested that drought conditions had slowed market activity over the previous year, and 2001 was likely to rebound to more normal levels of market activity.

As for agricultural land value changes in 2001, two-thirds of the reporters were looking for very stable value levels with only very minor value adjustments either way (Table 13). In some districts, the percentage of reporters expecting some value movements was higher, but there also the more general opinion was for a relatively stable pattern. Value changes, if expected, were approximately 5 percent in either direction.

In sum, the general outlook of UNL reporters was for some continued stability throughout the year as some major economic forces move through the agricultural economy.

Table 11: Analysis of Typical Net Returns For Selected Land Types and Locations Using Typical Cash Rental Rates, 2001 ^{2/}

Row	Item	Northeast NE Dryland Cropland	Northeast NE Pivot Irrigated Cropland	Eastern NE Dryland Cropland	Eastern NE Gravity Irrigated Cropland (from well)	Southeast NE Dryland Cropland
1.	Current purchase price per acre ...	\$1,170.00	\$1,925.00	\$1,570.00	\$2,280.00	\$1,040.50
2.	Annual cash rent per acre (gross)	\$78.00	\$130.00	\$87.00	\$133.00	\$64.00
3.	Gross Rent-to-Value ratio	6.7%	6.7%	5.5%	5.8%	6.1%
	Annual owner expenses (per acre)					
4.	Real Estate Taxes ^e	\$17.55	\$28.90	\$23.55	\$34.20	\$15.70
5.	Irrigation Costs ^d	—	\$27.00	—	\$21.00	—
6.	Incidental Costs	\$4.00	\$5.00	\$4.00	\$5.00	\$4.00
7.	Total Owner Costs	\$21.55	\$60.90	\$27.55	\$60.20	\$19.70
8.	Annual net returns per acre (before income taxes)	\$56.45	\$69.10	\$59.45	\$72.80	\$44.30
9.	Percentage rate of return to land (before income taxes)	4.8%	3.6%	3.8%	3.2%	4.2%
10.	Mortgage amount per acre which could be serviced by the net returns assuming:					
11.	15-year amortized loan at 7.25% interest	\$506.10	\$619.50	\$533.00	\$652.70	\$397.20
12.	% of purchase price	43%	32%	34%	29%	38%
13.	20-year amortized loan at 7.5% interest	\$575.50	\$704.45	\$606.05	\$742.15	\$451.60
14.	% of purchase price	49%	36%	39%	33%	43%

(See footnotes at end of table)

Table 11: (continued)

Row	Item	Southwest NE Dryland Cropland	Southern NE Pivot Irrigated Cropland ^b	Northwest NE Gravity Irrigated Cropland (from well)	Northern NE Pivot Irrigated Cropland (from well) ^b	Northern NE Sandhills Rangeland
1.	Current purchase price per acre	\$460.00	\$1,975.00	\$910.00	\$1,250.00	\$220.00
2.	Annual cash rent per acre (gross)	\$29.00	\$132.00	\$84.00	\$106.00	\$12.00
3.	Gross Rent-to-value ratio	6.3%	6.7%	9.2%	8.5%	5.5%
	Annual owner expenses (per acre)					
4.	Real Estate Taxes ^d	\$6.90	\$29.65	\$13.65	\$18.75	\$2.75
5.	Irrigation Costs ^d	—	\$27.00	\$21.00	\$27.00	—
6.	Incidental Costs	\$2.00	\$5.00	\$4.00	\$5.00	\$1.00
7.	Total Owner Costs	\$8.90	\$61.65	\$38.65	\$50.75	\$3.75
8.	Annual net returns per acre (before income taxes)	\$20.10	\$70.35	\$45.35	\$55.25	\$8.25
9.	Percentage rate of return to land (before income taxes)	4.4%	3.6%	5.0%	4.4%	3.8%
10.	Mortgage amount per acre which could be serviced by the net returns assuming:					
11.	15-year amortized loan at 7.25% interest	\$180.20	\$630.75	\$406.60	\$495.35	\$73.95
12.	% of purchase price	39%	32%	45%	40%	34%
13.	20-year amortized loan at 7.5% interest	\$204.90	\$717.20	\$462.30	\$563.25	\$84.10
14.	% of purchase price	45%	36%	51%	45%	38%

a/ Current purchase prices and cash rents based upon the UNL 2001 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 1.25 percent of purchase price for all rangeland.

d/ Estimated fixed costs of depreciation and insurance on irrigation equipment, based on *Estimated Irrigation Costs, 1995, Nebraska Cooperative Extension CC371 and Nebraska Crop Budgets 2000*, EC99-872-S.

Table 12: Reporters' Beginning-Year Expectations of Market Activity for Agricultural Land During 2001 by Agricultural Statistics District in Nebraska ^a

Agricultural Statistics District	Relative to 2000, reporters expecting the number of agricultural land tracts offered for sale in 2001 will:		
	Increase ^b	Decrease ^c	Stay the Same
	----- Percent -----		
Northwest	35	0	65
North	22	0	78
Northeast	29	12	59
Central	15	0	85
East	18	6	76
Southwest	50	0	50
South	10	0	90
Southeast	11	0	89
State	18	3	79

^a Source: 2001 UNL Nebraska Farm Real Estate Market Developments Survey.

^b For those expecting an increase, the average expected increase was 5.1 percent.

^c For those expecting a decrease, the average expected decrease was 10.0 percent.

Table 13: Reporters' Beginning-Year Expectations of Agricultural Land Value Changes During 2001, by Agricultural Statistics District in Nebraska ^a

Agricultural Statistics District	Reporters expecting the average value of agricultural land in 2001 to:		
	Increase ^b	Decrease ^c	Stay the Same
	----- Percent -----		
Northwest	25	25	50
North	11	11	78
Northeast	41	18	41
Central	29	21	50
East	12	14	74
Southwest	11	0	89
South	20	20	60
Southeast	11	5	84
State	23	14	67

^a Source: 2001 UNL Nebraska Farm Real Estate Market Developments Survey.

^b For those expecting an increase, the average expected increase was 5.3 percent.

^c For those expecting a decrease, the average expected decrease was 4.6 percent.

Inventorying Nebraska's Irrigation Acres

With much of the state lying over the Ogallala Aquifer, Nebraska has a valuable irrigation endowment. According to USDA's 1997 National Resources Inventory, Nebraska has more than 7 million acres of irrigated cultivated cropland. Only one other state, Texas, has more cultivated cropland; and that state has been experiencing a steady decline in irrigated acres over the past quarter century.

While the economic significance of irrigation to the state's agricultural economy seems obvious, it is somewhat surprising to find no clear consensus as to how many acres are really under irrigation. Nor has there been any definitive information on the acreage distribution by type of irrigation system.

The 1997 Census of Agriculture, a source used extensively for benchmark analysis of the agricultural production sector down to the county level, indicates Nebraska has a total of 6.94 million acres of irrigated land; while Nebraska Agricultural Statistics Service estimates a total of 8.1 million acres that have wells or ditch water available and could be irrigated if conditions warrant. Finally, the USDA's 1997 National Resource Inventory, which classifies the acreage base across all states, placed Nebraska's cultivated cropland at 7.42 million acres with an additional 352,000 acres of non-cultivated irrigated cropland (such as irrigated forage production.)

