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Nebraska Farm Real Estate Market Developments 2003-2004

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by

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

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Nebraska Farm Real Estate Market Developments 2003-2004
Summary

Nebraska's agricultural land values moved sharply upward across the state during 2003 and into 2004, recording an average gain of 9.2 percent for the 12 months ending February 1, 2004. This average increase was the largest annual percentage gain in 14 years. And it followed on several years of fairly stable land values. Virtually all land classes showed gains, and in all areas of the state–even in areas of serious multi-year drought, where previous-year value declines had occurred.

The highest-priced land in the state is now center pivot irrigated cropland in Eastern Nebraska as the market preference for this irrigated land over gravity irrigated land has risen over the past five years.

The impact of drought has been present in agricultural land markets; but those impacts have been mixed in nature depending upon unique conditions of the particular region. The value of land with irrigation potential has increased most rapidly in recent years in the eastern regions, while western areas of the state with more limited water availability have not seen values rise as much. In some localities, water policy restrictions or further irrigation development, either existing or pending, has altered demand for this type of land.

Other forces impacting the current market center on low interest rates and widespread demand by non-farmer buyers. While active farmers continue to be the major buyer group, typically buying for farm expansion purposes, their dominance in local markets across the state has fallen over the past decade.

Despite agricultural land transfers typically involving considerable dollar values, nearly half of the transfers in 2003 were cash purchases involving no debt financing. Survey reporters frequently commented on the presence of 1031 tax exchanges in agricultural land transfers which may explain part of the relatively high incidence of cash purchases.

Given more favorable commodity price levels as well as continued strong demand for rental land in most local land markets, 2004 cash rental rates were up from previous-year levels, frequently 5 percent or more for most cropland classes. Pasture rental rates for 2004 were also higher, both on a per acre and an animal unit per month basis.

According to survey reporters, we are seeing a continuation of a slow multi-year decline of expected annual net rates of returns to the various agricultural land classes. Apparently, market participants are generally willing to bid values upward somewhat faster than their expectations for increases in annual net rates of return. In the vernacular of the stock market, this is akin to a rising price/earnings ratio.

Nebraska Farm Real Estate Market Developments 2003-2004

Introduction

With more than 46 million acres in production, Nebraska ranks fourth among the 50 states in land acreage in farms and ranches. This year, for the first time, the estimated value of its agricultural land assets exceeds $40 billion (Appendix Table 1). Nearly all of this acreage is in private ownership, distributed across some 105,000 agricultural landowners comprised of over 50,000 owner operators and 55,000 non-operator owners (landlords) who rent all the land they own to others to farm[1] Given this magnitude of dollar value and the wide distribution of ownership, the state's agricultural land market dynamics are of considerable interest and importance.

As a consequence, the UNL Department of Agricultural Economics has monitored and analyzed agricultural land market conditions annually since 1978. The foundation of this process is an annual February 1st survey of agricultural real estate market conditions across the state. The information collected from this survey and its subsequent analysis provide valuable insight into market characteristics and trends, both over time and across the sub-state regions.

This year's survey received input from a panel of nearly 150 reporters from across the state. Most are real estate professionals. Many of these panelists are actively engaged in professional agricultural appraisal. Others are professional farm managers and/or agricultural real estate brokers–also closely attuned to the agricultural land market conditions in their areas of the state. Since the vast majority of the panel members have been responding to this survey each year for a number of years, the continuity of the information series is strengthened.

Survey panel members provide point-in-time estimates of current market values and cash rents for the various classes of agricultural land in their localities. These are then aggregated into averages for each of the eight agricultural statistical areas in the state. For market values, these area averages are further aggregated to the state level using an acreage weighting procedure to arrive at all-state average values for each of the various land classes as well as a state all-land average. From these estimates, comparisons over time are made to arrive at annual percentage changes in market values.

In addition to point-in time estimates of market values and cash rents, survey reporters also provide specific information regarding actual transactions which have occurred over the previous 12-month period and are deemed representative of local market conditions. In the 2004 survey, detailed information on 350 transactions were reported, which provide additional insight into the nature of the market.

This year, for the first time in the 27-year series, we are emphasizing a particular theme of land market conditions for further elaboration. And given its critical nature in virtually every area of the state, we are highlighting **the role of water** and its interface with the state's agricultural land markets.

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[1]For more detail see: Burce Johnson, *Agricultural Land Ownership and Tenant Patterns in Nebraaska,* NEBGUIDE, G03-1486-A.

Current Land Values and Recent Trends

Following several years of relatively stable agricultural land values, Nebraska's agricultural land markets increased significantly in 2003. For the 12-month period ending February 1, 2004, average farmland values rose an average of 9.2 percent (Figure 1 and Table 1) The increase was the largest annual percentage change for the state in 14 years (see Appendix Table 4 for long-term historical land value series). This percentage change is sharply above the past five-year and ten-year annual average changes of 3.7 percent and 3.9 percent respectively for the state's all-land average value.

Figure 1. Average Value of Nebraska Farmland, February 1, 2004 and Percent Change From Year Earlier.

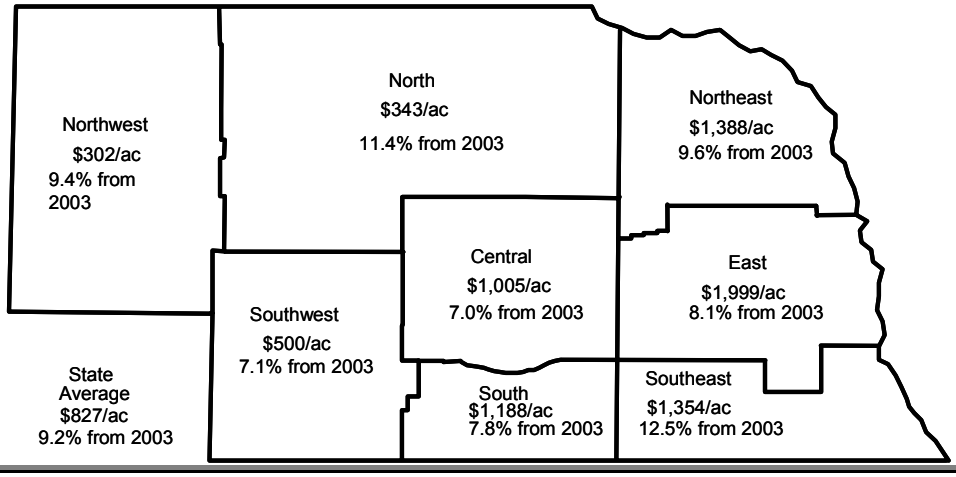


Figure 2. Nebraska Agricultural Statistics Districts

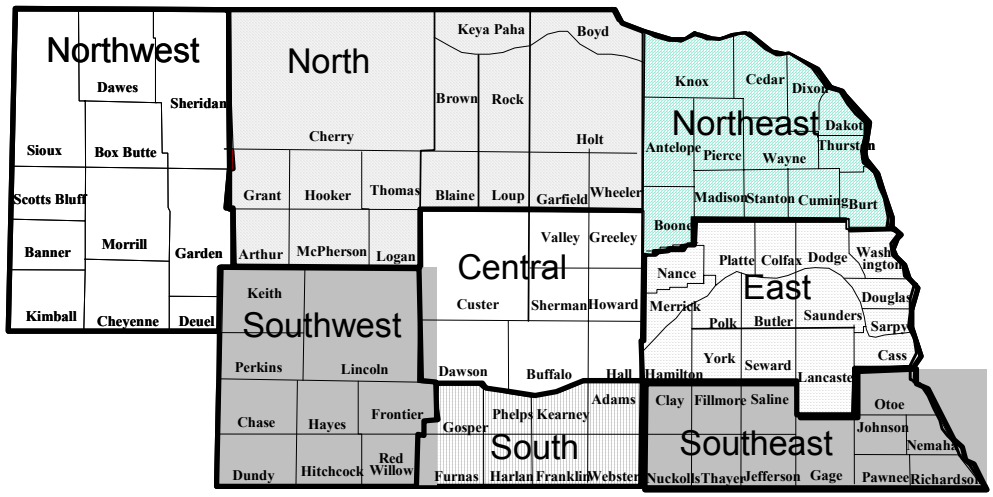
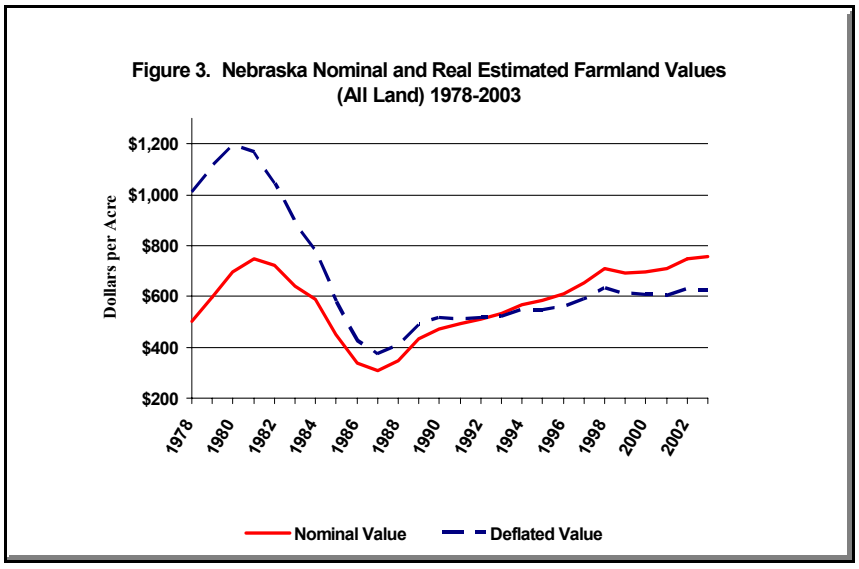


Table 1. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, Feb. 1, 2003 - Feb. 1, 2004.[a]