So which data base is the most accurate one? Just what is a reliable estimate of Nebraska's irrigated acreage? Moreover, how is this acreage distributed geographically across Nebraska counties and how is the acreage distributed across the various types of irrigation being used? With these questions in mind, we attempted to construct a realistic inventory of irrigated acres in Nebraska by type of water distribution system.

The method involved starting with Nebraska Department of Revenue's county-level totals of privately-owned irrigation acreage on the property tax roles for the 1999-2000 assessment year. Since this series is the data base used for the assignment of assessed value, and hence, property taxes, we believe it represents an accurate acreage amount. To this was added estimates of publically-owned irrigation acreage not on the tax roles which were obtained from the Nebraska Board of Educational Lands and Funds and the University of Nebraska-Lincoln. When combined, the state's irrigated acreage totals nearly 7.4 million acres distributed across the eight agricultural districts as noted in Appendix Table 7. This irrigated acreage amount represents one third of the State's cropland acreage.

Once a reliable benchmark estimate of total irrigated cropland was determined, the next task was to identify the distribution of that acreage by type of system used. More specifically, we wanted to estimate the extent of center pivot technology being used and the acreage that it represented. This technology, which was invented here in Nebraska and developed over the past half century, has literally transformed irrigation agriculture in the state as well as the world over. Not only has it opened up lands which would otherwise not be irrigable, but it has also greatly enhanced water

use and other input efficiencies on land that was previously gravity irrigated. As a result, thousands of Nebraska's irrigated acres are being converted each year to center pivot systems.

Unfortunately, detailed acreage statistics on center pivot systems and associated acres are not available. Hence, we relied upon the UNL's Conservation and Survey Division's satellite imagery of the State which reveals the center pivot circles in graphic detail. Using the satellite map for 1997, the latest one available, we were able to develop county-level center pivot acreage estimates. These were then reconciled against our previously-developed irrigated acreage totals, and the final center pivot acreage estimates made.

As can be seen in Appendix Table 7, center pivot irrigation is the primary system being used in Nebraska, accounting for more than 4.6 million acres and approaching two-thirds of our irrigated land base. A quarter century earlier, that amount was only one third. If conversion of gravity irrigated land to center pivot continues at the rate of recent years as well as some dryland cropland being developed with center pivot technology, as much as 70 percent of Nebraska's irrigated acreage could be under center pivot systems by the year 2010.

The implications of the above are for much more than state's bragging rights. Nebraska's irrigated land base represents a most vital resource that will increasingly become the envy of a water-deficit world. Moreover, the fact that the bulk of that acreage is using an irrigation technology that is water efficient and complementary to precision agriculture, we can be more assured of its sustainability into the future.

Appendix

Appendix Table 1. Farm Real Estate Values in Nebraska, USDA Historical Series, 1860-2001.^a

Year	Number of Farms	Land in Farms	Value of Land & Buildings			Building Value
			Per Acre	Per Farm	Total Value	
	<u>Thousand</u>	<u>Million Acres</u>	<u>Dollars</u>	<u>Thousand Dollars</u>	<u>Million Dollars</u>	<u>Million Dollars</u>
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	91
1910	129.7	38.6	47	14.0	1,813	199
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	382
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	398
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	447
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	341
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	257
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	382
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	109.0	48.4	58	25.6	2,789	
1951	107.0	48.4	66	29.8	3,192	562
1952	105.0	48.3	72	33.1	3,477	605
1953	104.0	48.3	75	34.7	3,610	621
1954	103.0	48.3	70	32.8	3,386	589
1955	102.0	48.3	73	34.5	3,534	645

See footnotes at end of table.

Appendix Table 1. Farm Real Estate Values in Nebraska, USDA Historical Series, 1860-2001.^a

Year	Number of Farms	Land in Farms	Value of Land & Buildings			Building Value
			Per Acre	Per Farm	Total Value	
	Thousand	Million Acres	Dollars	Thousand Dollars	Million Dollars	Million Dollars
1956	101.0	48.3	73	34.9	3,523	719
1957	98.0	48.3	72	35.8	3,501	606
1958	96.0	48.3	79	40.0	3,839	572
1959	94.0	48.3	86	43.9	4,131	677
1960	93.0	48.2	89	46.3	4,308	763
1961	90.0	48.2	90	48.2	4,341	790
1962	88.0	48.2	95	52.2	4,598	860
1963	86.0	48.1	97	54.0	4,647	911
1964	84.0	48.2	105	60.0	5,055	1,072
1965	82.0	48.2	111	65.3	5,352	1,258
1966	80.0	48.2	120	72.6	5,805	1,283
1967	78.0	48.2	132	81.4	6,348	1,143
1968	76.0	48.2	143	90.5	6,882	1,136
1969	74.0	48.2	150	97.8	7,238	1,021
1970	73.0	48.1	154	101.5	7,407	941
1971	72.0	48.1	157	104.9	7,552	853
1972	71.0	48.1	170	115.2	8,177	932
1973	70.0	48.1	193	132.6	9,283	1,012
1974	70.0	48.1	242	166.3	11,640	1,152
1975	67.0	47.9	282	201.6	13,508	1,229
1976	67.0	47.9	363	259.2	17,366	1,546
1977	66.0	47.8	420	304.1	20,070	1,806
1978	66.0	47.8	412	298.5	19,702	1,832
1979	65.0	47.7	525	385.3	25,043	2,204
1980	65.0	47.7	635	466.0	30,289	2,547
1981	65.0	47.7	729	535.0	34,773	2,851
1982	63.0	47.5	730	550.4	34,675	2,809
1983	62.0	47.4	701	535.9	33,227	2,758
1984	61.0	47.2	645	499.1	30,444	2,710
1985	60.0	47.2	485	381.9	22,911	2,474
1986	59.0	47.2	416	332.7	19,629	2,532
1987	59.0	47.2	400	320.1	18,885	2,682
1988	58.0	47.1	457	371.1	21,525	3,186
1989	57.0	47.1	511	422.2	24,068	3,451
1990	57.0	47.1	524	433.0	24,680	3,186
1991	56.0	47.1	517	434.8	24,350	2,978
1992	56.0	47.1	517	434.8	24,350	3,026
1993	55.0	47.1	514	440.2	24,209	3,061
1994	55.0	47.1	562	481.5	26,485	3,670
1995	56.0	47.0	580	486.8	27,260	4,280
1996	56.0	47.0	610	512.0	28,670	4,473
1997	55.0	46.4	620	582.3	28,768	4,459
1998	55.0	46.4	645	544.1	29,928	4,639
1999	55.0	46.4	670	565.2	31,088	4,819
2000	54.0	46.4	695	597.2	32,248	4,998
2001 ^b	54.0	46.4	706	606.3	32,758	5,077

^a SOURCE: Farm Real Estate Historical Series Data: 1950-92, USDA, Economic Research Service, Sta. Bul. No. 855, May 1993 and earlier reports as well as recent issues annually by Economic Research Service, U.S. Department of Agriculture.