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 2004	328	416	1231	758	1717	473	800	1190	862
Rptd. in 2003	319	360	1107	710	1585	453	748	1059	788
% Change	2.8	15.6	11.2	6.8	8.3	4.4	7.0	12.4	9.4
Dryland Cropland (Irrigation Potential)									
Rptd. in 2004	445	534	1554	1137	2093	586	1217	1469	1272
Rptd. in 2003	396	480	1410	1095	1930	558	1118	1290	1159
% Change	12.4	11.3	10.2	3.8	8.4	5.0	8.9	13.9	9.7
Grazing Land (Tillable)									
Rptd. in 2004	212	307	794	611	926	305	558	716	375
Rptd. in 2003	180	280	750	562	801	290	534	640	341
% Change	17.8	9.6	5.9	8.7	15.6	5.2	4.5	11.9	10.0
Grazing Land (Nontillable)									
Rptd. in 2004	163	230	619	494	655	240	422	550	275
Rptd. in 2003	149	210	559	446	590	219	389	490	250
% Change	9.4	9.5	10.7	10.8	11.0	9.6	8.5	10.2	10.0
Hayland									
Rptd in 2004	339	433	715	577	815	413	513	611	505
Rptd. in 2003	319	380	660	557	765	375	508	575	464
% Change	6.3	13.9	8.3	3.6	6.5	10.1	1.0	6.3	8.8
Gravity Irrigated Cropland									
Rptd. in 2004	925	1125	1867	1961	2531	1297	1969	2087	1957
Rptd. in 2003	890	1075	1760	1835	2401	1213	1863	1899	1840
% Change	3.9	4.7	6.1	6.9	5.4	6.9	5.7	9.9	6.4
Center Pivot Irrigated Cropland[b]									
Rptd. in 2004	806	1211	2004	1901	2669	1123	2044	2218	1788
Rptd. in 2003	750	1075	1840	1785	2460	1033	1846	1981	1636
% Change	7.5	12.7	8.9	6.5	8.5	8.7	10.7	12.0	9.3
All Land Average[c]									
Rptd. in 2004	302	343	1388	1005	1999	500	1188	1354	827
Rptd. in 2003	276	308	1266	939	1850	467	1102	1204	757
% Change	9.4	11.4	9.6	7.0	8.1	7.1	7.8	12.5	9.2

[a] SOURCE: 2003 and 2004 UNL Nebraska Farm Real Estate Market Developments surveys.
[b] Value of pivot not included in per acre value.
[c] Weighted averages

As noted in Figure 3, the current all-land average value in nominal terms is at an all-time high, surpassing the previous peak values of the early 1980s before a major value downturn occurred. However, when adjusting for inflation in the overall U.S. economy and expressing the current all-land average value in constant 1992 dollars, the 2004 *real* average value is still less than 60 percent of the previous peak which occurred a quarter-century earlier.

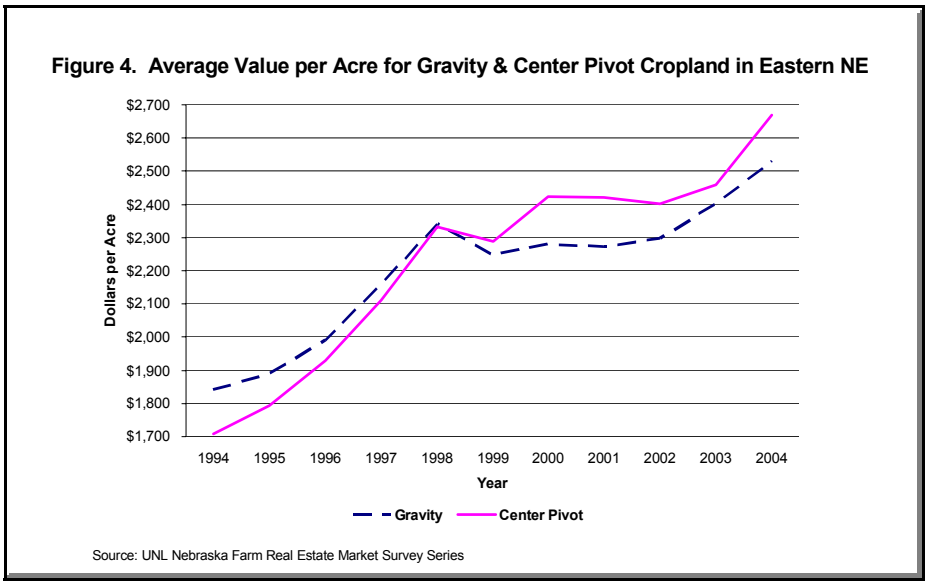


It is also important to note that the pattern of long-term change has varied substantially across the regions of the state. The 2004 all-land values in five of the eight regions represent all-time historic highs in nominal terms. But in the Northwest, Southwest, and South Districts, the 2004 values, even in nominal terms, are just 76 percent, 93 percent, and 93 percent respectively of the previous peak average all-land values which were recorded in the early 1980s.

The more recent regional changes in land values are perhaps best understood in the context of the past two years. While all regions recorded value gains for the 12-month period ending February 1, 2004, in several instances these gains followed on patterns of stable to falling values the previous year. The most significant contrast occurred in the Southwest District where the recent increase of 7.1 percent followed a previous-year decline of nearly 7 percent– thus there has been essentially no change in average values in southwestern Nebraska over the past two years. Relative to the rest of the state, this region has experienced the most severe multi-year drought effect; and, consequently its area land markets have been altered. Likewise, the Northwest and North Districts recorded declining values in 2002; thus, the percentage gains posted for the 12-months ending February 1, 2004 are not as striking as they might initially appear. By contrast, the three eastern districts each have combined two-year gains in their all-land average of around 13 percent.

Comparisons by land type indicate values of most cropland classes rose similarly in the 12-month period ending February 1, 2004. The exception was gravity irrigated land, which tended to show somewhat smaller percentage gains across much of the state. In some areas, more limited availability of irrigation water from irrigation districts has led to more conservative bidding in those local land markets. Perhaps an even more pronounced effect state-wide is the growing market preference for land irrigated via center pivot. Center pivot irrigation technology is more efficient than gravity irrigation–both in terms of water efficiency and labor efficiency. It is also more compatible with a precision agriculture type of management, and thus commands higher values in today's transfer markets as well as higher cash rents in the rental markets. As seen in the value trends for the Eastern Nebraska district in Figure 4, this

preference has led to a crossover point in values about six years ago, with irrigated land under center pivot now commanding higher per acre values (even *without* the value of the pivot included) than gravity irrigated acres.



As for dryland cropland, the percentage changes for the year ending February 1, 2004 were generally consistent between the two classes–with and without irrigation potential.

Conventional wisdom would suggest that during multi-year drought periods, the demand for dryland cropland that could be converted to irrigation (i.e., water is available to do so) would be stronger than cropland without such potential–other things being equal. To test this perception, we looked back over the past three years (essentially the brunt of the drought period which most of the state has experienced) and compared value changes. For the state as a whole, the annual percentage increase in the value of dryland cropland *with* irrigation potential has averaged 5.0 percent per year over the past three years as compared with a 4.3 percent annual average for cropland *without* irrigation potential. While the pattern follows conventional logic, it is certainly not substantially different. Moreover, in five of the eight districts, the value of dryland cropland without irrigation potential actually increased by a greater percentage rate over this time period of wide-spread drought.

The above suggests that other factors may be dampening or even inhibiting this *irrigation-potential effect* on area land values. One explanation is that in many local markets the remaining supply of dryland cropland which is considered by market participants to be irrigable may be very limited and marginal. Logic would suggest that the land with the greatest economic profitability from irrigation development has already been developed, and thus leaving only marginal/high-risk development opportunities. Likewise, regional water policy restrictions on further irrigation expansion, either existing or pending, may reduce demand for land with such potential. The possibility of well-drilling moratoriums and/or pumping restrictions certainly can drastically alter the expected future income streams and, in turn, bid levels in the land market.

While cropland was experiencing strong value gains in recent months, so also was the forage-producing land classes. The grazing land classes rose an average of 10 percent for the year ending February 1, 2004, while hayland values rose nearly 9 percent. According to UNL survey reporters, the strong cattle economy which prevailed throughout 2003 explains much of the solid gains in grazing land values.

Agricultural Land Value Ranges in 2004

UNL survey reporters also provide value ranges for each class of land according to quality–low grade and high grade. (Table 2) This provides a useful perspective of the variability of land quality which exists in any local area, and the recognition of this variability by market participants.

Table 2.Average Reported Value Per Acre of Farmland for Different Types and Grade of Land in Nebraska by Agricultural Statistics District, February 1, 2004. [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	328	416	1231	758	1717	473	800	1190
High Grade	350	510	1540	980	1945	555	930	1500
Low Grade	235	335	955	605	1325	380	580	890
Dryland Cropland (Irrigation Potential)								
Average	445	534	1554	1137	2093	586	1217	1469
High Grade	530	665	1845	1360	2405	685	1390	1830
Low Grade	370	465	1180	875	1625	515	900	1120
Grazing Land (Tillable)								
Average	212	307	794	611	926	305	558	716
High Grade	230	375	920	835	1155	395	600	800
Low Grade	170	290	650	530	730	250	405	545
Grazing Land (Nontillable)								
Average	163	230	619	494	655	240	422	550
High Grade	190	305	735	580	780	290	470	620
Low Grade	125	180	490	400	570	210	335	425
Hayland								
Average	339	433	715	577	815	413	513	611
High Grade	400	525	850	705	1140	615	565	740
Low Grade	275	365	630	490	670	370	365	505
Gravity Irrigated Cropland								
Average	925	1125	1867	1961	2531	1297	1969	2087
High Grade	1040	1300	2075	2310	2805	1650	2150	2300
Low Grade	575	900	1310	1410	1965	1015	1415	1630
Center Pivot Irrigated Cropland [b]								
Average	806	1211	2004	1901	2669	1123	2044	2218
High Grade	1000	1420	2350	2325	2930	1300	2225	2380
Low Grade	625	865	1555	1340	2035	890	1400	1730

[a] SOURCE: 2004 UNL Nebraska Farm Real Estate Market Developments Survey.
[b] Value of pivot not included in per acre value.

The pattern of land value ranges by quality for 2004 tends to follow historical patterns. In general, there is about a 50 percent value differential between the low-grade and high-grade quality range. With few exceptions, this approximate level of dispersion runs across all the land classes as well as across all the regions of the state. In other words, in any given local farm real estate market, the market participants tend to identify a quality gradient and assign market values accordingly. If, for example, low-quality non irrigated cropland is currently valued at $1000 per acre in the local market, then high-quality cropland in the same local market would likely be valued in the $1500 range.

Of course, the quality differential being discussed here represents the perceived variation in land productivity and its income flow potential in agricultural use. However, when non-agricultural land use considerations enter the market dynamic, this value dispersion may narrow, and, in some instances, actually be reversed. Take, for example, poorer quality, tree-canopied pasture land along streams that may be conducive to recreational hunting opportunities. Such land in its agricultural use may well be valued at the lower end of the value continuum due to its more limited forage productivity. However, because of its recreational potential, its market value may be enhanced considerably. Likewise, areas of the state where rural-urban transition is underway may actually see poorer quality agricultural land selling at a premium (perhaps even higher than high-quality agricultural land) simply because of its amenities for new country acreages and residential sub-division development may be greater.[2] Increasingly, rural acreage and other on-agricultural use considerations are entering the local agricultural real estate markets across the state.

Factors Influencing Current Agricultural Land Markets

Each year, UNL survey panel members are asked to rank in importance a set of forces influencing their local markets. They respond using a scale from 1 (strongly negative) to 5 (strongly positive) with 3 being essentially no impact upon area land values.

As noted in Figure 5, the general perception is that a large majority of factors, 14 out of 17, are contributing to upward value movements. Relatively low mortgage interest rates were seen as the most positive influence on agricultural land values in 2004.[3] This was followed closely in magnitude of positive influence by demand for farm expansion and by non-farmer investor interest.

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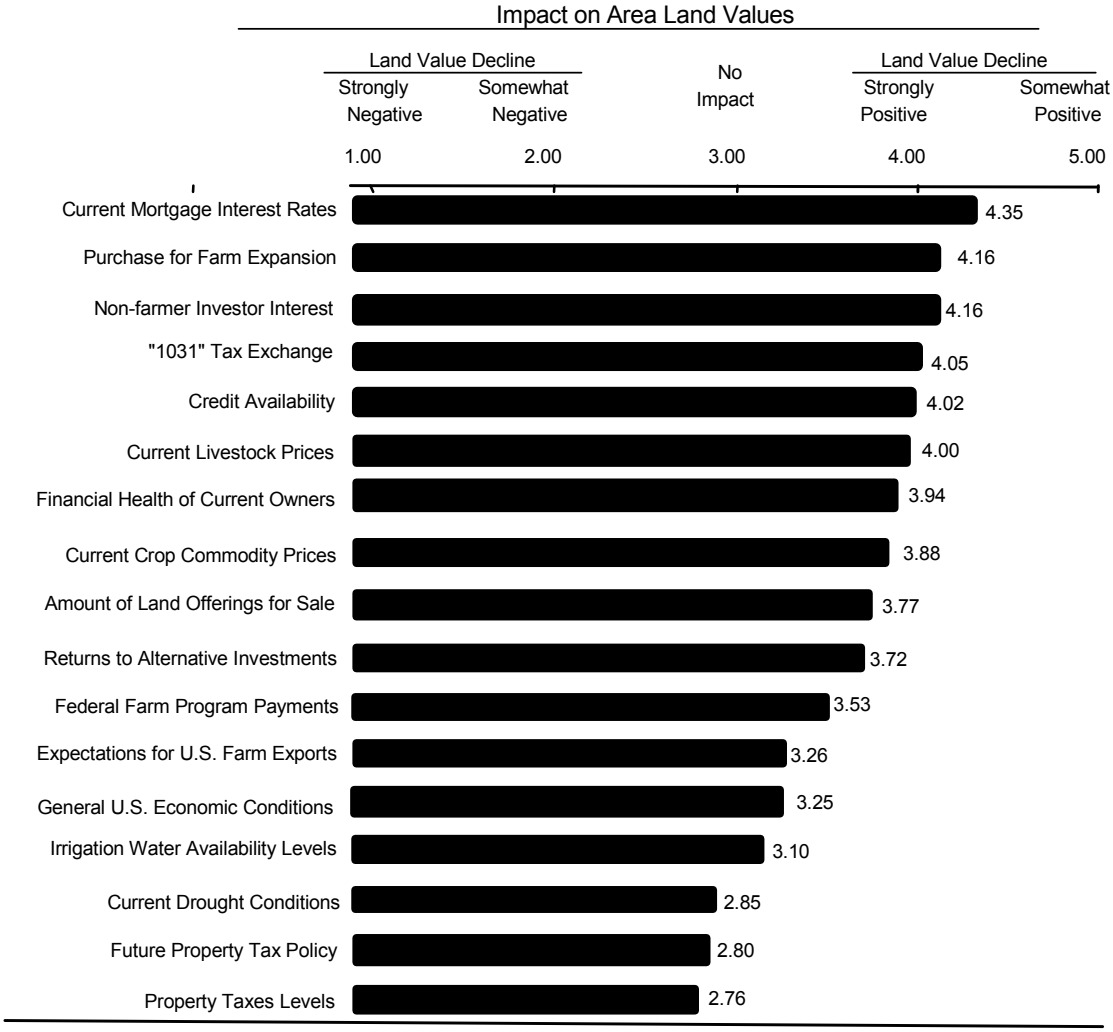
[2]In a recent study of the Saunders County, NE agricultural and rural land market, researchers found that all but the highest 20 percent of the land on an agricultural quality index sold for a higher value per acre for rural acreage development than if it had remained in agricultural use. See: Drozd, David J. and Bruce B. Johnson, *Dynamics of a Rural Land Market Experiencing Farmland Conversion to Acreages: The Case of Saunders County, Nebraska,* Land Economics, Volume 80, No. 2., May 2004.

[3]In recent economic modeling of historic Nebraska agricultural land values, the level of interest rates was found to be a significant explanatory variable in forecasting agricultural land value changes, i.e., the lower the interest rate levels the greater the annual percentage change in agricultural land values. Source: Glenn Helmers, Saleem Shaik, and Bruce Johnson, *Forecasting Nebraska Land Values,* forthcoming.

Figure 5. Reporters' Rating of Factors Influencing Agricultural Land Values in Their Areas of Nebraska, February 2004.

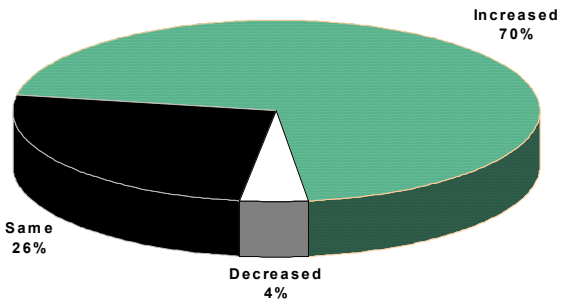


Source: 2004 UNL Nebraska Farm Real Estate Market Developments Survey.

The demand for farm expansion is a perennially strong element in virtually every local land market, as the structure of production agriculture continues towards consolidation of farms and ranches into larger production units. Given the relatively low rate of land ownership transfer (a turnover rate of three percent or less per year) those agricultural producers who are desiring to buy more land for expansion purposes must essentially be in the local market aggressively at all times.

As for non-farmer investor interest, reporters throughout the state believe that this has been an influential demand factor. They often noted that non-farmer interest is frequently associated with the *1031 tax exchange* provisions of the federal tax code, by which one can defer capital gains tax on a sale of property if one reinvests in another real estate property within an allotted time period (this sometimes leads to very aggressive demand to purchase a replacement unit since the time window of opportunity is relatively short.) Interestingly, non-farmer buyer interest is also correlated inversely with low interest

Figure 6. Respondents Perception of changes in the presence of Non-Farmer buyers over the past 10 years in Nebraska



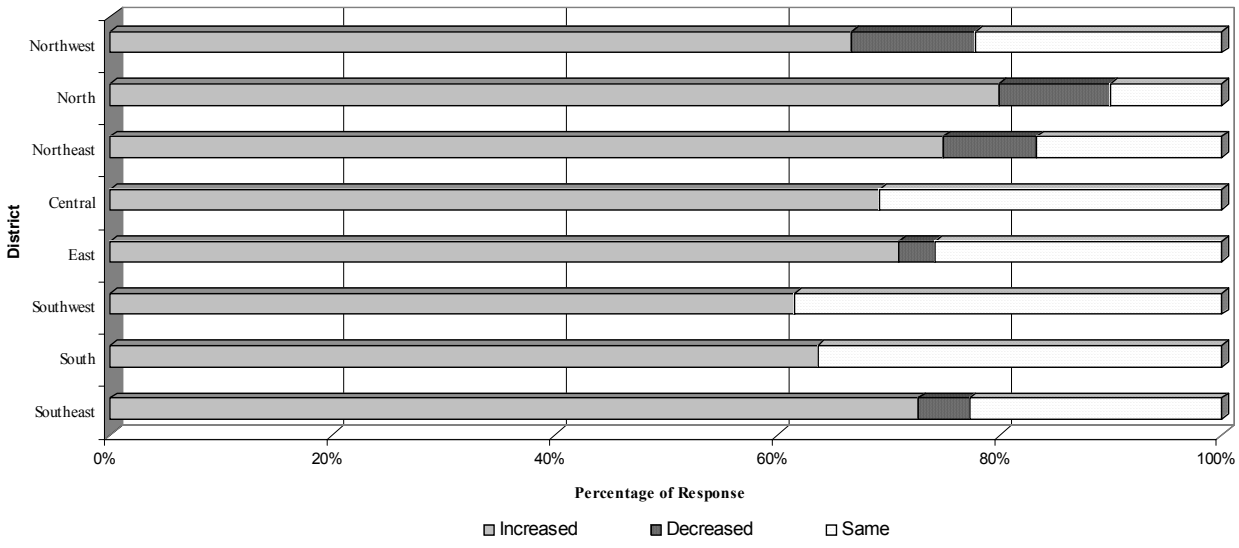
Source: 2004 Nebraska Farm Real Estate Market Developments Survey

rates, in that relatively low returns on certificates of deposit and other more secure investment options have made returns to investment in agricultural land look increasingly favorable to many potential non-farmer investors.

When asked specifically about this non-farmer presence in their local markets, 70 percent of this year's survey panel members believed the presence of non-farmer buyers has grown over the past 10 years in Nebraska (Figure 6). Moreover, this perception was consistent across the state (Figure 7). Given this pattern, it was not surprising to find panel members estimating that currently only two out of every three acres is farmed by buyers themselves, while about one in three acres is believed purchased with the intent of renting it out to tenants (Figure 8). Only a small part of today's agricultural land acreage being transferred, 2 percent, is seen as signaling the conversion of that land into non-agricultural uses.