^b Preliminary estimates.

Appendix Table 2. Deflated USDA Farmland Values and Percent Changes for Nebraska, 1930 to 2001.^a

Year	USDA Average Value/Ac. for Nebraska	1st Quarter GDP Price Deflator (1992 = 100)	Deflated Average Value/Ac. ^b	Year-to-Year Change Deflated Farmland Values ^d
1930	56	10.83	517	
1931	52	9.84	528	2.1
1932	44	8.75	503	-4.7
1933	35	8.57	408	-18.9
1934	35	9.30	376	-7.8
1935	34	9.48	359	-4.5
1936	34	9.57	355	-1.1
1937	32	10.02	319	-10.1
1938	30	9.75	308	-3.4
1939	28	9.66	290	-5.8
1940	24	9.93	242	-16.6
1941	22	10.74	205	-15.3
1942	24	11.82	203	-1.0
1943	27	12.36	219	7.9
1944	33	12.635	261	19.2
1945	37	12.91	287	10.0
1946	42	14.98	280	-2.4
1947	47	16.97	277	-1.1
1948	56	18.14	309	11.6
1949	62	17.96	345	11.7
1950	58	18.32	317	8.1
1951	66	19.49	339	6.9
1952	72	19.765	364	7.4
1953	75	20.04	374	2.8
1954	70	20.31	345	-7.8
1955	73	20.76	352	-2.0
1956	73	21.39	341	-3.1
1957	72	22.20	324	-5.0
1958	79	22.47	352	8.6
1959	86	22.92	375	6.5
1960	89	23.13	385	2.7
1961	90	23.45	384	-0.3
1962	95	23.75	400	4.2
1963	97	24.00	404	1.0
1964	105	24.35	431	6.7
1965	111	24.77	448	3.9
1966	120	25.32	474	5.8
1967	132	26.14	505	6.5
1968	143	27.21	526	4.2
1969	150	28.39	528	0.2

Appendix Table 2. Deflated USDA Farmland Values and Percent Changes for Nebraska, 1930 to 2001.^a

Year	USDA Average Value/Ac. for Nebraska	1st Quarter GDP Price Deflator (1992 = 100)	Deflated Average Value/Ac. ^b	Year-to-Year Change Deflated Farmland Values ^d
1970	154	29.94	514	-2.6
1971	156	31.50	495	-3.7
1972	171	33.02	518	4.7
1973	193	34.36	562	8.5
1974	246	37.01	665	18.3
1975	282	41.05	687	3.3
1976	363	43.69	831	21.0
1977	420	46.32	907	9.2
1978	412	49.42	834	-8.0
1979	525	53.51	981	17.6
1980	635	58.18	1091	11.2
1981	729	64.15	1136	4.1
1982	730	68.86	1060	-6.7
1983	701	72.08	973	-8.2
1984	645	75.02	860	-11.6
1985	485	77.63	625	-27.3
1986	416	79.81	521	-16.6
1987	400	82.09	487	-6.5
1988	457	84.67	540	10.9
1989	511	88.45	578	7.0
1990	524	92.00	570	-1.4
1991	517	96.27	537	-5.8
1992	517	99.13	522	-2.8
1993	514	101.84	505	-3.3
1994	562	104.13	540	6.9
1995	580	106.74	543	0.6
1996	610	108.91	560	3.1
1997	620	111.00	559	-0.2
1998	645	112.32	574	2.7
1999	670	113.45	591	3.0
2000	695	115.21	603	2.0
2001 ^c	706	117.91	599	-0.7

^a Revised from series reported in earlier reports. Refers to year ending March 1 for years prior to 1976; year ending February 1 for years 1976-1981; year ending April 1 for years 1982-1985; year ending February 1, 1986-1989; year ending January 1, 1990-1994; mid-year 1995-1997, and year ending January 1, 2000.

^b Computed by dividing the average value per acre by the 1st Quarter GDP Price Deflator and multiplying by 100.

^c Preliminary estimate.

^d A positive value entry in this column represents a real increase in asset value for the year (i.e., the rate of land value appreciation exceeded the general rate of inflation for the U.S. economy). Conversely, a negative value entry represents a real decrease in asset value.

Appendix Table 3. Nominal and Deflated Agricultural Land Values by Selected Types of Land in Nebraska, 1978 to 2001.^a

Year	Nominal Value/Ac. ^a				1st Quarter GDP Price Deflator (1992 = 100)	Deflated Value/Ac. ^b			
	Dryland Cropland	Center Pivot Irrigated Cropland ^c	Grazing Land (Nontillable)	All Land Average		Dryland Cropland	Center Pivot Irrigated Cropland ^c	Grazing Land (Nontillable)	All Land Average
	-----Dollars/Ac.-----								
1978	492	947	153	500	49.42	996	1,916	310	1,012
1979	602	1,114	186	597	53.51	1,125	2,082	348	1,116
1980	702	1,272	209	695	58.18	1,207	2,186	359	1,195
1981	778	1,341	230	749	64.15	1,213	2,090	359	1,168
1982	742	1,293	227	720	68.86	1,078	1,878	330	1,046
1983	681	1,130	205	642	72.08	945	1,568	284	891
1984	632	1,049	184	588	75.02	842	1,398	245	784
1985	501	833	135	450	77.63	645	1,073	174	580
1986	384	634	98	339	79.81	481	794	123	425
1987	371	580	83	306	82.09	452	707	101	373
1988	416	661	91	346	84.67	491	781	107	409
1989	500	841	123	432	88.45	565	951	139	488
1990	532	935	146	473	92.00	578	1,016	159	514
1991	536	977	159	492	96.27	557	1,015	165	511
1992	551	1,000	166	510	99.13	556	1,009	167	514
1993	573	1,045	172	531	101.84	563	1,026	169	521
1994	608	1,107	183	566	104.13	584	1,063	176	544
1995	623	1,149	192	582	106.75	584	1,076	180	545
1996	656	1,235	189	608	108.91	602	1,134	174	558
1997	706	1,338	202	654	111.00	636	1,205	182	589
1998	767	1,471	224	710	112.32	683	1,310	199	632
1999	749	1,428	219	690	113.45	660	1,259	193	608
2000	752	1,455	230	698	115.21	653	1,263	200	606
2001	760	1,459	243	709	117.91	645	1,237	206	601

^a February 1st estimates reported in the UNL Nebraska Farm Real Estate Market Developments Surveys.

^b Computed by dividing the average value per acre by the 1st Quarter Gross Domestic Price (GDP) Deflator and multiplying by 100.

^c Pivot not included in per acre value.