Finally, in summarizing factors impacting land values, survey reporters saw several factors associated with current returns to land as being land value enhancing–either *directly* (such as current commodity

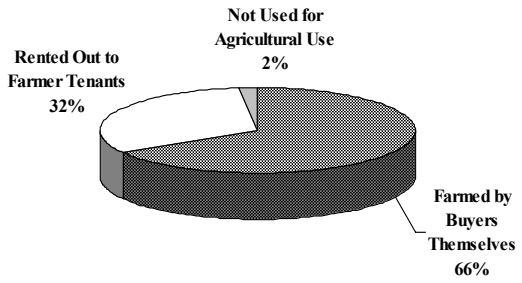
Figure 7. Respondents Perception of changes in the presence of Non-Farmer buyers over the past 10 years by region in Nebraska



Source: 2004 Nebraska Farm Real Estate Market Developments Survey.

price levels, federal farm program payments, and general economic expectations) and/or *indirectly* (financial health of current owners, favorable cost and availability of credit, returns to alternative investments). While current drought conditions were viewed as somewhat dampening, the irrigation water availability levels were perceived as mildly positive, a reflection of regional differences across the state. Only property tax aspects continued to be seen as somewhat negative on land value trends across the state in 2004.

Figure 8. Buyer Use of Recent Purchases, 2004



Source: Reporters' estimated distribution in 2004 UNL Nebraska Farm Real Estate Market Developments Survey.

Characteristics of Actual Land Transactions in 2003

Each year, UNL survey panelists are asked to provide specific information on actual sales which: (1) had occurred in their areas over the past 12 months, and (2) were deemed representative of their local agricultural land markets. Reporters to the 2004 survey provided detailed information on 350 transactions, which represents a sample of sufficient size for making some generalizations of current agricultural land market conditions and trends.

As noted in Table 3, the 2003 transactions vary widely from one area of the state to another, reflecting the wide diversity of land assets and agricultural structure which exists. Both in acreage size of transaction as well as in price per acre, the spectrum of reported sales exhibit considerable diversity by sub-state region. The East District has the smallest-sized parcels in the market, but the largest price per acre. Pasture land in this area is only a small part of the parcels transferred. By contrast, the majority of transferred acreage in the Northwest, North, and Central Districts in 2003 was pasture land.

Table 3. Land Characteristics of 2003 Agricultural Real Estate Transactions, 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	700	24	16	60	472	330,400
North	1552	9	29	62	606	940,500
Northeast	163	54	24	22	1591	259,300
Central	297	9	31	60	928	275,600
East	123	49	44	7	2345	288,400
Southwest	298	42	26	32	668	199,100
South	196	22	50	28	1325	259,700
Southeast	159	58	22	20	1474	234,400
State	295	28	29	43	1020	300,900

SOURCE: Based on 350 transactions which occurred across Nebraska during 2003 and reported in the 2004 UNL Nebraska Farm Real Estate Market Developments Survey.

Even with these regional variations, the overall dollar magnitude of the 2003 transfers was substantial throughout the state, averaging more than $300,000 per transaction. Despite the high level of financial outlay, it may seem surprising that a substantial portion of these transactions represented cash purchases with no debt financing involved. In 2003, 45 percent of the transactions were cash purchases (Table 4).

Table 4. Types of Financing Associated with 2004 Agricultural Real Estate Sales, by Agricultural Statistics District in Nebraska.

Agricultural Statistics District	Financing of Purchase				
	Cash Purchase	Mortgage	Contract for Deed	Other	Total
	- Percent -				
Northwest	35	62	3	0	100
North	46	42	8	4	100
Northeast	30	61	7	2	100
Central	64	25	8	3	100
East	51	46	3	0	100
Southwest	43	57	0	0	100
South	57	38	3	2	100
Southeast	39	54	5	2	100
State	45	48	5	2	100

SOURCE: Based on 350 transactions which occurred across Nebraska during 2003 and reported in the 2004 UNL Nebraska Farm Real Estate Market Developments Survey.

This level of cash purchases, which has prevailed for the past few years, implies buyers in the market typically have considerable financial means with which to participate. Certainly, those buyers who are exercising their “1031" tax exchange opportunities are part of this group who obviously can pay cash

outright. But also there are buyer-investors who are moving some of their financial wealth portfolio into agricultural land assets in order to achieve what they perceive as more favorable rates of return. For them, debt-financing is not necessary.

While the mortgage interest rates have remained relatively low over the past year, and the availability of credit from conventional financial institutions remains high, it may seem strange that there is any incidence of seller-financed contracts-for-deed in the agricultural land market. Yet, reporters did identify a small percentage of such transactions in 2004. The fact that they do exist today may reflect more interest in them on the part of sellers than the buyers. Given the recent relatively low rates of return on certificates of deposit and other lower-risk investment options, some sellers are willing to offer a contract-for-deed for a period of time in order to draw a more favorable rate of interest.

On the selling side of the market, estate settlement continued to be the largest seller group in 2003, followed by non-farmers (Table 5). Also, in many instances of sales by non-farmers, the situation involves an inheritance from a previous estate settlement rather than real estate that had been previously purchased by the seller.

The quitting farmer/rancher group is primarily constituted by those who are of retirement age and are selling all or part of their land holdings. It is likely that this seller group will become more predominant in the coming years as the average age of active farmers continues to rise.[4]

Table 5. Percent Distribution of Agricultural Real Estate Transactions in 2004 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	38	17	10	28	7
North	21	5	16	58	0
Northeast	9	27	37	27	0
Central	17	28	44	11	0
East	12	13	44	28	3
Southwest	21	33	29	13	4
South	14	24	32	27	3
Southeast	10	24	36	29	1
State	15	21	35	27	2

SOURCE: Based on 350 transactions which occurred across Nebraska during 2003 and reported in the 2004 UNL Nebraska Farm Real Estate Market Developments Survey.

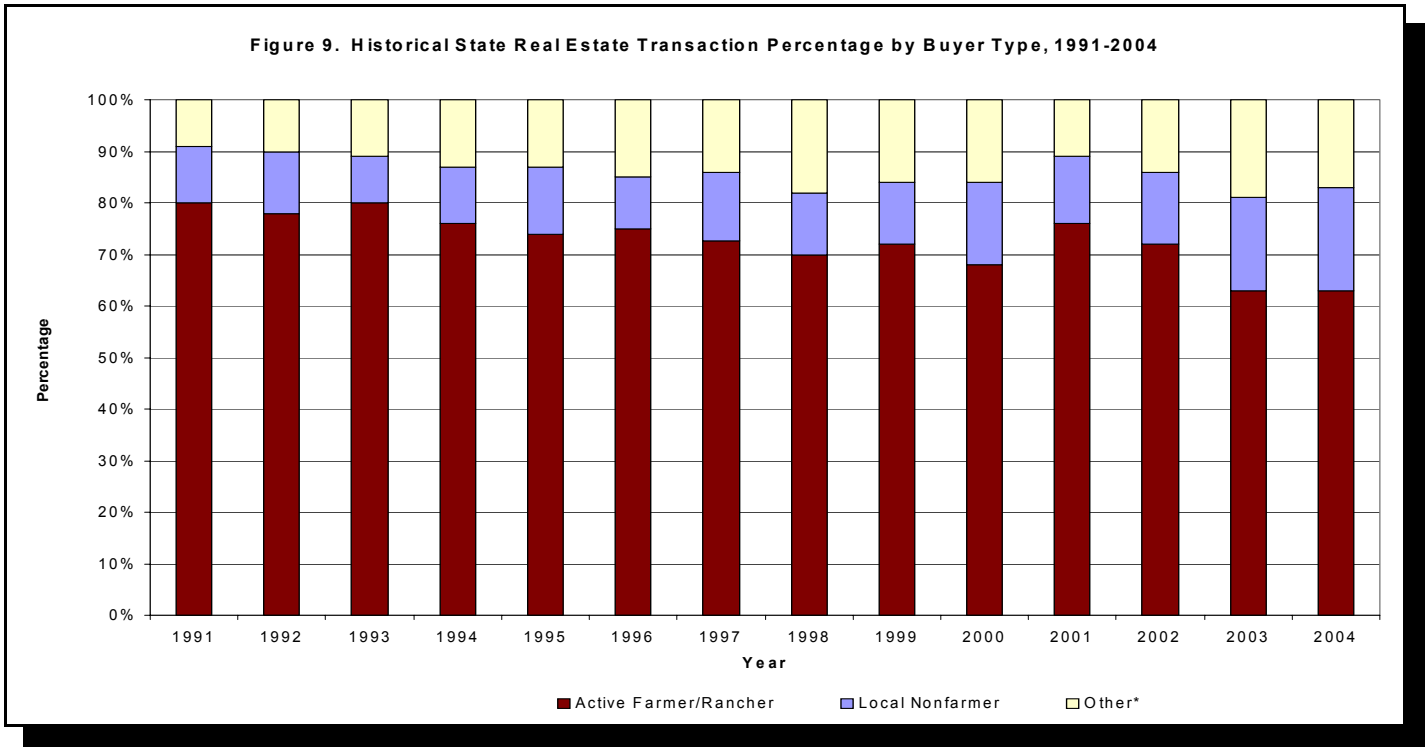
[4]According to the preliminary findings of the 2002 Agricultural Census, the average age of Nebraska farmers was 53.9 as compared with an average of 50.7 in 1992 an 48.5 in 1982.

As for the buying side of the agricultural land market, the majority of transactions in 2003 (63 percent) were acquired by active farmer/ranchers (Table 6). Moreover they were the major buyer class in all regions of the state. However, over the past decade their buying prominence has gradually declined (Figure 9). Presently, local non-farmers and other non-farmer groups represent nearly 40 percent of the buyers for the state as a whole–a pattern that further substantiates reporters' strong perceptions of the trend toward greater non-farmer buyer interest in Nebraska's agricultural land markets.

Table 6. Percent Distribution of Agricultural Real Estate Transactions in 2004 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	12	10	4	0
North	53	5	21	21	0
Northeast	68	18	7	6	1
Central	72	17	4	7	0
East	61	19	16	4	0
Southwest	83	8	4	4	1
South	57	19	19	5	0
Southeast	51	36	3	10	0
State	63	20	11	6	0

SOURCE: Based on 350 transactions which occurred across Nebraska during 2003 and reported in the 2004 UNL Nebraska Farm Real Estate Market Developments Survey.



Net Rates of Return to Agricultural Land

Each year, survey panel members are asked to estimate the average percentage rate of net return to land given current levels of market value. In the vernacular of real estate appraisal, this is referred to as the market-derived capitalization rate which is used in the income-capitalization approach to value estimation. In short, if a property being appraised has an expected net income flow of $100 per acre annually, and the market-derived capitalization rate is estimated to be 4 percent, then the implied current market value of that property is $2,500 per acre ($100/.04 = $2,500).

The estimated rates for 2004 were generally similar to previous-year levels for irrigated and pasture land classes, while being slightly lower for dryland cropland in seven of the eight regions (Table 7). For dryland cropland, the apparent percentage growth in perceived earnings to land over the previous year did not match the value percentage increases. As evident in the table, the market-perceived percentage rate of return has gradually declined over the past decade. The magnitude of decline has been about one percentage point for each of the land classes at the state level. In other words, buyers have been willing to bid land values somewhat beyond the growth rate of expected net annual earnings to that land. This is akin to a rising price/earnings ratio for stock market investors.

Regionally, 2004 estimated net rates of return were down from 2003 levels for all of the land classes in two of the districts–the Southwest and the South. As previously noted, these areas have experienced the major brunt of the multi-year drought as well as pervasive irrigation water limitations. Consequently, even with rising commodity price levels over the past year, the income-earnings potential in these areas has been muted by production shortfalls.

Table 7.Estimated Annual Net Rates of Return by Type of Land and Agricultural Statistics District, 1990-2004. [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
2002	5.4	5.9	5.5	5.3	4.5	6.2	5.3	5.1	5.4
2003	5.3	5.8	5.2	5.2	4.4	6.3	5.4	5.1	5.3
2004	5.3	6.1	5.2	5.2	4.7	5.6	5.3	5.3	5.3

Table 7.Estimated Annual Net Rates of Return by Type of Land and Agricultural Statistics District, 1990-2004. [ab]

Type of Land and Year	Agricultural Statistics District								State Ave.
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	
	Percent								
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
2002	4.0	4.6	5.3	5.1	4.5	4.7	4.6	4.9	4.7
2003	3.6	4.5	4.8	4.6	4.1	4.1	4.7	4.4	4.4
2004	3.5	4.4	4.5	4.3	3.8	3.9	4.4	4.6	4.2
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
2002	2.8	4.1	4.4	3.8	3.7	4.0	3.8	4.1	3.8
2003	2.4	3.3	3.8	3.3	3.4	3.4	3.9	3.8	3.4
2004	2.8	3.1	3.6	3.3	3.7	3.3	3.4	4.1	3.4

[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.

Cash Rental Rates for 2004

While estimated rates of return may provide a general pattern of earnings, it is also useful to observe the levels and trends of cash rental rates for building more specific measures of potential returns. Moreover, the rental market for agricultural land is very extensive in Nebraska with the total acreage under lease approaching half of the state's agricultural land base.[5] Thus, the local rental market is a significant companion market to the local transfer market throughout the state.

In 2004, UNL survey panelists estimated cash rental rates to be higher for most land classes and areas of the state (Table 8 and Appendix Table 6). Rental demand for cropland has been very spirited in most areas, and 2004 rates have accordingly moved upward from year-earlier levels. Cash rental rates for dryland cropland in the eastern part of the state are up nearly 6 percent from previous year levels. While the largest reported increase for dryland cropland occurred in the North District, this was somewhat of an aberration since cash rents reported for the previous year had fallen substantially. The 2004 cropland cash rental rates in the Northwest were generally steady.

Average rental rates for irrigated land also moved upward across most of the state in 2004. Highest average rents exceeded $150 per acre for the first time in 2004; and these occurred in the East District. It should be noted that these averages reflect arrangements where the landowner owns the entire irrigation system. If the tenant is providing some of the irrigation system, such as the power unit and/or the center pivot system, then this essentially represents a *rent-in-kind*, and thus the per-acre cash rent should be adjusted downward from the averages quoted here.

For each cropland type and in each area of the state, the range in cash rental rates is fairly broad, reflecting land quality differences. It appears the rental market participants are astute in adjusting negotiated rents to account for quality/productivity differences. For example, in the East District center pivot irrigated land at the lower end of the quality continuum is renting for an average of $130 per acre in 2004; which this land class at the high end of the quality range is renting for over $170 per acre–more than 30 percent higher. For many of the cropland classes across the state, the range differentials are even more extreme, with the upper end of cash rental rates often being more than 60 percent higher than the lower end of the range.

Pasture rental rates for 2004 are also higher than year-earlier levels, both on a per-acre and an animal unit per month basis (Table 9). In terms of dollars per animal unit month (the cow-calf pair rates), 2004 levels cluster in the $26 to $27 range for most of the major rangeland areas of the state. Under these averages, UNL survey panel members indicated that the landowner is typically providing adequate perimeter fencing and fencing materials to maintain it as well as maintaining water services; the tenant, in turn, is providing labor for monitoring and repairing the fences during the grazing season. When the animal-unit-month (AUM) rates move upwards towards the higher end of the ranges, respondents indicated that landowners are often providing additional services which normally are the responsibility of the tenant. Such services may include providing mineral blocks for the livestock as well as giving daily oversight of the herd.

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[5]See: Bruce Johnson, *Agricultural Land Ownership and Tenure Patterns in Nebraska*, NEBGUIDE, G03-1486-A.

Table 8. Reported Cash Rental Rates for Various Types of Nebraska Farmland: 2004 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	22	35	91	60	94	33	55	75
Range:								
High	25	45	111	76	113	42	67	92
Low	17	24	71	44	76	26	40	58
Gravity Irrigated Cropland:								
Average	88	105	129	134	138	101	128	131
Range:								
High	111	117	144	153	158	119	146	150
Low	66	80	113	109	116	85	107	110
Center Pivot Irrigated Cropland								
Average	97	114	144	139	151	117	139	143
Range:								
High	117	142	164	164	172	132	162	167
Low	78	96	124	113	130	99	118	122
Dryland Alfalfa:								
Average	b	b	92	63	85	b	53	74
Range:								
High	b	b	104	81	98	b	69	87
Low	b	b	73	51	67	b	45	60
Irrigated Alfalfa:								
Average	b	b	132	126	128	b	123	126
Range:								
High	b	b	151	139	144	b	137	143
Low	b	b	115	105	107	b	97	105
Other Hayland:								
Average	b	30	b	42	57	b	36	42
Range:								
High	b	42	b	54	72	b	45	56
Low	b	24	b	33	43	b	28	32
Pasture:								
Average	8	13	36	24	32	13	22	27
Range:								
High	10	16	44	29	43	16	30	37
Low	6	10	23	18	25	10	17	19

[a] SOURCE: Reporters' estimated cash rental rates (both averages and ranges) from the 2004 UNL Nebraska Farm Real Estate Market Developments Survey.
[b] Insufficient number of reports.

Table 9. Reported Cash Rental Rates for Pasture on a Monthly Rate Basis for 2004: Averages and Ranges by Agricultural Statistics District. [a]

Type of Land	Agricultural Statistics District							
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast
	Dollars Per Month							
Cow-Calf Pair Rates [c]								
Average	21.00	27.65	26.80	26.35	26.00	26.25	24.00	25.15
Range:								
High	26.20	31.65	32.70	31.55	29.55	30.25	28.20	30.25
Low	17.65	23.35	21.40	20.55	20.85	21.00	17.00	19.70
Stocker (500-600 lb) Rates:								
Average	14.00	16.00	18.00	16.80	b	16.00	b	b
Range:								
High	16.20	18.25	22.00	20.20	b	18.75	b	b
Low	11.20	13.75	14.00	13.40	b	13.50	b	b

[a] SOURCE: Reporters' estimated cash rental rates (both averages and ranges) from the 2004 UNL Nebraska Farm Real Estate Market Developments Survey.
[b] Insufficient number of reports.
[c] A 1,000 lb. cow with calf at side grazed for one month during the normal usage season.

Rent-to-Value Ratios

A useful measure for assessing market patterns is to combine current market values with typical cash rental rates and estimate the *gross rent-to-value* ratio. This can serve as another indicator of the relationship of economic returns to the asset value, even though it does not factor into the equation any owner costs such as real estate taxes. The ratios presented in Table 10 show rather wide variations across the land classes and geographic areas of the state. Typically, irrigated land has somewhat higher ratios because of higher ownership costs associated with the irrigation systems. For dryland cropland and pastureland the ownership costs, aside from property taxes, are minimal; and consequently the rent-to-value ratios derived from the rental market negotiations tend to be lower.

This rent-to-value ratio can be used to infer either: (1) a proxy of current of market value of a particular land parcel given knowledge of its cash rental rates or (2) what the appropriate cash rental rate level may be given knowledge of its current market value. As presented in the table, the 2004 gross rent-to-value ratios can be used for comparison levels across a variety of land type and quality situations. For example, consider a parcel of center pivot cropland in the Central District which is able to command a cash rent of $160 per acre, the high end of the range. Given a gross rent-to-value ratio for this land class of 7.0 percent, the implied current market value of this parcel is $2285 per acre ($160/.07 = $2285). Or, a lower-grade pasture parcel in that same district with a current market value of $400 per acre would, according to the rent-to-value ratio of 4.8 percent would suggest an appropriate annual cash rent of $19 per acre ($400 x .048 = $19). In other words, both rents and values can be adjusted across the various grade levels for identifying the levels appropriate for quality differences of specific tracts of land.