Appendix Table 4. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1978-2001.^a

Type of Land & Year	Agricultural Statistics 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	1,061	387	541	808	602
1980	347	340	920	471	1,296	454	626	971	702
1981	419	346	1,009	519	1,409	546	754	1,060	778
1982	411	335	966	502	1,325	522	752	988	742
1983	387	321	864	450	1,204	469	664	939	681
1984	379	300	779	416	1,129	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
1990	309	279	728	407	877	409	491	662	532
1991	316	279	735	463	885	380	508	655	536
1992	340	295	700	418	955	386	513	673	551
1993	337	288	766	486	1,000	373	573	701	573
1994	345	314	797	504	1,090	390	620	741	608
1995	335	320	803	519	1,144	403	637	764	623
1996	358	338	823	535	1,244	419	658	799	656
1997	381	363	909	588	1,336	432	701	852	706
1998	385	390	982	631	1,477	457	753	956	767
1999	346	367	968	635	1,462	428	740	953	749
2000	331	400	970	648	1,464	434	708	958	752
2001	319	403	996	645	1,493	433	725	954	760

See footnotes at end of table.

Appendix Table 4. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1978-2001.^a

Type of Land & Year	Agricultural Statistics District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	State ^c
----- Dollars Per Acre -----									
Dryland Cropland (Irrigation Potential)									
1978	409	387	741	590	1,128	471	873	953	757
1979	449	514	930	708	1,411	520	1,102	1,152	926
1980	533	565	1,132	767	1,733	628	1,282	1,352	1,107
1981	680	533	1,225	880	1,785	733	1,432	1,402	1,192
1982	658	535	1,097	833	1,665	685	1,411	1,268	1,108
1983	563	462	975	680	1,462	654	1,175	1,160	979
1984	507	441	911	638	1,349	631	1,050	1,069	905
1985	425	340	746	486	1,013	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
1990	371	367	840	539	1,056	473	706	816	720
1991	396	360	817	604	1,083	478	756	777	725
1992	411	381	823	658	1,124	476	792	835	753
1993	419	400	884	678	1,195	445	883	888	794
1994	430	436	962	739	1,338	482	923	936	861
1995	429	424	1,002	781	1,397	493	941	979	891
1996	441	444	1,040	845	1,525	508	1,008	1,046	948
1997	458	475	1,103	917	1,643	543	1,114	1,130	1,018
1998	482	510	1,219	986	1,810	578	1,216	1,250	1,115
1999	436	480	1,216	956	1,792	538	1,173	1,172	1,081
2000	418	492	1,220	957	1,800	546	1,112	1,187	1,080
2001	409	500	1,256	981	1,807	572	1,126	1,234	1,100

See footnotes at end of table.

Appendix Table 4. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1978-2001.^a

Type of Land & Year	Agricultural Statistics District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	State ^c
----- Dollars Per Acre -----									
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
1990	102	185	381	270	459	153	296	360	197
1991	107	200	394	308	495	168	338	366	213
1992	113	213	395	339	500	169	348	395	224
1993	121	195	427	359	524	171	371	418	227
1994	128	215	440	380	573	192	407	460	246
1995	128	223	456	400	611	193	414	471	253
1996	125	225	473	406	617	196	413	483	255
1997	135	250	512	440	686	200	433	519	276
1998	153	265	550	461	741	227	467	575	299
1999	165	270	569	456	735	234	470	575	306
2000	173	275	581	471	731	256	464	588	315
2001	171	288	670	505	750	291	524	578	335

See footnotes at end of table.

Appendix Table 4. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1978-2001.^a

Type of Land & Year	Agricultural Statistics District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	State ^c
----- Dollars Per Acre -----									
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
1990	83	134	272	225	340	113	233	298	146
1991	86	148	284	252	357	125	254	314	159
1992	90	155	302	267	373	126	261	316	166
1993	93	157	322	278	382	136	290	330	172
1994	98	167	325	302	388	153	307	354	183
1995	106	175	337	308	421	163	308	357	192
1996	103	173	347	299	428	155	296	367	189
1997	115	183	366	327	468	163	318	412	202
1998	128	199	395	366	516	189	337	473	224
1999	127	192	411	350	507	187	327	476	219
2000	137	206	432	365	510	193	333	478	230
2001	142	220	475	386	532	200	353	479	243

See footnotes at end of table.

Appendix Table 4. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1978-2001.^a

Type of Land & Year	Agricultural Statistics District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	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
1990	217	218	326	328	405	245	278	328	243
1991	225	240	330	350	434	252	286	361	261
1992	248	247	325	365	452	250	329	341	269
1993	242	265	365	366	473	251	360	358	283
1994	251	296	392	400	511	278	386	370	310
1995	260	300	418	408	528	277	397	385	317
1996	270	300	429	403	524	289	396	402	320
1997	295	325	459	438	575	300	403	435	346
1998	315	345	517	472	640	336	437	497	373
1999	318	325	507	457	625	330	412	502	359
2000	313	358	539	444	618	350	398	463	379
2001	306	381	563	458	677	364	450	502	398

See footnotes at end of table.

Appendix Table 4. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1978-2001.^a

Type of Land & Year	Agricultural Statistics District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	State ^c
----- Dollars Per Acre -----									
Gravity Irrigated Cropland									
1978	1,246	796	1,030	1,545	1,624	1,134	1,412	1,404	1,410
1979	1,300	964	1,289	1,705	1,910	1,197	1,746	1,772	1,638
1980	1,369	1,020	1,547	1,976	2,317	1,329	2,046	2,026	1,906
1981	1,555	1,054	1,781	2,088	2,403	1,493	2,230	2,026	2,030
1982	1,580	1,033	1,771	2,053	2,269	1,598	2,254	1,924	1,994
1983	1,361	1,000	1,430	1,798	1,969	1,412	1,872	1,854	1,737
1984	1,269	1,020	1,429	1,613	1,838	1,250	1,762	1,639	1,601
1985	1,042	81	1,102	1,304	1,329	1,010	1,283	1,171	1,214
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	1,151	740	994	956	947
1989	815	900	1,100	1,210	1,462	841	1,232	1,170	1,182
1990	841	900	1,186	1,413	1,513	895	1,390	1,285	1,287
1991	834	917	1,250	1,518	1,622	975	1,480	1,306	1,363
1992	889	1,035	1,221	1,563	1,653	1,021	1,583	1,413	1,418
1993	857	1,058	1,246	1,609	1,730	1,018	1,643	1,479	1,461
1994	875	1,070	1,250	1,666	1,842	1,093	1,728	1,568	1,533
1995	857	1,065	1,260	1,671	1,887	1,090	1,731	1,606	1,548
1996	870	1,070	1,361	1,738	1,989	1,138	1,800	1,697	1,621
1997	890	1,115	1,466	1,858	2,160	1,167	1,943	1,853	1,740
1998	925	1,150	1,575	1,972	2,340	1,200	2,042	1,936	1,847
1999	894	1,050	1,575	1,861	2,247	1,198	1,945	1,813	1,768
2000	907	1,025	1,696	1,754	2,279	1,325	1,856	1,831	1,765
2001	900	1,033	1,715	1,729	2,273	1,279	1,810	1,843	1,750

See footnotes at end of table.

Appendix Table 4. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1978-2001.^a

Type of Land & Year	Agricultural Statistics District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	State ^c

----- Dollars Per Acre -----

Center Pivot Irrigated Cropland^b

1978	771	678	956	877	1,484	813	1,023	1,286	947
1979	915	770	1,164	1,076	1,690	895	1,291	1,590	1,114
1980	894	886	1,372	1,223	2,043	971	1,535	1,795	1,272
1981	973	816	1,456	1,312	2,110	1,105	1,732	1,900	1,341
1982	989	810	1,332	1,270	2,010	1,123	1,681	1,748	1,293
1983	847	769	1,217	1,016	1,727	926	1,391	1,643	1,130
1984	809	698	1,130	969	1,655	827	1,350	1,465	1,049
1985	691	581	875	850	1,243	691	1,055	1,020	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	1,038	548	792	820	661
1989	532	604	993	779	1,320	683	1,021	1,056	841
1990	619	710	1,090	910	1,393	765	1,117	1,133	935
1991	651	714	1,129	1,053	1,461	748	1,229	1,194	977
1992	681	740	1,084	1,085	1,510	783	1,263	1,228	1,000
1993	641	745	1,156	1,160	1,593	799	1,356	1,346	1,045
1994	690	800	1,215	1,200	1,707	850	1,425	1,413	1,107
1995	693	825	1,254	1,268	1,793	882	1,454	1,474	1,149
1996	710	913	1,320	1,340	1,930	981	1,550	1,565	1,235
1997	748	962	1,427	1,507	2,111	1,058	1,696	1,725	1,338
1998	829	1,020	1,583	1,698	2,332	1,139	1,863	1,907	1,471
1999	750	984	1,581	1,616	2,288	1,124	1,830	1,806	1,428
2000	750	981	1,609	1,579	2,424	1,192	1,795	1,810	1,455
2001	742	965	1,653	1,602	2,420	1,152	1,778	1,898	1,459

See footnotes at end of table.

Appendix Table 4. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1978-2001.^a

Type of Land & Year	Agricultural Statistics District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	State ^c
----- Dollars Per Acre -----									
All Land Average^c									
1978	279	201	674	608	1,125	363	796	844	500 ^d
1979	307	244	836	699	1,376	405	970	1,044	597 ^d
1980	333	269	989	800	1,670	472	1,139	1,215	695 ^d
1981	397	271	1,077	86	1,748	538	1,268	1,260	749 ^d
1982	396	269	1,004	843	1,643	527	1,272	1,173	720 ^d
1983	343	248	890	734	1,475	480	1,057	1,099	642 ^d
1984	318	229	829	654	1,341	442	990	989	588 ^d
1985	258	180	664	528	1,007	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	1,009	300	673	711	432 ^d
1990	219	202	744	580	1,069	331	734	763	473 ^d
1991	226	215	747	639	1,115	341	787	756	492 ^d
1992	239	226	737	669	1,156	348	827	800	510 ^d
1993	239	226	790	693	1,217	346	885	845	531 ^d
1994	249	244	835	728	1,325	375	935	894	566 ^d
1995	250	251	860	744	1,378	384	944	925	582 ^d
1996	254	256	895	769	1,479	398	984	978	608 ^d
1997	269	275	962	833	1,600	417	1,066	1,057	654 ^d
1998	288	295	1,053	897	1,754	450	1,140	1,162	710 ^d
1999	275	285	1,052	859	1,718	439	1,099	1,111	690 ^d
2000	276	299	1,070	842	1,737	464	1,056	1,121	698 ^d
2001	274	312	1,107	854	1,747	471	1,060	1,143	709 ^d

^a February 1st estimates reported in the annual UNL Nebraska Farm Real Estate Market Developments Surveys.

^b Pivot not included in per acre value.

^c Weighted average based upon acreage in each land type.

^d All land average for state may not conform to USDA series due to different acreage weighting. In addition, the USDA series includes farm buildings in its per acre estimates of value.

Appendix Table 5. Historical Per Acre Value Range for Different Types and Grades of Land in Nebraska by Agricultural Statistics District, 1996-2001.^a

District and Type of Land	Reported Value Per Acre											
	1996	1997	1998	1999	2000	2001	1996	1997	1998	1999	2000	2001
----- Dollars Per Acre -----												
Northwest:												
Dry Crop (No irr. pot.) ¹	285	300	275	235	220	225	415	455	450	405	385	365
Dry Crop (Irr. pot.)	365	375	380	360	335	335	515	525	555	500	490	480
Grazing (Tillable)	110	120	120	130	140	140	145	160	170	205	210	200
Grazing (Nontillable)	85	100	100	95	105	105	120	130	145	150	160	160
Hayland	205	220	250	230	235	255	305	340	355	380	360	370
Gravity Irrigated	610	655	650	600	600	585	985	1,040	1,095	1,090	1,130	1,020
Center Pivot Irrigated ^b	605	635	570	530	530	565	810	865	915	830	890	890
North:												
Dry Crop (No irr. pot.)	250	275	275	270	280	310	405	450	475	465	490	495
Dry Crop (Irr. pot.)	375	400	415	360	390	385	550	600	685	575	600	600
Grazing (Tillable)	200	210	215	230	245	250	310	345	360	365	345	325
Grazing (Nontillable)	130	135	140	160	180	170	215	225	245	250	285	290
Hayland	245	250	280	240	300	310	420	500	495	455	485	470
Gravity Irrigated	850	890	900	900	875	815	1,250	1,350	1,430	1,335	1,325	1,265
Center Pivot Irrigated ^b	750	790	800	750	765	690	1,050	1,105	1,200	1,150	1,175	1,160
Northeast:												
Dry Crop (No irr. pot.)	590	625	710	725	740	805	985	1,090	1,275	1,200	1,175	1,230
Dry Crop (Irr. pot.)	760	765	935	960	1,000	1,055	1,115	1,175	1,350	1,385	1,415	1,545
Grazing (Tillable)	420	425	480	505	475	530	590	635	680	710	705	770
Grazing (Nontillable)	305	315	365	345	360	365	445	455	500	515	530	590
Hayland	335	360	450	425	445	465	490	550	630	640	655	695
Gravity Irrigated	1,070	1,080	1,190	1,240	1,365	1,310	1,520	1,630	1,835	1,710	1,945	1,865
Center Pivot Irrigated ^b	990	1,055	1,240	1,270	1,265	1,295	1,470	1,575	1,845	1,780	1,850	1,925
Central:												
Dry Crop (No irr. pot.)	385	430	470	500	505	495	670	705	735	765	795	815
Dry Crop (Irr. pot.)	605	605	695	700	710	740	1,070	1,170	1,210	1,170	1,195	1,235
Grazing (Tillable)	330	365	395	410	415	425	530	570	585	585	590	665
Grazing (Nontillable)	250	260	280	290	300	315	345	380	410	400	425	460
Hayland	320	320	365	375	345	360	480	530	565	545	530	550
Gravity Irrigated	1,245	1,310	1,445	1,325	1,190	1,215	1,930	2,070	2,200	2,045	1,920	2,035
Center Pivot Irrigated ^b	895	1,010	1,225	1,200	1,085	1,100	1,610	1,780	1,880	1,840	1,785	1,910

See footnotes at end of table.