Table 10. 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, 2004. [a]

Agricultural Statistics District and Type of Land	Gross Average Cash Rent Per Acre	Associated Value Per Acre [b]	Gross Rent to Value
	---------- Dollars ----------		--- Percent ---
Northwest:			
Dryland Cropland	22	315	7.0
Gravity Irrigated Cropland	88	965	9.1
Center Pivot Irrigated Cropland [c]	97	1050	9.2
Pastureland	8	175	4.6
North:			
Dryland Cropland	35	500	7.0
Gravity Irrigated Cropland	105	1150	9.1
Center Pivot Irrigated Cropland [c]	114	1350	8.4
Pastureland	13	285	4.6
Northeast:			
Dryland Cropland	91	1550	5.9
Gravity Irrigated Cropland	129	2100	6.1
Center Pivot Irrigated Cropland [c]	144	2295	6.3
Dryland Alfalfa	92	1265	7.3
Irrigated Alfalfa	132	1865	7.1
Pastureland	36	665	5.4
Central:			
Dryland Cropland	60	885	6.8
Gravity Irrigated Cropland	134	1955	6.9
Center Pivot Irrigated Cropland [c]	139	1995	7.0
Dryland Alfalfa	63	875	7.2
Irrigated Alfalfa	126	1755	7.2
Other Hayland	42	715	5.9
Pastureland	24	495	4.8
East:			
Dryland Cropland	94	1825	5.2
Gravity Irrigated Cropland	138	2430	5.7
Center Pivot Irrigated Cropland [c]	151	2680	5.6
Dryland Alfalfa	85	1525	5.6
Irrigated Alfalfa	128	2060	6.2
Other Hayland	57	1050	5.4
Pastureland	32	720	4.4
Southwest:			
Dryland Cropland	33	475	6.9
Gravity Irrigated Cropland	101	1145	8.8
Center Pivot Irrigated Cropland [c]	117	1255	9.3
Pastureland	13	270	4.8
South:			
Dryland Cropland	55	840	6.5
Gravity Irrigated Cropland	128	1765	7.3
Center Pivot Irrigated Cropland [c]	139	2030	6.8
Pastureland	23	460	5.0
Southeast:			
Dryland Cropland	75	1295	5.8
Gravity Irrigated Cropland	131	2065	6.3
Center Pivot Irrigated Cropland [c]	143	2250	6.4
Pastureland	27	620	4.4

[a] Source: 2004UNL 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 of this land class.

Analysis of Typical Returns to Agricultural Land

While general trends and patterns are of interest to property owners, it is likely that their major question is, "What is the annual rate of return on my investment given its current market value?" This is a key economic measure for making any kind of investment decisions. Consequently, we have included a more detailed breakdown of ownership costs, rents, and returns for a series of typical land groups by sub-state area. We have also calculated debt-servicing capacity of these asset returns in today's market which provide further insight into the cash-flow considerations of agricultural land investment. These various land scenarios are presented in Table 11.

Using this more detailed analysis which incorporates owner costs, the annual percentage rate of return to the various land classes at today's current market values range from a low of 3.0 percent for Sandhills rangeland in Northern Nebraska up to a high of 5.1 percent for dryland cropland in Southwest Nebraska. In the majority of cases, calculated returns fall within the 4.0 to 4.5 percent range.

For 15-year amortized loans, the associated debt-servicing capacity for the various land scenarios are in the 30 to 50 percent range (the amount of current market value covered by the annual net returns). The range of debt-servicing capacity for typical 25-year loans was 37 to 63 percent. This infers that, unless a substantial down-payment is associated with the land purchase, it will not cash flow, even with the relatively low current mortgage interest rates.

For the dryland cropland and rangeland scenarios, the calculated returns in Table 11 are generally consistent with those estimated by survey panel members and reported in Table 7. However, for the irrigated land classes, the calculated percentage net returns of Table 11 are all more than a percentage point below the reported estimates in Table 7. As we have reported in earlier reports in this series, this disparity appears to be due largely to the assignment of fixed costs of deprecation, insurance, and interest on irrigation equipment investments. Even though these costs may not be significant out-of-pocket costs in any given year, the irrigation system itself represents a depreciating asset which must be periodically replaced. It is also an asset that can be damaged by natural disasters, and, thus, needs to be insured by the owner. When landowners are providing the complete irrigation system, these costs, on an annualized basis, can easily reach $25 per acre on gravity irrigated land and $35 per irrigated acre on center pivot irrigated land. The appropriate assignment of these ownership costs in Table 11 results in the net returns estimates on irrigated land scenarios being pared down considerably.

The fact that these inconsistencies for irrigated land exist between the survey reporter estimates and the calculated net returns in Table 11 does not imply that either set is in error. We believe that survey panel members are reporting an actual market pattern in which owners typically do **not** take into full account the depreciation and insurance expenses on irrigation systems when negotiating annual cash rental rate levels. Because irrigation equipment replacement is intermittent in nature or may be factored downward somewhat by income tax considerations (deductible expenses), owners of irrigated land appear to be willing to negotiate rent levels which yield percentage rates of return that are often below those associated with dryland cropland.

Consideration of these true costs of irrigation systems become increasingly important as the incidence increases of rental arrangements involving tenant ownership of part of the system. When the tenant is providing portions of the system, such as the power unit and/or the center pivot, he/she is essentially paying a portion of the rent to the owner *"in kind"*. Both parties to the rental contract need to recognize these contributions and adjust the negotiated dollar rent accordingly.[6]

Effects of Water Availability

There is some evidence that changes in water availability, both rainfall and irrigation water, have affected land values in recent years. The value of land with irrigation potential increased most rapidly during the 2002 to 2004 drought in the East, Northeast and Southeast regions (Appendix Table 4). Drought conditions tend to increases the economic payoff from investing in irrigation by increasing the differences between irrigated and dryland crop yields. Hence, the effects were largest in the East where dryland yields are normally quite high and thus more vulnerable to drought, relative to Western Nebraska where dryland yields, and thus the potential returns to irrigation, were affected to a much lesser extent.

The effect of irrigation water availability on land values is most noticeable to the Southwest region. This is the only region where irrigated land actually decreased in value during the 2000 to 2004 time period. During this period current surface water supplies were sharply reduced by drought and both future groundwater and surface water resources became less certain as Nebraska's water supply obligations to Kansas were established by the Courts. The Northwest region had the next lowest rate of change in land values. Many irrigators in this regions are dependent exclusively on surface water supplies which were sharply curtailed by a snowfall drought upstream in the mountains of Colorado and Wyoming.

[6]In making these adjustments for the parcelization of the irrigation system, market participants will find the following report useful: *Estimated Irrigation Costs, 2001*, Nebraska Cooperative Extension CC371.

Table 11: Analysis of Typical Net Returns For Selected Land Types and Locations Using Typical Cash Rental Rates, 2004 [a/]

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 .	$1,550.00	$2,300.00	$1,850.00	$2,500.00	$1,350.00
2.	Annual cash rent per acre (gross)	$95.00	$150.00	$100.00	$150.00	$80.00
3.	Gross Rent-to-Value ratio	6.1%	6.5%	5.4%	6.0%	5.9%
	Annual owner expenses (per acre)					
4.	Real Estate Taxes[c]	$21.70	$32.20	$25.90	$35.00	$18.90
5.	Irrigation Costs[d]	—	$33.00	—	$25.00	—
6.	Incidental Costs	$3.00	$4.00	$3.00	$4.00	$4.00
7.	Total Owner Costs	$24.70	$69.20	$28.90	$64.00	$22.90
8.	Annual net returns per acre (before income taxes)	$70.30	$80.80	$71.10	$86.00	$57.10
9.	Percentage rate of return to land (before income taxes)	4.5%	3.5%	3.8%	3.4%	4.2%
10.	Mortgage amount per acre which could be serviced by the net returns assuming:					
	15-year amortized loan at 6.0% interest	$682.80	$784.70	$690.50	$835.30	$554.60
	% of purchase price	44%	34%	37%	33%	41%
	25-year amortized loan at 6.5% interest	$857.50	$985.60	$867.30	$1,049.00	$696.50
	% of purchase price	55%	43%	47%	42%	52%

(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	$475.00	$1,275.00	$1,000.00	$1,350.00	$285.00
2.	Annual cash rent per acre (gross)	$33.00	$118.00	$90.00	$115.00	$13.00
3.	Gross Rent-to-value ratio	6.9%	9.2%	9.0%	8.5%	4.6%
	Annual owner expenses (per acre)					
4.	Real Estate Taxes[c/]	$6.65	$17.85	$14.00	$18.90	$3.40
5.	Irrigation Costs[d/]	—	$35.00	$25.00	$33.00	—
6.	Incidental Costs	e$2.00	$4.00	$3.00	$4.00	$1.00
7.	Total Owner Costs	$8.65	$56.85	$42.00	$55.90	$4.40
8.	Annual net returns per acre (before income taxes)	$24.35	$61.15	$48.00	$59.10	$8.60
9.	Percentage rate of return to land (before income taxes)	5.1%	4.8%	4.8%	4.4%	3.0%
10.	Mortgage amount per acre which could be serviced by the net returns assuming:					
	15-year amortized loan at 6.0% interest	$236.50	$593.90	$466.20	$574.00	$83.50
	% of purchase price	50%	47%	47%	43%	29%
	25-year amortized loan at 6.5% interest	$297.00	$745.90	$585.50	$720.90	$104.90
	% of purchase price	63%	59%	59%	53%	37%

a/ Current purchase prices and cash rents based upon the UNL 2004 Nebraska Farm Real Estate Market Survey.
b/ Value of pivot of approximately $200.00 per acre added to the land value.
c/ Real estate taxes assumed to be 1.4 percent of purchase price for all cropland, and 1.2 percent of purchase price for all rangeland.
d/ Estimated fixed costs of depreciation, insurance on irrigation equipment, and interest on investment based on *Estimated Irrigation Costs,* 2001, Nebraska Cooperative Extension CC371.

Appendix

Appendix Table 1. Farm Real Estate Values in Nebraska, USDA Historical Series, 1860-2004.[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
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.

Continued

Appendix Table 1. Farm Real Estate Values in Nebraska, USDA Historical Series, 1860-2004.[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	54.0	46.4	730	627.3	33,872	5,250
2002	53.0	46.4	765	669.7	35,496	5,502
2003	52.0	46.4	800	713.8	37,120	5,754
2004[b]	52.0	46.4	874	779.9	40,554	6,286

[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 electronic 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 2004.[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 in Values[c]
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
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

See footnotes at end of table.

Continued:

Appendix Table 2. Deflated USDA Farmland Values and Percent Changes for Nebraska, 1930 to 2004.[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 in Values[c]
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	104.01	540	6.9
1995	580	106.40	545	0.9
1996	610	108.78	561	2.9
1997	620	110.85	559	-0.4
1998	645	112.32	574	2.7
1999	670	113.70	589	2.6
2000	695	115.80	600	1.9
2001	730	117.74	620	3.3
2002	765	120.04	637	2.7
2003	800	121.50	658	3.3
2004[d]	874	122.82	712	8.2

[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 USDA average value per acre by the 1st Quarter GDP Price Deflator (1992 x 100) and multiplying by 100.

[c] 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.

[d] Preliminary estimate.