Appendix Table 5. Historical Per Acre Value Range for Different Types and Grades of Land in Nebraska by Agricultural Statistics District, 1996-2001. ^a

District and Type of Land	Reported Value Per Acre											
	1996	1997	1998	1999	2000	2001	1996	1997	1998	1999	2000	2001
----- Dollars Per Acre -----												
East:												
Dry Crop (No irr. pot.)	895	950	1,050	1,060	1,070	1,095	1,475	1,570	1,700	1,727	1,735	1,695
Dry Crop (Irr. pot.)	1,140	1,150	1,340	1,350	1,365	1,395	1,720	1,810	2,010	2,055	2,035	2,015
Grazing (Tillable)	465	490	555	480	510	590	720	800	865	780	850	895
Grazing (Nontillable)	330	370	380	395	425	420	520	555	630	605	625	700
Hayland	445	460	495	535	530	565	640	700	750	800	760	875
Gravity Irrigated	1,470	1,610	1,790	1,740	1,745	1,760	2,180	2,420	2,605	2,510	2,525	2,560
Center Pivot Irrigated ^b	1,415	1,570	1,750	1,720	1,755	1,815	2,115	2,370	2,595	2,585	2,640	2,600
Southwest:												
Dry Crop (No irr. pot.)	320	325	340	355	350	350	505	540	545	495	490	520
Dry Crop (Irr. pot.)	400	400	430	450	445	465	595	645	650	610	610	635
Grazing (Tillable)	170	175	200	215	225	230	235	240	280	285	315	350
Grazing (Nontillable)	120	135	150	155	165	165	190	205	215	215	230	235
Hayland	240	250	290	315	325	330	415	425	465	455	505	515
Gravity Irrigated	765	795	870	900	1,005	985	1,215	1,295	1,365	1,280	1,415	1,415
Center Pivot Irrigated ^b	695	730	780	800	855	820	1,090	1,195	1,260	1,135	1,330	1,285
South:												
Dry Crop (No irr. pot.)	440	480	520	500	485	505	775	825	870	885	865	865
Dry Crop (Irr. pot.)	725	805	905	790	755	745	1,195	1,285	1,375	1,360	1,275	1,345
Grazing (Tillable)	300	325	340	350	340	395	490	505	555	555	535	655
Grazing (Nontillable)	230	245	250	235	235	270	340	370	385	390	375	450
Hayland	295	300	325	260	255	310	450	460	500	445	435	515
Gravity Irrigated	1,180	1,295	1,385	1,335	1,260	1,265	2,035	2,145	2,225	2,140	2,020	2,005
Center Pivot Irrigated ^b	980	1,090	1,340	1,270	1,160	1,200	1,765	1,925	2,035	1,965	1,910	1,930
Southeast:												
Dry Crop (No irr. pot.)	570	610	700	725	670	680	1,060	1,140	1,315	1,255	1,200	1,150
Dry Crop (Irr. pot.)	805	915	1,035	810	790	835	1,315	1,375	1,540	1,345	1,245	1,350
Grazing (Tillable)	345	400	465	455	440	445	540	575	725	670	685	690
Grazing (Nontillable)	285	320	375	330	340	340	425	455	570	565	600	535
Hayland	300	330	380	385	400	425	455	500	580	580	570	585
Gravity Irrigated	1,210	1,295	1,340	1,355	1,345	1,345	1,890	2,045	2,150	1,980	2,060	2,085
Center Pivot Irrigated ^b	1,175	1,300	1,485	1,220	1,285	1,395	1,880	2,050	2,185	1,950	1,940	2,090

^a Source: UNI, Nebraska Farm Real Estate Market Developments Surveys.

^b Pivot not included in per acre value.

Appendix Table 6. Historical Average Cash Rental Rates of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1981-2001.^a

Type of Land and Year	Agricultural Statistics District							
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast

Dryland Cropland ----- Dollars Per Acre -----

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
1990	b	b	65	44	72	31	41	54
1991	b	b	64	45	73	27	41	58
1992	b	b	60	47	73	28	43	57
1993	24	28	65	46	74	28	47	60
1994	b	33	66	44	79	32	45	62
1995	21	36	69	48	79	29	46	61
1996	21	35	69	49	81	31	47	62
1997	22	38	74	53	85	32	49	65
1998	22	39	79	53	88	32	51	70
1999	21	38	79	51	85	30	49	67
2000	20	38	79	53	86	29	49	66
2001	20	37	78	53	87	29	51	64

See footnotes at end of table.

Appendix Table 6. Historical Average Cash Rental Rates of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1981-2001.^a

Type of Land and Year	Agricultural Statistics District							
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast
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
1990	74	88	99	113	113	96	106	104
1991	84	95	99	119	118	101	112	103
1992	83	101	98	109	119	99	118	109
1993	77	93	107	118	124	94	124	114
1994	83	100	110	121	131	107	124	122
1995	80	98	108	120	127	101	123	116
1996	78	99	108	124	127	104	126	118
1997	80	105	114	129	136	108	132	125
1998	91	105	116	129	136	103	133	128
1999	85	102	111	123	133	98	130	119
2000	82	98	118	123	133	100	128	120
2001	84	98	122	128	133	106	127	126

See footnotes at end of table.

Appendix Table 6. Historical Average Cash Rental Rates of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1981-2001.^a

Type of Land and Year	Agricultural Statistics District							
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast

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
1990	77	97	106	99	114	91	104	108
1991	85	98	108	109	120	94	115	110
1992	79	96	105	102	120	92	119	113
1993	79	83	107	108	124	93	124	114
1994	85	104	115	116	130	98	126	122
1995	86	100	118	117	128	101	127	122
1996	80	107	117	119	130	105	128	124
1997	90	115	124	130	142	110	138	132
1998	95	115	125	132	143	111	138	132
1999	90	109	122	124	143	110	136	127
2000	93	105	125	124	144	111	135	129
2001	94	106	130	129	144	113	132	134

See footnotes at end of table.

Appendix Table 6. Historical Average Cash Rental Rates of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1981-2001.^a

Type of Land and Year	Agricultural Statistics District							
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast
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
1990	b	b	62	49	67	30	b	48
1991	b	38	62	57	71	28	b	49
1992	b	36	56	46	58	b	50	48
1993	b	27	65	47	66	31	50	54
1994	b	b	65	46	70	37	51	52
1995	b	b	68	50	73	b	54	57
1996	b	b	68	52	78	b	51	54
1997	b	b	72	56	82	b	54	60
1998	b	b	79	58	86	b	59	64
1999	b	b	80	54	82	b	b	64
2000	b	b	80	56	82	b	b	b
2001	b	b	79	53	79	b	b	b

See footnotes at end of table.

Appendix Table 6. Historical Average Cash Rental Rates of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1981-2001.^a

Type of Land and Year	Agricultural Statistics District							
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast

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
1990	b	b	96	95	93	90	111	b
1991	b	b	98	98	102	78	98	b
1992	b	b	88	81	82	b	94	b
1993	b	b	96	96	92	b	100	b
1994	b	b	99	93	101	b	95	b
1995	b	b	99	102	101	b	103	b
1996	b	b	108	106	108	b	109	b
1997	b	b	113	106	119	b	b	b
1998	b	b	118	112	124	b	b	b
1999	b	b	112	108	115	b	b	b
2000	b	b	105	107	114	b	b	b
2001	b	b	118	107	118	b	b	b

See footnotes at end of table.

Appendix Table 6. Historical Average Cash Rental Rates of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1981-2001.^a

Type of Land and Year	Agricultural Statistics District							
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast
Other Hayland								
1981	b	21	b	37	39	34	b	34
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	b	b	30	44	b	b	34
1990	b	b	b	39	44	34	b	38
1991	b	18	37	37	43	35	b	33
1992	b	21	31	30	34	b	27	30
1993	b	22	38	34	38	b	35	29
1994	b	b	38	37	39	b	33	29
1995	b	b	41	40	44	b	31	34
1996	b	b	42	40	40	b	31	36
1997	b	b	42	43	44	b	32	38
1998	b	b	48	43	50	b	35	40
1999	b	b	48	38	48	b	b	b
2000	b	b	48	35	43	b	b	b
2001	b	b	50	37	47	b	b	b

See footnotes at end of table.

Appendix Table 6. Historical Average Cash Rental Rates of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1981-2001.^a

Type of Land and Year	Agricultural Statistics District							
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast

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	6	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
1990	5	9	25	17	25	9	15	20
1991	6	10	26	20	27	10	17	22
1992	7	12	25	18	25	12	18	21
1993	6	10	24	21	27	10	19	21
1994	9	11	30	21	28	11	20	23
1995	7	11	31	21	27	12	19	24
1996	7	11	30	20	28	12	19	24
1997	8	12	30	21	29	12	20	25
1998	8	12	31	22	30	12	21	25
1999	7	12	31	21	29	11	20	23
2000	7	13	32	22	29	11	20	21
2001	7	12	32	23	30	11	20	22

See footnotes at end of table.

Appendix Table 6. Historical Average Cash Rental Rates of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1981-2001.^a

Type of Land and Year	Agricultural Statistics District							
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast
----- Dollars Per AUM -----								
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
1990	12.90	16.75	15.55	17.80	15.70	17.40	15.00	15.35
1991	14.85	20.00	18.00	20.30	19.50	18.25	17.50	18.00
1992	14.60	21.00	18.80	19.95	17.40	17.65	19.00	18.00
1993	16.40	21.30	18.50	22.35	19.85	20.75	20.40	19.85
1994	17.20	23.25	19.70	23.00	21.55	23.00	23.00	21.60
1995	16.75	23.40	19.90	23.00	20.50	22.30	22.20	20.30
1996	16.40	23.00	18.35	21.80	21.00	20.35	21.15	20.05
1997	17.00	23.50	20.50	22.25	22.30	21.20	21.20	20.75
1998	18.10	23.70	21.00	23.40	23.60	23.40	22.20	21.70
1999	16.70	23.00	21.60	23.25	21.90	23.25	22.00	20.40
2000	18.25	23.15	23.80	23.80	22.50	24.50	22.00	21.35
2001	19.65	25.10	23.40	24.45	24.00	25.00	22.20	22.75

^a Reporter's annual estimates of cash rental rates in the annual UNL Nebraska Farm Real Estate Market Developments Survey Series.

^b Insufficient number of reports.

^c Animal unit month (AUM) refers to sufficient forage capacity to sustain an animal unit for one month during the normal range season. Animal unit is defined by the Society of Range Management as: a mature cow approximately 1,000 pounds, either dry or with calf up to six months of age, or the equivalent based on a standardized amount of forage consumed.

Appendix Table 7. Land in Farms and Irrigated Acreage Data by County and Agricultural Statistics District, 2000.

County and District	Irrigated Cropland			Dryland Cropland ^a	Grassland ^a	Other ^d	Total Land in Farms ^e
	Center Pivot ^b	Other ^c	Total ^a				
Banner	25,900	100	26,000	124,806	288,418	7,259	446,482
Box Butte	134,350	2,250	136,600	204,139	103,868	251,895	696,502
Cheyenne	51,900	2,500	54,400	419,046	270,717	35,268	779,431
Dawes	5,150	6,200	11,350	118,575	686,530	5,301	821,756
Deuel	11,350	9,350	20,700	180,691	79,861	257	281,509
Garden	29,300	6,550	35,850	101,698	918,087	22,130	1,077,766
Kimball	27,500	5,850	33,350	254,819	270,128	6,902	565,199
Morrill	68,850	45,950	114,800	76,440	649,038	20,586	860,864
Scotts Bluff	14,400	159,000	173,400	33,181	223,508	12,820	442,909
Sheridan	35,550	25,900	61,450	175,731	1,207,255	42,498	1,486,934
Sioux	18,650	22,000	40,650	42,793	987,621	43,555	1,114,619
NORTHWEST	422,900	285,650	708,550	1,731,919	5,685,031	448,471	8,573,971
Arthur	11,000	500	11,500	0	449,828	3,985	465,313
Blaine	9,500	200	9,700	1,587	434,580	6,158	452,025
Boyd	5,500	100	5,600	96,922	188,417	5,643	296,581
Brown	53,700	500	54,200	0	623,138	23,616	700,954
Cherry	30,000	1,500	31,500	30,048	3,771,688	48,595	3,881,831
Garfield	13,550	2,950	16,500	9,930	272,780	8,750	307,960
Grant	2,100	100	2,200	0	465,334	9,347	476,881
Holt	232,000	1,600	233,600	90,125	1,072,138	68,234	1,464,097
Hooker	3,300	50	3,350	0	367,718	422	371,490
Keya Paha	15,800	300	16,100	35,853	445,826	1,935	499,714
Logan	17,700	300	18,000	21,631	281,072	2,262	322,965
Loup	6,900	6,850	13,750	9,644	310,975	4,826	339,195
McPherson	11,600	300	11,900	4,466	422,421	4,547	443,334
Rock	47,100	700	47,800	22,961	544,966	15,392	631,119
Thomas	2,800	250	3,050	0	363,387	2,084	368,521
Wheeler	58,000	700	58,700	15,174	210,690	8,216	292,780
NORTH	520,550	16,900	537,450	338,340	10,224,958	214,012	11,314,760

See footnotes at end of table.

Appendix Table 7. Land in Farms and Irrigated Acreage Data by County and Agricultural Statistics District, 2000.