Appendix Table 3. Nominal and Deflated Agricultural Land Values by Selected Types of Land in Nebraska, 1978 to 2004.[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. - - - - - - - - - -					- - - - - - - - - - - - - - - Dollars/Ac. - - - - - - - - - - - - - - -			
1978	492	947	153	500	49.42	996	116	310	1012
1979	602	1 114	186	597	53.51	1,125	2082	348	1116
1980	702	1272	209	695	58.18	1,207	2186	359	1195
1981	778	1 341	230	749	64.15	1,213	2090	359	1168
1982	742	1293	227	720	68.86	1,078	1878	330	1046
1983	681	1 130	205	642	72.08	945	1568	284	891
1984	632	1049	184	588	75.02	842	1398	245	784
1985	501	833	135	450	77.63	645	1073	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	1016	159	514
1991	536	977	159	492	96.27	557	1015	165	511
1992	551	1000	166	510	99.13	556	1009	167	514
1993	573	1045	172	531	101.84	563	1026	169	521
1994	608	1107	183	566	104.01	585	1064	176	544
1995	623	1149	192	582	106.40	586	1080	180	545
1996	656	1235	189	608	108.78	603	1135	174	559
1997	706	1338	202	654	110.85	637	1207	182	590
1998	767	1471	224	710	112.32	683	1310	199	632
1999	749	1428	219	690	113.70	659	1256	193	607
2000	752	1455	230	698	115.80	649	1256	199	603
2001	760	1459	243	709	117.74	645	1239	206	602
2002	779	1622	249	749	120.04	649	1351	207	624
2003	788	1636	250	757	121.50	649	1347	206	623
2004	862	1788	275	827	122.82	702	1456	224	673

[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, 1978-2004.[a]

Type of Land & Year	Agricultural Statistics District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	State[cd]
	Dollars Per Acre								
Dryland Cropland (No Irrigation Potential)									
1978	289	253	648	319	817	360	468	660	492
1979	317	319	813	397	1061	387	541	808	602
1980	347	340	920	471	1296	454	626	971	702
1981	419	346	1,009	519	1409	546	754	1,060	778
1982	411	335	966	502	1325	522	752	988	742
1983	387	321	864	450	1204	469	664	939	681
1984	379	300	779	416	1129	444	653	840	632
1985	325	237	643	340	905	365	474	612	501
1986	259	198	499	263	669	308	412	423	384
1987	242	190	520	246	626	288	377	416	371
1988	267	202	576	301	692	294	411	513	416
1989	305	250	688	370	824	371	491	621	500
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	1000	373	573	701	573
1994	345	314	797	504	1090	390	620	741	608
1995	335	320	803	519	1144	403	637	764	623
1996	358	338	823	535	1244	419	658	799	656
1997	381	363	909	588	1336	432	701	852	706
1998	385	390	982	631	1477	457	753	956	767
1999	346	367	968	635	1462	428	740	953	749
2000	331	400	970	648	1464	434	708	958	752
2001	319	403	996	645	1493	433	725	954	760
2002	325	407	1095	680	1523	460	743	1024	779
2003	319	360	1107	710	1585	453	748	1059	788
2004	328	416	1231	758	1717	473	800	1190	862

See footnotes at end of table.

Continued:

Appendix Table 4. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1978-2004.[a]

Type of Land & Year	Agricultural Statistics District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	State[cd]
	Dollars Per Acre								
Dryland Cropland (Irrigation Potential)									
1978	409	387	741	590	1128	471	873	953	757
1979	449	514	930	708	1411	520	1102	1152	926
1980	533	565	1132	767	1733	628	1282	1352	1107
1981	680	533	1225	880	1785	733	1432	1402	1192
1982	658	535	1097	833	1665	685	1411	1268	1108
1983	563	462	975	680	1462	654	1175	1160	979
1984	507	441	911	638	1349	631	1050	1069	905
1985	425	340	746	486	1013	504	705	723	684
1986	312	300	598	367	746	377	573	545	524
1987	285	250	567	325	707	328	503	508	484
1988	310	266	646	380	801	339	576	623	552
1989	376	339	773	483	980	433	684	772	674
1990	371	367	840	539	1056	473	706	816	720
1991	396	360	817	604	1083	478	756	777	725
1992	411	381	823	658	1124	476	792	835	753
1993	419	400	884	678	1195	445	883	888	794
1994	430	436	962	739	1338	482	923	936	861
1995	429	424	1002	781	1397	493	941	979	891
1996	441	444	1040	845	1525	508	1008	1046	948
1997	458	475	1103	917	1643	543	1114	1130	1018
1998	482	510	1219	986	1810	578	1216	1250	1115
1999	436	480	1216	956	1792	538	1173	1172	1081
2000	418	492	1220	951	1800	546	1112	1187	1080
2001	409	500	1256	981	1807	572	1126	1234	1100
2002	418	514	1355	1020	1814	581	1145	1318	1135
2003	396	480	1410	1095	1930	558	1118	1290	1159
2004	445	534	1554	1137	2093	586	1217	1469	1272

See footnotes at end of table.

Continued:

Appendix Table 4. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1978-2004.[a]

Type of Land & Year	Agricultural Statistics District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	State[cd]
	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
2002	182	299	706	523	796	325	537	629	347
2003	180	280	750	562	801	290	534	640	341
2004	212	307	794	611	926	305	558	716	375

See footnotes at end of table.

Continued:

Appendix Table 4. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1978-2004.[a]

Type of Land & Year	Agricultural Statistics District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	State[cd]
	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
2002	151	218	515	419	584	213	378	499	249
2003	149	210	559	446	590	219	389	490	250
2004	163	230	619	494	655	240	422	550	275

See footnotes at end of table.

Continued:

Appendix Table 4. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1978-2004.[a]

Type of Land & Year	Agricultural Statistics District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	State[cd]
	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
2002	313	388	611	502	694	373	483	529	446
2003	319	380	660	557	765	375	508	575	464
2004	339	433	715	577	815	413	513	611	505

See footnotes at end of table.

Continued:

Appendix Table 4. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1978-2004.[a]

Type of Land & Year	Agricultural Statistics District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	State[cd]
	Dollars Per Acre								
Gravity Irrigated Cropland									
1978	1246	796	1030	1545	1624	1134	1412	1404	1410
1979	1300	964	1289	1705	1910	1197	1746	1772	1638
1980	1369	1020	1547	1976	2317	1329	2046	2026	1906
1981	1555	1054	1781	2088	2403	1493	2230	2026	2030
1982	1580	1033	1771	2053	2269	1598	2254	1924	1994
1983	1361	1000	1430	1798	1969	1412	1872	1854	1737
1984	1269	1020	1429	1613	1838	1250	1762	1639	1601
1985	1042	817	1102	1304	1329	1010	1283	1171	1214
1986	754	612	900	940	975	867	963	957	920
1987	650	567	775	802	959	718	863	843	826
1988	668	691	862	948	1151	740	994	956	947
1989	815	900	1100	1210	1462	841	1232	1170	1182
1990	841	900	1186	1413	1513	895	1390	1285	1287
1991	834	917	1250	1518	1622	975	1480	1306	1363
1992	889	1035	1221	1563	1653	1021	1583	1413	1418
1993	857	1058	1246	1609	1730	1018	1643	1479	1461
1994	875	1070	1250	1666	1842	1093	1728	1568	1533
1995	857	1065	1260	1671	1887	1090	1731	1606	1548
1996	870	1070	1361	1738	1989	1138	1800	1697	1621
1997	890	1115	1466	1858	2160	1167	1943	1853	1740
1998	925	1150	1575	1972	2340	1200	2042	1936	1847
1999	894	1050	1575	1861	2247	1198	1945	1813	1768
2000	907	1025	1696	1754	2279	1325	1856	1831	1765
2001	900	1033	1715	1729	2273	1279	1810	1843	1750
2002	914	1080	1759	1825	2298	1350	1827	1928	1821
2003	890	1075	1760	1835	2401	1213	1863	1899	1840
2004	925	1125	1867	1961	2531	1297	1969	2087	1957

See footnotes at end of table.

Continued:

Appendix Table 4. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1978-2004.[a]

Type of Land & Year	Agricultural Statistics District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	State[cd]
	Dollars Per Acre								
Center Pivot Irrigated Cropland[b]									
1978	771	678	956	877	1,484	813	1023	1286	947
1979	915	770	1164	1076	1690	895	1291	1590	1114
1980	894	886	1372	1223	2043	971	1535	1795	1272
1981	973	816	1456	1312	2110	1105	1732	1900	1341
1982	989	810	1332	1270	2010	1123	1681	1748	1293
1983	847	769	1217	1016	1727	926	1391	1643	1130
1984	809	698	1130	969	1655	827	1350	1465	1049
1985	691	581	875	850	1243	691	1055	1020	833
1986	496	400	700	628	970	558	788	788	634
1987	417	396	703	541	888	487	665	723	580
1988	446	441	800	622	1038	548	792	820	661
1989	532	604	993	779	1320	683	1021	1056	841
1990	619	710	1090	910	1393	765	1117	1133	935
1991	651	714	1129	1053	1461	748	1229	1194	977
1992	681	740	1084	1085	1510	783	1263	1228	1000
1993	641	745	1156	1160	1593	799	1356	1346	1045
1994	690	800	1215	1200	1707	850	1425	1413	1107
1995	693	825	1254	1268	1793	882	1454	1474	1149
1996	710	913	1320	1340	1930	981	1550	1565	1235
1997	748	962	1427	1507	2111	1058	1696	1725	1338
1998	829	1020	1583	1698	2332	1139	1863	1907	1471
1999	750	984	1581	1616	2288	1124	1830	1806	1428
2000	750	981	1609	1579	2424	1192	1795	1810	1455
2001	742	965	1653	1602	2420	1152	1778	1898	1459
2002	775	1043	1775	1693	2401	1167	1830	1959	1622
2003	750	1075	1840	1785	2460	1033	1846	1981	1636
2004	806	1211	2004	1901	2669	1123	2044	2218	1788

See footnotes at end of table.