County and District	Irrigated Cropland			Dryland Cropland ^a	Grassland ^a	Other ^d	Total Land in Farms ^e
	Center Pivot ^b	Other ^c	Total ^a				
Antelope	214,000	1,100	215,100	138,125	124,843	14,008	492,076
Boone	124,900	20,150	145,050	138,451	157,424	7,026	447,951
Burt	31,300	23,100	54,400	201,157	32,415	4,478	292,450
Cedar	48,800	25,700	74,500	260,842	105,155	4,933	445,430
Cuming	39,000	100	39,100	267,733	40,393	12,376	359,603
Dakota	2,100	11,750	13,850	102,461	20,038	5,719	142,068
Dixon	10,200	9,600	19,800	193,605	19,736	9,470	242,611
Knox	45,000	400	45,400	238,084	276,854	35,199	595,537
Madison	89,000	600	89,600	184,056	49,939	5,824	329,419
Pierce	110,900	5,900	116,800	147,323	40,199	4,500	308,822
Stanton	23,800	300	24,100	162,998	26,788	12,503	226,389
Thurston	8,800	200	9,000	154,254	18,985	6,730	188,969
Wayne	27,700	2,100	29,800	203,668	20,892	2,847	257,207
NORTHEAST	775,500	101,000	876,500	2,392,758	933,661	125,613	4,328,532
Buffalo	114,500	90,950	205,450	96,587	308,960	10,230	621,227
Custer	133,000	71,500	204,500	191,156	1,145,710	10,800	1,552,166
Dawson	46,900	222,300	269,200	40,942	315,582	24,123	649,847
Greeley	56,000	17,550	73,550	54,041	159,605	3,818	291,014
Hall	47,100	153,900	201,000	27,089	102,809	11,369	342,267
Howard	42,200	58,550	100,750	59,590	164,117	5,527	329,984
Sherman	49,600	21,000	70,600	57,492	189,437	6,358	323,887
Valley	45,700	38,800	84,500	53,278	191,396	3,416	332,590
CENTRAL	535,000	674,550	1,209,550	580,175	2,577,617	75,641	4,442,982
Butler	71,400	29,250	100,650	184,048	61,419	7,422	353,539
Cass	2,000	250	2,250	259,648	30,966	7,722	300,586
Colfax	30,400	26,850	57,250	146,232	25,716	1,205	230,403
Dodge	45,400	42,400	87,800	180,832	28,288	26,160	323,080
Douglas	3,900	7,050	10,950	64,809	28,650	8,356	112,765
Hamilton	105,900	141,950	247,850	44,081	46,787	4,904	343,622
Lancaster	12,400	2,650	15,050	312,312	80,865	12,863	421,089
Merrick	60,800	109,900	170,700	30,875	63,328	8,989	273,892
Nance	30,800	29,200	60,000	83,188	94,870	6,234	244,292
Platte	129,000	28,950	157,950	175,345	79,690	7,044	420,028
Polk	50,700	89,900	140,600	75,754	39,945	2,242	258,541
Sarpy	2,800	2,400	5,200	78,470	11,163	6,849	101,682
Saunders	53,600	2,850	56,450	302,431	65,502	11,482	435,865
Seward	76,700	32,450	109,150	161,069	44,141	6,258	320,618
Washington	4,400	6,600	11,000	170,988	21,687	15,490	219,165
York	103,700	126,500	230,200	77,971	40,813	3,977	352,961
EAST	783,900	679,150	1,463,050	2,348,052	763,829	137,197	4,712,128

See footnotes at end of table.

Appendix Table 7. Land in Farms and Irrigated Acreage Data by County and Agricultural Statistics District, 2000.

County and District	Irrigated Cropland			Dryland Cropland ^a	Grassland ^a	Other ^d	Total Land in Farms ^e
	Center Pivot ^b	Other ^c	Total ^a				
Chase	173,800	13,700	187,500	108,402	259,680	1,092	556,674
Dundy	118,200	650	118,850	96,358	371,697	4,030	590,935
Frontier	22,100	41,250	63,350	168,374	298,433	1,017	531,174
Hayes	39,600	1,550	41,150	139,707	244,718	758	426,333
Hitchcock	12,100	22,500	34,600	181,313	183,089	7,225	406,227
Keith	65,000	24,300	89,300	126,000	375,857	15,734	606,891
Lincoln	157,200	46,750	203,950	119,905	1,063,695	32,871	1,420,421
Perkins	128,000	600	128,600	305,953	112,418	5,911	552,882
Red Willow	22,000	34,650	56,650	175,402	199,284	5,024	436,360
SOUTHWEST	738,000	185,950	923,950	1,421,414	3,108,872	73,661	5,527,897
Adams	82,100	95,000	177,100	91,973	72,186	3,063	344,322
Franklin	42,500	51,050	93,550	75,956	174,504	6,848	350,857
Furnas	21,500	33,050	54,550	191,378	191,173	13,207	450,308
Gosper	21,100	60,000	81,100	60,608	91,468	967	234,143
Harlan	39,200	40,700	79,900	106,420	133,599	5,526	325,445
Kearney	78,500	41,400	119,900	64,265	132,076	3,530	319,771
Phelps	82,600	156,100	238,700	29,394	107,169	3,551	378,814
Webster	31,000	21,200	52,200	118,381	134,321	8,877	313,779
SOUTH	398,500	498,500	897,000	738,375	1,036,496	45,568	2,717,439
Clay	81,500	108,150	189,650	79,146	91,421	4,369	364,586
Fillmore	123,200	63,300	186,500	123,314	42,667	4,413	356,894
Gage	34,100	12,200	46,300	339,491	122,165	11,024	518,981
Jefferson	33,900	24,500	58,400	166,772	83,921	6,033	315,125
Johnson	8,100	4,850	12,950	130,854	51,606	1,447	196,857
Nemaha	2,600	100	2,700	184,458	48,087	3,964	239,209
Nuckolls	21,300	33,600	54,900	163,275	108,449	821	327,445
Otoe	3,300	500	3,800	276,869	65,127	8,634	354,430
Pawnee	450	50	500	139,216	86,954	2,896	229,566
Richardson	1,800	150	1,950	233,015	66,822	16,830	318,617
Saline	42,100	47,500	89,600	187,426	38,323	2,168	317,517
Thayer	80,800	37,850	118,650	141,224	105,260	3,344	368,478
SOUTHEAST	433,150	332,750	765,900	2,165,060	910,802	65,943	3,907,705
NEBRASKA	4,607,500	2,774,450	7,381,950	11,716,092	25,241,266	1,186,106	45,525,414

^a Summation of land in this category on the 1999-2000 property tax values plus estimated publically-owned agricultural land (in this category) by county.

^b County estimates of center pivot acreage derived from UNL Conservation and Survey Division's satellite imaging of the state for 1997.

^c The acreage residual after subtracting the center pivot estimates from the total irrigated acreage for each of the respective counties.

^d The acreage residual after subtracting the total acreage in irrigated cropland, dryland cropland, and grassland from the total land in farm acreage for each of the respective counties.

^e Source: USDA, National Agricultural Statistics Service, 1999 Census of Agriculture – Nebraska State and County Data.