Continued:

Appendix Table 4. Average Reported Value of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1978-2004.[a]

Type of Land & Year	Agricultural Statistics District								
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast	State[cd]
	Dollars Per Acre								
All Land Average[c]									
1978	279	201	674	608	1125	363	796	844	500[d]
1979	307	244	836	699	1376	405	970	1,044	597
1980	333	269	989	800	1670	472	1139	1215	695
1981	397	271	1077	865	1748	538	1268	1260	749
1982	396	269	1004	843	1643	527	1272	1173	720
1983	343	248	890	734	1475	480	1057	1099	642
1984	318	229	829	654	1341	442	990	989	588
1985	258	180	664	528	1007	347	706	689	450
1986	190	136	522	379	745	273	543	518	339
1987	165	115	502	324	707	232	474	482	306
1988	173	124	567	385	817	241	545	579	346
1989	210	171	689	495	1009	300	673	711	432
1990	219	202	744	580	1069	331	734	763	473
1991	226	215	747	639	1115	341	787	756	492
1992	239	226	737	669	1156	348	827	800	510
1993	239	226	790	693	1217	346	885	845	531
1994	249	244	835	728	1325	375	935	894	566
1995	250	251	860	744	1378	384	944	925	582
1996	254	256	895	769	1479	398	984	978	608
1997	269	275	962	833	1600	417	1066	1057	654
1998	288	295	1053	897	1754	450	1140	1162	710
1999	275	285	1052	859	1718	439	1099	1111	690
2000	276	299	1050	842	1737	464	1056	1121	698
2001	274	312	1107	854	1747	471	1060	1143	709
2002	283	321	1221	896	1768	500	1096	1204	749
2003	276	308	1266	939	1850	467	1102	1204	757
2004	302	343	1388	1005	1999	500	1188	1354	827

[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 Quality Grades of Land in Nebraska by Agricultural Statistics District, 1999-2004. [a]

District and Type of Land	Reported Value Per Acre											
	Low Grade						High Grade					
	1999	2000	2001	2002	2003	2004	1999	2000	2001	2002	2003	2004
	Dollars Per Acre											
Northwest:												
Dry Crop (No irr. potential)[7]	235	220	225	230	225	235	405	385	365	365	340	350
Dry Crop (Irr. pot.)	360	335	335	340	325	370	500	490	480	490	475	530
Grazing (Tillable)	130	140	140	145	150	170	205	210	200	205	205	230
Grazing (Nontillable)	95	105	105	115	115	125	150	160	160	170	170	190
Hayland	230	235	255	255	245	275	380	360	370	370	370	400
Gravity Irrigated	600	600	585	610	555	575	1090	1130	1020	1050	990	1040
Center Pivot Irrigated[b]	530	530	565	585	605	625	830	890	890	940	920	1000
North:												
Dry Crop (No irr. potential)	270	280	310	325	290	335	465	490	495	530	450	510
Dry Crop (Irr. pot.)	360	390	385	425	425	465	575	600	600	635	600	665
Grazing (Tillable)	230	245	250	255	260	290	365	345	325	360	345	375
Grazing (Nontillable)	160	180	170	165	165	180	250	285	290	280	265	305
Hayland	240	300	310	310	305	365	455	485	470	475	465	525
Gravity Irrigated	900	875	815	870	875	900	1335	1325	1265	1270	1250	1300
Center Pivot Irrigated[b]	750	765	690	750	770	865	1150	1175	1160	1185	1260	1420
Northeast:												
Dry Crop (No irr. potential)	725	740	805	870	880	955	1200	1175	1230	1350	1385	1540
Dry Crop (Irr. pot.)	960	1000	1055	1065	1090	1180	1385	1415	1545	1665	1685	1845
Grazing (Tillable)	505	475	530	575	600	650	710	705	770	815	850	920
Grazing (Nontillable)	345	360	365	470	450	490	515	530	590	650	670	735
Hayland	425	445	465	500	580	630	640	655	695	740	780	850
Gravity Irrigated	1240	1365	1310	1390	1230	1310	1710	1945	1865	1945	1930	2075
Center Pivot Irrigated[b]	1270	1265	1295	1435	1425	1555	1780	1850	1925	2030	2125	2350
Central:												
Dry Crop (No irr. potential)	500	505	495	530	570	605	765	795	815	845	895	980
Dry Crop (Irr. pot.)	700	710	740	785	840	875	1170	1195	1235	1280	1325	1360
Grazing (Tillable)	410	415	425	455	485	530	585	590	665	685	735	835
Grazing (Nontillable)	290	300	315	355	370	400	400	425	460	502	520	580
Hayland	375	345	360	405	460	490	545	530	550	605	675	705
Gravity Irrigated	1325	1190	1215	1320	1315	1410	2045	1920	2035	2155	2170	2310
Center Pivot Irrigated[b]	1200	1085	1100	1190	1250	1340	1840	1785	1910	2025	2135	2325

See footnotes at end of table.

Continued:

Appendix Table 5. Historical Per Acre Value Range for Different Types and Quality Grades of Land in Nebraska by Agricultural Statistics District, 1999-2004. [a]

District and Type of Land	Reported Value Per Acre											
	Low Grade						High Grade					
	1999	2000	2001	2002	2003	2004	1999	2000	2001	2002	2003	2004
	Dollars Per Acre											
East:												
Dry Crop (No irr. potential)	1060	1070	1095	1160	1255	1325	1727	1735	1695	1730	1805	1945
Dry Crop (Irr. pot.)	1350	1365	1395	1380	1540	1625	2055	2035	2015	2040	2140	2405
Grazing (Tillable)	480	510	590	625	640	730	780	850	895	980	990	1155
Grazing (Nontillable)	395	425	420	465	505	570	605	625	700	720	735	780
Hayland	535	530	565	550	630	670	800	760	875	900	1060	1140
Gravity Irrigated	1740	1745	1760	1805	1900	1965	2510	2525	2560	2500	2615	2805
Center Pivot Irrigated[b]	1720	1755	1815	1790	1895	2035	2585	2640	2600	2545	2600	2930
Southwest:												
Dry Crop (No irr. potential)	355	350	350	380	370	380	495	490	520	570	530	555
Dry Crop (Irr. pot.)	450	445	465	490	495	515	610	610	635	650	655	685
Grazing (Tillable)	215	225	230	255	235	250	285	315	350	380	375	395
Grazing (Nontillable)	155	165	165	180	185	210	215	230	235	255	270	290
Hayland	315	325	330	345	355	370	455	505	515	535	560	615
Gravity Irrigated	900	1005	985	1045	1010	1015	1280	1415	1415	1485	1445	1650
Center Pivot Irrigated[b]	800	855	820	830	790	890	1135	1330	1285	1320	1250	1300
South:												
Dry Crop (No irr. potential)	500	485	505	535	550	580	885	865	865	865	865	930
Dry Crop (Irr. pot.)	790	755	745	805	830	900	1360	1275	1345	1280	1255	1390
Grazing (Tillable)	350	340	395	395	380	405	555	535	655	640	585	600
Grazing (Nontillable)	235	235	270	285	310	335	390	375	450	455	440	470
Hayland	260	255	310	340	360	365	445	435	515	550	550	565
Gravity Irrigated	1335	1260	1265	1255	1350	1415	2140	2020	2005	1960	2010	2150
Center Pivot Irrigated[b]	1270	1160	1200	1275	1285	1400	1965	1910	1930	1975	2005	2225
Southeast:												
Dry Crop (No irr. potential)	725	670	680	750	800	890	1255	1200	1150	1290	1325	1500
Dry Crop (Irr. pot.)	810	790	835	915	1015	1120	1345	1245	1350	1485	1625	1830
Grazing (Tillable)	455	440	445	490	495	545	670	685	690	730	720	800
Grazing (Nontillable)	330	340	340	355	375	425	565	600	535	565	560	620
Hayland	385	400	425	460	480	505	580	570	585	620	690	740
Gravity Irrigated	1355	1345	1345	1450	1490	1630	1980	2060	2085	2090	2075	2300
Center Pivot Irrigated[b]	1220	1285	1395	1490	1540	1730	1950	1940	2090	2080	2125	2380

[a] Source: UNL 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, 1981-2004.[a]

Type of Land and Year	Agricultural Statistics District							
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast
	Dollars Per Acre							
Dryland Cropland								
1981	b	b	60	43	68	35	38	55
1982	b	b	67	38	71	34	38	60
1983	b	b	63	43	66	25	41	57
1984	b	b	63	41	72	29	44	57
1985	b	b	55	38	65	26	40	50
1986	b	b	52	29	58	25	35	45
1987	b	b	55	29	58	23	35	45
1988	b	b	58	35	62	25	38	48
1989	b	b	65	42	70	26	43	52
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
2002	21	38	85	54	87	31	53	69
2003	22	32	86	59	89	32	52	71
2004	22	35	91	60	94	33	55	75

See footnotes at end of table.

Continued:

Appendix Table 6. Historical Average Cash Rental Rates of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1981-2004.[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
2002	84	100	124	128	136	104	128	131
2003	86	98	120	129	135	97	125	128
2004	88	105	123	134	138	101	128	131

See footnotes at end of table.

Continued:

Appendix Table 6. Historical Average Cash Rental Rates of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1981-2004.[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
2002	96	108	132	131	146	115	133	135
2003	97	105	137	134	145	115	135	138
2004	97	114	144	139	151	117	139	143

See footnotes at end of table.

Continued:

Appendix Table 6. Historical Average Cash Rental Rates of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1981-2004.[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
1983	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
2002	b	b	86	55	82	b	56	b
2003	b	b	84	62	77	b	53	68
2004	b	b	92	63	85	b	53	74

See footnotes at end of table.

Continued:

Appendix Table 6. Historical Average Cash Rental Rates of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1981-2004.[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
2002	b	b	124	111	121	b	116	b
2003	b	b	125	121	124	b	117	b
2004	b	b	132	126	128	b	123	126

See footnotes at end of table.

Continued:

Appendix Table 6. Historical Average Cash Rental Rates of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1981-2004.[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
2002	b	b	50	38	51	b	36	b
2003	b	b	46	36	53	b	33	b
2004	b	30	b	42	57	b	36	42

See footnotes at end of table.

Continued:

Appendix Table 6. Historical Average Cash Rental Rates of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1981-2004.[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	b	16	10	22	6	10	16
1987	4	4	18	10	20	5	11	15
1988	4	5	20	12	21	6	12	18
1989	5	7	23	15	23	7	15	19
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
2002	8	13	33	24	32	12	21	25
2003	7	11	33	23	28	11	22	24
2004	8	13	36	24	32	13	22	27

See footnotes at end of table.

Continued:

Appendix Table 6. Historical Average Cash Rental Rates of Nebraska Farmland for Different Types of Land by Agricultural Statistics District, 1981-2004.[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
2002	20.35	26.35	23.80	25.10	24.30	25.00	23.30	24.40
2003	19.15	26.15	25.10	24.90	24.45	24.60	23.00	23.15
2004	21.00	27.65	26.80	26.35	26.00	26.25	24.00	25.15

[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.